

CATALOG

2024-2025





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Southwest Tech Programs

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Welcome. We're Glad You Are Here!



Welcome to Southwest Tech! We are grateful you are a student at our college. You will notice that we are a friendly college and we strive to help every single student. As we get to know you, please ask us about our programs, services, and opportunities for students. You may also find answers to your questions at our web site www.swtc.edu.

We have found that students who attend and in class are most likely to be successful. The faculty strive to make the learning environment very similar to what you will find in the real world. In our classes, you will get individual attention and hands-on experience. The more you participate in class, the more you will enjoy learning as you prepare for a career. We also strive to help you learn and develop outside of the classroom.

In the Knox Learning Center you will find tutors, library services, computers, and more that will help you be successful. If you would like to meet other students, you may want to join a club or participate in an activity. Many students enjoy Charley's, which has all sorts of activities and games for students to relax and enjoy time together. You can also get assistance from Academic Success Coaches who are dedicated to helping students achieve their goals. Thank you for choosing Southwest Tech. We look forward to your success!

Jason S. Wood, Ph.D., College President

Mission Statement

Southwest Wisconsin Technical College provides education and training opportunities responsive to students, employers, and communities.

Vision Statement

Southwest Wisconsin Technical College will be a preferred provider of education, source of talent, and place of employment in the region. We at the College change lives by providing opportunities for success.

Please reference the Student Handbook for policies regarding financial aid, grading, and conduct.

www.swtc.edu/handbook

Southwest Tech reserves the right to modify Student Policies and Procedures and Employees' and Students' Right to Know at any time to reflect changes in district policy and/or applicable law.

2024–2025 Academic Calendar

JULY

9 Book Vouchers Begin

AUGUST

19 Fall Semester Begins for All Students
25 Drop/Add Period Ends

SEPTEMBER

1 Begin Accepting Applications for 2024-2025
2 Campus Closed (Holiday)
18 Fall Financial Aid Book Deferment Ends
26 1st Semester Disbursement of Grants and Federal Loans

OCTOBER

4 Registration Closes for Oct. 14 Classes
4 Program Completion Forms Due
9 No Classes
11 End of First Eight Weeks

NOVEMBER

11 Veteran Priority Registration
12 Continuing Student Registration Begins
21 New Student Registration Opens
28–29 Campus Closed (Holiday)

DECEMBER

2 Spring Semester Book Deferment Opens
2 Waitlist and Dual Enrollment Registration Begins
9 Open Registration Begins
13 Winter Graduation Ceremony
16 Grades/Course Assessments Due

WINTER BREAK

December 16–January 10: No Classes
December 24–January 1: Campus Closed

JANUARY

3 Registration Closes for Spring 2025 Classes
13 Spring Semester Begins
19 Drop/Add Period Ends

FEBRUARY

11 Spring Financial Aid Book Deferment Ends
20 2nd Semester Disbursement of Grants and Federal Loans

MARCH

7 Program Completion Forms Due
7 End of First Eight Weeks
7 Registration Closes for March 17 Classes
10–14 Spring Break—No classes
TBD Veteran Priority Registration
TBD Continuing Student Registration Begins

APRIL

TBD New Student Registration Begins
17 No Classes
18 Campus Closed (Holiday)
21 No classes

MAY

TBD Waitlist Registration Begins
17 Spring Graduation Ceremony
19 Grades/Course Assessments Due
26 Campus Closed (Holiday)

JUNE

2 Summer Semester Begins
TBD Open Registration Begins



Accreditation

Southwest Wisconsin Technical College is accredited by the [Higher Learning Commission \(hlcommission.org\)](http://hlcommission.org), a regional accreditation agency recognized by the U.S. Department of Education. Southwest Tech has been accredited since 1976. In 2002, Southwest Tech was accepted as an AQIP institution, and in June, 2017 became a member of the Standard Pathway.

Higher Learning Commission
230 South LaSalle Street, Suite 7-500
Chicago, IL 60604
800.621.7400

Programs offered by the college are also approved by the Wisconsin Technical College System and the Educational Approval Board for the Veterans Administration.

Core Abilities

In cooperation with representatives from business and industry, Southwest Tech faculty and staff have identified six skills that are essential to a person's successful performance on-the-job. These six core abilities will be evaluated in all programs within the College.

Southwest Tech's core abilities provide graduates with life-long skills that will assist them in obtaining and keeping a job. Employers have said they prefer to hire and promote persons who exhibit the following characteristics:

Act Professionally. To act professionally means that an individual recognizes an obligation to conform to the technical and ethical standards of their chosen career.

Communicate Clearly. To communicate clearly means an individual is able to apply appropriate writing, speaking, and listening skills to precisely convey information, ideas, and opinions.

Value Learning. To value learning means an individual maintains acquired knowledge and skills, acquires new knowledge and skills quickly, and adapts to technological and workplace changes.

Work Productively. To work productively means an individual applies effective work habits and attitudes within a work setting.

Work Cooperatively. To work cooperatively means an individual is capable of working with others to complete tasks, solve problems, resolve conflicts, provide information and offer support.

Solve Problems. To solve problems means an individual is able to use all elements of problem solving strategies to generate realistic, practical, and workable solutions.

Online Learning

Online Learning at Southwest Tech offers you flexibility. Whether you are a working adult looking to obtain a degree, or a high school student needing to pick up a few college credits, online learning can work for you.

Online Associate Degree Programs

- Accounting
- Business Management
- Data Analytics
- Cancer Information Management (CIM)
- Early Childhood Education
- Health Information Technology (HIT)
- Leadership Development
- Nonprofit Leadership
- Supply Chain Management

Online Technical Diploma Programs

- Accounting Assistant
- Child Care Services
- Driver Safety Education
- Medical Coding Specialist
- Supply Chain Assistant

Online Certificates for Career Advancement

- Agribusiness Science & Technology-Applicator Technician
- Cancer Information Management Advanced Technical Certificate
- Logistics Certificate
- Payroll Assistant
- Production Planner
- Purchasing Agent/Buyer
- Solar Installation Technician
- Tax Preparer Assistant

Requirements for an Online Student

1. Chromebooks are not compatible with some testing features within Schoology (our Learning Management System.) Southwest Tech does not recommend Chromebooks for classes.
2. Cable/broadband/DSL internet with a minimum speed of 1.5Mbps. Test your local internet speed at www.speedtest.net. Higher bandwidth and speed will greatly assist you in your online learning environment, so where possible, a faster internet speed is recommended. Cable internet tend to be faster than DSL or 4G wireless, although DSL or 4G wireless may also work depending on other factors. Your computer, other software (such as anti spyware), other users on the system, and system configurations can all influence your ultimate line speed. Many instructors use videos as a part of their instruction, as well as synchronous meeting times (Skype, Adobe Connect, etc). Having an acceptable internet connection speed will be important to your success.
3. Convenient access to a computer that has one of the following current versions of Internet Browsers: Microsoft Internet Explorer, Google Chrome, Mozilla Firefox, and Safari. Call 608.822.2302 for verification of other browsers.
4. An active e-mail account (all Southwest Tech students are issued a free email account)
5. Word processing software. Microsoft Word is the recommended software at Southwest Wisconsin Technical College. Free Microsoft Office software is available to all Southwest Tech students at <http://products.office.com/en-us/student>.
6. Availability of 10-15 hours per week for each 3-credit course
7. Self-motivation and self-discipline

Credit for Prior Learning

Credit for prior learning gives students at Southwest Tech the opportunity to earn credit for college-level learning that was acquired outside of the classroom. There are six different ways to earn credit. Not all options are available for all classes. Please check your program page to see what is accepted for your program.

Transfer Credits

Credits earned at another accredited institution may transfer if related to the program of study and have a grade of "C" or better. Transfer credits also include advanced standing and transcribed credits completed in high school.

Challenge Exam

A challenge exam is developed by Southwest Tech faculty and allows the student to demonstrate that he/she can meet the competencies of the course. Depending on the course, a test may be a standard test or a demonstration test.

Military Experience

Credits may be awarded based on the training taken during military service and/or based on the position held in the military. Southwest Tech uses ACE (American Council on Education) recommendations for military credits.

National Tests

Southwest Tech is a CLEP testing center and accepts several CLEP tests for credit. Other national tests are also accepted including Advanced Placement (AP), DSST (DANTES), and Excelsior as examples.

Industry Recognized Certificate Crosswalks

Employers may offer training in the workplace that leads to an industry recognized certificate. Southwest Tech will recognize certificates that relate to the program courses and meet the competencies of the course.

Portfolios

A portfolio is a detailed documentation illustrating what you have learned and how it relates to a Southwest Tech course.

For more information and how to earn credit for prior learning, visit the credit for prior learning page at www.swtc.edu/cpl.

Accounting

Associate Degree

The Accounting program provides the educational background and training required for entry positions in private business and industry, governmental agencies, and public accounting firms. Students in this program receive a thorough foundation in accounting theory and practice as students learn to perform a variety of business accounting functions. Graduates are prepared for positions as junior accountants in public accounting firms, private industry, or government service.

Is Accounting for you?

If you are an energetic self-starter, inquisitive, adaptable, analytical, and a forward thinker with good communications skills, you may have what it takes to be successful in the accounting field!

Career Opportunities

- Bookkeeper
- Cost Accountant
- Public Accountant
- Staff Accountant
- Tax Accountant
- Accounts Receivable/Payable Clerk
- Account Manager
- Account Specialist
- Payroll Accountant
- Governmental Accountant
- Not-for-Profit Accountant

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 1: (Fall in-person, Spring online) (Tuition: \$2,620)

10-101-111	Accounting 1	4
10-101-117	Taxes 1	3
10-103-105	Beginning Microsoft Word	1
10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel	1
10-801-196	Oral/Interpersonal Communication	3
10-809-199	Psychology of Human Relations	3
		<u>16</u>

Semester 2: (Spring in-person, Fall online) (Tuition: \$2,780)

10-101-112	Accounting 2	4
10-101-121	Advanced Accounting Spreadsheets	3
10-101-123	Payroll Applications	2
10-101-127	QuickBooks	1
10-102-133	Career Planning in Business	1
10-801-136	English Composition 1	3
10-804-123	Math with Business Applications * OR *	3
10-804-189	Introductory Statistics	3
		<u>17</u>

Semester 3: (Fall in-person, Spring online) (Tuition: \$2,610)

10-101-113	Accounting 3	4
10-101-116	Cost Accounting	3
10-101-125	Managerial Accounting	3
10-102-109	Business Law I	3
10-809-172	Introduction to Diversity Studies	3
		<u>16</u>

Semester 4: (Spring in-person, Fall online) (Tuition: \$2,610)

10-101-114	Accounting 4	4
10-101-118	Taxes 2	3
10-101-124	Accounting Systems and Procedures	3
10-801-197	Technical Reporting	3
10-809-195	Economics * OR *	3
20-809-287	Principles of Macroeconomics	3
		<u>16</u>

Total Credits: 65

Estimated Total Tuition*: \$10,620

Accounting Assistant

Technical Diploma

The Accounting Assistant program trains students in basic accounting for sole proprietorships, partnerships, and corporations. Students also study income tax preparation for individuals, payroll accounting, and computerized accounting. They can then choose to specialize in business taxation or business spreadsheet applications.

Accounting Assistant graduates may work in a small business and be responsible for various aspects of bookkeeping, or work in a larger firm under the supervision of an accountant, and specialize in a certain area.

Is Accounting Assistant for you?

Good analytical skills and the ability to work independently will give you a good start in the Accounting Assistant program. If you are adaptable, energetic, organized, detail-oriented and a good communicator, you may thrive in today's accounting profession.

Career Opportunities

- Account Clerk
- Bookkeeper
- Office Assistant
- Tax Accountant
- Payroll Accountant
- Accountant
- Accounts Receivable/Payable Clerk

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$2,620)		
10-101-111	Accounting 1	4
10-101-117	Taxes 1	3
10-103-105	Beginning Microsoft Word	1
10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel	1
10-801-196	Oral/Interpersonal Communication	3
10-809-199	Psychology of Human Relations	3
		<hr/> 16
Semester 02 (Tuition: \$2,780)		
10-101-112	Accounting 2	4
10-101-121	Advanced Accounting Spreadsheets	3
10-101-123	Payroll Applications	2
10-101-127	QuickBooks	1
10-102-133	Career Planning in Business	1
10-801-136	English Composition 1	3
10-804-123	Math with Business Applications * OR *	3
10-804-189	Introductory Statistics	3
		<hr/> 17
Total Credits: 33		
Estimated Total Tuition*: \$5,400		

Agribusiness Science & Technology - Agribusiness Management

Associate Degree

Combine business and science to help farmers produce a product and make a profit.

As a student in the Agribusiness Science & Technology – Agribusiness Management program, you'll learn: agricultural input supply, production, finance, commodity assembly and processing, and marketing

Is Agribusiness Management for you?

Do you enjoy both business and agriculture? Do you work well as part of a team? Are you a problem solver, analytical thinker, and a strong communicator? If so, the Agribusiness Science & Technology – Agribusiness Management program may be a great fit for you.

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

For more information contact:

Matt Schneider, Advisor
Phone: 608.822.2365
Toll Free: 800.362.3322, extension 2365
Email: mschneider@swtc.edu

Curriculum & Costs

Semester 01 (Tuition: \$2,460)		
10-006-159	Agribusiness Computer Applications	1
10-006-161	Career Development in Agriculture	1
10-006-180	Animal Science	3
10-093-101	Plant and Soil Science	3
10-103-106	Beginning Microsoft Excel	1
10-801-136	English Composition 1	3
10-804-123	Math with Business Applications	3
		<hr/> 15
Semester 02 (Tuition: \$2,340)		
10-006-113	Precision Ag Technologies	3
10-006-133	Agribusiness Financial Management	3
10-006-136	Agricultural Commodity Marketing	3
10-070-104	Ag Safety, Electrical & Maintenance	2
10-801-196	Oral/Interpersonal Communication	3
		<hr/> 14
Semester 03 (Tuition: \$490)		
10-006-197	Agribusiness Experiential Learning	3
		<hr/> 3
Semester 04 (Tuition: \$2,610)		
10-006-134	Agricultural Equipment Management	3
10-006-137	Agribusiness Marketing & Promotion	3
10-006-162	Agribusiness Operations	3
10-101-111	Accounting 1	4
10-809-199	Psychology of Human Relations	3
		<hr/> 16
Semester 05 (Tuition: \$2,450)		
10-006-164	Agriculture Law	3
10-006-167	Agriculture Risk Management	3
10-102-129	Human Resources Management	3
10-104-105	Selling Principles	3
10-809-172	Introduction to Diversity Studies	3
		<hr/> 15
Total Credits: 63		
Estimated Total Tuition*: \$10,350		

Agribusiness Science & Technology - Agronomy

Associate Degree

The Precision Agronomy associate degree introduces students to the principles of precision agronomy, emphasizing the use of advanced technologies like GPS, sensors, and satellites for site-specific crop management. The course curriculum covers efficient utilization of inputs like soil, water, and nutrients, and how these practices lead to improved sustainability, productivity, and economic returns in agricultural operations. Graduates will be equipped with the skills to implement precision agronomy techniques, analyze agricultural data, and make informed decisions that enhance both sustainability and profitability in farming. Students will be prepared for careers in on-farm data management, agronomic consulting, and technology implementation in agriculture. This program structure offers a comprehensive view of precision agronomy, blending theoretical knowledge with practical skills and emphasizing the economic benefits of adopting these advanced agricultural practices.

Is Agronomy for you?

Do you have a passion for business, technology, and agriculture? Do you excel both independently and as part of a team? Are you driven by innovation, with strong problem-solving skills, analytical thinking, and excellent communication abilities? If so, the Precision Agronomy program could be the perfect fit for you

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809

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Toll Free: 800.362.3322, extension 2365
Email: mschneider@swtc.edu

Curriculum & Costs

Semester 01 (Tuition: \$2,470)	
10-006-116 Introduction to Soils	3
10-006-159 Agribusiness Computer Applications	1
10-006-160 Plant Science	3
10-006-161 Career Development in Agriculture	1
10-103-106 Beginning Microsoft Excel	1
10-801-136 English Composition 1	3
10-804-123 Math with Business Applications	3
	15
Semester 02 (Tuition: \$3,040)	
10-006-113 Precision Ag Technologies	3
10-006-124 Pesticide Applicator Training	1
10-006-125 Crop Protection Products	2
10-006-126 Pest ID & Mgt/Crop Scouting	3
10-006-127 Soil Fertility and Fertilizers	2
10-070-101 Field Application Equipment	2
10-070-104 Ag Safety, Electrical & Maintenance	2
10-801-196 Oral/Interpersonal Communication	3
	18
Semester 03 (Tuition: \$490)	
10-006-197 Agribusiness Experiential Learning	3
	3
Semester 04 (Tuition: \$2,620)	
10-006-132 Spatial Data Collection in Agriculture	2
10-006-162 Agribusiness Operations	3
10-093-102 Grain Production & Management	3
10-093-103 Forage Production & Management	3
10-093-104 Applications of GIS in Agriculture	2
10-809-199 Psychology of Human Relations	3
	16
Semester 05 (Tuition: \$1,960)	
10-006-117 Agribusiness Performance Standards	3
10-093-105 Nutrient Management & Precision Planning	3
10-104-105 Selling Principles	3
10-809-172 Introduction to Diversity Studies	3
	12
Total Credits: 64	
Estimated Total Tuition*: \$10,580	

Agribusiness Science & Technology - Agronomy Tech

Technical Diploma

The curriculum offers the opportunity to obtain skills for entry level positions in agriculture. The student will obtain proficiencies in crop protection, pest identification, soil fertility, and precision agriculture. This pathway also allows the opportunity to obtain Commercial Pesticide Applicator License.

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809

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Curriculum & Costs

Semester 01 (Tuition: \$2,470)	
10-006-116 Introduction to Soils	3
10-006-159 Agribusiness Computer Applications	1
10-006-160 Plant Science	3
10-006-161 Career Development in Agriculture	1
10-103-106 Beginning Microsoft Excel	1
10-801-136 English Composition 1	3
10-804-123 Math with Business Applications	3
	<hr/> 15
Semester 02 (Tuition: \$3,040)	
10-006-113 Precision Ag Technologies	3
10-006-124 Pesticide Applicator Training	1
10-006-125 Crop Protection Products	2
10-006-126 Pest ID & Mgt/Crop Scouting	3
10-006-127 Soil Fertility and Fertilizers	2
10-070-101 Field Application Equipment	2
10-070-104 Ag Safety, Electrical & Maintenance	2
10-801-196 Oral/Interpersonal Communication	3
	<hr/> 18
Semester 03 (Tuition: \$490)	
10-006-197 Agribusiness Experiential Learning	3
	<hr/> 3
Total Credits: 36	
Estimated Total Tuition*: \$6,000	

Agribusiness Science & Technology - Animal Science

Associate Degree

Specialize in the animal side of the farm operation. Prepare for the field of marketing, sales and production of animal products, and animal management operations.

As a student in the Agribusiness Science & Technology -Animal Science program, you'll learn about: animal nutrition and health, livestock housing, meat and milk quality, reproduction, and animal selection and improvement

You may also take courses in agribusiness management to prepare for managerial careers in agriculture.

Is Animal Science for you?

Do you enjoy animals and agriculture? Do you work well independently, as well as in a team setting? Are you a problem solver, analytical thinker, and a strong communicator? If so, the Agribusiness Science & Technology – Animal Science program may be a great fit for you.

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

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Email: mschneider@swtc.edu

Curriculum & Costs

Semester 01 (Tuition: \$2,460)		
10-006-159	Agribusiness Computer Applications	1
10-006-161	Career Development in Agriculture	1
10-006-180	Animal Science	3
10-093-101	Plant and Soil Science	3
10-103-106	Beginning Microsoft Excel	1
10-801-136	English Composition 1	3
10-804-123	Math with Business Applications	3
		<hr/> 15
Semester 02 (Tuition: \$2,830)		
10-006-123	Artificial Insemination Training	1
10-006-150	Farm Animal Reproduction	3
10-070-104	Ag Safety, Electrical & Maintenance	2
10-080-117	Animal Nutrition & Ration Balancing	4
10-080-118	Introduction to Animal Health	3
10-801-196	Oral/Interpersonal Communication	3
		<hr/> 16
Semester 03 (Tuition: \$490)		
10-006-197	Agribusiness Experiential Learning	3
		<hr/> 3
Semester 04 (Tuition: \$2,990)		
10-006-162	Agribusiness Operations	3
10-080-119	Livestock Housing & Equipment	3
10-080-120	Animal Genetics	3
10-093-106	Crop Production & Management	3
10-809-199	Psychology of Human Relations	3
10-006-146	Milk Production * OR *	
10-006-147	Meat Quality	3
		<hr/> 18
Semester 05 (Tuition: \$2,020)		
10-006-117	Agribusiness Performance Standards	3
10-082-101	Automation in Agriculture	3
10-809-172	Introduction to Diversity Studies	3
10-006-153	Dairy Production Management * OR *	
10-006-157	Livestock Production Management	3
		<hr/> 12

Total Credits: 64

Estimated Total Tuition*: \$10,790

Agribusiness Science & Technology-Applicator Tech

Certificate

The Applicator Tech program prepares you to mix or apply pesticides, herbicides, fungicides, or insecticides through sprays, dusts, vapors, soil incorporations or chemical application on crops. This certificate will prepare you for entry as an Applicator Technician.

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809

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Email: mschneider@swtc.edu

Curriculum & Costs

Semester 01 (Tuition: \$1,730)	
10-006-124 Pesticide Applicator Training	1
10-006-125 Crop Protection Products	2
10-006-126 Pest ID & Mgt/Crop Scouting	3
10-070-101 Field Application Equipment	2
10-070-104 Ag Safety, Electrical & Maintenance	2
	<hr/> 10
Total Credits: 10	
Estimated Total Tuition*: \$1,730	

Agricultural Power & Equipment Technician

Technical Diploma

Agricultural equipment has become more complex, precise, and expensive, and it is becoming more difficult for individuals to repair their own equipment. Students in this program learn the theory, operation, and repair of a variety of tillage, planting, and harvesting equipment, as well as tractors. Students study diesel engines, drivetrains, electrical systems, and hydraulics. This program includes a dealership internship during the summer between the first and second year; which, prepares the student to be employed as technicians at farm implement dealerships, repair shops, businesses that use farm equipment or diesel engines, or to work on their own equipment.

Is Agricultural Power & Equipment Technician for you?

If you have a love of farm machinery and good mechanical skills, are detail-oriented and enjoy problem-solving challenges, Agricultural Power & Equipment Technician may be a good fit for you.

Career Opportunities

- Farm Equipment Technician
- Diesel Equipment Technician
- Mobile Equipment Technician
- Service Writer
- Parts Department Personnel

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

For more information contact:

Matt Schneider, Advisor
Phone: 608.822.2365
Toll Free: 800.362.3322, extension 2365
Email: mschneider@swtc.edu

Curriculum & Costs

Semester 01 (Tuition: \$2,760)		
31-801-310	Workplace Communication	2
31-804-305	Applied Mathematics	2
32-070-305	Intro to Ag Electrical Systems	3
32-070-309	Farm Machinery Maintenance	5
32-070-314	Ag Shop Safety & Practices	1
32-442-301	Related Welding	2
		15
Semester 02 (Tuition: \$2,720)		
32-070-341	Basic Hydraulics	4
32-070-346	Consumer Equipment Maintenance & Repair	3
32-070-347	Farm Equipment I	3
32-070-348	Farm Equipment II	3
32-806-303	Science of Mechanics	2
		15
Semester 03 (Tuition: \$330)		
32-070-350	Ag Power Occup Internship	2
		2
Semester 04 (Tuition: \$2,960)		
32-070-301	Farm Machinery Harvest	5
32-070-303	Chassis Drive Systems	5
32-070-344	Air Conditioning	2
32-070-345	Advanced Electrical Systems	4
		16
Semester 05 (Tuition: \$2,580)		
32-070-311	Diesel Engines I	5
32-070-312	Diesel Engines II	5
32-070-343	Applied Hydraulics	4
		14

Total Credits: 62
Estimated Total Tuition*: \$11,350
Tools/Equipment: \$3,000 (optional)
Additional cost for uniforms.

Artisanal Modern Meat Butchery

Overview

The need for qualified animal handling and meat processing employees is in high demand throughout the USA. The WI Department of Agriculture, Trade and Consumer Protection has provided funding for interested students to complete this technical diploma. As a student in the Artisanal Modern Meat Butchery program, you'll learn about the meat production industry – from care and handling pre-mortem through packaged products ready for retail sale. In this program, you will also participate in an internship with a local meat processing facility, butcher shop, or harvester.

Is Artisanal Modern Meat Butchery for you?

If you have good hand eye coordination, memory retention, and are interested in working with meat and providing quality products to customers, you might consider a career as a butcher. While many butchers work for supermarkets or factories, many are self-employed.

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$290)		
30-316-301	Introduction to the Meat Industry	1
30-316-302	Humane Handling, Slaughter, and Fabrication	2
30-316-303	Processed Meat Manufacturing	2
		5
Semester 02 (Tuition: \$10)		
30-316-304	Meat Marketing and Merchandising	2
30-316-305	Artisanal Modern Meat Butchery Internship	2
		4
Total Credits: 9		
Estimated Total Tuition*: \$300		

Auto Collision Repair & Refinish Technician

Technical Diploma

Each year American drivers log millions of miles on the highways, and each year there are thousands of accidents that will require the service of a trained technician to repair these vehicles. The Auto Collision Repair & Refinish program teaches students to examine vehicles to determine type and extent of damaged parts, both cosmetic and structural. This program is fast-paced and intensive, as today's complex vehicles are constructed with high strength steel, plastics and computer systems. During the year, the student learns mig welding, straightening techniques, proper use of plastic fillers, surface preparation, and refinishing techniques. This program is certified by the National Institute for Automotive Service Excellence (ASE) Education Foundation.

Is Auto Collision Repair & Refinish Technician for you?

If you are driven, highly motivated, love cars, possess a keen eye for detail, and love hands-on work, this field may be just the career for you.

Career Opportunities

- Auto Body Technician
- Frame & Alignment Technician
- Painting Technician
- Auto Glass Replacement Specialist
- Estimator
- Custom Painter
- Paint & Equipment Supplier
- Insurance Adjustor

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

For more information, contact Greg Wubben, Auto Collision Instructor
608.822.2605 | gwubben@swtc.edu

Curriculum & Costs

Semester 01 (Tuition: \$3,680)		
31-404-337	Auto Body Mechanics Chassis	2
31-404-347	Electrical Fundamentals	2
31-405-356	Auto Body Welding	3
31-405-364	Buffing & Detailing	2
31-405-365	Bolt-On Panels & Dent Repair	4
31-405-366	Fundamentals of Painting	2
31-804-305	Applied Mathematics	2
		<hr/> 17
Semester 02 (Tuition: \$3,520)		
31-404-338	Auto Body Mechanics HVAC & Restraints	2
31-405-367	Damage Analysis, Estimating, & Customer Service	3
31-405-368	Structural Repair	3
31-405-369	Intermediate Painting	2
31-405-370	Advanced Painting	3
31-405-371	Auto Collision Internship	1
31-801-310	Workplace Communication	2
		<hr/> 16

Total Credits: 33

Estimated Total Tuition*: \$7,200

Tools/Equipment: \$200 (lease)

Automotive Technician

Technical Diploma

The Automotive Technician program teaches students essential servicing techniques, including the testing, repairing, and rebuilding of basic automotive systems, as well as diagnosis and repair of automotive and light truck electrical, mechanical, and hydraulic systems. Individuals who are mechanically talented, like to solve problems, and enjoy working with people may find success in the automotive technician field. This program is certified by the National Institute for Automotive Service Excellence (ASE) Education Foundation.

Is Automotive Technician for you?

Do you love problem solving and diverse work? Are you detail-oriented and ambitious? If you possess these attributes and you love cars and trucks, you may have what it takes to pursue a career as an auto technician.

Career Opportunities

- Auto Technician
- Auto Specialist
- Parts Specialist
- Service Manager

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$2,770)		
31-804-305	Applied Mathematics	2
32-404-310	Auto Electrical I	3
32-404-314	Automotive Maintenance	3
32-404-334	Automotive Service Fundamentals	3
32-404-335	Automotive Brakes	3
32-404-336	Advanced Braking Systems	1
		<u>15</u>
Semester 02 (Tuition: \$2,770)		
32-404-311	Auto Electrical II	3
32-404-315	Engine Repair	5
32-404-322	Suspension & Steering	5
32-806-303	Science of Mechanics	2
		<u>15</u>
Semester 03 (Tuition: \$330)		
32-404-350	Auto Tech Occupational Internship	2
		<u>2</u>
Semester 04 (Tuition: \$2,440)		
32-404-312	Auto Electrical III	3
32-404-323	Emission Control Systems	2
32-404-326	Auto Engine Performance	4
32-404-329	Advanced Engine Systems	4
		<u>13</u>
Semester 05 (Tuition: \$2,960)		
31-801-310	Workplace Communication	2
32-404-321	Automatic Transmissions	5
32-404-327	Climate Control Systems	3
32-404-328	Hybrid and Electric Vehicles	2
32-404-337	Drivetrain Systems	4
		<u>16</u>
Total Credits: 61		
Estimated Total Tuition*: \$11,270		
Tools/Equipment: \$1,750 (optional)		
Additional cost for uniforms.		

Building Performance Technician

Overview

The Building Performance Technician technical diploma prepares individuals to design an integrated portfolio of renewable and traditional energy-producing systems. Technicians perform site assessments and recommend appropriate renewable energy technologies, sell and/or market renewable energy technologies, and manage renewable energy installation projects.

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$2,620)		
10-196-215	Project Management Fundamentals	3
10-410-101	Construction Fundamentals	3
10-481-101	Solar Photovoltaic Technology	3
10-481-102	Introduction to Renewable Energy	3
10-660-101	Introduction to DC/AC	3
		<hr/> 15
Semester 02 (Tuition: \$2,850)		
10-102-152	Data Analytics 1	3
10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel	1
10-481-103	Intro to Energy Management	3
10-481-105	Energy Control Strategies	3
10-801-196	Oral/Interpersonal Communication	3
10-804-189	Introductory Statistics	3
		<hr/> 17
Total Credits: 32		
Estimated Total Tuition*: \$5,470		

Building Trades-Carpentry

Technical Diploma

Building Trades-Carpentry students are trained to construct residential structures using both standard and sustainable building materials. Students will prepare for this career through a blend of classroom theory and hands-on experience. Students will become adept at using hand tools, portable power tools, and other equipment common in the carpentry profession, as well as working with lumber, panel products, concrete, roofing materials, fasteners, and a variety of hardware. The skills needed for site layout and foundation work, rough framing, roof framing, and exterior and interior finish work will also be developed. In addition, blueprint reading, math, and estimating components will be studied.

Is Building Trades-Carpentry for you?

Do you like making things and working with your hands? Are you detail-oriented and do you enjoy physical work in the outdoors? A career in Building Trades-Carpentry may be for you.

Career Opportunities

- Carpenter
- Finish Carpenter
- Remodeler
- Rough Carpentry

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$2,620)	
31-408-308 Construction Safety and Health	1
31-475-312 Introduction to Building Trades	1
31-475-313 Site Layout, Foundations, and Formwork	2
31-475-314 Floor and Wall Framing	3
31-475-315 Blueprint Reading	2
31-475-316 Roof Systems	2
31-475-317 Exterior Finishes	2
31-804-305 Applied Mathematics	2
	<hr/> 15
Semester 02 (Tuition: \$2,270)	
31-475-318 Residential Estimating	2
31-475-319 Building Science and Sustainability	1
31-475-320 Insulation, Drywall Installing, and Finishing	2
31-475-321 Cabinet Construction and Installation	1
31-475-322 Interior Finishes and Stair Construction	3
31-475-323 Windows, Doors, and Hardware Installation	2
31-801-310 Workplace Communication	2
	<hr/> 13
Total Credits: 28	
Estimated Total Tuition*: \$4,890	
Tools/Equipment: \$300	
Additional cost for uniforms.	

Business Management

Associate Degree

The Business Management program provides students with the tools needed to meet the challenges of managing a business. Students receive a background in business operations, accounting, marketing, service operations management, human resource management, team building, problem solving, and business law. Business managers are found in every sector of the economy, in nearly all work settings. Graduates may find positions as an entry-level manager, assistant manager, office manager, team leader, or may start their own business.

The Business Management program may be completed in-person, online, or through a combination of these options.

Is Business Management for you?

If you set goals for yourself and strive to accomplish them, prefer working with others rather than alone, enjoy serving as a leader even if it means more work, and want to improve your skills and promotion potential, then a career in business management may be a good choice for you.

Career Opportunities

- Manager/Assistant Manager
- Business Owner/Entrepreneur
- Sales Representative/Agent/Broker
- Supervisor/Assistant Supervisor
- Customer Relations
- Financial Manager

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$2,460)		
10-102-105	Introduction to Business	3
10-102-131	Developing a Business Plan	1
10-102-151	Personal Finance	1
10-103-105	Beginning Microsoft Word	1
10-801-136	English Composition 1	3
10-804-123	Math with Business Applications * OR *	
10-804-195	College Algebra with Applications	3
10-809-195	Economics * OR *	
20-809-287	Principles of Macroeconomics	3
		<hr/> 15
Semester 02 (Tuition: \$2,290)		
10-101-111	Accounting 1	4
10-102-109	Business Law I	3
10-102-130	Management Principles	3
10-103-106	Beginning Microsoft Excel	1
10-104-130	Marketing Principles	3
		<hr/> 14
Semester 03 (Tuition: \$2,610)		
10-102-104	Principles of Finance	3
10-102-110	Business Law 2	3
10-102-129	Human Resources Management	3
10-102-133	Career Planning in Business	1
10-809-143	Microeconomics	3
10-809-198	Introduction to Psychology	3
		<hr/> 16
Semester 04 (Tuition: \$2,450)		
10-102-108	Risk Management	3
10-102-115	Business Management Strategies	3
10-102-132	Operations Management	3
10-104-105	Selling Principles	3
10-801-198	Speech	3
		<hr/> 15
Total Credits: 60		
Estimated Total Tuition*: \$9,810		

Cancer Information Management

Associate Degree (Online)

This two year associate degree in Cancer Information Management prepares students for a career working in hospital-based or population-based registries. Various healthcare agencies need dedicated specialists to collect, manage, and disseminate vital data that goes into cancer registries. Graduates may be eligible to take the national certifying examination given by the National Cancer Registrars Association to become a Certified Tumor Registrar (CTR).

What Does a CTR Do?

CTRs play an important role in cancer data management. CTRs are required to collect, analyze, and disseminate cancer data for various healthcare agencies. This data includes a complete history, diagnosis, treatment, and health status for every cancer patient in the U.S. They ensure that timely and accurate data are maintained on all types of cancer diagnosed and treated within a health care institution or a defined population. These data are then used to inform a wide variety of public health decisions and provide information for cancer diagnosis, education, research, treatment and prevention programs.

What Are Some Specific Duties of a CTR?

- Identifying reportable cancers
- Abstracting patient cancer data from patient records, pathology, radiology and other reports
- Participate in cancer program, institution, and community benefit activities as part of the active leadership structure
- Coding and staging primary site, histology and extent of disease
- Monitoring timeliness, completeness, and accuracy of cancer data
- Performing cancer patient follow-up activities
- Reporting cancer data to health care officials, hospital administrators, physician regulatory agencies for use in cancer prevention and control
- Assuring patient privacy and data integrity and security
- Assisting medical staff and epidemiologists in special studies and research

Why Choose Cancer Information Management?

- 100% online program, created with the working adult in mind
- Learn by doing through internships
- A fast growing occupation (Bureau of Labor Statistics)
- Work behind the scenes in healthcare without direct patient care
- Become a critical member of the healthcare team

Curriculum & Costs

Semester 01 (Tuition: \$1,150)		
10-501-101	Medical Terminology	3
10-806-177	General Anatomy & Physiology * OR *	
20-806-207	Anatomy and Physiology I	4
		<u>7</u>
Semester 02 (Tuition: \$2,460)		
10-501-107	Digital Literacy for Healthcare	2
10-530-162	Foundations of HIM	3
10-801-136	English Composition 1	3
10-801-196	Oral/Interpersonal Communication	3
10-806-179	Adv Anatomy & Physiology * OR *	
20-806-208	Anatomy and Physiology II	4
		<u>15</u>
Semester 03 (Tuition: \$2,450)		
10-530-110	Introduction to Cancer Registry Management	3
10-530-111	Cancer Disease Management	4
10-530-178	Healthcare Law & Ethics	2
10-809-172	Introduction to Diversity Studies	3
10-809-198	Introduction to Psychology	3
		<u>15</u>
Semester 04 (Tuition: \$2,120)		
10-530-112	Oncology Coding and Staging	4
10-530-113	Cancer Statistics and Epidemiology	3
10-530-114	Abstracting Principles and Practice I	3
10-530-164	Intro to Health Informatics	3
		<u>13</u>
Semester 05 (Tuition: \$1,970)		
10-530-115	Cancer Patient Follow-up	2
10-530-116	Abstracting Principles and Practice II	3
10-530-117	Cancer Registry Management Practicum	3
10-530-118	CTR Prep	1
10-530-161	Health Quality Management	3
		<u>12</u>
Total Credits: 62		
Estimated Total Tuition*: \$10,150		

Cancer Information Management (CIM) ATC

Advanced Technical Certificate (Online) Curriculum & Costs

This one year Advanced Technical Certificate in Cancer Information Management prepares students for a career working in hospital-based or population-based registries. Various healthcare agencies need dedicated specialists to collect, manage, and disseminate vital data that goes into cancer registries. Graduates may be eligible to take the national certifying examination given by the National Cancer Registrars Association to become a Certified Tumor Registrar (CTR).

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809

Semester 01 (Tuition: \$1,140)		
10-530-110	Introduction to Cancer Registry Management	3
10-530-111	Cancer Disease Management	4
		<hr/> 7
Semester 02 (Tuition: \$1,960)		
10-530-112	Oncology Coding and Staging	4
10-530-113	Cancer Statistics and Epidemiology	3
10-530-114	Abstracting Principles and Practice I	3
10-530-115	Cancer Patient Follow-up	2
		<hr/> 12
Semester 03 (Tuition: \$990)		
10-530-116	Abstracting Principles and Practice II	3
10-530-117	Cancer Registry Management Practicum	3
		<hr/> 6
Total Credits: 25		
Estimated Total Tuition*: \$4,090		

Child Care Services

Technical Diploma

Students in this fast-growing field receive training in planning and implementing developmentally appropriate curricula for children in the birth-to-eight-years age range; using positive guidance techniques to manage an early childhood classroom; providing for the health, safety, and physical needs of the children; and work with families to provide connections for the child between home and their place of care.

Is Child Care Services for you?

If you are patient, creative, dependable, and have good communication skills, stimulating the physical, emotional, intellectual, and social growth of young children may be the rewarding career you are looking for.

Career Opportunities

- Child Care Teacher
- Child Care Teacher's Assistant/Aide
- In-home Provider/Nanny
- Family Day Care Provider
- Preschool Teacher

Admission and Program Requirements

- Submit Application
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services. Schedule an admissions meeting by clicking "Make an appointment" with your program advisor.

Requirements Prior to August 1, each face-to-face Field Experience 1 student will need to complete and submit the health requirements to be able to participate in the required lab time on campus: Physical form, background information disclosure, TB skin testing, current Tdap vaccination, fact sheet, and current BLS for Healthcare providers CPR certification.

- Potential students are required to have met with the program advisor and have preapproval for online/offsite Field Experience placement.

Curriculum & Costs

Semester 01 (Tuition: \$2,500)

10-307-148	ECE: Foundations of ECE	3
10-307-151	ECE: Infant & Toddler Dev	3
10-307-160	ECE: Field Experience 1	3
10-307-167	ECE: Hlth Safety & Nutrition	3
10-809-172	Introduction to Diversity Studies	3
		<u>15</u>

Semester 02 (Tuition: \$2,500)

10-307-108	ECE: Early Language & Literacy	3
10-307-170	ECE: Field Experience 2	3
10-307-179	ECE: Child Development	3
10-307-188	ECE: Guiding Child Behavior	3
10-801-136	English Composition 1	3
		<u>15</u>

Total Credits: 30

Estimated Total Tuition*: \$5,000

Additional cost for physical, criminal background check, and key card.

CNC Machine Operator/Programmer

Technical Diploma

Today's advanced manufacturing businesses are looking for employees that have experience with tools, machines, and mechanicals.

As a student in the CNC Machine Operator/Programmer program, you'll learn to operate a variety of machine tools, setup, operate, and program CNC machines, read and analyze engineering drawings, and use precision measuring and inspection instruments.

Career Opportunities

- Machinists
- CNC machinists
- Quality control inspector
- CNC Operator
- CNC programmers
- Field service representatives

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809

Curriculum & Costs

Semester 01 (Tuition: \$2,600, Books: TBD)		
10-105-110	Computer Applications	1
31-420-320	Intro to Print Reading	1
31-420-321	Machine Shop Safety Practices & Maintenance	1
31-420-322	Intro to Manual Mill	1
31-420-323	Intro to Manual Lathe	1
31-420-324	Manual Machine Speeds & Feeds	1
31-420-325	Tooling & Materials of Manufacturing	1
31-420-326	Intro to Quality Practices & Measurement Equipment	1
31-420-327	Intro to Surface Grinding	1
31-420-328	Intro to Mastercam Mill 2D	1
31-420-329	Advanced Manual Mill	1
31-420-330	Advanced Manual Lathe Machine	1
31-420-331	Advanced Print Reading	1
		13
Semester 02 (Tuition: \$2,600, Books: TBD)		
31-420-332	Advanced Measuring Equipment	1
31-420-333	Intro to Mastercam Lathe	1
31-420-334	Intro to Computer Numerical Control Prog Mill	1
31-420-335	Intro to Computer Numerical Control Prog Lathe	1
31-420-336	Basic CNC Operation Mill	1
31-420-337	Basic CNC Operation Lathe	1
31-420-340	Geometric Dimensioning & Tolerance	1
31-420-341	Fixture Basic Lathe & Mill	1
31-420-342	CNC Machine Speeds & Feeds	1
31-420-343	Processes of Manufacturing	1
31-420-344	Advanced Mastercam Mill & Lathe	1
31-420-345	Precision Machining Internship	2
		13
Total Credits: 26		
Estimated Total Tuition*: \$5,200		
Tools/Equipment: \$300		

Cosmetology

Technical Diploma

The Cosmetology program combines theory with practice in the art of haircutting, styling, perm waving and chemical relaxing, haircolor, highlighting, foiling techniques, and nail and skin care. Students gain experience in Southwest Tech's Creative Elements Salon by working on mannequins, fellow students, and salon guests. Students also learn the business aspects of working in a salon, including professional and personal development, business practices, communication, and Wisconsin state law. Lower cost and less time than local competitors. Scholarships available for cosmetology program students.

Is Cosmetology for you?

Do you have a love for style, enjoy helping others enhance their appearance and look their best, and enjoy working closely with the public? If you are also friendly, outgoing, and creative, then a career in Cosmetology may be a perfect fit. Students must complete 1550 hours of classroom instruction to meet the requirements of Southwest Wisconsin Technical College and the State of Wisconsin Department of Safety and Professional Services (DSPS). If you want to work in Wisconsin, get licensed in Wisconsin. Make the transition from graduate to licensed Cosmetologist in Wisconsin easy.

Career Opportunities

- Hair Stylist
- Nail Technician
- Platform Artist
- Barbering
- Make-up Artist
- Cosmetology Instructor
- Salon Owner
- Produce Line Sales Representative

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$2,630)		
31-502-301	Basic Hair Design	5
31-502-302	Salon/Spa Science	2
31-502-303	Chemical Restructuring	2
31-502-304	Haircoloring and Techniques	3
31-502-305	Nail Technology	3
		<hr/> 15
Semester 02 (Tuition: \$2,620)		
31-502-306	Basic Facials	2
31-502-307	Salon/Spa Management	2
31-502-314	Salon Services I - Fundamentals	3
31-502-315	Salon Services II - Basic Concepts	4
31-502-316	Salon Services III - Skill Building	4
		<hr/> 15
Semester 03 (Tuition: \$2,470)		
31-502-317	Salon Services IV - Intermediate Skills	4
31-502-318	Salon Services V - Proficiency Building	5
31-502-319	Salon Services VI - Advanced Techniques	5
		<hr/> 14
Total Credits: 44		
Estimated Total Tuition*: \$7,720		
Additional cost for uniforms.		

Criminal Justice - Law Enforcement 2

Associate Degree

The Criminal Justice-Law Enforcement program provides training in protecting lives and property, as well as preserving the peace while upholding the law. Students study patrol procedures for residential, commercial, and industrial areas, learn to monitor traffic for safe and legal operations, and understand how to properly issue warnings, citations, and make arrests. Students are trained to investigate accident and crime scenes and carry out long-term investigations leading to the prosecution of criminal offenders, while studying strategies to maintain the confidence of the public by displaying professional conduct.

Is Criminal Justice - Law Enforcement 2 for you?

If you are interested in making a difference in your community by providing safety, order and serving those in need, a career in law enforcement may be for you.

Career Opportunities

- Police Officer
- Deputy Sheriff
- Security Guard
- Bailiff
- Correctional Officer
- Each of these careers may require special additional requirements and/or training

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$2,490)		
10-504-101	Introduction to Criminal Justice Studies	3
10-504-103	Criminal Law Studies	3
10-801-136	English Composition 1	3
10-801-196	Oral/Interpersonal Communication	3
10-804-107	College Mathematics	3
		<hr/> 15
Semester 02 (Tuition: \$2,460)		
10-504-102	Constitutional Law Application	3
10-504-107	Criminal Investigation Application	3
10-504-134	Emergency Telecommunicator	2
10-504-154	Community Policing in a Diverse Society	3
10-809-172	Introduction to Diversity Studies	3
		<hr/> 14
Semester 03 (Tuition: \$2,430)		
10-504-120	Homeland Security/Terrorism	3
10-504-127	Emergency Response and Intervention	3
10-504-129	Criminal Evidence	2
10-504-135	Law Enforcement Academy Prep * OR *	
10-504-128	Criminal Justice Internship	3
10-809-198	Introduction to Psychology * OR *	
10-809-159	Abnormal Psychology	3
		<hr/> 14
Semester 04 (Tuition: \$3,880; Integration Fee: \$450)		
30-504-500	Overview of Patrol Response	
30-504-501	Physical Fitness	2
30-504-502	Application of Investigations	1
30-504-503	Overview of Criminal Justice	1
30-504-504	Principles of Emergency Vehicle Response	1
		<hr/> 2
30-504-505	Sensitive Crimes	
30-504-506	Overview of Investigations	2
30-504-507	Application of Traffic Response	2
30-504-508	Principles of Investigations	3
30-504-509	Principles of Tactics	1
30-504-510	Overview of Tactics	5
30-504-511	Scenario Assessment	1
		<hr/> 1
Total Credits: 65		22
Estimated Total Tuition*: \$11,260		

Criminal Justice-Law Enforcement 720 Academy

Technical Diploma

The Southwest Tech 720-hour summer Law Enforcement Academy is designed for those seeking a law enforcement career in the State of Wisconsin. The instruction meets the criteria established by the Wisconsin Department of Justice Training and Standards Bureau.

Training is delivered via lecture, group discussion, hands-on exercises, and scenario participation. The training instructors are a combination of educators and active or retired law enforcement officers. All instructors meet certification standards established by the Training and Standards Board.

Is Criminal Justice-Law Enforcement 720 Academy for you?

If you are seeking a law enforcement career in the State of Wisconsin, have already completed at least 60 college credits from an accredited college or university, and meet the Academy eligibility requirements, the Criminal Justice – Law Enforcement Academy may be right for you.

Minimum Qualifications

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

For more information about Southwest Tech's Criminal Justice – Law Enforcement Academy, please contact:

Kris Wubben
Criminal Justice Supervisor
Southwest Tech
1800 Bronson Blvd.
Fennimore, WI 53809
608.822.2706
kwubben@swtc.edu

For admissions materials, please visit
<https://www.swtc.edu/720LEAcademy>

Curriculum & Costs

30-504-500	Overview of Patrol Response	2
30-504-501	Physical Fitness	1
30-504-502	Application of Investigations	1
30-504-503	Overview of Criminal Justice	1
30-504-504	Principles of Emergency Vehicle Response	2
30-504-505	Sensitive Crimes	2
30-504-506	Overview of Investigations	2
30-504-507	Application of Traffic Response	3
30-504-508	Principles of Investigations	1
30-504-509	Principles of Tactics	5
30-504-510	Overview of Tactics	1
30-504-511	Scenario Assessment	1
		<hr/> 22

Total Credits: 22

Estimated Total Cost: \$5,000

Criminal Justice Studies

Associate Degree

The Criminal Justice-Law Enforcement program provides training in protecting lives and property, as well as preserving the peace while upholding the law. Students study patrol procedures for residential, commercial, and industrial areas, learn to monitor traffic for safe and legal operations, and understand how to properly issue warnings, citations, and make arrests. Students are trained to investigate accident and crime scenes and carry out long-term investigations leading to the prosecution of criminal offenders, while studying strategies to maintain the confidence of the public by displaying professional conduct.

Is Criminal Justice Studies for you?

If you're a community service-oriented individual who values honesty, order, and detail, a career in law enforcement may be for you.

Career Opportunities

- Police Officer
- Deputy Sheriff
- Security Guard
- Bailiff
- Correctional Officer
- Each of these careers may require special additional requirements and/or training

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$2,490)	
10-504-101	Introduction to Criminal Justice Studies 3
10-504-103	Criminal Law Studies 3
10-801-136	English Composition 1 3
10-801-196	Oral/Interpersonal Communication 3
10-804-107	College Mathematics 3
	15
Semester 02 (Tuition: \$2,460)	
10-504-102	Constitutional Law Application 3
10-504-107	Criminal Investigation Application 3
10-504-134	Emergency Telecommunicator 2
10-504-154	Community Policing in a Diverse Society 3
10-809-172	Introduction to Diversity Studies 3
	14
Semester 03 (Tuition: \$2,920)	
10-504-119	Introduction to Corrections 3
10-504-120	Homeland Security/Terrorism 3
10-504-127	Emergency Response and Intervention 3
10-504-129	Criminal Evidence 2
10-504-135	Law Enforcement Academy Prep * OR *
10-504-128	Criminal Justice Internship * OR *
10-504-156	Community Service Field Experience 3
10-809-159	Abnormal Psychology * OR *
10-809-198	Introduction to Psychology 3
	17
Semester 04 (Tuition: \$2,660)	
10-503-100	Firefighting Principles 4
10-503-101	Hazardous Material Awareness and Operations 2
10-504-126	Communication Principles for Emergency Services 3
10-531-105	Emergency Medical Technician 1 3
10-531-106	Emergency Medical Technician 2 3
	15
Total Credits: 61	
Estimated Total Tuition*: \$10,530	

Dairy and Livestock Technician

Technical Diploma

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$2,460)		
10-006-159	Agribusiness Computer Applications	1
10-006-161	Career Development in Agriculture	1
10-006-180	Animal Science	3
10-093-101	Plant and Soil Science	3
10-103-106	Beginning Microsoft Excel	1
10-801-136	English Composition 1	3
10-804-123	Math with Business Applications	3
		<hr/> 15
Semester 02 (Tuition: \$2,830)		
10-006-123	Artificial Insemination Training	1
10-006-150	Farm Animal Reproduction	3
10-070-104	Ag Safety, Electrical & Maintenance	2
10-080-117	Animal Nutrition & Ration Balancing	4
10-080-118	Introduction to Animal Health	3
10-801-196	Oral/Interpersonal Communication	3
		<hr/> 16
Semester 03 (Tuition: \$490)		
10-006-197	Agribusiness Experiential Learning	3
		<hr/> 3
Total Credits: 34		
Estimated Total Tuition*: \$5,780		

Data Analytics

Associate Degree (Online)

Join one of the fastest-growing fields, Data Analytics, by earning an Associate Degree in Applied Sciences from Southwest Wisconsin Technical College.

Big data is a huge part of business today. Learning the skills will set you up for a successful career as a data analyst. Graduates of this program are in high demand in many industries, including healthcare, manufacturing, insurance, and finance.

This is where learning is valued. Learn the role of analyzing data for employers gathering information necessary to identify data needs. Apply critical-thinking skills through the use of data. Develop effective communication skills with stakeholders through your findings and offer solutions, while recommending opportunities for improvement with the use of data. This is where anything is possible 100% Online Asynchronous Courses— login on anytime anywhere to complete your coursework. Flexible schedule – with courses starting every 8 weeks you will focus on mastering specific topics before moving on to new ones. All current American Council on Education (ACE) credit recommendations are eligible for prior learning credit evaluation at Southwest Tech. Learn more under Prior Learning below.

Admission and Program Requirements

- Submit Application
- A basic understanding of Excel is strongly recommended

Curriculum & Costs

Semester 01 (Tuition: \$2,450)		
10-102-152	Data Analytics 1	3
10-102-153	Elicitation & Coll Techniques	3
10-102-154	Databases	3
10-102-156	Ethics in Data Analytics	3
10-804-189	Introductory Statistics	3
		<hr/> 15
Semester 02 (Tuition: \$1,960)		
10-102-155	Business Intelligence and Visualization	3
10-102-157	Data Analytics 2	3
10-196-209	Team Building and Problem Solving	3
10-801-196	Oral/Interpersonal Communication	3
		<hr/> 12
Semester 03 (Tuition: \$1,150)		
10-103-118	Intermediate Microsoft Excel	1
10-809-166	Intro to Ethics: Theory & App	3
10-809-195	Economics * OR *	
20-809-287	Principles of Macroeconomics	3
		<hr/> 7
Semester 04 (Tuition: \$1,960)		
10-102-130	Management Principles	3
10-102-158	Business Analytics & Insights	3
10-102-160	Software Applications	3
10-196-215	Project Management Fundamentals	3
		<hr/> 12
Semester 05 (Tuition: \$2,290)		
10-102-161	Strategy Analysis & Evaluation	3
10-102-162	Programming in Data Analytics	3
10-102-163	Data Analytics Career Experience (Internship)	2
10-623-110	Lean Concepts	3
10-801-197	Technical Reporting	3
		<hr/> 14
Total Credits: 60		
Estimated Total Tuition*: \$9,810		

Dental Assistant

Technical Diploma

The Dental Assistant program includes instruction and practical experience on how to use and care for dental equipment instruments, expose and process radiographs, record medical and dental information, assist with dental emergencies, perform basic office procedures, and maintain an inventory of supplies. Dental assistants are vital to the safe and efficient operation of the dental office, assisting the dentist in the treatment room, the lab, and with business administration.

Is Dental Assistant for you?

Caring, organized, and compassionate individuals who work well in a team health care setting may find a rewarding career as a dental assistant. If you're interested in a career that focuses on helping people and offers plenty of variety in the workday, dental assisting is a great choice for you.

Career Opportunities

- Receptionist / Chair-side Assistant
- Hygiene Instructor
- Laboratory Assistant / Hygiene Assistant
- Dental Sales Representative
- Dental Treatment Coordinator

Admission and Program Requirements

- Submit Application
- Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech (email admissions@swtc.edu, or mail to Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809)
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session.
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$2,950)	
10-508-101 Dental Health Safety	1
10-508-103 Dental Radiography	2
10-508-113 Dental Materials	2
31-508-302 Dental Chairside	5
31-508-304 Dental & General Anatomy	2
31-508-306 Dental Assistant Clinical	3
31-508-307 Dental Assistant Professional	1
	<hr/> 16

Total Credits: 16

Estimated Total Tuition*: \$2,950

Additional costs for physical, uniforms, and travel. For detailed costs, contact Health Programs Support.

Driver and Safety Education Certification

Technical Diploma

The Driver and Safety Education Certification program provides training to instruct Driver Education within public, private, commercial and Technical Colleges throughout the state. Students will learn to teach the goals and outcomes of driver and traffic safety education. These goals include in-car instruction, including observation, curriculum development and practical experience behind-the-wheel; curriculum information selection, development and use, with observation and teaching activities and classroom curriculum development; problems of alcohol, drugs and addiction, the effects of physiological, psychological and sociological aspects, as well as how education programs are utilized within our community and schools; behavioral aspects in accident prevention using concepts and methods to understand the impact on unsatisfactory driver-related attitudes and behaviors; and basic concepts and principles of safety and loss prevention, with an emphasis on various teaching techniques relating to school and roadway safety and risk awareness.

Is Driver and Safety Education Certification for you?

If you are interested in teaching our teenage population the correct method(s) of becoming safe, insightful, responsible drivers, then teaching Driver Education may be just what you're looking for.

Admission and Program Requirements

- Submit Application
- Please submit official college transcripts showing completion of either a Bachelors or Masters degree to Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809.
- WI provisional, lifetime or master educator license
- Perform and successfully pass a criminal background check

Curriculum & Costs

Semester 01 (Tuition: \$1,470)	
30-812-301 Driver Education Classroom Instruction	3
30-812-302 Driver Education In-Car Instruction	3
30-812-303 Driver Education Safety	3
	<hr/>
Total Credits: 9	9
Estimated Total Tuition*: \$1,470	

Early Childhood Education

Associate Degree

The Early Childhood Education program teaches students to implement developmentally-appropriate activities for children aged infant through eight years old. A focus on maintaining a safe and healthy environment, building relationships with parents and staff, and guiding children's behavior is emphasized. With an on-campus daycare facility, students have the opportunity to put theory into practice before embarking on a rewarding career.

Is Early Childhood Education for you?

If you are patient, creative, dependable, and have good communication skills, stimulating the physical, emotional, intellectual, and social growth of young children may be the rewarding career you are looking for.

Career Opportunities

- Child Care Center Owner/Operator
- Child Care Center Director/Manager
- Preschool Teacher
- Child Care Teacher
- Exceptional Needs Aide
- In-Home Provider/Nanny

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services. Schedule an admissions meeting with your program advisor. Requirements Prior to August 1, each face-to-face Field Experience 1 student will need to complete and submit the health requirements to be able to participate in the required lab time on campus. Physical Form, background information disclosure, TB skin testing, current Tdap vaccination, fact sheet, and current BLS for Healthcare providers CPR certification.

Curriculum & Costs

Semester 01 (Tuition: \$2,500)		
10-307-148	ECE: Foundations of ECE	3
10-307-151	ECE: Infant & Toddler Dev	3
10-307-160	ECE: Field Experience 1	3
10-307-167	ECE: Hlth Safety & Nutrition	3
10-809-172	Introduction to Diversity Studies	3
		<hr/> 15
Semester 02 (Tuition: \$2,500)		
10-307-108	ECE: Early Language & Literacy	3
10-307-170	ECE: Field Experience 2	3
10-307-179	ECE: Child Development	3
10-307-188	ECE: Guiding Child Behavior	3
10-801-136	English Composition 1	3
		<hr/> 15
Semester 03 (Tuition: \$2,460)		
10-307-110	ECE: Soc S, Art, & Music	3
10-307-112	ECE: STEM	3
10-307-190	ECE: Field Experience 3	3
10-804-123	Math with Business Applications	3
10-809-198	Introduction to Psychology	3
		<hr/> 15
Semester 04 (Tuition: \$2,470)		
10-307-187	ECE: Children w Diff Abilities	3
10-307-195	ECE: Family & Community Rel	3
10-307-210	ECE: Field Experience 4	3
10-801-196	Oral/Interpersonal Communication	3
10-809-128	Marriage & Family	3
		<hr/> 15

Total Credits: 60

Estimated Total Tuition*: \$9,930

Additional cost for physical, criminal background check, and key card.

Additional costs for physical, uniforms, and travel. For detailed costs, contact Health Programs Support.

Early Childhood Licensing Basic Ages 0-2

Overview

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809

Curriculum & Costs

Semester 01 (Tuition: \$1,470)	
10-307-148 ECE: Foundations of ECE	3
10-307-151 ECE: Infant & Toddler Dev	3
10-307-167 ECE: Hlth Safety & Nutrition	3
	<hr/>
Total Credits: 9	9
Estimated Total Tuition*: \$1,470	

Electrical Power Distribution

Technical Diploma

Electric lineworkers install and repair cables and wires used in electrical power and distribution systems. They erect poles and light-or heavy-duty transmission towers. They locate line trouble, climb poles, use hot line tools, and operate and maintain substations. This program provides theoretical and hands-on training in all phases of power line construction and maintenance. It provides fundamentals of electrical theory, as well as application of electrical equipment with emphasis on safety.

Is Electrical Power Distribution for you?

If you like working outdoors in all kinds of weather, are an independent problem solver, and enjoy the rewards of a hard day's work, Electric Power Distribution may be the ideal program for you.

Career Opportunities

- Electrician
- Lineman
- Lineman Technician
- Installer
- Line Mechanic
- Power Technician

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$2,620)		
31-413-303	Electric Power Distribution Fund 1A	4
31-413-304	Electric Power Distribution Fund 1B	4
31-413-305	Electric Power Dist Fund 1C-App Lab	5
31-804-305	Applied Mathematics	2
		<hr/> 15
Semester 02 (Tuition: \$2,860)		
10-105-110	Computer Applications	1
10-620-156	Fiber Optic Cabling Technician	1
31-413-306	Electric Power Dist Fund 2A	4
31-413-307	Electric Power Dist Fund 2B	4
31-413-308	Electric Power Dist Fund 2C-AppLab	4
31-801-310	Workplace Communication	2
		<hr/> 16
Total Credits: 31		
Estimated Total Tuition*: \$5,480		
Tools/Equipment: \$1,900		

Electricity (Construction) Apprenticeship

Overview

Construction electricians lay out, assemble, install and test electrical circuits of fixtures, controls and switches, alarms, communications, and light and power systems. The Construction Electrician Apprenticeship Program is five years in length, consisting of 8,000 hours. The apprentice attends 576 hours of paid related instruction classes at Southwest Tech. Classes are usually one 8-hour day every other week between August and May. Apprentices must also complete unpaid related instruction in OSHA safety, NEC code, First Aid, CPR, and Transition to Trainer. Apprentices must take and pass the State Electrical Journeyman Exam prior to the completion of the Apprenticeship Contract.

Career Opportunities

- Electrician
- Helper--Electrician
- Security and Fire Alarm Systems Installer
- Electrical Power-Line Installer and Repairer
- Signal and Track Switch Repairer

Minimum Requirements

- Complete Apprentice Application
- Provide a copy of your High School transcripts or GED. (High school seniors in their last semester may apply if they meet all other qualifications and submit a letter from their high school counselor stating they will graduate at the end of the academic year.)
- Prove you have a valid driver's license
- Prove you have satisfactorily completed (C or better) one year of high school Algebra (or one semester college Algebra)
- Take the TABE Survey entrance assessment test which will consist of the following sections: Math, Math Computation, and Reading.
- Complete Employer Application

For more information about Southwest Tech's Apprenticeship opportunities, please contact:

Nicole Nelson
Southwest Tech
1800 Bronson Blvd.
Fennimore, WI 53809
608.822.2400
nnelson@swtc.edu

Curriculum & Costs

Semester 01 (Tuition: \$330)	
50-413-521 Construction Electrician I	$\frac{2}{2}$
Semester 02 (Tuition: \$330)	
50-413-522 Construction Electrician II	$\frac{2}{2}$
Semester 03 (Tuition: \$330)	
50-413-523 Construction Electrician III	$\frac{2}{2}$
Semester 04 (Tuition: \$330)	
50-413-524 Construction Electrician IV	$\frac{2}{2}$
Semester 05 (Tuition: \$330)	
50-413-525 Construction Electrician V	$\frac{2}{2}$
Semester 06 (Tuition: \$330)	
50-413-526 Construction Electrician VI	$\frac{2}{2}$
Semester 07 (Tuition: \$330)	
50-413-527 Construction Electrician VII	$\frac{2}{2}$
Semester 08 (Tuition: \$330)	
50-413-528 Construction Electrician VIII	$\frac{2}{2}$

Total Credits: 16
Estimated Total Tuition*: \$2,640

Electro-Mechanical Technology

Associate Degree

In the world of manufacturing, constant technology change brings with it more complex systems of assembly, control measurement, and material processing of manufactured products. The Electro-Mechanical Technology program provides training in electrical and electronic controls, robotics, utilization of computers and computer-based controls, as well as the knowledge of how these controls integrate with hydraulics, pneumatics and other mechanical drive elements to form automated systems.

Is Electromechanical Technology for you?

Are you mechanically inclined and comfortable with computers? Do you have good math skills? Answering "yes" could mean that a rewarding career awaits you in the Electro-Mechanical field.

Career Opportunities

- Electromechanical Technician
- Electronic Technician
- Maintenance Mechanic
- Industrial Electrician
- Control Design Drafter

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$3,060)		
10-620-101	DC and AC Fundamentals	5
10-620-121	Mechanics and Materials	4
10-620-123	Construction Electrical Wiring I	1
10-620-124	Welding for Maintenance	2
10-620-138	Construction Electrical Wiring II	1
10-620-163	Intro to Mechatronics	1
10-804-113	College Technical Math 1A	3
		17
Semester 02 (Tuition: \$3,020)		
10-449-160	Industrial Safety Practices & Career Development	1
10-620-107	Hydraulics and Pneumatics	3
10-620-148	Intro to Motor Controls	2
10-620-149	Intro to Programmable Controls	2
10-620-162	Manual Machine Shop Fundamentals	3
10-620-164	Intro to Preventative Maintenance	1
10-804-114	College Technical Math 1B	2
10-809-199	Psychology of Human Relations	3
		17
Semester 03 (Tuition: \$3,030)		
10-150-129	Introduction to Networks	2
10-620-126	Industrial Electrical Wiring	2
10-620-151	Process Control Systems	5
10-620-156	Fiber Optic Cabling Technician	1
10-620-157	Fundamentals of Embedded Systems	1
10-801-136	English Composition 1	3
10-809-172	Introduction to Diversity Studies	3
		17
Semester 04 (Tuition: \$2,670)		
10-150-126	Premises Cabling Technician	2
10-620-117	Robotics	3
10-620-150	Advanced Programmable Controls	2
10-620-159	Introduction to Frequency & Servo Drives	2
10-801-197	Technical Reporting	3
10-806-143	College Physics 1	3
		15
Total Credits: 66		
Estimated Total Tuition*: \$11,780		
Tools/Equipment: \$400		
Additional industry credentialing certification fees may apply.		

Emergency Medical Technician

Overview

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809

Curriculum & Costs

Semester 01 (Tuition: \$1,100)	
30-531-305 Emergency Medical Technician 1	2
30-531-306 Emergency Medical Technician 2	3
	<hr/>
	5
Total Credits: 5	
Estimated Total Tuition*: \$1,100	

Golf Course Management

Associate Degree

The Golf Course Management program prepares students for positions as managers and assistant managers of both public and private golf courses. Job duties may include managing personnel and public relations, overseeing food and beverage operations, administering financial plans, coordinating golf shop operations, managing the maintenance of facilities and equipment, directing turf and non-turf management practices, and complying with regulatory and legal issues.

Is Golf Course Management for you?

If you enjoy leading people in pursuit of a unified goal, have a passion for the game of golf, and possess enthusiasm for exceptional guest service, then a career in golf course management may be for you.

Career Opportunities

- Assistant Golf Course Manager
- Clubhouse Manager
- Assistant Golf Course Superintendent
- General Manager
- Assistant Head Pro

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$2,480)		
10-109-102	Hospitality Professional Devel Seminar	1
10-109-105	Hospitality Law	3
10-325-101	Golf Course Operations	3
10-325-118	Golf Course Irrigation Systems	3
10-325-124	Player Development 1	2
10-801-136	English Composition 1	3
		<u>15</u>
Semester 02 (Tuition: \$2,810)		
10-325-103	Pro Shop Management	3
10-325-107	Soils, Conservation, and Fertility	3
10-325-108	Tournament Promotions	2
10-325-114	Techniques for Teaching Golf	2
10-801-196	Oral/Interpersonal Communication	3
10-804-107	College Mathematics	3
10-325-128	Spring Internship: Clubhouse * OR *	
10-325-131	Spring Internship: Maintenance	1
		<u>17</u>
Semester 03 (Tuition: \$170)		
10-325-129	Summer Internship: Clubhouse * OR *	
10-325-132	Summer Internship: Maintenance	1
		<u>1</u>
Semester 04 (Tuition: \$2,730)		
10-109-103	Event Management	3
10-109-108	Hospitality Supervision	3
10-325-104	Club Financial Management	3
10-325-127	Turf Grass Horticulture	3
10-809-199	Psychology of Human Relations	3
10-325-130	Fall Internship: Clubhouse * OR *	
10-325-133	Fall Internship: Maintenance	1
		<u>16</u>
Semester 05 (Tuition: \$2,480)		
10-006-122	Pest Management	1
10-109-104	Hospitality Marketing	3
10-325-109	Integrated Turf Management	3
10-325-110	Golf Course Design and Renovation	2
10-325-113	Golf Course Equipment Repair	3
10-809-172	Introduction to Diversity Studies	3
		<u>15</u>
Total Credits: 64		
Estimated Total Tuition*: \$10,670		

Graphic and Web Design

Associate Degree

Graphic and web designers create a wide variety of materials, including advertisements, displays, packaging, signs, logos, web sites, and web pages to meet the needs and preferences of their various clients for communication and promotion. Graphic and web designers work as in-house designers for a company, as staff designers for a graphic design firm, or as freelance designers. This growing profession needs creative minds that have excellent visualization, computer, and design skills.

Is Graphic And Web Design for you?

Have you been told that you have creative and visualization skills? Do you enjoy analyzing design decisions and often think it could have been done better? If you are attracted to the design elements of color, type, shape, illustration, and layout, then creating web sites and print-ready design solutions can be a very satisfying career choice.

Career Opportunities

- Graphic Designer
- Desktop Publisher
- Communication Assistant
- Web Designer
- Production Designer/Artist

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$2,630, Laptop Fee: \$725)		
10-201-101	Design Fundamentals	3
10-201-124	Portfolio Introduction	1
10-201-133	Photoshop	3
10-201-134	Illustrator	3
10-801-136	English Composition 1	3
10-804-123	Math with Business Applications * OR *	
10-804-133	Math & Logic	3
		<hr/> 16
Semester 02 (Tuition: \$2,960, Laptop Fee: \$725)		
10-152-116	HTML & CSS	3
10-201-110	Pre-Press Management	3
10-201-135	InDesign	3
10-201-138	Typography	3
10-201-142	Digital Marketing for Graphic Designers	3
10-801-196	Oral/Interpersonal Communication * OR *	
10-801-198	Speech	3
		<hr/> 18
Semester 03 (Tuition: \$2,470, Laptop Fee: \$725)		
10-201-139	Web Page Design 1	3
10-201-143	Beginning WordPress	2
10-201-144	Freelancing for Creatives	1
10-201-145	Motion Design	3
10-203-131	Introduction to Digital Photography	3
10-809-172	Introduction to Diversity Studies	3
		<hr/> 15
Semester 04 (Tuition: \$2,790, Laptop Fee: \$725)		
10-201-140	Web Page Design 2	3
10-201-141	Professional Portfolio Assessment	2
10-201-146	Digital Video Concepts	3
10-801-197	Technical Reporting	3
10-809-199	Psychology of Human Relations	3
10-201-128	Internship/Field Study * OR *	
10-201-129	Graphic and Web Design Projects	3
		<hr/> 17
Total Credits: 66		
Estimated Total Tuition*: \$10,850		
Additional cost of laptop fees \$2,900 (see details).		

Health Information Technology

Associate Degree (Online)

This two year associate degree in Health Information Technology (HIT) prepares students for a career working in patient health data management. Health Information Technicians are the individuals who compile the data for medical related agencies. They play a vital role in the organization because they are the ones that determine specifically how the data is compiled and reported to insurance companies, government agencies and others for reimbursements, research and quality monitoring.

What Does a Health Information Technician Do?

- Guardians and gatekeepers of the most important tool in modern health care – the medical record
- Ensure patient's histories are accurate, complete, up-to-date, and properly entered into clinical databases
- Log patient histories, diagnoses, treatments and procedures
- Understand workflow in all size healthcare settings, from large hospital systems to the private physician practice
- Play a vital role in the daily operation of health information management and electronic health records (EHR) at almost every point in the healthcare delivery cycle
- Ensure an organization has the right information on hand when and where it is needed
- Maintain the highest standards of data integrity, confidentiality, and security

Where Do Health Information Technicians Work?

Health Information Technicians work in almost every health care setting, including: hospitals, outpatient clinics, health insurance organizations, physician's offices, and mental health facilities.

Why Is There a High Demand for HIT Professionals?

The health care industry depends on electronic information systems. As health data becomes more digitized, opportunities are created for trained health information technicians with the skills and knowledge to collect, analyze, monitor, maintain and report health data according to established data quality principles, legal and information security standards and professional best-practice guidelines.

Why Choose Health Information Technology?

- 100% online program, created with the working adult in mind
- Learn by doing through internships
- A fast growing occupation (Bureau of Labor Statistics)
- Work behind the scenes in healthcare without direct patient care
- Become a critical member of the healthcare team

Curriculum & Costs

Semester 1 (Tuition: \$1,150, Books: \$328.98 - \$588.45)

10-501-101	Medical Terminology	3
10-806-177	General Anatomy & Physiology * OR *	
20-806-207	Anatomy and Physiology I	4
		<hr/> 7

Semester 2 (Tuition: \$2,120, Books: \$659.85)

10-501-107	Digital Literacy for Healthcare	2
10-530-162	Foundations of HIM	3
10-530-182	Human Diseases for Hlth Profes	3
10-530-197	ICD Diagnosis Coding	3
10-530-199	ICD Procedure Coding	2
		<hr/> 13

Semester 3 (Tuition: \$2,290, Books: \$399.97)

10-530-159	Health Revenue Management	3
10-530-165	Intermediate Coding	3
10-530-178	Healthcare Law & Ethics	2
10-530-184	CPT Coding	3
10-801-196	Oral/Interpersonal Communication	3
		<hr/> 14

Semester 4 (Tuition: \$2,450, Books: \$247.90 - \$277.90)

10-530-163	Healthcare Stats and Analytics	3
10-530-164	Intro to Health Informatics	3
10-801-136	English Composition 1	3
10-804-189	Introductory Statistics	3
10-809-198	Introduction to Psychology	3
		<hr/> 15

Semester 5 (Tuition: \$2,130, Books: \$454.95 – \$519.94)

10-530-161	Health Quality Management	3
10-530-166	HIT Capstone	1
10-530-167	Management of HIM Resources	3
10-530-196	Professional Practice	3
10-809-172	Introduction to Diversity Studies	3
		<hr/> 13

Total Credits: 62

Estimated Total Tuition*: \$10,140

Human Services Associate

Associate Degree

The Human Services Associate program trains students to provide information, support, care, and advocacy in a human service setting. Students acquire the skills needed to work with individuals, groups, and communities. They learn to work with people of diverse racial, ethnic, and cultural backgrounds. General education courses included in the program teach students to better understand social problems. During the second year of the program, students receive fieldwork placement in a human service setting.

Is Human Services Associate for you?

Do you have an interest in working with people in need, have effective communication and interpersonal skills, and an appreciation of cultural diversity? Human Services may be a rewarding career choice.

Career Opportunities

- Activities Assistant
- Community Outreach Worker
- Human Services Specialist
- Visitation Worker
- Program Aide

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 1 (Tuition: \$2,450)		
10-520-101	Introduction to Human Services	3
10-520-104	Community Resources and Services	3
10-801-136	English Composition 1	3
10-809-172	Introduction to Diversity Studies	3
10-809-188	Developmental Psychology	3
		<hr/> 15
Semester 2 (Tuition: \$2,450)		
10-520-102	Ethics for the Profession	3
10-520-103	Issues In ATODA	3
10-520-105	Interviewing and Counseling Techniques	3
10-801-198	Speech	3
10-809-198	Introduction to Psychology	3
		<hr/> 15
Semester 3 (Tuition: \$3,100)		
10-520-106	Issues of Gerontology	3
10-520-108	Methods of Social Casework	3
10-520-109	Professional Documentation in Human Services	3
10-520-121	Field Study 1	4
10-809-159	Abnormal Psychology	3
10-809-196	Introduction to Sociology	3
		<hr/> 19
Semester 4 (Tuition: \$2,120)		
10-520-107	Disability Studies	3
10-520-112	Children, Youth, & Family	3
10-520-122	Field Study 2	4
10-804-123	Math with Business Applications	3
		<hr/> 13
Total Credits: 62		
Estimated Total Tuition*: \$10,120		

Individualized Technical Studies

Overview

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum

The following courses and credits are needed to earn a degree in this program. Actual number of courses and credits may vary based on individual needs. General Studies courses will be planned with occupational advisor and program dean.

General Studies Core

Communications	Min 6
Social Science	Min 3
Behavioral Science	Min 3
Mathematics / Science	Min 3
Additional chosen from Core	6
Total	Min 21

Individual Technical Studies Core

Major Program Emphasis (minimum of 20 credits in one program)	39-45
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Electives

Minimum of 6 credits	Min 6
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Total Program Credits	Min 60-66
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Industrial Electrician Apprenticeship

Overview

The industrial electrician maintains and repairs many different types of electrical equipment. They may also modify or install electrical equipment like motors, transformers, generators, machine controls and lighting systems in industrial, commercial and public establishments. The electrician is responsible for the periodic inspection of equipment to locate and repair defects before breakdowns occur.

The Industrial Electrician Apprenticeship Program is four years in length. The apprentice attends 720 hours of paid related instruction classes at Southwest Tech.

Career Opportunities

- Electrician
- Helper--Electrician

Minimum Requirements

- Complete Apprentice Application
- Complete Employer Application
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Contact:

Jeff Kennedy, Apprenticeship Navigator
608.249.9001
jkennedy@wdbscw.org

Curriculum & Costs

Semester 01 (Tuition: \$650)	
50-413-501 Industrial Electrician I	$\frac{4}{4}$
Semester 02 (Tuition: \$650)	
50-413-502 Industrial Electrician II	$\frac{4}{4}$
Semester 03 (Tuition: \$330)	
50-413-503 Industrial Electrician III	$\frac{2}{2}$
Semester 04 (Tuition: \$330)	
50-413-504 Industrial Electrician IV	$\frac{2}{2}$
Semester 05 (Tuition: \$330)	
50-413-505 Industrial Electrician V	$\frac{2}{2}$
Semester 06 (Tuition: \$330)	
50-413-506 Industrial Electrician VI	$\frac{2}{2}$
Semester 07 (Tuition: \$330)	
50-413-507 Industrial Electrician VII	$\frac{2}{2}$
Semester 08 (Tuition: \$330)	
50-413-508 Industrial Electrician VIII	$\frac{2}{2}$
Total Credits: 20	
Estimated Total Tuition*: \$3,280	

Industrial Mechanic

Technical Diploma

The Industrial Mechanic program teaches technical skills in mechanical drive systems, electrical systems, hydraulics and pneumatics, laser alignment, basic welding and machining, and many other in-demand skill sets that employers are looking for. Graduates have the option of seeking employment or enrolling in the two year Electromechanical Technology program.

Is Industrial Mechanic for you?

If you like to troubleshoot problems, put theory to work hands-on, and have interests in math and mechanical processes, a career in industrial maintenance may be your key to success.

Career Opportunities

- Maintenance Mechanic
- Engineering Technician
- Hydraulic Technician
- Quality Assurance
- Millwright
- Mechanic's Helper

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$3,060)		
10-620-101	DC and AC Fundamentals	5
10-620-121	Mechanics and Materials	4
10-620-123	Construction Electrical Wiring I	1
10-620-124	Welding for Maintenance	2
10-620-138	Construction Electrical Wiring II	1
10-620-163	Intro to Mechatronics	1
10-804-113	College Technical Math 1A	3
		<hr/> 17
Semester 02 (Tuition: \$3,020)		
10-449-160	Industrial Safety Practices & Career Development	1
10-620-107	Hydraulics and Pneumatics	3
10-620-148	Intro to Motor Controls	2
10-620-149	Intro to Programmable Controls	2
10-620-162	Manual Machine Shop Fundamentals	3
10-620-164	Intro to Preventative Maintenance	1
10-804-114	College Technical Math 1B	2
10-809-199	Psychology of Human Relations	3
		<hr/> 17
Total Credits: 34		
Estimated Total Tuition*: \$6,080		
Tools/Equipment: \$200		

Instrumentation and Controls Technology

Associate Degree

Programmable Logic Controllers (PLCs), networks, security, and process control; these are the buzz words of modern industry. In today's increasingly competitive global marketplace, manufacturing facilities are becoming increasingly reliant on highly specialized automated and interconnected machines, systems, and processes to increase productivity, accuracy, and quality. Become a part of this challenging and financially rewarding career field by enrolling in the Instrumentation and Controls Technology program at Southwest Tech.

As a student in the Instrumentation and Controls Technology program you will learn how to install, configure, program, troubleshoot, and repair these complex systems. In addition, you will learn to select, calibrate, and maintain the instruments that measure, indicate, and control process variables such as pressure, level, flow, composition, and temperature used in the energy, food and dairy processing, and manufacturing industries.

Is Instrumentation and Controls Technology for you?

Are you detail orientated and mechanically inclined? Do you love problem solving and enjoy math and science? Do you like working with the latest technology? Answering "Yes" could mean that a challenging and rewarding career awaits you in the Instrumentation & Control field.

Career Opportunities

- Instrumentation & Controls Specialist
- Instrumentation & Electrical Technician
- Field Service Technician
- Maintenance Technician
- Control Systems Field Technician
- Refinery Technician – Instrumentation

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809

Curriculum & Costs

Semester 01 (Tuition: \$2,820)		
10-620-101	DC and AC Fundamentals	5
10-620-121	Mechanics and Materials	4
10-620-163	Intro to Mechatronics	1
10-801-136	English Composition 1	3
10-804-113	College Technical Math 1A	3
		<hr/> 16
Semester 02 (Tuition: \$2,610)		
10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel	1
10-449-160	Industrial Safety Practices & Career Development	1
10-620-107	Hydraulics and Pneumatics	3
10-620-148	Intro to Motor Controls	2
10-620-149	Intro to Programmable Controls	2
10-804-114	College Technical Math 1B	2
10-809-199	Psychology of Human Relations	3
		<hr/> 15
Semester 03 (Tuition: \$2,830)		
10-150-129	Introduction to Networks	2
10-513-188	Manufacturing Practices for the Food Industry	1
10-620-151	Process Control Systems	5
10-620-156	Fiber Optic Cabling Technician	1
10-620-157	Fundamentals of Embedded Systems	1
10-801-197	Technical Reporting	3
10-809-172	Introduction to Diversity Studies	3
		<hr/> 16
Semester 04 (Tuition: \$3,060)		
10-150-126	Premises Cabling Technician	2
10-513-184	HACCP Training	2
10-620-117	Robotics	3
10-620-150	Advanced Programmable Controls	2
10-620-154	Advanced Calibration Techniques & Analytics	3
10-620-159	Introduction to Frequency & Servo Drives	2
10-806-143	College Physics 1	3
		<hr/> 17

Total Credits: 64

Estimated Total Tuition*: \$11,320

Tools/Equipment: \$200

Additional industry credentialing certification fees may apply.

IT - Cybersecurity & Network Administration

Associate Degree

The IT-Cybersecurity and Network Administration program provides students with the skills required to maintain a secure IT system along with the expertise to design, install, and manage the integrity of a computer network infrastructure. Equipment and technology used in this program includes firewalls, intrusion detection and prevention systems, anomaly identification systems, physical server computing, cloud computing, and associated physical security technologies. Students will work with business class systems such as Microsoft, Linux, and Mac OS. Extensive hands-on, real-world, experiences with real equipment are provided to gain the immense knowledge required to accurately configure and secure network systems.

Career Opportunities

- Network and Computer Systems Administrators
- IT Support Specialist
- System Administrator
- Information Security Analyst
- Information Security Engineer
- Network Systems Administrator
- Network Security Technician
- Penetration Testers
- Digital Forensics Analysts

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$2,710)		
10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel	1
10-150-129	Introduction to Networks	2
10-150-134	Windows Support	1
10-151-101	Introduction to Security	1
10-154-110	Hardware/Software Fundamentals	3
10-620-156	Fiber Optic Cabling Technician	1
10-801-136	English Composition 1	3
10-804-133	Math & Logic	3
		16
Semester 02 (Tuition: \$3,230)		
10-107-192	IT Career Development	2
10-150-126	Premises Cabling Technician	2
10-150-135	Windows Server Administration (2 cr)	2
10-151-102	Cybersecurity Essentials	2
10-151-103	Cisco Networking and Security	3
10-151-104	Linux Administration and Security	3
10-801-196	Oral/Interpersonal Communication	3
		17
Semester 03 (Tuition: \$2,800)		
10-150-121	VMWare VCP Essentials	3
10-150-132	Voice Over IP Administration	2
10-150-154	Firewall/VPN Technologies	2
10-151-105	Wireless Networking and Security	2
10-151-106	Scripting for Security	2
10-151-107	Cybersecurity Operations	3
10-809-195	Economics * OR *	3
20-809-287	Principles of Macroeconomics	3
		17
Semester 04 (Tuition: \$2,470)		
10-150-136	Cloud Computing	2
10-151-108	Database Security Administration	3
10-151-109	Advanced Security Capstone	3
10-151-110	Network Defense & Forensics	3
10-151-111	Offensive Security Operations	1
10-809-199	Psychology of Human Relations	3
		15
Total Credits: 65		
Estimated Total Tuition*: \$11,210		

IT - Network Systems Technician

Technical Diploma

The IT-Network Systems Technician program provides students with the skills required to support the integrity of a computer network infrastructure. Students will be able to manage, configure and troubleshoot common system infrastructure issues, including network switching, routing, IP services, fiber optics, premises cabling and basic network device security. Students will work with business class systems such as Cisco, Microsoft and Linux. Extensive hands-on, real-world, experiences with real equipment are provided to gain the immense knowledge required to accurately configure and secure network systems.

Is IT - Network Systems Technician for you?

Students entering the IT-Network Systems Technician program should:

- Be a digital native and have a curiosity for technology
- Have an eye for detail and possess an analytical and creative mind.
- Like to solve problems and be challenged.
- Enjoy working independently and in teams.

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$2,710)

10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel	1
10-150-129	Introduction to Networks	2
10-150-134	Windows Support	1
10-151-101	Introduction to Security	1
10-154-110	Hardware/Software Fundamentals	3
10-620-156	Fiber Optic Cabling Technician	1
10-801-136	English Composition 1	3
10-804-133	Math & Logic	3
		<hr/> 16

Semester 02 (Tuition: \$3,230)

10-107-192	IT Career Development	2
10-150-126	Premises Cabling Technician	2
10-150-135	Windows Server Administration (2 cr)	2
10-151-102	Cybersecurity Essentials	2
10-151-103	Cisco Networking and Security	3
10-151-104	Linux Administration and Security	3
10-801-196	Oral/Interpersonal Communication	3
		<hr/> 17

Total Credits: 33

Estimated Total Tuition*: \$5,940

Laboratory Science Technician

Technical Diploma

Food quality technicians work in a fast-paced environment. Enjoy plenty of variety in your work day in the high-demand food processing industry. You'll work as part of a food quality team, producing internationally-recognized products, such as cheese, yogurt, butter, and more.

Making sure the food we eat is safe is just one of the responsibilities of a laboratory food quality technician. Learn how to:

- Conduct food quality and safety tests
- Report Results
- Evaluate the environment's effect on food quality
- Apply quality principles to food production
- Be involved in research and development of new products

Work in high-demand food processing and agriculture industries.

Southwest Tech's Laboratory Science Technician program is a one-year technical diploma with a four-week internship that will ensure you are workplace ready!

Is Laboratory Science Technician for you?

Successful Lab Science Technicians will: Enjoy working in a fast-paced environment. Be focused on quality and organization. Enjoy using hands-on lab skills in a team setting in day-to-day work.

Career Opportunities

- Laboratory Technician
- Laboratory Assistant
- Quality Technician
- Environmental/Sanitation Technician
- Milk Quality Lab Technician

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals.

Curriculum & Costs

Semester 01 (Tuition: \$1,490)		
10-513-110	Basic Lab Skills	1
10-513-113	QA Lab Math	1
10-513-188	Manufacturing Practices for the Food Industry	1
10-806-109	Fundamentals of Chemistry	2
31-513-181	Quality Lab Microbiology 1	2
31-513-182	Quality Lab Skills 1	1
		<hr/> 8
Semester 02 (Tuition: \$1,110)		
10-103-106	Beginning Microsoft Excel	1
10-513-184	HACCP Training	2
31-513-185	Quality Lab Skills 2	1
31-513-186	Quality Lab Microbiology 2	2
		<hr/> 6
Semester 03 (Tuition: \$330)		
10-513-187	Lab Science Practicum	2
		<hr/> 2
Total Credits: 16		
Estimated Total Tuition*: \$2,930		

Leadership Development

Associate Degree (Online)

FULLY ONLINE PROGRAM FOR WORKING ADULTS!

The 100% online Leadership Development degree program is designed to meet the needs of working adults with four week classes that start every month. The program provides leadership training and education for individuals currently employed in leadership and development positions, and also those who wish to prepare themselves for such a position.

Start Today:

- Earn prior learning credit for documented work experience.
- Enter at any time during the year. No need to wait for a semester to begin.
- Select courses that fit your schedule and your lifestyle.
- Meet with an advisor to plan your individualized course schedule.

Is Leadership Development for you?

Are you currently employed, with an interest in moving into a leadership position? Do you enjoy coaching and working with people, both individually and in teams? Do you possess good communication skills and enjoy problem solving? Leadership Development may be a great fit for you. The online Leadership Development program is designed specifically to meet the industry demand for trained leaders in all types of organizations. The program content provides training and education for individuals presently employed in leadership positions or those aspiring to move into a leadership position. Career/job titles for someone with leadership training include supervisor, manager, production manager, human resources manager. Students entering the Leadership Development program should: Enjoy coaching and working with people both individually and in teams, possess good communication skills, and enjoy solving problems.

Career Opportunities

- Supervisor
- Office Manager
- Manager
- Production Manager
- Human Resources Manager

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd., Fennimore, WI 53809

Curriculum & Costs

Semester 1: Spring (Tuition: \$1,960)		
10-102-105	Introduction to Business	3
10-196-208	Personal Leadership	3
10-196-209	Team Building and Problem Solving	3
10-809-172	Introduction to Diversity Studies	3
		<hr/> 12
Semester 2: Summer (Tuition: \$980)		
10-196-210	Legal Issues for Supervisors	3
10-809-195	Economics * OR *	
20-809-287	Principles of Macroeconomics	3
		<hr/> 6
Semester 3: Fall (Tuition: \$2,120)		
10-102-130	Management Principles	3
10-103-106	Beginning Microsoft Excel	1
10-196-119	Managerial Budgeting & Finance	3
10-196-211	Workplace Innovations	3
10-196-214	Leading Strategically	3
		<hr/> 13
Semester 4: Spring (Tuition: \$1,960)		
10-102-129	Human Resources Management	3
10-623-110	Lean Concepts	3
10-801-196	Oral/Interpersonal Communication	3
10-804-123	Math with Business Applications	3
		<hr/> 12
Semester 5: Summer (Tuition: \$980)		
10-196-213	Workplace Safety	3
10-801-136	English Composition 1	3
		<hr/> 6
Semester 6: Fall (Tuition: \$1,800)		
10-196-212	Training and Talent Development	3
10-196-215	Project Management Fundamentals	3
10-196-216	Leading Change	3
10-196-217	Leadership Development Career Experience	2
		<hr/> 11

Total Credits: 60

Estimated Total Tuition*: \$9,800

Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Logistics

Certificate (Online)

Logistics Pathway is designed to equip the student with the skills necessary to be successful in improving efficiency and profitability within the supply chain. Potential occupations include: Freight Broker, Logistics Coordinator, Load Planner, International Coordinator, Cargo Agent, Freight Forwarder, Receiving Manager, Traffic Manager, Shipping Coordinator, Transportation Supervisor, Warehouse Supervisor, Fleet Manager, Loader Operator, Shipping and Receiving Operator or Shipper, among others.

Career Opportunities

- Load Planner
- Logistics Coordinator
- Intermodal Dispatcher
- Shipping Clerk
- Supervisor
- International Coordinator
- Shipping and Receiving Operator

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809

Curriculum & Costs

Semester 01 (Tuition: \$820)

10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel	1
10-623-110	Lean Concepts	3
		<hr/> 5

Semester 02 (Tuition: \$1,470)

10-182-107	Logistics	3
10-182-108	Global Supply Chain Management	3
10-182-137	Technology in the Supply Chain	3
		<hr/> 9

Total Credits: 14

Estimated Total Tuition*: \$2,290

Mechatronics Technician Apprenticeship

Overview

A Mechatronics Technician is an electrical, mechanical, and electronics systems technician in industrial plants. The job includes work in automation and robotics in modern manufacturing processes. Work processes include installing, repairing, and maintaining equipment/devices. Workers typically troubleshoot, operate, and debug industrial computer and communication systems, including Programmable Logic Controls (PLC), and Human Machine Interface (HMI) technologies. They also machine metal and other materials, fabricate parts, and weld/join components.

The Mechatronics Technician Apprenticeship program is five years in length, with a minimum 10,000 hours. The apprentice attends 864 hours of paid, related instruction classes at Southwest Tech and will complete the Transition to Trainer course in the final year.

Career Opportunities

- Mechatronics Technician
- Robotics Technician
- Mechanical Engineering Technician
- Manufacturing Production Technician
- Electrical and Electronics Repairer
- Industrial Machinery Mechanics
- Automation Technician
- Control Panel Assembler
- Field Service Technician
- Maintenance Mechanic/Technician

Minimum Requirements

- Complete Apprentice Application
- Complete Employer Application
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Contact:

Jeff Kennedy, Apprenticeship Navigator
608.249.9001
jkennedy@wdbscw.org

Curriculum & Costs

Semester 01 (Tuition: \$660)		
50-620-701	Trade Math Review for Mechatronics Apprentices	1
50-620-702	Mechatronic Principles	2
50-620-703	DC Electricity for Mechatronics	1
		<hr/> 4
Semester 02 (Tuition: \$660)		
50-620-704	AC Electricity for Mechatronics	1
50-620-705	Motors & Motor Control for Mechatronics	2
50-620-706	Electrical Codes for Mechatronics	1
		<hr/> 4
Semester 03 (Tuition: \$660)		
50-620-708	Fluid Power Systems for Mechatronics Apprentices	2
50-620-709	Servos and Drives for Mechatronics	1
50-620-710	Power Transmission Systems for Mechatronics	1
		<hr/> 4
Semester 04 (Tuition: \$660)		
50-620-711	Machining Concepts for Mechatronics	2
50-620-712	Introduction to Programmable Logic Controllers	2
		<hr/> 4
Semester 05 (Tuition: \$660)		
50-620-714	HMI Technologies & PLC Applications for Mechatronics	2
50-620-715	Introduction to Robotic Systems for Mechatronics	2
		<hr/> 4
Semester 06 (Tuition: \$660)		
50-620-707	Welding Basics for Mechatronics	1
50-620-716	Introduction to Robotic Integration	3
		<hr/> 4
Total Credits: 24		
Estimated Total Tuition*: \$3,960		

Medical Assistant

Technical Diploma

Medical assistants serve an important role on the medical team by performing a wide variety of clinical and clerical duties. The Medical Assistant program is designed to orient students to the duties of a physician's office employee, from general office procedures to the technical phases of exam room assisting, and elementary medical laboratory techniques. Occupational experience is provided through placement in a local office/clinic during the last four weeks of the final semester, and graduates are eligible to sit for the national certification examination immediately after graduation.

Is Medical Assistant for you?

If you are interested in a health care career and think you would enjoy the variety of administrative, laboratory, and patient care areas of a physician's office or clinic, a Medical Assistant career will be an excellent choice for you.

Career Opportunities

- Medical Assistant
- Claims Analyst
- EKG Technician
- Laboratory Assistant
- Medical Records Clerk
- Medical Office Assistant
- Phlebotomist

Admission and Program Requirements

- Submit Application
- Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech (email admissions@swtc.edu, or mail to Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809)
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Program Requirements Prior to January 15 of your Spring semester each student will need to complete and submit the Health Requirements to be able to participate in their clinical externship experience: Physical form, background information disclosure, TB skin testing, and current BLS for healthcare providers CPR certification.

Curriculum & Costs

Semester 01 (Tuition: \$2,720)		
31-501-104	Contemporary Healthcare Practices	2
31-509-301	Medical Asst Admin Procedures	2
31-509-302	Human Body in Health & Disease	3
31-509-303	Medical Asst Lab Procedures 1	2
31-509-304	Medical Asst Clin Procedures 1	4
10-501-101	Medical Terminology * OR *	
31-501-101	Medical Terminology	2
		15
Semester 02 (Tuition: \$2,370)		
31-509-305	Medical Asst Lab Procedures 2	2
31-509-306	Medical Asst Clin Procedures 2	3
31-509-307	Med Office Insurance & Finance	2
31-509-308	Pharm for Allied Health	2
31-509-309	Medical Law, Ethics & Profession	2
31-509-310	Medical Assistant Practicum	3
		14

Total Credits: 29

Estimated Total Tuition*: \$5,090

Additional costs for physical, uniforms, and travel. For detailed costs, contact Health Programs Support.

Medical Coding Specialist

Technical Diploma (Online)

The Medical Coding Specialist program prepares students for employment as entry-level coding specialists in health care facilities such as hospitals, clinics, physician practice groups, surgery centers, long-term care facilities, and home health care agencies. This program teaches students to review medical documentation provided by physicians and other health care providers, and translate it into universally recognized numeric codes.

Is Medical Coding Specialist for you?

If you are analytical, detail-oriented, enjoy working with data, and have an interest in the health care field, a career as a Medical Coding Specialist could be an excellent choice.

Career Opportunities

- Outpatient Coder
- Inpatient Coder
- Medical Coding Specialist
- Coding Analyst
- Claims Analyst

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$1,150, Books: \$328.98 - \$588.45)

10-501-101	Medical Terminology	3
10-806-177	General Anatomy & Physiology * OR *	
20-806-207	Anatomy and Physiology I	4
		<hr/> 7

Semester 02 (Tuition: \$2,120, Books: \$659.85)

10-501-107	Digital Literacy for Healthcare	2
10-530-162	Foundations of HIM	3
10-530-182	Human Diseases for Hlth Profes	3
10-530-197	ICD Diagnosis Coding	3
10-530-199	ICD Procedure Coding	2
		<hr/> 13

Semester 03 (Tuition: \$2,290, Books: \$399.97)

10-530-159	Health Revenue Management	3
10-530-165	Intermediate Coding	3
10-530-178	Healthcare Law & Ethics	2
10-530-184	CPT Coding	3
10-801-196	Oral/Interpersonal Communication	3
		<hr/> 14

Total Credits: 34

Estimated Total Tuition*: \$5,560

Medical Laboratory Technician

Associate Degree

Students in the Medical Laboratory Technician program learn to perform routine clinical laboratory tests such as hematology, clinical chemistry, immunohematology, microbiology, serology/immunology, coagulation, molecular and other emerging diagnostics. They develop communication skills, as this career requires frequent interactions with members of the healthcare team, external relations, customer service, and patient education. A combination of fundamental laboratory techniques and clinical experience prepares graduates for work in laboratories serving the health care sector. Graduates are prepared to complete the ASCP Board of Certification to become certified Medical Laboratory Technicians.

Is Medical Laboratory Technician for you?

Are you analytical, accurate, and interested in science, technology, and health care? The Medical Lab Tech program may be a good fit for you.

Career Opportunities

- Medical Lab Technician
- Medical Lab Technologist
- Laboratory Processor
- Clinical Lab Assistant
- Phlebotomist

Admission and Program Requirements

- Submit Application
- Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech (email admissions@swtc.edu, or mail to Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809)
- Assessment or equivalent (only one is required). Students who do not meet one of these may be conditionally accepted to the program: HESI Exam: schedule and pay for HESI by calling 608.822.2313 or by going to www.swtc.edu/community/testing-center/hesi
 - Bachelor's Degree
 - High School GPA of 2.8+ and ACT composite of 20+ (within the last 4 years)
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$3,010)		
10-513-110	Basic Lab Skills	1
10-513-111	Phlebotomy	2
10-513-113	QA Lab Math	1
10-513-115	Basic Immunology Concepts	2
10-801-136	English Composition 1	3
10-806-177	General Anatomy & Physiology	4
10-806-186	Intro to Biochemistry	4
		<hr/> 17
Semester 02 (Tuition: \$3,210)		
10-513-109	Blood Bank	4
10-513-114	Urinalysis	2
10-513-120	Basic Hematology	3
10-513-121	Coagulation	1
10-801-196	Oral/Interpersonal Communication	3
10-806-197	Microbiology	4
		<hr/> 17
Semester 03 (Tuition: \$980)		
10-809-172	Introduction to Diversity Studies * OR *	
10-809-196	Introduction to Sociology	3
10-809-188	Developmental Psychology * OR *	
10-809-198	Introduction to Psychology	3
		<hr/> 6
Semester 04 (Tuition: \$2,270)		
10-513-116	Clinical Chemistry	4
10-513-130	Advanced Hematology	2
10-513-133	Clinical Microbiology	4
10-513-180	Body Fluids Analysis	1
		<hr/> 11
Semester 05 (Tuition: \$2,190)		
10-513-140	Advanced Microbiology	2
10-513-141	Pre-Clinical Experience	2
10-513-151	Clinical Experience 1	3
10-513-152	Clinical Experience 2	4
10-513-170	Introduction to Molecular Diagnostics	2
		<hr/> 13

Total Credits: 64

Estimated Total Tuition*: \$11,660

Additional costs for physical, uniforms, and travel. For detailed costs, contact Health Programs Support.

Midwife (Direct Entry)

Associate Degree

The SWTC Direct Entry Midwifery Program is a two-year associate degree program designed to equip aspiring midwives with the skills and knowledge necessary for certification and licensure in Wisconsin. This program focuses on providing comprehensive, hands-on holistic care throughout the childbearing years, with a particular emphasis on low-risk pregnancy assessment and appropriate referral practices. Throughout the program, students will develop essential competencies in various aspects of pregnancy assessment, including nutritional evaluation, overall health monitoring, risk assessment, fetal growth and development monitoring, lactation techniques, initial newborn care, and evaluating family support and child transition while identifying available community resources.

Is Direct Entry Midwife for you?

Do you have a committed interest in the Midwifery Model of Care? Are you tolerant of different lifestyles, values, beliefs, and cultures? Are you a self-confident, independent, and self-directed learner? You may find a career in Midwifery rewarding.

Career Opportunities

- Midwife

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech (email admissions@swtc.edu, or mail to Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809)
- Submit a Professional letter of recommendation to: Southwest Tech (email admissions@swtc.edu, or mail to Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809)
- Complete the Background Information Disclosure form on MySWTC.
- Submit a current CPR/BLS for the Healthcare Provider certificate (must include hands-on component).
- Submit a current Neonatal Resuscitation (AAP-approved; must include hands-on component).
- Submit evidence of a completed Doula Workshop Certificate.
- Attend a pre-admissions meeting with the Program Director
- After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services

Curriculum & Costs

1st Year Spring (Tuition: \$2,680) Lab Course Travel to Campus - \$250 to \$2000, based on home location

10-501-153	Body Structure and Function	3
10-510-155	Introduction to Midwifery Practice	2
10-510-156	Midwife Science Lab	1
10-510-157	Physical Exam for the Midwife	2
10-510-158	Introduction to Midwife Clinic	1
10-801-136	English Composition 1	3
10-809-198	Introduction to Psychology * OR *	
10-809-199	Psychology of Human Relations	3
		<hr/> 15

1st Year Summer (Tuition: \$1,150)

10-510-159	Midwife Clinic 1	1
10-801-196	Oral/Interpersonal Communication	3
10-809-172	Introduction to Diversity Studies	3
		<hr/> 7

1st Year Fall (Tuition: \$2,490) Lab Course Travel to Campus - \$250 to \$2000, based on home location

10-510-140	Nutrition	3
10-510-153	Applied Pharmacology	2
10-510-160	Antepartum Theory	4
10-510-161	Antepartum Lab	1
10-510-162	Midwife Clinic 2	2
10-809-128	Marriage & Family	3
		<hr/> 15

2nd Year Spring (Tuition: \$2,180) Lab Course Travel to Campus - \$250 to \$2000, based on home location

10-510-148	Midwife Clinic Lab I	1
10-510-150	OB/Medication Management	1
10-510-163	Midwife Clinic 3	1
10-510-164	Intrapartum	3
10-510-165	Postpartum	1
10-510-166	Neonate	1
10-510-167	Midwife Clinic 4	2
10-804-123	Math with Business Applications	3
		<hr/> 13

2nd Year Summer (Tuition: \$660)

10-510-168	Midwife Clinic 5	2
10-510-169	Midwife Clinic 6	2
		<hr/> 4

2nd Year Fall (Tuition: \$2,380) Lab Course Travel to Campus - \$250 to \$2000, based on home location

10-510-146	Well Woman Gynecology	3
10-510-149	Professional Issues in Midwifery	2
10-510-152	Midwife Clinic Lab II	2
10-510-154	Midwife Research	1
10-510-170	Midwife Clinic 7	3
10-809-166	Intro to Ethics: Theory & App	3
		<hr/> 14

Total Credits: 68

Estimated Total Tuition*: \$11,540

Additional costs for physical, uniforms, and travel. For detailed costs, contact Health Programs Support.

Nail Technician

Technical Diploma

Completing these courses prepares individuals to take the State of Wisconsin examination to become licensed manicurists. Nail Technician students will take a state licensing exam to become a Licensed Nail Technician, while state licensing exam for students enrolled in the Cosmetology Program will be certified in Cosmetology Services as well as Nail Technician.

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$870)	
31-502-302 Salon/Spa Science	2
31-502-305 Nail Technology	3
	<hr/> 5
Semester 02 (Tuition: \$860)	
31-502-307 Salon/Spa Management	2
31-502-322 Nail Services	3
	<hr/> 5
Total Credits: 10	
Estimated Total Tuition*: \$1,730	

Nonprofit Leadership

Associate Degree (Online)

In many communities, non-profit organizations exist to meet an unmet needs, delivering essential services to individuals, families and neighborhoods. These organizations and their staff play a critical role in building strong communities while also creating meaningful social change. SWTC's Non-Profit Leadership Program provides students with the skills and experiences to equip them for careers with social service organizations hospitals and clinics, foundations, government agencies—including emergency services, health and human services, and educational institutions—and other organizations providing direct services to residents and communities.

Students in the Non-Profit Leadership Program study non-profit strategic planning, management principles, board relations, non-profit branding and marketing, and fundraising. Courses in this program emphasize “learning by doing,” ensuring that students graduate with practical, marketable skills that can be applied in a variety of non-profit and government career fields.

Is Nonprofit Leadership for you?

If you are interested in community service, are a task-driven self-starter, enjoy teamwork, and are drawn to jobs and activities that allow you to give back to others while creating meaningful change, the Nonprofit Leadership Program may be a good fit for you.

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.
- Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech (email admissions@swtc.edu, or mail to Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809)

Curriculum & Costs

Semester 1 (spring or fall) (Tuition: \$1,960)		
10-196-300	Foundations and Non-profits	3
10-196-301	Current Trends in Non-profits	3
10-196-302	Non-profit Strategic Planning	3
10-801-196	Oral/Interpersonal Communication	3
		<hr/> 12
Semester 2 (summer) (Tuition: \$980)		
10-809-166	Intro to Ethics: Theory & App	3
10-809-195	Economics * OR *	
20-809-287	Principles of Macroeconomics	3
		<hr/> 6
Semester 3 (fall or spring) (Tuition: \$1,960)		
10-102-130	Management Principles	3
10-196-303	Non-profit Leadership	3
10-196-305	Meeting and Event Planning	3
10-196-311	Nonprofit Financial Tools for Decisions	3
		<hr/> 12
Semester 4 (spring or fall) (Tuition: \$1,960)		
10-102-129	Human Resources Management	3
10-196-304	Board Relations and Volunteer Management	3
10-196-306	Nonprofit Branding and Marketing	3
10-804-123	Math with Business Applications	3
		<hr/> 12
Semester 5 (summer) (Tuition: \$980)		
10-196-307	Nonprofit Revenue Generation 1	3
10-801-136	English Composition 1	3
		<hr/> 6
Semester 6 (fall or spring) (Tuition: \$1,960)		
10-196-216	Leading Change	3
10-196-308	Community & Social Service in Nonprofits	3
10-196-309	Nonprofit Revenue Generation 2	3
10-196-310	NonProfit Leadership Career Experience	3
		<hr/> 12
Total Credits: 60		
Estimated Total Tuition*: \$9,800		

Nursing

Associate Degree

The Associate Degree Nursing program prepares students with the knowledge and skills needed to work successfully as registered nurses (RN) and function with critical thinking, clinical judgment, and technical competence when providing care for patients. The program offers classroom discussion, independent learning projects, labs, and hands-on clinical experiences in area healthcare agencies. Our well-rounded curriculum features state-of-the-art technology, including adult, pediatric, and obstetric simulators. Students are eligible to take the licensing exam (NCLEX-RN) for Registered Nurses after completion of all 65 credits in the program.

Is Nursing - Associate Degree for you?

Nurses must work well under pressure, and they typically enjoy math, science, communications, and problem solving. If you are independent, compassionate, and are committed to helping people, you may find nursing to be very rewarding.

Career Opportunities

- Registered Nurse
- Staff Nurse
- Nurse Clinician
- Nurse Technician

Admission and Program Requirements

- Submit Application
- Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech (email admissions@swtc.edu, or mail to Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809)
- HESI Exam: schedule and pay for HESI by calling 608.822.2313 or by going to www.swtc.edu/community/testing-center/hesi
- Nursing Assistant: submit transcript showing successful completion of the Nursing Assistant course
- Chemistry Coursework: submit transcripts showing two semesters of High School Chemistry with a 'C' or higher * OR * one semester of College Chemistry with a 'C' or higher
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$3,160)HESI Resources - \$250 All Book and Material Costs are Approximate

10-543-101	Nursing Fundamentals	2
10-543-102	Nursing Skills	3
10-543-103	Nursing Pharmacology	2
10-543-104	Nursing Intro Clinical Practice	2
10-801-136	English Composition 1	3
10-809-188	Developmental Psychology	3
10-806-177	General Anatomy & Physiology * OR *	
20-806-207	Anatomy and Physiology I	4
		19

Semester 02 (Tuition: \$2,820)HESI Resources - \$250 All Book and Material Costs are Approximate

10-543-105	Nursing Health Alterations	3
10-543-106	Nursing Health Promotion	3
10-543-107	Nursing Clinical Care Across the Lifespan	2
10-543-108	Intro to Clinical Care Management	2
10-801-196	Oral/Interpersonal Communication	3
10-806-179	Adv Anatomy & Physiology * OR *	
20-806-208	Anatomy and Physiology II	4
		17

Semester 03 (Tuition: \$2,660)HESI Resources - \$250 All Book and Material Costs are Approximate

10-543-109	Nursing Complex Health Alterations I	3
10-543-110	Mental Health & Community Concepts	2
10-543-111	Nursing Intermediate Clinical Practice	3
10-543-112	Nursing Advanced Skills	1
10-806-197	Microbiology	4
10-809-198	Introduction to Psychology	3
		16

Semester 04 (Tuition: \$2,170)HESI Resources - \$250 All Book and Material Costs are ApproximateNCLEX licensure exam: approximately \$272.00

10-543-113	Nursing Complex Health Alterations II	3
10-543-114	Nursing Management & Professional Concepts	2
10-543-115	Nursing Advanced Clinical Practice	3
10-543-116	Nursing Clinical Transition	2
10-809-196	Introduction to Sociology * OR *	
10-809-197	Contemporary American Society	3
		13

Total Credits: 65

Estimated Total Tuition*: \$10,810

Additional costs for physical, uniforms, and travel. For detailed costs, contact Health Programs Support.

Nursing Assistant

Technical Diploma

Nursing Assistants play an important role in basic patient/resident care activities in hospitals, nursing homes, and other health care settings, including home health care. The Nursing Assistant course meets state and federal requirements for training and testing, and is open to individuals 16 years of age or older. The course also serves as one prerequisite for individuals applying for the Nursing – Associate Degree program.

The Southwest Tech Nursing Assistant Program is approved by the Wisconsin Department of Health and Family Services, preparing the student to be successful in meeting state and federally regulated competencies as a nursing assistant. The graduating student is eligible to take the National Nurse Aid Assessment Program Exam, which includes both a written and skills exam.

Is Nursing Assistant for you?

If you are a good communicator, compassionate, and interested in caring for people, becoming a nursing assistant may be a rewarding career choice for you.

Career Opportunities

- Certified Nursing Assistant
- Nursing Assistant
- Patient Care Coordinator
- Resident Assistant
- Home Health Aide

Admission and Program Requirements

- Apply online
- Activate your MySWTC account
- Log in to your MySWTC and complete requirements listed in "My Documents"
- Register for the class you want
- Materials needed before first day of class

Curriculum & Costs

Semester 01 (Tuition: \$350)
30-543-300 Nursing Assistant

2
2

Total Credits: 2

Estimated Total Tuition*: \$350

Additional costs for physical, uniforms, and travel. For detailed costs, contact Health Programs Support.

Payroll Assistant

Certificate

Learn the basics of managing payroll. As a student in the Payroll Assistant Certificate, you will learn to review time sheets, work charts, and calculate wages, exemptions, transfers, and deductions.

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809

Curriculum & Costs

Semester 01 (Tuition: \$1,470)	
10-101-111 Accounting 1	4
10-103-105 Beginning Microsoft Word	1
10-103-106 Beginning Microsoft Excel	1
10-801-196 Oral/Interpersonal Communication	3
	<hr/>
	9
Semester 02 (Tuition: \$490)	
10-101-123 Payroll Applications	2
10-101-127 QuickBooks	1
	<hr/>
	3
Total Credits: 12	
Estimated Total Tuition*: \$1,960	

Physical Therapist Assistant

Associate Degree

Physical therapist assistants work under the supervision of a physical therapist. Their duties include: assisting the physical therapist with treatment programs according to the plan of care; training patients in exercises and activities of daily living; conducting treatments; using special equipment; administering modalities and other treatment procedures; and reporting to the physical therapist about the patient's responses.

Is Physical Therapist Assistant for you?

Do you have an interest in helping others and enjoy working with people from a variety of backgrounds and abilities? Do you enjoy working independently, and are you in good physical and emotional health? If so, the Physical Therapist Assistant program may provide the opportunity you need to launch a great career.

Career Opportunities

- Physical Therapist Assistant
- Certified Athletic Trainer
- Rehab Tech

Admission and Program Requirements

- Submit Application
- Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech (email admissions@swtc.edu, or mail to Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809)
- Successful completion of Chemistry Coursework: Two semesters of High School Chemistry with a 'C' or higher OR One semester of College Chemistry with a 'C' or higher
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Petition Requirements Preferential Deadline: June 1.
Complete General Anatomy Physiology course, 32 hours of observation of physical therapy, ACT composite score of 18 or HESI placement assessment, technical functions form, and the petition request form.

Curriculum & Costs

Prerequisites to Program Core Courses (Tuition: \$660)

10-806-177 General Anatomy & Physiology	4
	<hr/> 4

Semester 1 (Tuition: \$2,630)

10-524-139 PTA Patient Interventions	4
10-524-140 PTA Professional Issues 1	2
10-524-156 PTA Applied Kinesiology 1	4
10-801-136 English Composition 1	3
10-801-196 Oral/Interpersonal Communication	3
	<hr/> 16

Semester 2 (Tuition: \$2,140)

10-524-142 PTA Therapeutic Exercise	3
10-524-143 PTA Biophysical Agents	4
10-524-157 PTA Applied Kinesiology 2	3
10-809-188 Developmental Psychology	3
	<hr/> 13

Semester 3 (Tuition: \$2,630)

10-524-144 PTA Princ of Neuro Rehab	4
10-524-145 PTA Princ of Musculo Rehab	4
10-524-146 PTA Cardio & Integ Mgmt	3
10-524-147 PTA Clinical Practice 1	2
10-809-199 Psychology of Human Relations * OR *	
10-809-198 Introduction to Psychology	3
	<hr/> 16

Semester 4 (Tuition: \$3,100)

10-524-148 PTA Clinical Practice 2	3
10-524-149 PTA Rehab Across the Lifespan	2
10-524-150 PTA Professional Issues 2	2
10-524-151 PTA Clinical Practice 3	5
10-809-172 Introduction to Diversity Studies	3
	<hr/> 15

Total Credits: 64

Estimated Total Tuition*: \$11,160

Additional costs for physical, uniforms, travel, and testing & licensure. For detailed costs, contact Health Programs Support.

Plumbing Apprenticeship

Overview

Plumbers install, repair and maintain the water supply, waste water treatment, drainage and gas systems in homes, commercial and industrial buildings. The work includes plumbing tasks to assemble, install and repair pipes, fittings, and fixtures of heating, water and drainage systems according to specifications and plumbing codes.

The Technical Plumbing Apprenticeship program is five years in length, with a minimum of 8,000 hours. This includes 572 hours of paid related instruction and 260 hours of unpaid instruction, plus an 8 hour Plumbing Prep Test-Out Exam or a 54 hour Plumbing Code Review Course.

Career Opportunities

- Pipelayer
- Pipe Fitter and Steamfitter
- Plumber
- Helper--Pipelayer, Plumber, Pipefitter, and Steamfitter
- Septic Tank Servicer and Sewer Pipe Cleaner

Minimum Requirements

- Complete Apprentice Application
- Provide a copy of your High School transcripts or GED. (High school seniors in their last semester may apply if they meet all other qualifications and submit a letter from their high school counselor stating they will graduate at the end of the academic year.)
- Prove you have a valid driver's license
- Take the TABE Survey entrance assessment test which will consist of the following sections: Math, Math Computation, and Reading. ACT scores within the past five years of the test date can be used in lieu of the TABE Survey (minimum ACT standards of 15 in Math and 16 in Reading required).
- Complete Employer Application

For more information about Southwest Tech's Apprenticeship opportunities, please contact:

Nicole Nelson
Southwest Tech
1800 Bronson Blvd.
Fennimore, WI 53809
608.822.2400
nnelson@swtc.edu

Curriculum & Costs

Semester 0 (Tuition: \$1,490)		
10-620-131	Electrical Wiring - Basic	1
31-442-335	Welding for Plumbers	1
50-427-512	Level & Transit Plumbers	0.75
50-427-558	Isometric Interpretation & Drawing	0.5
50-427-760	Plumbing Applications	1
50-427-761	Plumbing Service and Repair	1.25
50-427-762	Plumbing Blueprint Reading	1.25
50-427-763	Plumbing PRI Independent Study	1
50-427-770	Plumbing PRI Independent Study - Makeup Hours	0.5
		<hr/>
		8
Semester 01 (Tuition: \$330)		
50-427-751	Sanitary Drains 1	2
		<hr/>
		2
Semester 02 (Tuition: \$330)		
50-427-752	Vents and Venting Systems	2
		<hr/>
		2
Semester 03 (Tuition: \$330)		
50-427-753	Water Distribution 1	2
		<hr/>
		2
Semester 04 (Tuition: \$330)		
50-427-754	Water Distribution 2	2
		<hr/>
		2
Semester 05 (Tuition: \$330)		
50-427-757	Green Plumbing Applications	2
		<hr/>
		2
Semester 06 (Tuition: \$330)		
50-427-755	Sanitary Drains 2	2
		<hr/>
		2
Semester 07 (Tuition: \$330)		
50-427-756	Private On-site Wastewater Treatment Systems (POWTS)	2
		<hr/>
		2
Semester 08 (Tuition: \$330)		
50-427-758	Plumbing Advanced Topics/TSA	2
		<hr/>
		2
Total Credits: 24		
Estimated Total Tuition*: \$4,130		

Production Planner

Certificate (Online)

Production Planners are involved with the planning and controlling of the flow of materials and information to effectively manage an organization's resources, minimize costs, and provide high levels of customer service. Completion of the Production Planner Pathway Certificate will prepare you for an introductory position within supply chain management, help you cross train in a new area, or expand your skills within a short time period.

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809

Curriculum & Costs

Semester 01 (Tuition: \$1,310)	
10-103-106	Beginning Microsoft Excel1
10-103-118	Intermediate Microsoft Excel1
10-182-104	Inventory Management3
10-623-110	Lean Concepts3
	8
Semester 02 (Tuition: \$490)	
10-182-137	Technology in the Supply Chain3
	3
Total Credits: 11	
Estimated Total Tuition*: \$1,800	

Purchasing Agent/Buyer

Certificate (Online)

Purchasing Agents/Buyers are involved with selecting and evaluating suppliers, creating and maintaining supplier relationships, and negotiating prices to minimize costs, and improve on time delivery. Completion of the Purchasing Agent/Buyer Pathway Certificate will prepare you for an introductory position within supply chain management, help you cross train in a new area, or expand your skills within a short time period.

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809

Curriculum & Costs

Semester 01 (Tuition: \$1,310)	
10-103-106 Beginning Microsoft Excel	1
10-103-118 Intermediate Microsoft Excel	1
10-182-103 Purchasing	3
10-623-110 Lean Concepts	3
	<hr/>
	8
Semester 02 (Tuition: \$980)	
10-182-108 Global Supply Chain Management	3
10-182-137 Technology in the Supply Chain	3
	<hr/>
	6
Total Credits: 14	
Estimated Total Tuition*: \$2,290	

Radiography

Associate Degree

Help doctors and patients find the answers they need. Radiographers provide an inside look. The Radiography associate degree program at Southwest Wisconsin Technical College will prepare you for a career as a radiographer. Radiographers, also known as radiologic technologists, play a key role in many health care settings, producing medical images used in the diagnosis and treatment of disease.

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809

Curriculum & Costs

Semester 01 (Tuition: \$2,830)		
10-526-149	Radiographic Procedures 1	5
10-526-158	Introduction to Radiography	3
10-526-159	Radiographic Imaging	3
10-526-168	Radiography Clinical 1	2
10-806-177	General Anatomy & Physiology	4
		<hr/> 17
Semester 02 (Tuition: \$2,160)		
10-526-191	Radiographic Procedures 2	5
10-526-192	Radiography Clinical 2	3
10-526-230	Advanced Radiographic Imaging	2
10-801-136	English Composition 1	3
		<hr/> 13
Semester 03 (Tuition: \$990)		
10-526-193	Radiography Clinical 3	4
10-526-231	Imaging Modalities	2
		<hr/> 6
Semester 04 (Tuition: \$2,310)		
10-526-194	Imaging Equipment Operation	3
10-526-195	Radiographic Image Analysis	2
10-526-199	Radiography Clinical 4	3
10-801-196	Oral/Interpersonal Communication	3
10-809-198	Introduction to Psychology	3
		<hr/> 14
Semester 05 (Tuition: \$2,130)		
10-526-174	ARRT Certification Seminar	2
10-526-189	Radiographic Pathology	1
10-526-190	Radiography Clinical 5	2
10-526-197	Radiation Protection and Biology	3
10-526-198	Radiography Clinical 6	2
10-809-172	Introduction to Diversity Studies	3
		<hr/> 13
Total Credits: 63		
Estimated Total Tuition*: \$10,420		

Solar Installation Technician

Certificate

The Solar Installation Technician certificate is designed to address the needs of regional utility power supplies that offer renewable energy options, as well as private companies that provide solar solutions for residential, commercial, non-profit, and government sectors.

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$2,620)		
10-196-215	Project Management Fundamentals	3
10-410-101	Construction Fundamentals	3
10-481-101	Solar Photovoltaic Technology	3
10-481-102	Introduction to Renewable Energy	3
10-660-101	Introduction to DC/AC	3
		<hr/> 15
Total Credits: 15		
Estimated Total Tuition*: \$2,620		

Supply Chain Assistant

Technical Diploma (Online)

Students can take as little as one year to complete this online Supply Chain Assistant Technical Diploma, which provides concentrated learning by focusing on occupational areas. Students learn about supply chain management and how it relates to purchasing, inventory management, logistics, negotiations, global supply chain management, enterprise resource planning, lean, and service operations.

Graduates in this fast-paced, growing field can make a positive impact on an organization by increasing profitability and efficiency through skills developed in this program. Many careers and job titles exist in supply chain management such as purchasing associate, material coordinator, production assistant, receiving lead, recycling specialist, cargo agent, and freight broker, among others.

Is Supply Chain Assistant for you?

Are you interested in business and how different areas work together to provide a great product or service for their customer? Are you good at coming up with new ideas or better ways of doing things? Do you like to solve problems and make decisions? Do you get bored easily and like variety? A career in supply chain management may be a good choice for you.

Career Opportunities

- Shipping Supervisor
- Buyer
- Materials Planner
- Production Scheduler
- Manufacturing Supervisor
- Team Leader
- Transportation Dispatcher

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$2,290)		
10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel	1
10-182-103	Purchasing	3
10-182-104	Inventory Management	3
10-623-110	Lean Concepts	3
10-804-123	Math with Business Applications	3
		<hr/> 14
Semester 02 (Tuition: \$1,960)		
10-182-107	Logistics	3
10-182-108	Global Supply Chain Management	3
10-182-109	Service Operations Management	3
10-182-137	Technology in the Supply Chain	3
		<hr/> 12
Semester 03 (Tuition: \$980)		
10-801-136	English Composition 1	3
10-804-189	Introductory Statistics	3
		<hr/> 6
Total Credits: 32		
Estimated Total Tuition*: \$5,230		

Supply Chain Management

Associate Degree (Online)

The Supply Chain Management degree program can be completed entirely online which allows working adults the flexibility to study anytime and anyplace. The courses are taught by experienced professionals who focus on application and share personal experiences to illustrate concepts. The program is designed for students seeking to expand current supply chain management skills as well as those just starting out. Credit for Prior learning is a great option to turn past experiences into college credit, and Southwest Tech hopes working adults take advantage of the opportunity to transfer current knowledge into college credit.

Is Supply Chain Management for you?

Are you good at coming up with new ideas or better ways of doing things? Are you a good negotiator? Do you like to solve problems and make decisions? Do you get bored easily and like variety? If you answered YES to these questions, Supply Chain Management may be an excellent choice!

Career Opportunities

- Shipping Supervisor
- Buyer
- Materials Planner
- Production Scheduler
- Manufacturing Supervisor
- Team Leader
- Transportation Dispatcher

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$2,290)		
10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel	1
10-182-103	Purchasing	3
10-182-104	Inventory Management	3
10-623-110	Lean Concepts	3
10-804-123	Math with Business Applications	3
		<hr/> 14
Semester 02 (Tuition: \$1,960)		
10-182-107	Logistics	3
10-182-108	Global Supply Chain Management	3
10-182-109	Service Operations Management	3
10-182-137	Technology in the Supply Chain	3
		<hr/> 12
Semester 03 (Tuition: \$980)		
10-801-136	English Composition 1	3
10-804-189	Introductory Statistics	3
		<hr/> 6
Semester 04 (Tuition: \$2,120)		
10-101-111	Accounting 1	4
10-102-130	Management Principles	3
10-196-215	Project Management Fundamentals	3
10-809-199	Psychology of Human Relations	3
		<hr/> 13
Semester 05 (Tuition: \$1,800)		
10-102-108	Risk Management	3
10-182-138	Supply Chain Capstone	2
10-801-196	Oral/Interpersonal Communication	3
10-809-143	Microeconomics	3
		<hr/> 11
Semester 06 (Tuition: \$980)		
10-809-172	Introduction to Diversity Studies	3
10-809-195	Economics * OR *	
20-809-287	Principles of Macroeconomics	3
		<hr/> 6

Total Credits: 62

Estimated Total Tuition*: \$10,130

Surgical Technology

Associate Degree

Surgical technologists are allied health professionals who are an integral part of the team of medical practitioners providing surgical care to patients in a variety of settings.

The surgical technologist works under medical supervision to facilitate the safe and effective conduct of invasive surgical procedures. This individual works under the supervision of a surgeon to ensure that the operating room or environment is safe, that equipment functions properly, and that the operative procedure is conducted under conditions that maximize patient safety.

A surgical technologist possesses expertise in the theory and application of sterile and aseptic technique and combines the knowledge of human anatomy, surgical procedures, and implementation tools and technologies to facilitate a physician's performance of invasive therapeutic and diagnostic procedures.

Admission and Program Requirements

- Submit Application
- HESI Exam: schedule and pay for HESI by calling 608.822.2313 or by going to www.swtc.edu/community/testing-center/hesi.
Passing grade for Grammar, Vocabulary, and Reading is 65%.
- HS Diploma or equivalent
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Progression Requirement: Students must achieve a grade of C or better in each course of the program curriculum to be eligible to progress.

Program Requirements: Prior to July 1st of your Fall semester each student will need to complete and submit the Health Requirements I to be able to participate in their clinical rotation experience: Physical Form, background information disclosure, TB skin testing, fact sheet, and current BLS for healthcare providers CPR.

Curriculum & Costs

Semester 1: Summer (Tuition: \$1,150)		
10-501-101	Medical Terminology	3
10-806-177	General Anatomy & Physiology	4
		<u>7</u>
Semester 2: Fall (Tuition: \$2,230, Books: \$400-\$500)		
10-512-125	Intro to Surgical Technology	4
10-512-126	Surgical Tech Fundamentals 1	4
10-512-127	Exploring Surgical Issues	2
10-801-196	Oral/Interpersonal Communication * OR	
	*	
10-801-198	Speech	3
		<u>13</u>
Semester 3: Spring (Tuition: \$2,510)		
10-512-128	Surgical Tech Fundamentals 2	4
10-512-129	Surgical Pharmacology	2
10-512-130	Surgical Skills Application	2
10-801-136	English Composition 1	3
10-806-197	Microbiology	4
		<u>15</u>
Semester 4: Fall (Tuition: \$2,120)		
10-512-131	Surgical Interventions 1	4
10-512-132	Surgical Technology Clinical 1	3
10-512-133	Surgical Technology Clinical 2	3
10-809-198	Introduction to Psychology	3
		<u>13</u>
Semester 5: Spring (Tuition: \$2,120)		
10-512-135	Surgical Technology Clinical 3	3
10-512-136	Surgical Technology Clinical 4	3
10-512-142	Surgical Interventions II	4
10-809-172	Introduction to Diversity Studies	3
		<u>13</u>
Total Credits: 61		
Estimated Total Tuition*: \$10,130		

Sustainable Energy Management

Associate Degree

In the United States, buildings represent one of our biggest energy consumers and make up a part of every business's bottom line. As a result, employers are seeking those who are skilled in monitoring energy consumption and recommend energy reduction strategies to reduce costs and dependence on carbon-based fuels. Energy Managers will examine the built environment and how it relates to energy using the latest research, tools, and technology available. You will gain hands-on experience working with community projects and living laboratories in Southwest Tech's state-of-the-art facilities. Graduates will work within a variety of business sectors: utility companies; energy equipment companies, government agencies; and heating, ventilating, air conditioning, and refrigeration contractors. The focus of the program is to prepare you for entry-level work in the growing renewable energy, energy efficiency, and building systems industry. Having these unique skills will give you a competitive advantage in the job market.

Is Sustainable Energy Management Technology for you?

Do you love problem-solving and diverse work? Do you find exploring enjoyable while seeking reliable information? Do you enjoy finding solutions through effectiveness, accuracy, and authenticity? Are you detail-oriented and ambitious? If you possess these attributes and you love innovation, you have may have what it takes to pursue a career in energy management.

Career Opportunities

- Construction and Building Inspectors
- Energy program coordinator
- Energy Auditors
- Control System Specialist
- Energy Conservation Representative
- Environmental Field Technician
- Weatherization Inspectors

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$2,620)		
10-196-215	Project Management Fundamentals	3
10-410-101	Construction Fundamentals	3
10-481-101	Solar Photovoltaic Technology	3
10-481-102	Introduction to Renewable Energy	3
10-660-101	Introduction to DC/AC	3
		15
Semester 02 (Tuition: \$2,850)		
10-102-152	Data Analytics 1	3
10-103-106	Beginning Microsoft Excel	1
10-103-118	Intermediate Microsoft Excel	1
10-481-103	Intro to Energy Management	3
10-481-105	Energy Control Strategies	3
10-801-196	Oral/Interpersonal Communication	3
10-804-189	Introductory Statistics	3
		17
Semester 03 (Tuition: \$2,520)		
10-102-130	Management Principles	3
10-104-105	Selling Principles	3
10-481-104	Lighting Fundamentals	3
10-481-107	Energy Accounting	3
10-801-197	Technical Reporting	3
		15
Semester 04 (Tuition: \$2,430)		
10-481-106	Commercial HVACR Analysis	3
10-481-108	Energy Modeling	3
10-481-109	Sustainable Energy Mngt Career Experience	2
10-809-172	Introduction to Diversity Studies	3
10-809-198	Introduction to Psychology	3
		14

Total Credits: 61

Estimated Total Tuition*: \$10,420

Tax Preparer Assistant

Certificate (Online)

Prepare tax returns for individuals or small businesses. As a student in the Tax Preparer Assistant Certificate, you will learn to conduct tax interviews, use appropriate tax adjustments, and prepare simple or complex tax returns.

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809

Curriculum & Costs

Semester 01 (Tuition: \$1,960)	
10-101-111 Accounting 1	4
10-101-117 Taxes 1	3
10-103-105 Beginning Microsoft Word	1
10-103-106 Beginning Microsoft Excel	1
10-801-196 Oral/Interpersonal Communication	3
	<hr/> 12
Total Credits: 12	
Estimated Total Tuition*: \$1,960	

Technical Studies-Journeyworker

Overview

The Technical Studies-Journeyworker program provides students who have completed a registered apprenticeship program an option to receive an associate degree designed around individual needs. The Journeyworker Associate of Applied Science (AAS) degree is a 60 credit degree designed for individuals seeking academic recognition for the completion of a registered apprenticeship. It is intended to support lifelong learning and accelerate the achievement of individual career goals.

Possible Careers:

This program will be designed for each individual student. Career opportunities will depend on the courses that are selected to meet the student's career goals. It is anticipated that a student will design a program plan that will meet the requirements of a particular career area.

Program Outcomes:

This program provides students who have completed a registered apprenticeship program an option to receive an associate degree designed around individual needs.

Degree Completion Requirements:

- Possess a Wisconsin Apprenticeship Completion Certificate issued by the Department of Workforce Development-Bureau of Apprenticeship Standards registered program which includes a minimum of 400 hours of prescribed apprentice related technical instruction in the Wisconsin Technical College System.
- Complete all prescribed WTCS apprentice related technical instruction. Possession of the DWD-BAS Wisconsin Apprenticeship Completion Certificate AND successful completion of all prescribed coursework fulfills the 39 credit minimum technical studies requirement of the Technical Studies – Journeyworker Associate of Applied Science degree.
- Meet the WTCS Associate of Applied Science Degree requirement for a minimum of 21 credits. This consists of 15 credits of general education distributed across Communications, Social Science, Behavioral Science, Math and/or Science categories as well as 6 elective Associate Degree Level Technical Studies or additional general education credits.
- Complete at least 25% of the total program credits through coursework undertaken at the technical college granting the AAS degree and meet any institutional graduation requirements. A WTCS apprenticeship program with at least 400 hours of paid related instruction (PRI) meets this threshold.
- Program Basics:
- Associate degree
- Day, evening, or online classes available
- Financial aid available
- Classes start in June, August, or January

Curriculum

Communications

10-801-136
10-801-195
10-801-196
10-801-197
10-801-198

6 Credits

English Composition 1
Written Communication
Oral/Interpersonal Communication
Technical Reporting
Speech

Social Science

10-809-122
10-809-128
10-809-143
10-809-166
10-809-172
10-809-195
10-809-196

3 Credits

Intro to American Government
Marriage & Family
Microeconomics
Intro to Ethics: Theory & App
Introduction to Diversity Studies
Economics
Intro to Sociology

Behavioral Science 3 Credits

10-809-159
10-809-188
10-809-198
10-809-199

Abnormal Psychology
Development Psychology
Intro to Psychology
Psychology of Human Relations

Math and/or Science 3 Credits

10-804-107
10-804-113
10-804-114
10-804-118
10-804-123
10-804-133
10-806-143
10-804-189
10-804-195
10-804-196
10-806-154
10-806-177
10-806-179
10-806-186
10-806-189
10-806-197

College Mathematics
Technical Math 1A
Technical Math 1B
Interm Algebra w Apps
Math w Business Apps
Math & Logic
College Physics
Introductory Statistics
College Algebra w Apps
Trigonometry with Apps
General Physics 1
Gen Anatomy & Physiology
Adv Anatomy & Physiology
Intro to Biochemistry
Basic Anatomy
Microbiology

Associate Degree Level Technical Studies or Additional General Education: 6 Credits

Students in this program are required to take 6 credits of Associate Degree Level Technical Studies (10-xxx-xxx) or an additional 6 General Education credits. The additional General Education credits may come from the list above. Contact the program Advisor to discuss options or credits for consideration.

Occupational Specific Courses: 39 Credits

Occupational Specific Courses are met by a Wisconsin Apprenticeship Completion Certificate, issued by the Department of Workforce Development-Bureau of Apprenticeship Standards (DWD-BAS) registered program. The program must include a minimum of 400 hours of prescribed apprentice-related instruction in the Wisconsin Technical College System.

University Transfer - Associate of Arts

Overview

The University Transfer - Associate of Arts degree provides a concentration on social sciences and humanities. It also provides a foundation if you intend to continue your education at a baccalaureate degree granting college or university. It does this by offering Liberal Arts courses equal to those found in the first two years of a four-year degree.

By completing this degree, you have the benefit of a degree-to-degree transfer, where universities grant junior status and waive specific lower division requirements. These may include general degree requirements and individual courses taken at Southwest Tech.

Diverse Educational Paths

Associate of Arts graduates go on to earn bachelors, masters, and doctoral degrees in a wide variety of disciplines:

- Business (management, marketing, human resources, accounting, finance, economics)
- Communication (English, journalism, mass media)
- Education (early childhood, elementary, secondary, physical)
- Fine Arts (art, music, theatre)
- History
- International Studies
- Literature
- Public Relations
- Social Sciences (psychology, sociology, social work, geography, geology, political science)

Is This Program for You?

If you are interested in earning a bachelor's degree and want the convenience of Southwest Tech's small class sizes, one-on-one attention, and want to save thousands of dollars by taking classes close to home, University Transfer may be a great fit for you.

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809

Curriculum

English-6 Credits

10-801-136	English Composition I	3
20-801-223	English Composition II	3

Speech-3 Credits

10-801-198	Speech	3
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Humanities-6 Credits

10-809-166	Intro to Ethics	3
10-809-122	Intro to American Government	3
20-801-204	Introduction to Literature	3
20-801-217	American Literature: Beg-1865	3
20-801-218	American Literature: 1865-Present	3
20-803-211	US History to 1877	3
20-803-212	US History 1877 to Present	3
20-815-210	Art History: Renaissance to Modern	3

Social Sciences-12 Credits

10-809-196	Introduction to Sociology	3
10-809-198	Introduction to Psychology	3
10-809-128	Marriage and Family	3
20-809-287	Principles of Macroeconomics	3
10-809-143	Microeconomics	3
10-809-159	Abnormal Psychology	3
10-809-188	Developmental Psychology	3
10-809-216	Introduction to Education	3

Mathematics & Natural Science-10 Credits

10-804-189	Introductory Statistics	3
20-804-211	Quantitative Reasoning	4
20-804-212	College Algebra	4
20-804-229	Math Analysis	5
20-806-234	General Biology	4
20-806-209	College Chemistry 1	5
20-806-212	College Chemistry 2	5
20-806-207	Anatomy & Physiology I	4
20-806-208	Anatomy & Physiology II	4
20-806-215	Environmental Science	3
20-806-230	Weather Fundamentals	4
20-804-231	Calculus Analytic Geometry I	5
20-804-232	Calculus Analytic Geometry 2	5
20-804-223	University Physics 1-Calculus Based	5

Health/Wellness/Physical Education-1 Credit

20-807-204	Physical Fitness for Life	1
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Diversity/Ethnic Studies

10-809-172	Introduction to Diversity Studies	3
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World Language

20-802-211	Spanish I	4
20-890-201	Foundations of University Transfer and Learning	1

University Transfer - Associate of Science

Overview

The Associate of Science degree places greater emphasis on science and mathematics. It also provides a foundation if you intend to continue your education at a baccalaureate degree granting college or university by offering Liberal Arts courses equal to those found in the first two years of a four-year degree.

By completing this degree, you have the benefit of a degree-to-degree transfer, where universities grant junior status and automatically waive specific lower division requirements, such as general degree requirements, regardless of individual courses taken at Southwest Tech.

Diverse Educational Paths

Associate of Science graduates go on to earn bachelors, masters, and doctoral degrees in a wide variety of disciplines:

- Architecture
- Business (management, marketing, human resources, accounting, finance, economics)
- Engineering
- Health (dentistry, medicine, nursing, optometry, chiropractic, physical therapy, veterinary, pharmacy)
- Information Technologies
- Mathematics
- Sciences (biology, biochemistry, chemistry, physics, sport/exercise science)

Is This Program for You?

If you are interested in earning a bachelor's degree and want the convenience of Southwest Tech's small class sizes, one-on-one attention, and save thousands of dollars by taking classes close to home, the Associate of Science degree may be a great fit for you.

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809

Curriculum

English-6 Credits

10-801-136	English Composition I	3
20-801-223	English Composition II	3

Speech-3 Credits

10-801-198	Speech	3
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Humanities-6 Credits

10-809-166	Intro to Ethics	3
10-809-122	Intro to American Government	3
20-801-204	Introduction to Literature	3
20-801-217	American Literature: Beg-1865	3
20-801-218	American Literature: 1865-Present	3
20-803-211	US History to 1877	3
20-803-212	US History 1877 to Present	3
20-815-210	Art History: Renaissance to Modern	3

Social Sciences-6 Credits

10-809-196	Introduction to Sociology	3
10-809-198	Introduction to Psychology	3
10-809-128	Marriage and Family	3
20-809-287	Principles of Macroeconomics	3
10-809-143	Microeconomics	3
10-809-159	Abnormal Psychology	3
10-809-188	Developmental Psychology	3
10-809-216	Introduction to Education	3

Mathematics & Natural Science-20 Credits

10-804-189	Introductory Statistics	3
20-804-211	Quantitative Reasoning	4
20-804-212	College Algebra	4
20-804-229	Math Analysis	5
20-806-234	General Biology	4
20-806-209	College Chemistry 1	5
20-806-212	College Chemistry 2	5
20-806-207	Anatomy & Physiology I	4
20-806-208	Anatomy & Physiology II	4
20-806-215	Environmental Science	3
20-806-230	Weather Fundamentals	4
20-804-231	Calculus Analytic Geometry I	5
20-804-232	Calculus Analytic Geometry 2	5
20-804-223	University Physics 1-Calculus Based	5

Health/Wellness/Physical Education-1 Credit

20-807-204	Physical Fitness for Life	1
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Diversity/Ethnic Studies

10-809-172	Introduction to Diversity Studies	3
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World Language

20-802-211	Spanish I	4
20-890-201	Foundations of University Transfer and Learning	1

Welding

Technical Diploma

The welding program trains students in manual, and semiautomatic welding processes used in a variety of fabrication and construction industries. Students develop skill proficiency through practice in over 19 welding processes, in all positions, and with a variety of metals. In addition, welding students learn to identify base and filler materials and their properties, operate equipment properly, practice correct procedures, test for strength and appearance, work safely and productively, be responsible for quality control, read blueprints for necessary information, measure and use math, and practice good interpersonal relations.

Is Welding for you?

Do you enjoy building things? Are you mechanically inclined, with strong math skills? Does a job working independently appeal to you? Welding may be a great career choice.

Career Opportunities

- Welder/Fitter
- Welder/Fabricator
- Iron Worker
- Pipe Trades Worker
- Shop Manager

Admission and Program Requirements

- Submit Application
- To make sure your classes are the right fit, we consider any previous college credit you've earned, Accuplacer or ACT scores, high school GPA, or an assessment at your registration session. Submit High School Transcripts, College Transcripts, and Test Scores to: Southwest Tech, Attn: Admissions, 1800 Bronson Blvd, Fennimore, WI 53809
- Admissions Meeting: After applying and submitting transcripts, work with your advisor to begin or continue your student success plan to talk about your career interests and goals, develop a plan for paying for college, learn about various funding options, create an academic map, and discuss supports and services.

Curriculum & Costs

Semester 01 (Tuition: \$3,530)		
31-442-310	Equipment Safety	1
31-442-311	Oxyfuel Gas Cutting & Gouging	1
31-442-312	Arc Cutting & Gouging	1
31-442-313	Plasma Cutting & Gouging	1
31-442-314	Oxyfuel Equipment	1
31-442-315	Oxyfuel Brazing & Welding-Carbon Steel	1
31-442-316	Oxyfuel Brazing & Welding-Stainless Steel	1
31-442-320	SMAW - Equipment	1
31-442-336	SMAW	2
31-457-317	Forming & Folding Metal	1
31-457-318	Fabricating	1
31-457-334	Fabrication Planning & Drawing	1
31-804-305	Applied Mathematics	2
32-442-308	Blueprint Reading-Welding 1	1
		<hr/> 16
Semester 02 (Tuition: \$3,050)		
31-442-323	GTAW - Equipment	1
31-442-324	GTAW - Carbon Steel	1
31-442-325	GTAW - Aluminum	1
31-442-326	GTAW - Stainless Steel	1
31-442-327	GMAW - Equipment	1
31-442-328	GMAW - Carbon Steel (S Process)	1
31-442-329	GMAW - Aluminum	1
31-442-330	GMAW - Stainless Steel	1
31-442-331	GMAW - Carbon Steel (Spray Transfer)	1
31-442-332	FCAW - Equipment	1
31-442-333	FCAW - Carbon Steel (Gas Shielded)	1
31-801-310	Workplace Communication	2
32-442-309	Blueprint Reading-Welding 2	1
		<hr/> 14

Total Credits: 30

Estimated Total Tuition*: \$6,580

Tools/Equipment: \$300

Continuing Education

Agriculture Training

The following optional stand-alone courses are open to anyone. For course descriptions and availability, visit www.swtc.edu/ag.

- CDL Training
- Tractor Driving Safety Training
- Skidloader Safety Training
- Diverse Cultures in Agriculture
- Artificial Insemination-Dairy

Dairy Goat Herd Management Certificate

Whether you are interested in starting a career in dairy goat production, recently started milking dairy goats, or are well established in the dairy goat industry, this certificate is for you! You will be able to earn a certificate by completing:

- 12 online courses with experiential learning components
- An annual Goat Management Academy providing hands-on training

Visit www.swtc.edu/dairygoat, email dairygoat@swtc.edu or call 608.822.2723 for more information.

Farm Business & Production Management

Our industry experts are ready to work one-on-one with you to help build your business. This program gives current farm owners/operators opportunities to develop and fine tune their skills with production agriculture. Knowledge and skills are provided through classroom settings, workshops and seminars, speakers of expertise, farm and business tours, and individual on-farm instruction.

Beginning Farm Management

- Open to high school juniors and seniors
- Focuses on developing a business plan for a production agriculture career

Adult Farm Management Course Offerings:

- Livestock Management
- Financial Management
- Crop Management
- Nutrient Management Planning

Individual instruction is available in the following areas:

- Financial Analysis
- Business and Marketing Planning
- Feasibility Study/Cash Flow
- Farm Succession Planning
- Nutrient Management Planning Update
- Computer Software Training

Visit www.swtc.edu/fbpm or call 608.822.2741 for more information

Health Training

IV Therapy

This program is designed to present basic concepts in IV therapy. Topics will include current infusion standards, guidelines and regulatory issues, blood draws for specimens, venipuncture, common types of intravenous solutions and medications, care of venous access devices, and the prevention and management of IV related complications. Participants will have the opportunity to practice skills presented with current IV equipment following the presentations. Email nhubbard@swtc.edu or call 608.822.2209 for more information.

Birth Doula Labor Support Workshop

Course participants will develop basic emotional, physical, and informational skills in order to increase their effectiveness as a labor support person. The course will cover basic childbirth education information, the responsibilities of the birth doula, emotional support skills and physical comfort measures, getting along with physicians and nurses, topics to cover during prenatal visits, handling challenging labors, and strategies for developing a business. Email nhubbard@swtc.edu or call 608.822.2209 for more information.

Emergency Medical Services Training

Southwest Tech offers initial and continuing education for area emergency medical service providers at various levels including EMR, EMT and AEMT. All courses are based on the State of Wisconsin adopted curriculum with the inclusion of the National Education Standards. Depending on provider level and service requirements Southwest Tech also offers required and supplementary continuing education to maintain and enhance the level of care provided by our community's emergency responders. Visit www.swtc.edu/ems for current course offerings. Email kschoville@swtc.edu or call 608.822.2665 for more information.

Business & Industry Services

Southwest Tech, through its Business & Industry Services office, provides a full array of education, training and performance improvement solutions fit your needs. Whether you are an individual looking to build your skills or an employer looking to provide a few employees with training opportunities, these workshops are designed to meet your needs. Customized training and technical assistance is provided by industry experts, who will work with you and your team to solve production problems, increase productivity, and reduce costs through targeted employee training programs. Open enrollment training opportunities are available and can be accessed via our continuing education portal at www.swtc.edu/bisreg, if you don't see the training you are looking for reach out to us through our website www.swtc.edu/bis, email bis@swtc.edu or call 608.822.2323.

Leadership Training: Leadership Training can fill the leadership skill gaps in your company or organization through customized training. We offer a variety of options for training in core values, time, stress and change management, as well as workshops in Strengths Finder, Everything DiSC Workplace, workplace communication and much more. No matter which option you choose, we use the same formula for success, first we Grow the Person, then we Develop the Leader, and finally we Build the Team.

LEAN Training: As a continuous improvement model, Lean focuses on the reduction of non-value added activities (waste) in product/service delivery processes. Although Lean has its roots firmly in manufacturing, the principles and practices have been effectively implemented in health care, education, government, banking and other service industries.

Project Management: Are you ready to take your project management skills to the next level? This comprehensive course is designed to provide you with the essential knowledge and skills needed to successfully plan, execute, and oversee projects of all sizes and complexities.

Spanish for the Workplace: Learn about Hispanic/Latino culture and basic Spanish words and phrases to improve workplace communication with native Spanish-speakers. Topics include introductory conversations, common Spanish phrases, basic workplace commands, making inquiries and asking questions and safety/emergency phrases.

Mental Health First Aid: Mental Health First Aid teaches you how to identify, understand, and respond to signs of mental illness and substance use disorders. This training gives you the skills you need to reach out and provide initial support to someone who may be developing a mental health or substance use problem and help connect them to the appropriate care.

Industrial Training: Electro-Mechanical Technology training, such as programmable logic controls (PLCs), motor control, mechatronics, electrical wiring and more can be customized to fit the needs of your business. Our new state-of-the-art mobile trainers can be brought right to your business for ease of scheduling.

Welding: On site, on campus, or in our Welding trailer, training can be customized to fit your needs. Students can take an entire class, utilize our Open Weld Nights to brush up on skills, and take an AWS Certification.

Compliance and Safety: Learn about OSHA standards, policies and procedures, or discuss electrical safety program requirements. Whatever your needs, we can help you stay compliant and up to date when it comes to safety training.

Small Business Development: We can offer customized training in areas such as Microsoft Word/Excel, Marketing (social media), QuickBooks, Customer Service and more! We can also provide Strategic Planning and Business Development consultation.

Public Safety Training

Fire Services Training

The Certified Firefighter courses are accredited by the International Fire Service Accreditation Congress (IFSAC). Fire Service Training provides initial training and continuing education to local firefighters. The core firefighting courses are based on the National Fire Protection Association Standard 1001 – Firefighter Professional Qualifications. The State of Wisconsin requires minimum training and establishes certification standards. The courses offered help firefighters achieve these goals. The Certified Firefighter courses are accredited by the International Fire Service Accreditation Congress (IFSAC). Technical Rescue and Hazardous Materials Response courses are also offered as well as locally delivered National Fire Academy courses. Visit www.swtc.edu/fire for current course offerings. Email publicsafety@swtc.edu or call 608.822.2700 for more information.

Law Enforcement Training

Southwest Tech serves the communities of Southwest Wisconsin with many options for all levels of training in the criminal justice and law enforcement industry. Email publicsafety@swtc.edu or call 608.822.2709 for more information about the following courses:

200-Hour Jail Academy

Learn key concepts and requirements underlying county jail operations and an introduction to the role of the jail officer as a corrections professional. This 5-week course is open to both pre-service and hired jail officers and is offered one time per year during the summer. The criteria was established by the Wisconsin Department of Justice, Training and Standards Bureau. pre-service and hired jail officers and is offered one time per year during the summer. The criteria was established by the Wisconsin Department of Justice, Training and Standards Bureau.

Law Enforcement Professional Development

Southwest Tech offers a variety of in-service, advanced and specialized law enforcement professional development classes. These courses provide the essential skills, knowledge, and resources necessary for law enforcement officers to stay on top of the changes that are occurring in this field. NOTE: Only certified law enforcement officers are eligible to take these professional development courses.

Community Education & Services

3-Wheel Basic Rider Course

Southwest Tech is one of two locations in Wisconsin that offers a 3-wheel Motorcycle Basic Rider Course. Successful completion of the course will allow students to earn a waiver from the DMV 3-wheel motorcycle skills test. The class consists of 6 classroom hours and 10 riding hours on the new motorcycle range within the Public Safety Complex. Students will be able to use their own 3-wheel motorcycles in the class. Class size is limited to 6 students to allow for a safer, more effective riding environment. Courses run from April through October. **Email trafficsafety@swtc.edu or call 608.822.2709 for more information.**

Adverse Weather Driver Training

In this course, the student will receive instruction on common weather-related factors that lead to adverse driving conditions. Students will receive hands-on driving instruction in techniques designed to make the driver more able to safely operate his or her vehicle in poor and dangerous driving conditions. **Email driversed@swtc.edu or call 608.822.2466 for more information.**

CPR/AED/First Aid Training

Southwest Tech is an aligned American Heart Association (AHA) Training Center. We offer CPR and First Aid classes at different skill and certification levels based on AHA curriculum. Visit www.swtc.edu/cpr for current course offerings. **Email greynolds@swtc.edu or call 608.822.2648 for more information.**

Driver Education

Southwest Tech offers both traditional and online driver education to students within our district and throughout the state, as well as behind-the-wheel instruction for our district high schools. Register for driver education classes at your high school. Students must be 15 years of age or older and enrolled as a student or live within the one of our high school districts. Parents of home-schooled students, please contact your district high school for confirmation of class dates and times. **Email driversed@swtc.edu or call 608.822.2466 for more information.**

Driver Safety Education Certification

This 9-credit Driver and Safety Education Certification program provides training to teach Driver Education within public, private, commercial and Technical Colleges throughout the state. Students will learn to teach the goals and outcomes of driver and traffic safety education. These goals include in-car instruction, including observation, curriculum development and practical experience behind-the-wheel; curriculum information selection, development and use, with observation and teaching activities and classroom curriculum development; problems of alcohol, drugs and addiction, the effects of physiological, psychological and sociological aspects, as well as how education programs are utilized within our community and schools; behavioral aspects in accident prevention using concepts and methods to understand the impact on unsatisfactory driver-related attitudes and behaviors; and basic concepts and principles of safety and loss prevention, with an emphasis on various teaching techniques relating to school and roadway safety and risk awareness.

Helpful Academic Background:

- Wisconsin provisional, lifetime, or master educator license
- Completion of either a Bachelors or Masters degree
- Employment with CESA, Technical College, K-12 School or DOT driving school
- Good verbal and non-verbal communication skills

Email driversed@swtc.edu or call 608.822.2466 for more information.

Firearms Training

The Southwest Tech Firearms Training Range is located at Southwest Tech's Public Safety Complex and features three separate shooting ranges designed with the most sophisticated and innovative equipment to meet a variety of training applications. The range hosts a variety of training courses including law enforcement academy training, advanced law enforcement training and a variety of civilian based courses such as the following:

- Beginner, Basic, Intermediate, or Advanced Handgun
- Basic Revolver
- Basic Hunting Shotgun, Rifle or Semi-Auto Rifle
- Concealed Carry
- Firearms Safety and Awareness

Email publicsafety@swtc.edu or call 608.822.2700 for more information.

Group Dynamics

The Group Dynamics / Traffic Safety School Program is one highway safety initiative within Wisconsin which aims to reduce the number and frequency of alcohol related crashes. Specifically, the course is designed to assist those involved in alcohol/traffic related offenses to make permanent changes in their drinking and driving behavior and attitudes. There is a minimum of 24 classroom hours contained in this alcohol educational program. A three point credit to your current driving record can be requested upon completion of this course. For all convicted of drunk driving if ordered through their treatment plan. **Email trafficsafety@swtc.edu or call 608.822.2700 for more information.**

Motorcycle Safety

Cycling requires special knowledge and skills that beginning riders likely do not have. Accident rates are high, and the cyclist must be constantly on the alert to avoid dangerous situations. Riders must be especially careful of changes in road and weather conditions. Statistics show that 60 percent of all accidents happen to those with less than one year of riding experience. Courses run from April through October. Email trafficsafety@swtc.edu or call 608.822.2709 for more information.

Multiple Offender Program

The Multiple Offender Program is a specialized education course for individuals who have experienced two or more operating while intoxicated (OWI) charges. Participants are encouraged to examine their drinking and driving behavior and attitudes, and to formulate an alternative lifestyle which will improve their ability to operate a vehicle safely. The Multiple Offender Program is not designed as a treatment program. It is intended to benefit the irresponsible drinker who is experiencing continual problems with drinking and driving. Individuals assessed as chemically dependent should not be referred to the program. Email trafficsafety@swtc.edu or call 608.822.2700 for more information.

Point Reduction

Students discuss and develop strategies to incorporate positive behaviors and techniques into their driving skills. Students participate in group discussions regarding their personal driving behaviors. Accumulated demerit points may be reduced by three upon successful completion of this course. Email trafficsafety@swtc.edu or call 608.822.2700 for more information.

Safety Training

At Southwest Tech, we believe education and prevention are the keys to saving lives. Our classes are designed to help you respond appropriately to emergencies.

- Fire Extinguisher Safety Training
- Basic ropes, knots, and climbing equipment awareness with rappelling activity
- Fire Extinguisher User for Public and Businesses
- General Fire Safety

Email publicsafety@swtc.edu or call 608.822.2700 for more information.

Responsible Beverage Server

This course is designed for people wishing to become a bartender in the State of Wisconsin and is a requirement to obtain an operators license for selling alcohol beverages. It also meets training requirements for tobacco retailers. Students apply state laws and local ordinances relating to alcohol beverage service, identify the effects of alcohol and behaviors associated with impairments, describe ramifications of intoxication, and apply strategies to reduce potential liability. Email publicsafety@swtc.edu or call 608.822.2700 for more information.

Youth Tractor Safety Certification

This is a standard tractor certification course designed to fulfill the Wisconsin mandate that any youth under the age of 16 must complete a tractor and machinery certification course in order to operate agricultural machinery on public roads. This course will provide hands-on training and instruction in the following units: safety, instruments and controls, maintenance and safety checks, starting and stopping tractors, tractor safety on the farm, tractor hitches, PTO equipment, and a tractor driving skill test. Upon successfully completing a written and a tractor driving test, students will be issued a state certificate. Students over age 14 will be issued a federal certificate. Students under age 14 will be issued a federal certificate when they reach the age of 14. Students must be at least 12 years old. Email gsnider@swtc.edu or call 608.822.2487 for more information.

Outreach Centers

Southwest Tech offers adult education courses, GED/HSED preparation, career planning services, English language learner classes, and various other options at outreach sites throughout Southwest Wisconsin. Many services are free of charge! Email champton@swtc.edu or visit www.swtc.edu to learn more.

Course Descriptions

10-006-113 Precision Ag Technologies

3 credits • 36 lecture hours • 36 lab hours • 72 total hours

Student will study fundamental processes of the Global Positioning System (GPS) with emphasis on its application to agricultural production. Technical aspects of the GPS satellites, differential correction, and hardware will be covered. The specific applications of the technology in agriculture for navigation, mapping, soil management, variable rate technology (VRT), and yield monitoring will be discussed and demonstrated by the student. Student will gain exposure to technology cost, and potential economic benefit of technology application. Student will also be introduced to the operation of Geographic Information Systems (GIS).

10-006-116 Introduction to Soils

3 credits • 36 lecture hours • 36 lab hours • 72 total hours

Course is designed to provide the student with fundamental knowledge of soil and soil composition. Students will study soil types, formation factors, physical properties, biological properties and basic soil chemistry. Units covering tillage, conservation, pH and soil management will also be included. Students will gain the skills required to interpret soil survey maps and recognize qualities of various soil types. The student will perform soil sampling, residue measurements, compaction assessments and soil loss determinations per crop rotation guidelines.

10-006-117 Agribusiness Performance Standards

3 credits • 54 lecture hours • 36 lab hours • 90 total hours

Course will provide students with ability to recognize and evaluate performance standards used in the agribusiness industry. Topics will include DOT regulations, legal descriptions, commodity marketing, contracts, financial statements and scorecards. Production standards will also be covered using industry benchmarks.

10-006-122 Pest Management

1 credits • 18 lecture hours • 0 lab hours • 18 total hours

Students will learn the principles and methods used in the control of pests found on Golf Courses. Preparation for the Wisconsin Commercial Pesticide Applicator licensing will include restricted use regulations, applicator safety, environmental safety, equipment calibration, and production label interpretations. Course topics will include pesticide mode of action, interpretation of aerial photos, and integrated pest management practices (IPMs). During the course, students will complete that exam for licensing as a Wisconsin Commercial Pesticide Applicator for Golf Courses.

10-006-123 Artificial Insemination Training

1 credits • 3.9 lecture hours • 0 lab hours • 3.9 total hours

This course is designed for the student wishing to learn artificial insemination of cattle as a career choice or to be used for personal farm purposes.

10-006-124 Pesticide Applicator Training

1 credits • 18 lecture hours • 0 lab hours • 18 total hours

The learner will develop a strong understanding and basis of pest application training techniques, methods and standards used in the industry today. This class prepares students to take the Commercial Pesticide Applicator Certifying and Licensing exam category 1.1 Field and Vegetable Crops for the state of Wisconsin.

10-006-125 Crop Protection Products

2 credits • 18 lecture hours • 36 lab hours • 54 total hours

Course provides information related to current products and practices used in protection of crops. Protection of crops both during the growing season and while in storage following harvest will be covered.

10-006-126 Pest ID & Mgt/Crop Scouting

3 credits • 36 lecture hours • 36 lab hours • 72 total hours

The student will learn and develop skills, practices, and principles of identifying and managing pests that are a problem for a variety of common regionally grown agricultural crops. The student will learn control measures and application; proper use and safety measures; how to identify insects, weeds, and diseases in crops; various stages of growth related to timeliness of treatment; and methods of applying control measures. The student will learn principles to follow regarding the different ways of crop scouting.

10-006-127 Soil Fertility and Fertilizers

2 credits • 18 lecture hours • 36 lab hours • 54 total hours

Course will cover the fundamental and applied principles and concepts of soil fertility and plant nutrition. Attention will be given to the nutrient requirements of the commonly produced agronomic crops of our area. Course will provide the student with the information necessary to plan and produce agronomic crops based on crop needs and available resources. Students will be able to interpret soil test reports and make recommendation based on given information for related crop plants. In-field activities will be used to effectively reinforce the material presented in class.

10-006-132 Spatial Data Collection in Agriculture

2 credits • 18 lecture hours • 36 lab hours • 54 total hours

Course will provide the student with skills related to the collection and processing of various types of spatial data in agriculture. Provides detailed instruction and hands-on use of GPS receivers and data loggers to collect field data. Units of study will include an appreciation for the value of data in decision making, operating a GIS (Geographic Information System) software, soil data, yield data, remote imagery and the equipment used to collect data. Students will generate geo-referenced maps using spatial data collected.

10-006-133 Agribusiness Financial Management

3 credits • 54 lecture hours • 0 lab hours • 54 total hours

This course will cover financial documents and practices as they relate to agribusinesses. Students will learn how agribusinesses use financial statements to analyze the financial health of a business. This course will give students a basic understanding of how to manage working capital and obtain financing.

10-006-134 Agricultural Equipment Management

3 credits • 54 lecture hours • 0 lab hours • 54 total hours

Course will provide the student with the knowledge necessary to make decisions related to equipment management. Study will include industry trends, power units, machine capacity and equipment management principles. A unit on equipment appraisal will be included. Students will take part in activities off campus to reinforce classroom material.

10-006-136 Agricultural Commodity Marketing

3 credits • 45 lecture hours • 18 lab hours • 63 total hours

Operation and use of agricultural commodity markets and institutions as applied to enterprise and firm risk management. Cash markets; futures markets and futures option markets; basis; hedging and forward pricing; fundamental analysis; technical analysis and risk management strategies.

10-006-137 Agribusiness Marketing & Promotion

3 credits • 54 lecture hours • 0 lab hours • 54 total hours

This course will apply specific principles of marketing to an agricultural business. Student will develop understanding and skills related to the relationship between a business and their customers. Units of study will include analyzing market potential, identifying target markets, the food chain, international trade, evaluating market trends and understanding competitive behavior. Students will create a branding plan for a business and outline methods of connecting with the customer base.

10-006-146 Milk Production**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students study the value of milk in human nutrition, milk and health issues, the role of dairy cattle in the production of animal protein, physiology of lactation, milk composition, the effect of various feeds, milk testing, production records, recommended milking procedures in association with proper sanitation and prepping the cow, care and maintenance of equipment, mastitis and its relationship to profitability, use of laboratory culturing and sensitivity testing, study of computerized production records and their uses, as well as laws regulating milk production. Field trips will be utilized to view firsthand the topics studied in class.

10-006-150 Farm Animal Reproduction**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

The student will learn the physiology and anatomy of the male and female reproductive tract of livestock. Also, covered in this course are hormones that effect the reproductive tract and the estrus cycle of the female. The student will become familiar with the reproductive disease of males and females. Finally an introduction to the common reproductive protocols and technology used within the industry.

10-006-153 Dairy Production Management**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

The student will study a variety of topics relevant to the dairy industry for the present and future planning of the industry. An overview of all aspects of the dairy industry ranging from health, nutrition, production, management practices, technology, reproductive, economics, food safety, contracts and employability opportunities. The continued important topic and animal welfare will be addressed. The course will be thoughtful engaging for those learners who have a strong desire for employment and those who have interests in farming.

10-006-159 Agribusiness Computer Applications**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

Students will construct, manipulate, and select spreadsheets and documents for various situations in the agriculture industry and on a farm. Data gathering agriculture software will be introduced to demonstrate its use in making management decisions. The use of email features used in business will be explored. Pre-requisite: Beginning Microsoft Excel (10-103-106)

10-006-160 Plant Science**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Provides fundamental knowledge of plant components and their functions. Topics include pollinating and propagating plants, germinating seeds, plant nutrients, and factors affecting photosynthesis, respiration, and transpiration. Participants will experience plant components and their functions through the completion of hands-on activities.

10-006-161 Career Development in Agriculture**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

Student will develop individual leadership and employment qualities, in addition to exploring the agricultural industry and available careers.

10-006-162 Agribusiness Operations**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will develop skills in understanding the agribusiness industry and the operational responsibilities of a business. Studies will include the role of management, forecasting, budgeting and the marketing approach to customer satisfaction. Students will develop a business plan for an agricultural related business.

10-006-164 Agriculture Law**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will acquire skills needed to be in compliance with laws regulating the industry of agriculture. Units of study will include: transportation, legal descriptions, USDA and WDACTP regulations, agricultural contracts and others rules pertaining to the operation of an agribusiness.

10-006-167 Agriculture Risk Management**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

The profitable operation of business is foundational to the sustainability of that business. Students will develop strategies to ensure that the risk associated with the operation of an agribusiness is managed. Studies will include financial health and ratios, taxation, depreciation schedules and making producer recommendations.

10-006-180 Animal Science**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

This course provides fundamental knowledge of the animal science field. Topics include animal health, animal environments, anatomy and physiology, genetics and reproduction, animal feedstuffs, and job related safety. Participants will experience animal concepts through the completion of hands-on activities.

10-006-197 Agribusiness Experiential Learning**3 credits • 0 lecture hours • 0 lab hours • 216 total hours**

The student will have the opportunity to apply course work to a practical, on-the-job situation. Goals, competencies and core abilities are followed.

10-070-101 Field Application Equipment**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Students learn to operate, recondition and maintain field application equipment such as manure spreaders, fertilizer spreaders and field sprayers used on modern farms and cooperatives. Students learn calibration procedures for liquid and dry fertilizer applicators. They will learn common terminology used when working with control monitors and associated equipment.

10-070-104 Ag Safety, Electrical & Maintenance**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Students will learn skills necessary to help them make general repairs and identify proactive maintenance steps of all types of equipment throughout a farmstead. Safety while performing daily tasks will be included in every unit. Emphasis areas include selecting personal protective equipment, working around cattle, crop storage, farm chemicals and fluids storage, safety awareness of electrical systems both on equipment and around the farmstead, selecting proper tools to perform maintenance procedures, and ATV safety. Students will gain an understanding of viewing the farmstead with a safety focus to recognize farm hazards and being aware of corrective measures that are needed to make the farmstead safe for all personnel on the farm.

10-080-117 Animal Nutrition & Ration Balancing**4 credits • 54 lecture hours • 36 lab hours • 90 total hours**

Students will study the digestive systems and nutritional needs of livestock and dairy animals. Identification of feedstuffs and regulations on livestock feeding will be explored. Students will read, interpret, and make recommendations on feed test reports and tags. They will also learn to read rations and mix sheets, along with the formulation and balancing of rations using computer-based software.

10-080-118 Introduction to Animal Health**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

This class is designed to introduce the student to the study of farm animal health. During this course students will study animal anatomy, basic immune system function and common diseases (causes, treatments and prevention). They will become familiar with genetic abnormalities and animal behavior. Finally, the student should gain a grasp of the uses of antibiotics, vaccines and hormones.

10-080-119 Livestock Housing & Equipment**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students will have the opportunity to learn principles of designing correct facilities based on the environment, feeding system, waste removal systems, and factors which influence animal health. Students will compare and contrast various facilities, as well as study building materials, design, layout and construction cost estimates. Additionally, students will identify requirements of a concentrated animal feeding operation permit. Students will complete a final project of designing the housing facilities for a livestock species of their choice.

10-080-120 Animal Genetics**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

The student will gain fundamentals in genetics of farm animals in this course. A historical perspective will be studied through Mendelian theory, followed by the study of current bull proving processes. Mastery of the terminology and theory will be used for application of sire selection and animal evaluation. Genomics will also be used to apply current theories in farm animal selection.

10-082-101 Automation in Agriculture**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Provides an overview of automation in agriculture and introduces the tools used. Trends and opportunities within the area of automation will be explored. Focus will be on robotics, data collection, animal health monitoring systems, and automated environments.

10-093-101 Plant and Soil Science**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Course is designed to provide the student with fundamental knowledge of soil, soil composition and plant components and their function. Students will build their knowledge on the physical and biological properties of soil and soil fertility, along with the factors that influence seed germination, plant growth and reproduction. Students will gain additional knowledge through hands-on experience in the classroom and out in the field.

10-093-102 Grain Production & Management**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Course will provide students with knowledge necessary to plan, produce, protect, harvest, and store commodity crops commonly produced in Wisconsin. Students will gain a basic understanding of how livestock production utilizes these commodities. The course will also introduce technology related to the advanced production of commodity crops. Students will gain experience with grain production and management through hands-on labs, field trips, and through real world in-the-field scenarios.

10-093-103 Forage Production & Management**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Course will provide students with knowledge necessary to plan, produce, protect, harvest, and store forage crops commonly produced in Wisconsin for livestock production. Students will gain a basic understanding of how livestock production utilizes these forages. The course will also introduce technology related to the advanced production and management forage crops. Students will gain experience with forage production and management through hands-on labs, field trips, and through real world in-the-field scenarios.

10-093-104 Applications of GIS in Agriculture**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Course will offer students the ability to build skills relating to Agronomic Geographic Information System (GIS) and on farm applications. Students will be able to advance their digital farming skills by learning how to adapt to different seasonal variables, monitor the health of individual crops, estimate yields from a given field, and maximize crop production. The course will have the opportunity for students to gain experience with new technology related to soil management, ag equipment, and unmanned aerial systems. Students will gain further experience through hands-on labs, field trips, and through real world in-the-field scenarios.

10-093-105 Nutrient Management & Precision Planning**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Course will provide students with knowledge necessary to plan, apply, and manage plant nutrients while building an understanding of the regenerative principals of nutrient management. Students will gain a basic understanding of how Wisconsin's 590 standard is built and implemented for on-farm practices. The course will also introduce technology that aids in the guidance and implementation of nutrient application, management, and precision planning. Students will gain experience through hands-on labs, field trips, and through real world in-the-field scenarios.

10-093-106 Crop Production & Management**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Course will provide students with knowledge necessary to plan, produce, protect, harvest, and store grain and forage crops commonly produced in Wisconsin. Students will gain a basic understanding of the relationships involved with producing quality grain and forage for livestock production. The course will also introduce technology related to the advancement of the production and management of grain and forage crops. Students will gain experience with forage production and management through hands-on labs, field trips, and through real world in-the-field scenarios.

10-101-111 Accounting 1**4 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Students learn accounting concepts and principles in a logical step-by-step manner. Students will do extensive problem work. Students focus on accounting for both service and merchandising businesses.

10-101-112 Accounting 2**4 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Students expand upon basic accounting concepts and principles developed in Accounting I and relate them to the accounting for notes receivable, fixed assets, investments, liabilities, partnerships, limited liability companies, and corporations. Students will learn to prepare the statement of cash flows and perform financial statement analysis. Prerequisite: Accounting 1 (10-101-111) OR Accounting 1, Part 2, (10-101-102)

10-101-113 Accounting 3**4 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Students study the three main financial statements in detail. Students review and expand upon generally accepted accounting principles as they apply to revenue recognition and current assets. Students perform extensive problem solving to provide a practical application of accounting concepts. Prerequisite: Accounting 2 (10-101-112)

10-101-114 Accounting 4**4 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Students study the noncurrent asset, liability, and stockholders' equity sections of the balance sheet. Students complete a comprehensive practice set to further develop an understanding of financial accounting concepts. Prerequisite: Accounting 2 (10-101-112)

10-101-116 Cost Accounting**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students learn accounting principles associated with manufacturing, including job order, process, and standard costing. Also, students study special problem areas such as scrap, lost or gained units, joint products, and by-products. In addition, the students use spreadsheet software to prepare manufacturing statements and perform required calculations. Prerequisite: Accounting 2 (10-101-112)

10-101-117 Taxes 1**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students learn basic federal and state tax law as it relates to individuals, including learning to research technical topics and use tax resource materials. Students will apply their knowledge by preparing tax returns using both manual and computerized preparation methods.

10-101-118 Taxes 2**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students learn basic federal, state, and local tax law as it relates to corporations, partnerships, estates, trusts, and exempt organizations. Students will learn to apply their knowledge by preparing tax returns using both manual and computerized preparation methods.

10-101-121 Advanced Accounting Spreadsheets**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students will plan, create, format, and modify Microsoft Excel worksheets for accounting applications. Students will use the software to apply mathematical and statistical commands, apply functions, and create and modify pivot tables, and graphs. Pre-requisites: Beginning Microsoft Excel (10-103-106) Co-requisite: Accounting 2 (10-101-112)

10-101-123 Payroll Applications**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Students identify federal and state laws affecting payroll, and determine coverage for FICA, federal and state income tax, and unemployment taxes. Students complete payroll tax forms, journal entries, and a comprehensive practice set. Prerequisites: Accounting 1 (10-101-111) or Accounting 1, Part 1 (10-101-101)

10-101-124 Accounting Systems and Procedures**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

The learner will examine the systems development life cycle including systems principles and internal controls. They will then apply these principles and controls to various systems analysis, designs, and implementation projects. Pre-requisites: Accounting 2 (10-101-112), Beginning Microsoft Excel (10-103-106)

10-101-125 Managerial Accounting**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

The learner will analyze financial performance, evaluate capital budget investments, compare capital structures, prepare a master budget, develop a working capital management strategy, evaluate long term financing alternatives, and analyze the effect of international exchange rates on financial decisions.

10-101-127 QuickBooks**1 credits • 0 lecture hours • 36 lab hours • 36 total hours**

Students develop a basic understanding of a computerized accounting system while working with QuickBooks Pro accounting software. Students will set up service and merchandising businesses, record customer, vendor, inventory, general ledger, and payroll transactions, and generate financial reports. It is highly recommended that students have taken Accounting 1 Part 1 (10-101-101) or Accounting 1 (10-101-111) in order to be successful in this class.

10-102-104 Principles of Finance**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students apply decision-making strategies such as short-term and long-term financing and investing, leverage, break-even analysis, and time value of money. Financial markets and institutions are discussed in length as well. The relationship between risk and return is emphasized throughout the course. Prerequisite: Accounting 1 (10-101-111) or Accounting 1 Part 1 (10-101-101) and Accounting 1 Part 2 (10-101-102)

10-102-105 Introduction to Business**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students gain an overview of the business enterprise in the American economy. Studies focus on the interrelationships between business functions and the economy by examining such topics as ownership forms, marketing, management, the legal environment of business, and management information systems.

10-102-108 Risk Management**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will be exposed to the process of managing risks faced by business firms and individuals. Students will use the risk management process in case studies to analyze and evaluate pure risks to minimize losses.

10-102-109 Business Law I**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students explore the United States legal system, apply common law contract principles to everyday business transactions, and the Uniform Commercial Code to the formation of sales contracts, transfer of title and risk, performance and product liability.

10-102-110 Business Law 2**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students learn legal principles applicable to agency and employment relations and explore the effect of government regulations on business enterprises; learn the basic legal concepts of secured transactions, bankruptcy, and alternatives to bankruptcy; and apply the Uniform Commercial Code to the issuance and transfer of negotiable instruments. Prerequisite: Business Law 1 (10-102-109)

10-102-115 Business Management Strategies**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students explore the activities undertaken by the management and leadership of a business organization. Students will apply problem-solving and decision-making skills to situations that affect business operations. The course will focus on the integration of the functions of finance, marketing, operations, technology, and human relations in the process of managing a firm. Prerequisite: Accounting 1 (10-101-111)

10-102-129 Human Resources Management**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will explore the people dimension of organizations; one of the most challenging aspects of management. Students will develop skills in the processes employed by human resource professionals to ensure employee's abilities are used effectively and efficiently to achieve an organization's goals. The impact of laws and of societal and business trends on human resource functions will be analyzed.

10-102-130 Management Principles**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students explore the challenges faced by the managers of organizations in today's competitive business environment. Students will examine managerial roles and skills as important factors in determining organizational performance. These factors include planning for the future by anticipating changes in the external environment, organizing people into groups, allocating resources to them and motivating them to attain organizational goals.

10-102-131 Developing a Business Plan**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

Every new business faces challenges. A good business plan provides an objective look at the big picture issues for the potential business venture. Students will complete a business plan for their business concept in this course. Students will evaluate their business concept and develop the marketing, operations, and financial components for this concept.

10-102-132 Operations Management**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will apply decision-making techniques to ensure efficient and competitive management of business operations. Students will focus on the key operational activities of product development, process design and management, and supply chain management. Course topics will include product design processes, quality, facility design and capacity planning, inventory control, project management, supply chain management, cost control, and customer service management. Prerequisite: Introduction to Business (10-102-105)

10-102-133 Career Planning in Business**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

Students will develop strategies to secure employment and make career decisions. Topics include: career research, goal setting, preparation of employment-related correspondence, professional profile development, and effective employment interviewing skills.

10-102-151 Personal Finance**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

This course will help students with the process of making informed financial decisions. Students will explore money management techniques, credit options, insurance, saving and investing, and retirement plans.

10-102-152 Data Analytics 1**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

In this course, the learner will learn the basic concepts of data analysis and how they are used to drive business processes. The learner will identify and retrieve relevant data sources, and to prepare data for analysis with pre-configured and custom tools. Upon completion of this course, the learner will be able to prepare data for further analysis to drive decision making for business.

10-102-153 Elicitation & Coll Techniques**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

The learner will learn the ability to define stakeholders and use the stakeholder analysis to conduct elicitation activities accurately capturing information needs, documenting and confirming results. Facilitates meetings and communication plan to support ongoing collaboration.

10-102-154 Databases**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

In this course, the learner will explore concepts, design, documentation, and implementation of various database systems, including proprietary and open source technologies. The learner will implement Structured Query Language (SQL) to store, retrieve, and manipulate data. The learner will create queries, normalize database structures, and create stored procedures. Upon completion of this course, the learner will be prepared to develop and maintain databases used in application development.

10-102-155 Business Intelligence and Visualization**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

In this course, the learner will learn to organize, manage, and analyze very large data sets from various sources. The learner will use software tools to present complex data in visually meaningful representations that can be communicated to business stakeholders. Upon completion, the learner will learn how to transform raw data into meaningful information that will be utilized for data-driven decision making.

10-102-156 Ethics in Data Analytics**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

In this course, the learner will discover the risks, challenges, and opportunities data presents to the greater good. It will cover the moral implications of concepts such as social marketing, fraud, risk management, and data privacy. Upon completion the learner will be able to evaluate risks and results of data utilization, anticipate the shifts and safeguards in the industry, and assess the company's rights and responsibilities in data collection and usage.

10-102-157 Data Analytics 2**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

In this course, the learner will build upon the skills learned in Data Analytics 1. The learner will work with large data sets and organize that information for effective data analysis. The learner will utilize commercial data analysis software packages, and create custom computer programs to analyze data. Upon completion of the course, the learner will be able to perform analysis of relevant data with various software tools, and use the generated information to help make informed business decisions. Pre-requisite: Data Analytics 1 (10-102-152)

10-102-158 Business Analytics & Insights**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

The learner will learn to prioritize and trace requirements, organize large amounts of data, understand and model requirements using various analysis techniques; verify, validate and communicate the requirements.

10-102-160 Software Applications**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

The learner will learn to use BA software tools- Visio, Sharepoint, OneNote, and advanced Excel involving scenarios and case studies.

10-102-161 Strategy Analysis & Evaluation**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

The learner will identify and define business needs; understand business structure, strategy, and impact of work efforts; define the importance of vision, strategy, goals and objectives; and define solution scope. Effectively facilitate change management. Pre-requisite: Business Intelligence & Visualization (10-102-155)

10-102-162 Programming in Data Analytics**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

In this course, the learner will investigate the fundamentals of computer programming using the Python and/or R programming language. The learner will examine data types, variables, conditional statements, looping, array structures, and structured programming techniques. Upon completion of the course, the learner will be able to use Python and/or R to apply problem-solving skills to create applications for delivery to various platforms.

10-102-163 Data Analytics Career Experience (Internship)**2 credits • 0 lecture hours • 0 lab hours • 144 total hours**

Students will obtain practical, hands-on experience while applying skills developed in the Data Analytics program at an approved site with employer and instructor supervision. Professional behavior, good communication, and positive interpersonal skills will also be demonstrated.

10-103-105 Beginning Microsoft Word**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

This course is an introduction to Microsoft Word. Students will create, edit, and format documents while using the built-in proofing tools. Other topic areas covered include text, paragraph, & document formatting as well as working with graphics in documents. Basic experience with Windows is assumed.

10-103-106 Beginning Microsoft Excel**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

This course is an introduction to Microsoft Excel. Students will learn the basic features to produce basic worksheets and charts. Other topic areas covered include formatting, formulas, built-in functions used to design functional worksheets to solve business problems. Basic experience with Windows is assumed.

10-103-118 Intermediate Microsoft Excel**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

This course introduces intermediate level features of Microsoft Excel. Students will learn to use relative & absolute reference formulas and functions, manage workbooks using multiple worksheets, create custom templates and use pivot tables effectively.

10-104-105 Selling Principles**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Philosophy of personal selling is introduced through learning to understand the societal role of salespersons and the human behaviors of customers, as well as how to sell ideas, services, and products. Students prepare sales presentations and practice selling techniques.

10-104-130 Marketing Principles**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will use the marketing mix in developing marketing concepts. Global, relationships, ethics, customer value, productivity, and technology perspectives to marketing will be developed by the student.

10-105-110 Computer Applications**1 credits • 0 lecture hours • 36 lab hours • 36 total hours**

At the end of this course, the student will be familiar with the use of a word processor, a spreadsheet, the Internet and email, and file management. The student will know the basics of each application and be able to create professional-looking documents. The student will be able to apply these applications to their field of study also.

10-107-192 IT Career Development**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Students will prepare final versions of employment-related documents including resumes, cover letters, follow-up letters, and job applications. Students will build an online career portfolio (LinkedIn) and will participate in mock interviews and job shadowing with an IT professional. Students will learn job seeking skills and practice appropriate work environment attitudes while projecting a professional image. Communication skills required for an IT professional will also be addressed.

10-109-102 Hospitality Professional Devel Seminar**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

Students will learn the challenges and opportunities in various careers in the hospitality and tourism industry.

10-109-103 Event Management**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students will learn to create, plan, organize and execute events related to the hospitality and tourism industry. Emphasis will be placed on events in the resort, food service and golf areas. The students will focus on design, internal management and post event evaluation of each event.

10-109-104 Hospitality Marketing**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will learn to develop and analyze marketing strategies, sales techniques, promotional tools, and market research for the hospitality and tourism industry.

10-109-105 Hospitality Law**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students explore the legal liabilities of the hospitality and tourism industry and apply legal principles using case studies. Special consideration is given to legal issues in the culinary, resort and golf industries.

10-109-108 Hospitality Supervision**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students investigate procedures involved in hiring and supervising personnel including relevant laws, types of communication, training employees, goal setting and professional interactions. Special emphasis is given to the hospitality, tourism and golf industries.

10-150-121 VMWare VCP Essentials**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

This hands-on training course allows the learner to explore installation, configuration, and management of VMware® vSphere, which consists of VMware ESXi/ESX and VMware vCenter Server. Students are introduced to virtualization and storage management concepts using VMware server virtualization products. The learner will be introduced to all the objectives for the VMware VCP industry certification exam. Prerequisite: Cisco Networking and Security (10151-103) OR Cisco Networking (10150-102)

10-150-126 Premises Cabling Technician**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

This course will introduce the learner to the knowledge and skills required in the installation of copper, fiber and wireless networks. An exploration of cabling types, termination techniques, design and testing will be conducted. Learners will practice using the tools and the skills required to terminate copper, fiber and wireless. At the completion of this course, the learner will complete the requirements for the CPCT certification with a written and hands-on examination.

10-150-129 Introduction to Networks**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Learners will install, operate, configure, secure and troubleshoot networks. This is an entry-level networking course that learners will explore the fundamentals of LAN and WAN technologies including routing, switching and wireless. Learners will work directly with Cisco routers and switches configuring IPv4 and IPv6 by implementing switched networks using VLANs, Access Control Lists (ACLs) and routing technologies.

10-150-132 Voice Over IP Administration**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Learners will be introduced to the protocols, terms and definitions of analog phone systems as well as Voice over IP (VOIP) networks. Learners will be configuring station call features, provisioning voice trunks, and establishing voicemail accounts. The learner will use the Cisco Unified Communications Manager platform while exploring the functionality of a voice over IP network. Prerequisite: Introduction to Networks (10-150-129)

10-150-134 Windows Support**1 credits • 9 lecture hours • 18 lab hours • 27 total hours**

This course will introduce the learner to a Microsoft Windows client-server environment including automated administrative tasks using PowerShell, ADDS account management, introduction to group policy, Windows deployment and remote administration tasks. Learners will demonstrate acquired skills in a simulated enterprise environment.

10-150-135 Windows Server Administration (2 cr)**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

This course will focus on planning, implementing, and managing the core infrastructure of a Windows client-server environment using the latest Windows server technology. Learners will work with on-premises Active Directory and Azure IaaS (Azure AD), network access and data security, Group Policy and Remote Access services. At the completion of this course, the learner will demonstrate their skills by implementing a simulated enterprise environment. Pre-requisites: Introduction to Networks (10-150-129) and Windows Support (10-150-134)

10-150-136 Cloud Computing**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

In this course, the learner will be introduced to cloud fluency exploring the latest cloud services available from providers such as Amazon, Google, and Microsoft. Learners will implement and manage a working compute and storage environment using the three cloud providers. At the completion of this course, the learner will demonstrate their skills by implementing cloud-based services for an enterprise environment.

10-150-154 Firewall/VPN Technologies**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Learners will participate in hands-on, career-oriented learning solutions focused on network devices designed to mitigate security threats. Learners will apply mitigation techniques like IDS/IPS, virtual private networks and various firewall technologies. Prerequisite: Cisco Networking and Security (10-151-103)

10-151-101 Introduction to Security**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

Learners will explore the importance of the field of cybersecurity, data confidentiality, and best practices for using the Internet and social media. The learner will have hands-on experience with cyber trends, threats and staying safe in cyberspace, protecting personal and company data. Learners will also explore career opportunities in the field of cybersecurity.

10-151-102 Cybersecurity Essentials**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Learners will explore the characteristics and tactics used by cyber criminals in today's connected world. Learners will then delve into the technologies, products, and procedures cybersecurity professionals use to combat cybercrime. Hands-on labs exploring the topics of this course will be used throughout the course. Prerequisite: Introduction to Networks (10150-129)

10-151-103 Cisco Networking and Security**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Learners in this course are exposed to the foundational knowledge required to respond to network security threats through various threat mitigation measures. Learners will configure and monitor various network devices in order to harden to protect data assets and network systems from attack. Prerequisite: Introduction to Networks (10150-129)

10-151-104 Linux Administration and Security**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Learners will gain an understanding of the fundamentals of the Linux operating system, system architecture, installation, command line and file system. This course implements a "practice as you read" approach to learning. Each learner has hands-on access to a Linux virtual machine to practice, explore and trial Linux command line concepts while reading course content. This course is aligned to the LPI LPIC-1 101 certification exam.

10-151-105 Wireless Networking and Security**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

The learner will be introduced to the design, implementation, operation, security and troubleshooting of wireless networking. The course will provide a comprehensive overview of technologies, security, and best practices. The learner will conduct hands-on installations and configurations of Wireless Client Adapters, Routers, Access Points, Repeaters, Bridges and other wireless devices using multiple-vendor equipment. Prerequisite: Introduction to Networks (10150-129)

10-151-106 Scripting for Security**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Learners will start out with hands-on labs working with Linux, Python programming and Bash scripting. The learner will then focus on developing scripts that could be used for security testing, data analysis or other routine tasks for a cybersecurity professional. Prerequisite: Linux Administration and Security (10151-104)

10-151-107 Cybersecurity Operations**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Learners in this course are exposed to all of the foundational knowledge required to detect, analyze, and escalate basic cybersecurity threats using common open-source tools. The learner will complete hands-on labs to develop skills related to security monitoring, host-based analysis, network intrusion analysis, and security policies and procedures. This course aligns with the Cisco Certified CyberOps Associate (CBROPS) certification. Prerequisite: Introduction to Networks (10150-129)

10-151-108 Database Security Administration**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

The learner will be introduced to the collection of processes and procedures used to protect and secure a database from illegitimate activity and use, malicious threats, and attacks. This course will start with basic SQL and Oracle database administration and architecture, then explore common database vulnerabilities and methods to protect and secure. Prerequisite: Linux Administration and Security (10151-104)

10-151-109 Advanced Security Capstone**3 credits • 18 lecture hours • 72 lab hours • 90 total hours**

Learners will be implementing various advanced secured wired and wireless systems with Intra/Internet services on both Windows and Linux operating systems. At the completion of this course, the learners will have an enterprise-level secured network infrastructure connected directly to the Internet. Prerequisite: Cisco Networking and Security (10151-103)

10-151-110 Network Defense & Forensics**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Learners are introduced to the NIST NICE CyberSecurity Workforce Framework, which is focused on the identification, analysis, and mitigation of threats to internal IT systems or networks. Learners will conduct hands-on labs that enforce knowledge within computer network defense analysis, incident response, vulnerability assessment and management, and computer network defense infrastructure support. Prerequisites: Cybersecurity Essentials (10151-102)

10-151-111 Offensive Security Operations**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

Learners are armed with the crucial knowledge they need to intelligently discuss and evaluate, at a basic level, the security environment for a given business context. Learners will perform threat modeling activities to evaluate physical, communication, and application security vulnerabilities and recommend threat mitigation measures. A CTF-like IoT Security vulnerability challenge with 10 missions will be the final assessment. Prerequisite: Cybersecurity Essentials (10-151-102)

10-152-116 HTML & CSS**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students will learn the fundamentals and techniques of developing websites using XHTML/CSS. Topics include common HTML tags, tables, linking, image manipulation, forms, and cascading style sheets (CSS). Topics include HTML 5 and CSS 3.

10-154-110 Hardware/Software Fundamentals**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students will learn all aspects of computer hardware and software commonly used in a business workplace. Students will develop their troubleshooting skills and use tools to resolve technology-related issues. Students will install, configure, troubleshoot, repair, and maintain computer hardware and operating systems. Network technologies, security concepts, and common standard operating procedures for IT departments will be covered. Students will demonstrate good communication skills and professionalism required of all entry-level IT professionals.

10-182-103 Purchasing**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Learners will examine the role of purchasing within an organization and explore basic purchasing activities. Learners will develop an evaluation for the purchasing function to include analyzing ordering quantities, selecting and evaluating suppliers, and monitoring cost. Students will be introduced to negotiating skills, strategies, tools, and techniques, and will develop their own negotiating skills as they explore topics in communication, strategy, perception, bias, leverage, ethics, global negotiations, and managing difficult negotiations.

10-182-104 Inventory Management**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Learners will develop an effective plan to minimize the cost of inventory while still meeting customer demand. Learners will create a foundation for managing materials and labor in an organization to include creating bills of materials and routings and understanding inventory records and transactions. Learners will examine the benefits and challenges of forecasting and its use in accurate scheduling of customer demand. Learners will develop an effective plan to manage the flow of materials and labor through the production process.

10-182-107 Logistics**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Learners will develop an understanding of logistics within a supply chain. Learners will examine the methods and requirements of transporting materials in a supply chain, and determine how to properly apply warehousing to a supply chain to reduce cost and improve efficiency.

10-182-108 Global Supply Chain Management**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Learners will explore strategies and gain insight into developing an international supply chain. Learners will examine the process of identifying, qualifying, and negotiating the purchase of goods from global sources, and consider factors that affect global transportation of both imports and exports.

10-182-109 Service Operations Management**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Learners will examine the unique requirements of providing an intangible product and formulate strategies to cultivate customer satisfaction. Learners will design delivery systems that meet the needs of service based customers and provide the required level of customer service.

10-182-137 Technology in the Supply Chain**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Learners will investigate technology advances that have improved the efficiency of supply chain management and review the processes that make up a business enterprise and examine the advantages and disadvantages of implementing Enterprise Resource Planning (ERP) software. Learners will develop process modeling strategies to improve existing supply chains.

10-182-138 Supply Chain Capstone**2 credits • 0 lecture hours • 0 lab hours • 144 total hours**

Students will obtain practical, hands-on experience while applying skills developed in the Supply Chain Management program at an approved site with employer and instructor supervision. Professional behavior, good communication, and positive interpersonal skills will also be demonstrated. Students will also demonstrated knowledge of the program TSA's (Technical Skill Attainment). Co-requisites: Inventory Management (10-182-104), Purchasing (10-182-103), Logistics (10-182-107).

10-196-119 Managerial Budgeting & Finance**3 credits • 11.7 lecture hours • 0 lab hours • 11.7 total hours**

The learner applies the skills and tools necessary to make sound financial decisions and recommendations. Each learner will demonstrate the application of financial planning, budgeting, cost measures, activity-based costing, and control measures.

10-196-208 Personal Leadership**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will learn about time management and personal planning, emotional intelligence, effective communication, assertiveness and stress management related to the challenges of a supervisor.

10-196-209 Team Building and Problem Solving**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will learn the benefits and challenges of group work, necessary roles in a team, stages of team development, meeting facilitation, different approaches to problem solving, consensus, data acquisition, analysis, developing alternative solutions, implementation and evaluation.

10-196-210 Legal Issues for Supervisors**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will learn legal practices of recruiting, interviewing, hiring, selection, evaluation/promotion, employee discipline, firing, EEOC and nondiscrimination, employee privacy, workplace harassment, FMLA, ADA and unions.

10-196-211 Workplace Innovations**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Student will implement the use of inventive thinking techniques and innovative methods to improve work processes in multiple workplace environments; research and analyze the use of technology in businesses to promote innovation in the workplace; develop an innovative, entrepreneurial, and entrepreneurial mindset.

10-196-212 Training and Talent Development**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will become acquainted with the principles and methods for training employees on the job. Experience practical training exercises that include the development of learning objectives and receipt of feedback through a training evaluation. Spend time organizing the training function within an organization and career planning for individual employees.

10-196-213 Workplace Safety**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will learn safety awareness, federal/state/local compliance, inspections, risk analysis, workplace violence, substance abuse, health hazards, first aid, CPR, fire and electrical safety, and emergency preparedness.

10-196-214 Leading Strategically**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will explore the organizational interrelationships that exist between strategy, structure, and the behavior of various size companies.

10-196-215 Project Management Fundamentals**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will become familiar with the role of project management, developing a project proposal, demonstration of relevant software, working with project teams, sequencing tasks, charting progress, dealing with variations, budgets and resources, implementation, and assessment.

10-196-216 Leading Change**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will learn to resolve challenges and handle the personnel dynamics in facilitating change within an organization.

10-196-217 Leadership Development Career Experience**2 credits • 0 lecture hours • 0 lab hours • 144 total hours**

Students will obtain practical, hands on experience while applying skills developed in the Leadership Development program with instruction supervision. Professional behavior, good communication, and positive interpersonal skills will also be demonstrated. Students will also demonstrate knowledge of program TSA's (Technical Skills Attainment). Pre-requisite: 10-196-214 Leading Strategically

10-196-300 Foundations and Non-profits**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will gain an introduction into concepts of nonprofit organizations as well as foundation types and their purposes and operations. Students will explore the differences between nonprofits and for-profit organizations as well as the general purpose and principles of foundations.

10-196-301 Current Trends in Non-profits**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

An introductory course aimed at providing an overview of the essential functions of a nonprofit organization. In this course students are introduced to the fundamentals of effective mission and vision statements, strategic planning, operations management, Board development, and budgeting.

10-196-302 Non-profit Strategic Planning**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Analyze current business and development strategies, recognize trends, develop vision and mission statements, identify funding benchmarks, measure business and development efforts against benchmarks, recommend future directions and strategies and stakeholders (with input from program, donors, potential donors). By the end of this course, students will have an opportunity to develop a mock strategic plan for a nonprofit organization.

10-196-303 Non-profit Leadership**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will learn about strategies that leaders use specifically to lead those who work in nonprofit organizations. This will include leading volunteers and effectively leading organizations where the mission is not to increase stakeholder wealth or to create a profit, but rather the strategy and mission is to provide a community service or to be socially

10-196-304 Board Relations and Volunteer Management**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

A dynamic course that focuses on developing and engaging a cohesive and strategic board of directors. Topics include defining the role of the board, strengthening the working relationship between staff members and board members, and organizing and facilitating effective meetings, publishing meeting minutes, and agreeing on tasks/next steps.

10-196-305 Meeting and Event Planning**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will explore different aspects of planning professional meetings and events, including scheduling, budgeting, marketing, venues, agendas, meeting and event invitations and RSVPs, speakers and presenters, facilitating the meeting, etc. Students will use scheduling software such as Microsoft Outlook and other software programs to assist with planning meetings and events. By the end of this course, students will have an opportunity to develop draft meeting agendas and a mock event plan.

10-196-306 Nonprofit Branding and Marketing**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will explore: What is nonprofit marketing, inbound marketing for nonprofits, creating a nonprofit marketing plan on a limited budget, and marketing strategies for nonprofit organizations as well as budget considerations for marketing proposals. Students will also explore guerilla marketing techniques, e.g. press releases, blog posts, social media, through the creation of a marketing plan. By the end of this course, students will have an opportunity to develop a mock marketing plan for a nonprofit organization.

10-196-307 Nonprofit Revenue Generation 1**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

In this dynamic class you will learn how to: apply fundamental fundraising principles and ethics to your organization strategy, develop a gift agreement(s) for scholarship, designated, field of interest funds, and analyze the planning and execution of a capital campaign to improve your campaigns, and plan and prepare key sections of a grant application.

10-196-308 Community & Social Service in Nonprofits**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Many nonprofit organizations use a Customer Relationship Management (CRM) software to manage the relationship between nonprofits and constituents, such as donors, volunteers, and members. In this dynamic class you will learn the basics on identifying the best tool to reach your organization's goals.

10-196-309 Nonprofit Revenue Generation 2**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Build revenue streams for your nonprofit organization. They are essential to accomplish the organization mission and provide consistent operations' support. Discover how to increase revenue from your current activities. Develop strategies for building new ones. Know how to effectively set prices or fees. Understand the 20% that generates 80% of your revenue-the necessity to identify and secure lead gifts as a foundation for any campaign. These are basic concepts that will yield greater results.

10-196-310 NonProfit Leadership Career Experience**3 credits • 0 lecture hours • 0 lab hours • 216 total hours**

Students can select any hands on experience related to Internship or Field Research relating to the Nonprofit Leadership Development program with instruction supervision. Students will develop skills in the foundations of leadership, with Professional behavior, good communication, and positive interpersonal skills will also demonstrated. Students will also demonstrate knowledge of program TSA's (Technical Skills Attainment). Pre-requisite: NonProfit Leadership 10-196-303

10-196-311 Nonprofit Financial Tools for Decisions**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

The learner will explore relevant reporting tools that lead to enhanced decision-making and precise results. Students will utilize budgeting and financial reports for planning and identification of key performance indicators.

10-201-101 Design Fundamentals**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students apply the elements of art (line, texture, color, shape, and value). Students will investigate how these elements can be manipulated using various principles of design to achieve different effects. Basic color theory will be covered.

10-201-110 Pre-Press Management**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students develop skills and techniques that are necessary to perform before a project is printed to ensure the project's highest quality. Students will learn proofreading skills and techniques and how to apply color management. Students will learn and use Adobe Acrobat 9.0 to perform pre-press operations. Pre-requisites: Illustrator (10-201-134)

10-201-124 Portfolio Introduction**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

Students plan individual professional portfolios. They will write goal statements and understand the value of career goal setting. Students will identify work samples that should be included in a professional portfolio and begin resume design. Portfolios will be finalized in the final semester of the program.

10-201-128 Internship/Field Study**3 credits • 0 lecture hours • 0 lab hours • 216 total hours**

Students obtain on-the-job experience in a web and/or graphic design department. Students work in an area focusing on web and/or graphic design. Internships comprise realistic work situations required by an entry-level web/graphic designer. Prerequisites: HTML & CSS (10-152-116) Illustrator (10-201-134) InDesign (10-201-135) Typography (10-201-138) Co-requisite: Web Page Design 2 (10-201-140)

10-201-133 Photoshop**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

This course introduces the learner to photo manipulation and enhancement using the industry leading Adobe Photoshop software. Course will also cover composition images, illustration, color correction, file formats, scanning, 3D objects, image quality and preparing images for print and web mediums. A working knowledge of computers is required for this course, including the ability to save and organize files. This course uses Macintosh computers; previous Macintosh experience is helpful but not necessary.

10-201-134 Illustrator**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

This course prepares the student to use Adobe's standard vector graphics software to create digital illustrations. The course will cover the basics of illustration as it relates to the digital environment. Students will turn out professional-looking graphics for web or print with Adobe Illustrator software. Through practical exercises, students become fluent in the premier program for line art, logos, vector graphics and quick page layout. A working knowledge of computers is required for this course, including the ability to save and organize files. This course uses Macintosh computers; previous Macintosh experience is helpful but not necessary.

10-201-135 InDesign**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

This course prepares the student to use Adobe's standard page layout software. Using Adobe InDesign, students will turn out professional-looking layouts for both print and web. Through practical exercises, students become fluent in constructing multi-page documents, master pages and digital publishing as well as tricks and time efficient techniques to keep work clean and professional. Prerequisites: Design Fundamentals (10-201-101) Photoshop (10-201-133)

10-201-138 Typography**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

This course prepares the learner to learn the basics of identifying, choosing, and using typefaces. Students will classify type by families, interpret choices for legibility and readability and compare best practices for using type. This course will prepare students to design type and develop creative documents using type. This is a living plan. Topics may change as the tenor of this class commands.

10-201-139 Web Page Design 1**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students develop skills that lay the foundation for producing web-ready communications: graphic design principles, storyboards, web development, shared project management skills such as interviewing and project scheduling, peer review, and redesign. Project activities focus on developing effective communications that can be deployed on the web. Students develop a variety of graphical images, an electronic portfolio, and a client website. Projects are accomplished using Dreamweaver and other Adobe Software. Prerequisites: Photoshop (10-201-133) and HTML & CSS (10-152-116)

10-201-140 Web Page Design 2**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

This course will focus on more advanced website design and development skills. Students will learn the importance of responsive design and gain hands-on experience in producing responsive websites for computer, tablet and mobile devices. Students will use advanced features in Dreamweaver and are exposed to content management systems like Word Press. Prerequisites: Web Page Design 1 (10-201-139)

10-201-141 Professional Portfolio Assessment**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Students will complete professional portfolios containing examples of their work that demonstrate competency as a graphic/web designer. Resumes will be completed and students will practice job search and interview skills. Students will role-play in a mock interview utilizing their portfolios and demonstrating competence of what was learned. Prerequisite: Illustrator (10-201-134) InDesign (10-201-135) Corequisite: Web Page Design 2 (10-201-140)

10-201-142 Digital Marketing for Graphic Designers**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

This course focuses on how graphic designers can achieve marketing objectives using digital technologies and media. Students will gain an appreciation for current mobile marketing strategies and the importance of being adaptable with communication techniques. Students will learn how to develop relevant, appropriate content based on different media outlets. A focus on marketing analytics is included in this course.

10-201-143 Beginning WordPress**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

WordPress is one of the most popular and fastest growing open source content management systems available today. This course provides an introduction to WordPress for building and managing websites. Students will learn the differences between WordPress.com and WordPress.org. In addition, students will learn how to install WordPress, use a theme and plugins, and how to add and manage content. Prerequisite: HTML & CSS (10-152-116)

10-201-144 Freelancing for Creatives**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

Nearly every type of design service needed by most businesses could be provided by a freelancer, including marketing, publicity, advertising, web programming, and other creative works performed by a graphic designer. In this course students will learn what it takes to be a freelancer: finding work, setting budgets, creating contracts, and other money-related issues.

10-201-145 Motion Design**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

This course teaches students how to use Adobe After Effects and other software to create various multimedia elements including video, audio, and basic animation. Students will create projects and learn how to incorporate these elements into various forms of digital mediums.

10-201-146 Digital Video Concepts**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

This course teaches students about fundamental video concepts and editing, while reinforcing motion design and digital marketing. Focus will be on industry standard editing software to create video using production editing techniques in lighting, sound, and effects. Students will gain hands-on experience with video editing and post-production techniques, enabling them to create professional quality videos.

10-203-131 Introduction to Digital Photography**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students will explore the operations of a digital camera and explore photography as an artform. Students will develop habits for professional work, and create a wide range of images for portfolio-quality production. Students will develop knowledge and understanding of the digital camera, the fundamentals to stronger photographs, and basic photo editing. This is a living plan. Topics may change as the tenor of this class commands.

10-307-108 ECE: Early Language & Literacy**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

This course explores strategies to encourage the development of early language and literacy knowledge and skill building in children birth to 8 years of age. Learners will investigate the components of literacy including; literacy and a source of enjoyment, vocabulary and oral language, phonological awareness, knowledge of print, letters and words, comprehensions and an understanding of books and other texts. Theories and philosophies regarding children's language and literacy development will be addressed. Dual language learning will be examined within the context of developmentally appropriate practices. Assessment tools for early language and literacy acquisition will be reviewed.

10-307-110 ECE: Soc S, Art, & Music**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

This course will focus on beginning level curriculum development in the specific integrated content areas of social studies, art, music and movement (SSAMM).

10-307-112 ECE: STEM**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

This course will focus on beginning level curriculum development in the specific integrated content areas of science, technology, engineering, and mathematics.

10-307-148 ECE: Foundations of ECE**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students are introduced to the early childhood profession. Students integrate strategies that support diversity and anti-bias perspectives; investigate the history of early childhood education; summarize types of early childhood education settings; identify the components of a quality early childhood education program; summarize responsibilities of early childhood education professionals; explore early childhood curriculum models.

10-307-151 ECE: Infant & Toddler Dev**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students study infant and toddler development as it applies to an early childhood education setting. Students integrate strategies that support diversity and anti-bias perspectives; analyze development of infants and toddlers (conception to three years); correlate prenatal conditions with development; summarize child development theories; analyze the role of heredity and the environment; examine research-based models; examine culturally and developmentally appropriate environments for infants and toddlers.

10-307-160 ECE: Field Experience 1**3 credits • 18 lecture hours • 0 lab hours • 162 total hours**

This 3-credit introductory field experience course, introduces the foundations of early childhood education under guided supervision of a mentor teacher in an early childhood setting, working with children birth through age 8. This course meets the requirements for the Wisconsin Model Early Learning Standards 18-hour training.

10-307-167 ECE: Hlth Safety & Nutrition**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students examine the topics of health, safety, and nutrition within the context of the early childhood educational setting. Students integrate strategies that support diversity and anti-bias perspectives; follow governmental regulations and professional standards as they apply to health, safety, and nutrition; provide a safe early childhood program; provide a healthy early childhood program; provide a nutritionally sound early childhood program; adhere to child abuse and neglect mandates; apply Sudden Infant Death Syndrome (SIDS) risk reduction strategies; incorporate health, safety, and nutrition concepts into the children's curriculum.

10-307-170 ECE: Field Experience 2**3 credits • 18 lecture hours • 0 lab hours • 162 total hours**

This 3-credit intermediate field experience course includes assisting the mentor teacher in carrying out classroom routines and implementing developmentally appropriate learning experiences that promote child development and learning through play for children birth to age 8.

10-307-179 ECE: Child Development**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students examine child development within the context of the early childhood education setting. Students analyze social, cultural, and economic influences on child development; summarize child development theories; analyze development of children age three through age eight; summarize the methods and designs of child development research; analyze the role of heredity and the environment.

10-307-187 ECE: Children w Diff Abilities**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students focus on the child with differing abilities in an early childhood education setting. Students integrate strategies that support diversity and anti-bias perspectives; provide inclusive programs for young children; apply legal and ethical requirements including, but not limited to, ADA and IDEA; differentiate between typical and exceptional development; analyze the differing abilities of children with physical, cognitive, health/medical, communication, and/or behavioral/emotional disorders; work collaboratively with community and professional resources; utilize an individual educational plan (IEP/IFSP) for children with developmental differences; adapt curriculum to meet the needs of children with developmental differences; cultivate partnerships with families who have children with developmental differences.

10-307-188 ECE: Guiding Child Behavior**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students examine positive strategies to guide children's behavior in the early childhood education setting. Students integrate strategies that support diversity and anti-bias perspectives; summarize early childhood guidance principles; analyze factors that affect the behavior of children; practice positive guidance strategies; develop guidance strategies to meet individual needs; create a guidance philosophy.

10-307-190 ECE: Field Experience 3**3 credits • 18 lecture hours • 0 lab hours • 162 total hours**

This 3-credit advanced field experience course focuses on supporting young children's development birth to age 8 through observation, assessment, and implementation of developmentally appropriate teaching strategies.

10-307-195 ECE: Family & Community Rel**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students examine the role of relationships with family and community in early childhood education. Students implement strategies that support diversity and anti-bias perspectives when working with families and community; analyze contemporary family patterns, trends, and relationships; utilize effective communication strategies; establish ongoing relationships with families; advocate for children and families; work collaboratively with community resources.

10-307-210 ECE: Field Experience 4**3 credits • 18 lecture hours • 144 lab hours • 306 total hours**

This final 3-credit pre-professional field experience course focuses on demonstrating a comprehensive understanding of children birth to age 8, and families. An emphasis is on practicing the lead teacher role to design, implement and evaluate a connected unit of learning experiences.

10-325-101 Golf Course Operations**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students tee time operation, rules of golf, terminology, licenses and certification, strategic and operational planning, golf associations, course/club membership / ownership's, and policies and procedures within a golfing facility.

10-325-103 Pro Shop Management**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students study policies and procedures for inventory control systems, work schedules, sales and service, product lines, pricing strategies, vendors and suppliers, quality control issues, tournament operations and programs, golf cart operations, teaching programs, and practice range operations.

10-325-104 Club Financial Management**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students study budgeting, banking, cash control procedures, the accounting cycle, financial reports, payroll procedures, labor costs, depreciation expense, and financial controls.

10-325-107 Soils, Conservation, and Fertility**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students study the establishment, modification, and maintenance of northern turf grasses. They learn about irrigation systems, drainage needs, and soil tests. They study weather-related issues, diseases, insects, pesticide application, and appropriate chemicals.

10-325-108 Tournament Promotions**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Students work in cooperation with a local golf course to apply promotion, marketing, and business principles to the development of plans and implementation of a group golf tournament program or outing.

10-325-109 Integrated Turf Management**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students study the establishment, modification, and maintenance of northern turf grasses. They learn about irrigation systems, drainage needs, and soil tests. They study weather-related issues, diseases, insects, pesticide application, and appropriate chemicals. Students study integrated pest management strategies (IPM). Prerequisite: Turf Grass Horticulture (10-325-127)

10-325-110 Golf Course Design and Renovation**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Students learn maintenance procedures for non-turf areas, bunkers, and ornamental plantings. They study the protection of environmentally sensitive areas, the management of water hazards, and the care of trees. Students also learn the safety issues with golf design and appropriate renovation techniques / procedures.

10-325-113 Golf Course Equipment Repair**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students study safe operating procedures, basic repairs, and maintenance practices to develop their understanding of the principles behind the operation of turf management and recreational equipment.

10-325-114 Techniques for Teaching Golf**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Students study the principles and techniques involved in teaching people the rules and etiquette of golf as well as the fundamentals and mechanics of the golf swing.

10-325-118 Golf Course Irrigation Systems**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students gain knowledge about irrigation systems for golf courses. Students learn how to effectively manage the irrigation systems. Students also learn about calibration, design, installation, repair, diagnostics, water efficiency, rates and frequency, water quality, disease and pest control, trace elements, water sampling, minerals deposits, effluent wastewater handling, and pump house design and maintenance.

10-325-124 Player Development 1**2 credits • 27 lecture hours • 18 lab hours • 45 total hours**

Students learn skills needed to help them pass the PGA players ability test. The course will concentrate on players putting, chipping and full swing. The use of modern teaching tools and swing analysis equipment will be provided. Students have hands-on lessons with PGA instructors and create their own learning portfolio.

10-325-127 Turf Grass Horticulture**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Biological principles of growing horticultural crops with an emphasis toward turfgrass- including anatomy, reproduction, light, temperature, water, nutrition, and growth and development. Laboratory exercises emphasize environmental factors and permit detailed observation of plant growth.

10-325-128 Spring Internship: Clubhouse**1 credits • 9 lecture hours • 0 lab hours • 45 total hours**

Course will focus on tournament and league organization/prep including complete entry forms, rules of competition, checklist, entry fee, prize payouts, and financial breakdowns. Students will learn multi-day tournament set up as well as league play.

10-325-129 Summer Internship: Clubhouse**1 credits • 0 lecture hours • 0 lab hours • 72 total hours**

This class is designed to complement the work experience a student will receive during a summer internship: The student will report on Tournament activities worked. The student will Shadow/Report Food and Beverage Director as well as teaching Professional. The Student will report on staffing levels and show mastery of point of sale equipment.

10-325-130 Fall Internship: Clubhouse**1 credits • 9 lecture hours • 0 lab hours • 45 total hours**

In this course students will recap the summer experience and connect the important relationship between revenue and expense and how the customer service experience plays a vital role in a clubs success.

10-410-101 Construction Fundamentals**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Develop the knowledge skills process and understanding of site plans, footings and foundations, floor plans, elevations, below-grade piping, above-grade piping, isometric piping diagrams, schedules and details, electrical floor plans, lighting, ventilating, and air conditioning. OSHA standards are covered.

10-449-160 Industrial Safety Practices & Career Development**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

Students will gain an understanding of the OSHA regulations governing safety in the workplace. They will earn an OSHA 10-hour certification card upon successful completion of this course. Students will also be introduced to the ASME safe rigging practices to be applied to rigging applications in the field. Students discover employment strategies designed to assist in securing employment. The course will help develop an awareness of personal and academic skills as they relate to the job seeking process.

10-481-101 Solar Photovoltaic Technology**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Examines the scientific principles, engineering design, and economic analysis of solar photovoltaic systems. Complete a site assessment, specify hardware components, and model economic performance for a solar PV system. This course can be applied as an elective for several STEM degree programs at SWTC and four-year universities, particularly those with program emphases in sustainability and renewable energy.

10-481-102 Introduction to Renewable Energy**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

An overview of various renewable energy technologies and sustainable design practices and their current applications. Emphasis is placed on policies, renewable energy production, green products and jobs.

10-481-103 Intro to Energy Management**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Introduces the basic concepts of energy, utility systems and utility rate structures; defines the need for energy management as an integral part of society at all levels. The course will present the various opportunities available to energy management students

10-481-104 Lighting Fundamentals**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Light sources, luminaries, lighting controls, manufacturer lamp and ballast specifications, lighting power density, lighting-HVAC interactions, retrofit opportunities, cost savings analysis and lighting codes/regulations. Students will critically evaluate lighting systems, luminaries and associated components. Understand and perform various types of lighting calculations. (Prerequisite: Intro to Energy Management)

10-481-105 Energy Control Strategies**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Building system control concepts and devices; including electric and digital controls, emphasis is placed on identifying and understanding control strategies related to energy using systems and methods to estimate energy savings.

10-481-106 Commercial HVACR Analysis**3 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Identify commercial HVAC system types and the general energy use impact of each type. Calculations of system equipment efficiencies will be used to determine EER, SEER, AFUE, COP, combination and seasonal efficiency in boilers, balance point partial efficiency.

10-481-107 Energy Accounting**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Review of energy units, data gathering for energy accounting utility rates and schedules, energy data organization, adjusted baselines, cost avoidance, load factor, data analysis, data presentation, and use of utility energy accounting software.

10-481-108 Energy Modeling**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

This course will teach the student how to use "Manual J" from ACCA, REScheck, and REMrate. Students will develop the skills to do residential heating and cooling heat loads. Students will calculate heat loss and also losses or gains due to infiltration, sun loads and internal gains. Additionally, the students will begin to investigate energy consumption associated with lighting, appliances and plug loads.

10-481-109 Sustainable Energy Mngt Career Experience**2 credits • 0 lecture hours • 0 lab hours • 144 total hours**

Students will obtain practical, hands-on experience while applying skills developed in the Sustainable Energy Management program at an approved site with employer and instructor supervision. Professional behavior, good communication, and positive interpersonal skills will also be demonstrated.

10-501-101 Medical Terminology**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

This course focuses on the component parts of medical terms: prefixes, suffixes and word roots. Students practice formation, analysis and reconstruction of terms. Emphasis on spelling, definition and pronunciation. Introduction to operative, diagnostic, therapeutic and symptomatic terminology of all body systems, as well as systemic and surgical terminology.

10-501-101 Medical Terminology**2 credits • 54 lecture hours • 0 lab hours • 54 total hours**

This course focuses on the component parts of medical terms: prefixes, suffixes and word roots. Students practice formation, analysis and reconstruction of terms. Emphasis on spelling, definition and pronunciation. Introduction to operative, diagnostic, therapeutic and symptomatic terminology of all body systems, as well as systemic and surgical terminology.

10-501-107 Digital Literacy for Healthcare**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Provides an introduction to basic computer functions and applications utilized in contemporary healthcare settings. Students are introduced to the hardware and software components of modern computer systems and the application of computers in the workplace. Emphasizes the use of common software packages, operating systems, file management, word processing, spreadsheet, database, Internet, and electronic mail.

10-501-153 Body Structure and Function**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

The learner will become familiarized with the body structures, the functions, and examine the interrelationship between structure and function.

10-503-100 Firefighting Principles**4 credits • 36 lecture hours • 72 lab hours • 108 total hours**

This course will provide the student an understanding of the principles of firefighting and fire department operations. It includes fire behavior, use of personal protective equipment, fire attack, and extinguishing methods.

10-503-101 Hazardous Material Awareness and Operations**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

This course will provide the student with the necessary training to operate at awareness and operational level for hazardous materials response in emergency situations.

10-504-101 Introduction to Criminal Justice Studies**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Learners will distinguish between the roles and functions of courts with jurisdiction in Wisconsin, differentiate between the roles and functions of federal, state, and local law enforcement agencies; apply professional principles as a law enforcement officer; determine modern police functions and policies from an historical perspective; identify the role of law enforcement officers in American society; identify the law enforcement policies required by Wisconsin statutes; defend the importance of written agency policies; distinguish between "ministerial" and "discretionary" duties; utilize a decision-making model; identify the characteristics of a good decision maker; describe how professionalism, ethics, and moral standards relate to a law enforcement career; practice a code of behavior that embodies the principles and obligations of the law enforcement code of ethics; incorporate ethical decision making strategies; describe how decisions are made; enhance an officer's critical thinking and police problem solving skills; and apply principles of critical thinking, decision-making, and problem solving.

10-504-102 Constitutional Law Application**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Learners will diagram the structure of the criminal justice system, identify situations where constitutional rules are applicable; identify situations where an officer may use reasonable suspicion to contact a subject; identify the elements of a lawful arrest; identify search-related activities where the 4th amendment is not applicable; identify the requirements that pertain to search warrants; analyze situations where an officer may conduct a search without a warrant; compare the requirements for conducting routine searches with those for searching disabled persons and strip searches; identify the requirements of the laws governing confessions and statements; and analyze the various requirements that evidence must meet before it can be admitted in court.

10-504-103 Criminal Law Studies**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Learners will identify basic concepts of criminal law; analyze facts, circumstances, and situations and determine which, if any, crimes against persons have been committed; analyze facts, circumstances, and situations and determine which, if any, crimes against property have been committed; and analyze facts, circumstances, and situations and determine which, if any, crimes involving drugs, alcohol or other criminal activity have been committed.

10-504-107 Criminal Investigation Application**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

The learner will describe the role evidence plays in criminal investigations and prosecutions; apply the steps for processing crime scenes; apply appropriate strategies to locate, handle, and package evidentiary items; document the crime scene; recognize the unique investigative issues for crimes against life; apply appropriate strategies to secure the scene, collect and preserve evidence, and investigate a death; recognize the dynamics of victimization; apply knowledge of the definitions and responsibilities for law enforcement; analyze the role of law enforcement in responding to domestic abuse; intervene and apply appropriate investigative strategies; respond to an officer-involved domestic violence incident; analyze the role of law enforcement in responding to sexual abuse; demonstrate investigative techniques in a simulated sexual assault case; and identify other resources that can assist in sexual assault cases.

10-504-119 Introduction to Corrections**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

The theories, philosophies, and practices of corrections will be examined. The history and current trends will be used to analyze the differences between correctional options.

10-504-120 Homeland Security/Terrorism**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students discuss the United States Department of Homeland Security and its mission will be investigated. Students analyze the use of chemical, biological, radiological, nuclear and explosive devices, and the use of these weapons of mass destruction. Discussion on the importance and basic elements of a planned response, methods used to prevent the importation of weapons of mass destruction into the U.S., and learn what is being done and what can be done to prevent another large-scale terrorist incident in the U.S. Learn the Incident Command System required by National Incident Management System as well as the National Emergency Response System. Analysis will be made of areas of threat identification, natural and man-made emergency operation planning and counterterrorism response.

10-504-126 Communication Principles for Emergency Services**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students will learn how to write a wide variety of law enforcement reports to accurately and fairly convey necessary information for use by investigators, prosecutors, and the public. Students will discuss the role of communication and how to apply specific communication skills and the strategies in a variety of simulated situations. Principles, guidelines, and techniques for law enforcement response to persons with possible mental disorders, alcohol or drug problems, dementia disorders, and/or developmental disabilities will be investigated. Students will practice the basics of presenting effective court testimony and will have the opportunity to practice giving testimony based on a report they have previously written. Students will learn techniques and procedures necessary to interview or interrogate a variety of individuals, including adult and juvenile witnesses, suspects, and victims.

10-504-127 Emergency Response and Intervention**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students will explore various unique challenges facing law enforcement officers operating in the criminal justice system. Specifically, students will examine contemporary issues surrounding tactical response options, active shooter response, hostage situations, mass panic and civil disorders, public health and pandemic response, natural disaster, and hazardous materials response. Students will examine the role of law enforcement professionals within the greater emergency management spectrum as it relates to the incident command structure.

10-504-129 Criminal Evidence**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Students recognize and appreciate the legal process and procedures involved in developing a case. They explore the history and necessity for having legal guidelines. Students practice collecting a variety of evidence including: trace, biological, fingerprint, and impression, and prepare a case for court.

10-504-134 Emergency Telecommunicator**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Based on standards, guidelines, and best practices, we will discuss issues relevant to one and two person communication centers and provide tips and recommendations on how to be a better call taker and dispatcher. Topics covered will be: • Telecommunication Essentials/Roles and Responsibilities • Call Management • Proper Call Classification/Coding • Legal Considerations • Dispatch Stress

10-504-134 Emergency Telecommunicator**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Based on standards and guidelines developed by the International Academies of Emergency Dispatch, we will discuss issues relevant to one and two person communications centers and provide tips and recommendations on how to be a better call taker and dispatcher. Topics covered: • Telecommunication Essentials/Roles and Responsibilities • Call Management • Proper Call Classification/Coding • Legal Considerations • Dispatch Stress This is a National Certification.

10-504-135 Law Enforcement Academy Prep**3 credits • 0 lecture hours • 72 lab hours • 144 total hours**

Students will participate in activities that will directly prepare them for the law enforcement academy. This course is designed for students that are actively seeking enrollment in a law enforcement academy and includes extensive fitness training as well as skills necessary to prepare for future law enforcement training. Students will also engage in instructor guided experiential learning related to course content.

10-504-154 Community Policing in a Diverse Society**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students will explore key insights and information relevant to criminal justice professionals engaged in law enforcement contacts with a variety of cultures, physical or mental conditions, and environmental challenges. Students identify principles, techniques and behaviors that promote community service and effective interaction in a diverse society. Students will learn to recognize and respond to people with mental illness by utilizing knowledge and community resources. They identify the differences in policing techniques given a variety of environments, and the importance of being able to recognize and adapt quickly in order to solve, rather than create or add to, a problem situation. They apply principles and techniques of good communication, decision-making, and problem solving-oriented policing. They implement principles and techniques of crime prevention and gaining community support for police efforts.

10-508-101 Dental Health Safety**1 credits • 0 lecture hours • 36 lab hours • 36 total hours**

Prepares dental auxiliary students to respond proactively to dental emergencies, control infection, prevent disease, adhere to OSHA standards, and safely manage hazardous materials. Students also take patient vital signs and collect patient medical/dental histories. CPR certification is required prior to completion of the course.

10-508-103 Dental Radiography**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Prepares dental auxiliary students to respond proactively to dental emergencies, control infection, prevent disease, adhere to OSHA standards, and safely manage hazardous materials. Students also take patient vital signs and collect patient medical/dental histories. CPR certification is required prior to completion of the course.

10-508-113 Dental Materials**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Prepares dental auxiliary students to handle and prepare dental materials such as liners, bases, cements, amalgam, resin restorative materials, gypsum products, and impression materials. They also learn to take alginate impressions on manikins and clean removable appliances.

10-510-140 Nutrition**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Learners examine and use basic nutrition principles in planning and evaluating preconception, pregnancy, lactation, and infant nutrition. They practice conducting routine nutrition screening, evaluate the impact of food safety, and promote healthy diets. Learners adhere to the MANA core competencies for basic midwifery practices as it relates to basic nutrition practices

10-510-146 Well Woman Gynecology**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

The learner will meet competencies set forth in the care of the well woman from childbearing through menopause; to include history and physical exams, methods of contraception, infertility, unplanned/unwanted pregnancy, human sexuality, and STDs. Prerequisite: Antepartum Theory (10-510-160) and Antepartum Lab (10-510-161)

10-510-148 Midwife Clinic Lab I**1 credits • 0 lecture hours • 36 lab hours • 36 total hours**

The learner will review and discuss their clinical experience and provide a formal case study presentation with analysis and critical thinking for positive client outcome. Prerequisites: Antepartum Theory (10-510-160) and Antepartum Lab (10-510-161)

10-510-149 Professional Issues in Midwifery**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

The learner will prepare for a professional career. Legal and ethical aspects of the profession, opportunities and trends, and professional issues will be covered.

10-510-150 OB/Medication Management**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

The learner will define the relationship of the midwife and healthcare partners, conditions which require referral and transfer to physician care, and the midwife's role and responsibility to client. Co-requisites: Intrapartum (10-510-164) Postpartum (10-510-165) Neonate (10-510-166)

10-510-152 Midwife Clinic Lab II**2 credits • 0 lecture hours • 72 lab hours • 72 total hours**

The learner will use critical thinking and problem solving skills utilizing case presentation and analysis using the learner's clinical experiences. The learner will provide input into discussion on ethics, professional considerations, and current practice standards as relates to midwife practice. Prerequisite: Midwife Clinic Lab I (10-510-148) Midwife Clinic 5 (10-510-168)

10-510-153 Applied Pharmacology**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

The learner will classify medications into correct drug categories and apply basic pharmacology principles. The learner will apply basic pharmacodynamics to identify common medications, medication preparation, and administration of medications used by the major body systems.

10-510-154 Midwife Research**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

The learner will gain an introductory understanding to midwifery and medical research by becoming research aware, and gaining a basic ability to read, evaluate, and interpret papers from various evidence sources including both research paradigms and the many approaches incorporated within them.

10-510-155 Introduction to Midwifery Practice**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

The learner will become familiar with the history and development of the CPM, basic principles of midwifery practice with an emphasis on basic healthcare and counseling skills using the Midwifery Model of Care, childbirth education for the consumer, diversity issues, basic terminology, and professional communication skills.

10-510-156 Midwife Science Lab**1 credits • 0 lecture hours • 36 lab hours • 36 total hours**

The learner will become familiar with basic theory and performance of beginning essential health care skills necessary to care for the woman during the childbearing year.

10-510-157 Physical Exam for the Midwife**2 credits • 0 lecture hours • 72 lab hours • 72 total hours**

The learner will become familiar with the needed theory and skills to perform a complete physical exam using an in-depth system approach.

10-510-158 Introduction to Midwife Clinic**1 credits • 0 lecture hours • 0 lab hours • 72 total hours**

The learner will prepare to observe, interact, and analyze maternity services in a variety of clinical settings within classroom and community interaction. The learner will participate in attendance of various childbirth education classes, breastfeeding support meetings, and exploration of public health services.

10-510-159 Midwife Clinic 1**1 credits • 0 lecture hours • 0 lab hours • 72 total hours**

Credits: 1 Lecture Hours: 0 Occupational Hours: 72 The learner will observe and interact within in a clinical setting with a focus on introduction to Midwifery practice and basic general skills. The learner will progress from observation to beginning performance in the clinical application of general basic skills. Credit for Prior Learning Option: Credential Notes: Current Certified Professional Midwife (CPM) certification Prerequisites: Introduction to Midwife Clinic (10-510-158) Midwife Science Lab (10-510-156) Physical Exam for the Midwife (10-510-157)

10-510-160 Antepartum Theory**4 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Antepartum provides an in-depth study of client care through the antepartum including nutrition, establishing pregnancy, the management and support of both psychological and physiological changes in pregnancy. The course includes issues of complications during pregnancy, genetics, embryology, fetology, lab and diagnostic tests. Prerequisites: Introduction to Midwifery Practice (10-510-155) Midwife Science Lab (10-510-156) Physical Exam for the Midwife (10-510-157) Introduction to Midwife Clinic (10-510-158)

10-510-161 Antepartum Lab**1 credits • 0 lecture hours • 36 lab hours • 36 total hours**

The learner will become familiar with the theory and performance of essential health care skills necessary during the Antepartum period of pregnancy. Co-requisite: Antepartum Theory (10-510-160)

10-510-162 Midwife Clinic 2**2 credits • 0 lecture hours • 0 lab hours • 144 total hours**

Credits: 2 Lecture Hours: 0 Occupational Hours: 144 ~ Births: 7 ~ Prenatal Exams: 10 ~ Initial Prenatal Exams: 2 ~ Newborn Exams: 7 ~ Postpartum Visits: 3 All as Assistant under Supervision The learner will develop beginning critical thinking skills for the antepartum client with a focus on counseling and education. The learner will perform in the clinical application of skills and theory for the client during the antepartum, intrapartum and postpartum periods of pregnancy using the Midwives Model of Care. Credit for Prior Learning Option: Credential Notes: Current Certified Professional Midwife (CPM) certification Visit the SWTC eCampus Bookstore for book costs and ISBNs. Prerequisite: Midwife Clinic 1 (10-510-159)

10-510-163 Midwife Clinic 3**1 credits • 0 lecture hours • 0 lab hours • 72 total hours**

Credits: 1 Lecture Hours: 0 Occupational Hours: 72 ~ Births: 3 ~ Prenatal: 5 ~ Initial Prenatal: 1 ~ Newborn Exams: 3 ~ Postpartum Visits: 2 All as Assistant under Supervision The learner will have the opportunity to further develop critical thinking skills using the Midwives Model of care in making clinical decision with an emphasis on antenatal care. The learner will focus on performance of initial history and physical examination including collection of appropriate specimens. Credit for Prior Learning Option: Credential Notes: Current Certified Professional Midwife (CPM) certification Visit the SWTC eCampus Bookstore for book costs and ISBNs. Prerequisite: Midwife Clinic 2 (10-510-162)

10-510-164 Intrapartum**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Intrapartum focuses on normal labor and birth. The learner will be able to determine the steps of the normal labor process including mechanisms of labor and birth, how to assess the mother and neonate's well-being, and screening for complications in each stage of labor. Prerequisites: Antepartum Theory (10-510-160) Antepartum Lab (10-510-161)

10-510-165 Postpartum**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

Postpartum focuses on the normal postpartum period of pregnancy. The learner will gain an understanding of the normal events of the entire postpartum period, assess for deviations from normal and identify appropriate response. Prerequisites: Antepartum Theory (10-510-160) Antepartum Lab (10-510-161)

10-510-166 Neonate**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

Neonate focuses on the normal newborn period, including breastfeeding. The learner will gain an understanding and be able to assess for normal newborn physical and behavioral characteristics and identify common complications affecting the neonate. Prerequisite: Antepartum Theory (10-510-160) Antepartum Lab (10-510-161)

10-510-167 Midwife Clinic 4**2 credits • 0 lecture hours • 0 lab hours • 144 total hours**

Credits: 2 Lecture Hours: 0 Occupational Hours: 144 ~ Births: 10 ~ Prenatal: 10 ~ Initial Prenatal: 3 ~ Newborn Exams: 10 ~ Postpartum Visits: 5 All as Assistant under Supervision The learner focuses on development and skills for education and counseling in the uncomplicated intra and postpartum periods in a supervised clinical setting progressing into a primary care role using the Midwives Model of Care. The learner will begin to develop management skills for the complicated client during the antepartum period. Credit for Prior Learning Option: Credential Notes: Current Certified Professional Midwife (CPM) certification Visit the SWTC eCampus Bookstore for book costs and ISBNs. Prerequisite: Midwife Clinic 3 (10-510-163)

10-510-168 Midwife Clinic 5**2 credits • 0 lecture hours • 0 lab hours • 144 total hours**

Credits: 2 Lecture Hours: 0 Occupational Hours: 144 ~ Births: 5 ~ Prenatal: 25 ~ Initial Prenatal: 8 ~ Newborn Exams: 5 ~ Postpartum: 10 All as Primary under Supervision. Using the Midwife Model of Care the learner focuses on beginning development of primary management skills for the uncomplicated intra and postpartum periods in a supervised clinical setting. The learner will begin development of management skills for the care and management of the uncomplicated newborn. The learner will develop primary intermediate management skills for the complicated client during the antepartum period. Credit for Prior Learning Option: Credential Notes: Current Certified Professional Midwife (CPM) certification Visit the SWTC eCampus Bookstore for book costs and ISBNs. Prerequisite: Midwife Clinic 4 (10-510-167)

10-510-169 Midwife Clinic 6**2 credits • 0 lecture hours • 0 lab hours • 144 total hours**

Credits: 2 Lecture Hours: 0 Occupational Hours: 144 ~ Births: 10 ~ Prenatal: 20 ~ Initial Prenatal: 6 ~ Newborn Exams: 10 ~ Postpartum: 14 All as Primary under Supervision. Using the Midwives Model of Care the learner focuses on intermediate development of primary management skills for the uncomplicated intra and postpartum periods in a supervised clinical setting. The learner will develop management skills for the primary care and management of the uncomplicated newborn. The learner will assist the preceptor in advanced primary antenatal care skills of the complicated client. The learner will begin to develop counseling and education management for Well Woman Care. Credit for Prior Learning Option: Credential Notes: Current Certified Professional Midwife (CPM) certification Visit the SWTC eCampus Bookstore for book costs and ISBNs. Prerequisite: Midwife Clinic 5 (10-510-168)

10-510-170 Midwife Clinic 7**3 credits • 0 lecture hours • 0 lab hours • 216 total hours**

Credits: 3 Lecture Hours: 0 Occupational Hours: 216 ~ Births: 10 ~ Prenatal: 30 ~ Initial Prenatal: 6 ~ Newborn Exams: 5 ~ Postpartum: 22 ~ Preconception visits: 10 ~ Lactation counseling: 10 All as Primary under Supervision ~ Includes 5 Continuity-of-Care Clients (5 PN + Birth + NB Exam + 2 PP), Exit Exam. Professional Issues exam. The learner will focus on refinement of all pertinent counseling and management skills for independent direct entry midwifery practice using the Midwives Model of Care. Credit for Prior Learning Option: Credential Notes: Current Certified Professional Midwife (CPM) certification Visit the SWTC eCampus Bookstore for book costs and ISBNs. Prerequisite: Midwife Clinic 6 (10-510-169)

10-512-125 Intro to Surgical Technology**4 credits • 54 lecture hours • 36 lab hours • 90 total hours**

Provides the foundational knowledge of the occupational environment. Principles of sterilization and disinfection are learned. Surgical instruments are introduced. Preoperative patient care concepts are simulated. Lab practice is included.

10-512-126 Surgical Tech Fundamentals 1**4 credits • 54 lecture hours • 36 lab hours • 90 total hours**

Focuses on preparing the patient and operating room for surgery. Principles of sterile technique are emphasized as the student moves into the scrub role. Lab practice is included.

10-512-127 Exploring Surgical Issues**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Explores a variety of issues related to surgical technology. Emphasis is placed on becoming a professional member of the surgical team.

10-512-128 Surgical Tech Fundamentals 2**4 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Focuses on enhancing surgical technology skills while functioning as a sterile team member. Lab is included. Prerequisites: Surgical Fundamentals 1 (10-512-126) Medical Terminology (10-501-101)

10-512-129 Surgical Pharmacology**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Basic study of drug classifications, care, and handling of drugs and solutions, application of mathematical principles in dosage calculations, terminology related to pharmacology, anesthesia, and drugs used in surgery.

10-512-130 Surgical Skills Application**2 credits • 0 lecture hours • 0 lab hours • 144 total hours**

Provides a transition from the academic to the clinical setting. Learners integrate the surgical technologist skills as they apply to various surgical procedures. Prerequisites: Surgical Technology (10-512-125) Surgical Fundamentals 1 (10-512-126)

10-512-131 Surgical Interventions 1**4 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Provides the foundational knowledge of surgical core and specialty procedures. Examines the pathophysiology, diagnostic interventions, health sciences, and surgical techniques for a variety of procedures.

10-512-132 Surgical Technology Clinical 1**3 credits • 0 lecture hours • 0 lab hours • 216 total hours**

Apply basic surgical theories, principles, and procedural techniques in the operating room. Students begin to function as team members under the guidance of the instructor and authorized clinical personnel. Prerequisite: Surgical Tech Fundamentals 2 (10-512-128) Surgical Skills Application (10-512-130)

10-512-133 Surgical Technology Clinical 2**3 credits • 0 lecture hours • 0 lab hours • 216 total hours**

Further experience in a clinical setting allows the student to continue to improve technical skills while accepting more responsibilities during surgical procedures

10-512-135 Surgical Technology Clinical 3**3 credits • 0 lecture hours • 0 lab hours • 216 total hours**

Further experience in a clinical setting allows the student to continue to improve technical skills while accepting more responsibilities during surgical procedures. Prerequisite: Surgical Interventions 1 (10-512-131) Surgical Technology Clinical 2 (10-512-133)

10-512-136 Surgical Technology Clinical 4**3 credits • 0 lecture hours • 0 lab hours • 216 total hours**

During this clinical course the student will function relatively independently. Serves as a transition from a student perspective to an employee by utilizing advanced skills for an entry level Surgical Technologist.

10-512-142 Surgical Interventions II**4 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Expands knowledge of core and specialty surgical procedures by incorporating pathophysiology, diagnostic interventions, health sciences, and surgical techniques.

10-513-109 Blood Bank**4 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Focuses on blood banking concepts and procedures including blood typing, compatibility testing, work ups for adverse reaction to transfusions, disease states and donor activities. Prerequisites: Basic Immunology Concepts (10-513-115)

10-513-110 Basic Lab Skills**1 credits • 9 lecture hours • 18 lab hours • 27 total hours**

This course explores health career options and the fundamental principles and procedures performed in the clinical laboratory. You will utilize medical terminology and basic laboratory equipment. You will follow required safety and infection control procedures and perform simple laboratory tests.

10-513-111 Phlebotomy**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

This course provides opportunities for learners to perform routine venipuncture, routine capillary puncture, and special collection procedures.

10-513-113 QA Lab Math**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

This course focuses on performing the mathematical calculations routinely used in laboratory settings. You will explore the concepts of quality control and quality assurance in the laboratory.

10-513-114 Urinalysis**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

This course prepares you to perform a complete urinalysis which includes physical, chemical, and microscopic analysis. You will explore renal physiology and correlate urinalysis results with clinical conditions. Prerequisite: Basic Lab Skills (10-513-110) General A&P (10-806-177)

10-513-115 Basic Immunology Concepts**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

This course provides an overview of the immune system including laboratory testing methods for diagnosis of immune system disorders, viral and bacterial infections. Co-requisite: Basic Lab Skills (10-513-110) General A&P (10-806-177)

10-513-116 Clinical Chemistry**4 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Introduces clinical chemistry techniques and procedures for routine analysis using photometric, potentiometric and separation techniques. Topics in this course include pathophysiology and methodologies for carbohydrates, lipids, proteins, renal function and blood gas analysis. Additional topics include hepatic, cardiac markers, tumor markers, endocrine function, miscellaneous body fluids, toxicology, enzymes and electrolytes. Prerequisites: Intro to Biochemistry (10-806-186)

10-513-120 Basic Hematology**3 credits • 18 lecture hours • 72 lab hours • 90 total hours**

This course covers the theory and principles of blood cell production and function and introduces you to basic practices and procedures in the hematology laboratory. Prerequisite: Basic Lab Skills (10-513-110) General A&P (10-806-177)

10-513-121 Coagulation**1 credits • 0 lecture hours • 36 lab hours • 36 total hours**

This course introduces the theory and principles of coagulation and explores mechanisms involved in coagulation disorders. Emphasis is placed upon laboratory techniques used to diagnose disease and monitor treatment. Prerequisite: Basic Lab Skills (10-513-110) General A&P (10-806-177)

10-513-130 Advanced Hematology**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

This course explores mechanisms involved in the development of hematological disorders. Emphasis is placed upon laboratory techniques used to diagnose disorders and monitor treatment. Prerequisite: Basic Hematology (10-513-120)

10-513-133 Clinical Microbiology**4 credits • 18 lecture hours • 108 lab hours • 126 total hours**

This course presents the clinical importance of infectious diseases with emphasis upon the appropriate collection, handling and identification of clinically relevant bacteria. Disease states, modes of transmission and methods of prevention and control, including antibiotic susceptibility testing will also be discussed. Prerequisite: Microbiology (10-806-197)

10-513-140 Advanced Microbiology**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

This course provides an overview of acid fast organisms, fungi, parasites, and anaerobic bacteria. The organisms, their pathophysiology, epidemiology, the diseases and conditions that they cause, laboratory methods of handling, culturing and identification will be discussed. Prerequisite: Clinical Microbiology (10-513-133)

10-513-141 Pre-Clinical Experience**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

This course provides a comprehensive theory review prior to the start of the clinical experience. Students also engage in professional development activities including communication skills and continuing education requirements. Prerequisite: Clinical Microbiology (10-513-133)

10-513-151 Clinical Experience 1**3 credits • 0 lecture hours • 0 lab hours • 216 total hours**

In this clinical you will practice the principles and procedures of laboratory medicine as an entry level Clinical Laboratory Technician in a clinical laboratory setting. You will learn to operate state of the art instruments and report results on Laboratory Information Systems. Prerequisites: Advanced Hematology (10-513-130) Clinical Chemistry (10-513-116)

10-513-152 Clinical Experience 2**4 credits • 0 lecture hours • 0 lab hours • 288 total hours**

Provides continuing practice for the principles and procedures of laboratory medicine as an entry level Clinical Laboratory Technician in a clinical laboratory setting. You will learn to operate state of the art instruments and report results on laboratory Information Systems. Prerequisite: Advanced Hematology (10-513-130) Clinical Chemistry (10-513-116)

10-513-170 Introduction to Molecular Diagnostics**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Introduces the principles and application of molecular diagnostics in the clinical laboratory. Prerequisites: Clinical Microbiology (10-513-133)

10-513-180 Body Fluids Analysis**1 credits • 9 lecture hours • 18 lab hours • 27 total hours**

Covers principles and procedures related to laboratory analysis of body fluids, including serous fluids, cerebral spinal fluid, synovial fluid, and bronchoalveolar lavage (BAL) fluid. The major emphasis of the course is hematologic analysis, including cell counts and differentials. The completion of case studies allows the student to correlate laboratory results with disease states. Prerequisite: Basic Hematology (10-513-120)

10-513-184 HACCP Training**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

This course provides an introduction to HACCP (Hazard Analysis and Critical Control Points) for food processors. The relationship between food safety and HACCP will be discussed in the food manufacturing setting. The principles of HACCP will be explored. HACCP plans, implementation and plan maintenance will be developed in order to prevent foodborne illness. Upon successful completion of the course, students will receive a certificate of completion. Prerequisite: Manufacturing Practices for Food Industry (10-513-183) OR Manufacturing Practices for Food Industry (10-513-188)

10-513-187 Lab Science Practicum**2 credits • 0 lecture hours • 0 lab hours • 144 total hours**

In this experiential course you will practice the principles and procedures of laboratory processes required in the food and dairy industry. You will become familiar with industry standards and practices related to quality assurance and safety while working in a laboratory setting. You will learn to operate state of the art instruments and report results per industry protocols. Prerequisites: Manufacturing Practices for Food Industry (10-513-188)

10-513-188 Manufacturing Practices for the Food Industry**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

This course focuses on the Good Manufacturing Practices (GMP's) as they are defined in Part 110 of Title 21 of the Code of Federal Regulation for the food industry. You will be introduced to each GMP requirements and explore ways food manufacturers can establish process and product control to meet the intent of each GMP. You will also discuss the consequences of failing to meet and maintain compliance with the GMP's. This course does not replace the mandatory annual GMP training required for workers already employed in a regulated production facility.

10-520-101 Introduction to Human Services**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students investigate the various roles and responsibilities of human service providers. Students examine the history of "helping" and its influence on contemporary programs and policies. Students explore the challenges and dilemmas confronting human service providers as well as current trends and controversies. Because effective human service providers are aware of their own values and biases, students reflect on their thoughts, beliefs, and attitudes about working with diverse populations.

10-520-102 Ethics for the Profession**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students demonstrate their understanding of the Ethical Standards of Human Service Professionals through reflection, class discussion, and case studies. Students apply a model for ethical decision-making to real-world scenarios. Students examine the ethical issues involved in current controversies that affect human services. Prerequisite: Introduction to Human Services (10-520-101)

10-520-103 Issues In ATODA**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students examine the impact of legal and illegal drug use upon individuals and society. Students analyze the physiological and psychological effects of drugs. Students identify local resources for ATODA services and investigate current treatment strategies. Students reflect upon their attitudes and values about drug use, and how these beliefs may influence their work as human service providers. Prerequisite: Introduction to Human Services (10-520-101)

10-520-104 Community Resources and Services**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students identify programs and services provided by local human service agencies, through presentations by guest speakers, site visits, and independent research. Students create a resource file. Students implement a service project to address an unmet need in the community.

10-520-105 Interviewing and Counseling Techniques**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students demonstrate entry-level interviewing skills through role-plays and simulations. Students apply the “strengths perspective” and “solution-focused” techniques to client interactions. Prerequisite: Introduction to Human Services (10-520-101)

10-520-106 Issues of Gerontology**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students examine the challenges faced by individuals and society as human longevity increases. Students explore the issues of concern to older adults: ageism, physical and mental health, finances, relationships, living situations, and long-term/end-of-life care. Students examine their attitudes and beliefs about working with elders. Students identify local providers of services for older adults. Prerequisite: Introduction to Human Services (10-520-101) Ethics for the Profession (10-520-102)

10-520-107 Disability Studies**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students examine disability as a “social construct” created by the non-disabled community. Students analyze the barriers that prevent many people with disabilities from full participation in society. Students identify the causes and characteristics of various disabling conditions. Students reflect on their attitudes and beliefs about working with people with disabilities. Students investigate resources for people with disabilities as well as strategies for increasing inclusion. Prerequisites: Ethics for the Profession (10-520-102) Community Resources & Services (10-520-104)

10-520-108 Methods of Social Casework**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students develop skills in several areas of the human services profession including case management, crisis intervention, documentation, and grant writing. Prerequisite: Interviewing & Counseling Techniques (10-520-105) Corequisite: Professional Documentation in Human Services (10-520-109)

10-520-109 Professional Documentation in Human Services**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students document client information in accordance with professional guidelines using written, recorded and role-played case studies. Students create cover letters, memos, electronic correspondence, and a grant proposal. Prerequisites: Written Communication (10-801-195) and Interviewing & Counseling Techniques (10-520-105) Corequisite: Methods of Social Casework (10-520-108)

10-520-112 Children, Youth, & Family**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will explore the issues and concerns affecting the family system. Students will develop strategies for working effectively with families. Students will learn about child abuse/neglect investigations, foster care, and community-based interventions with children and adolescents. Students will examine models of practice for working with at-risk youth and strengthening families. Prerequisites: Ethics for the Profession (10-520-102) Community Resources & Services (10-520-104)

10-520-121 Field Study 1**4 credits • 18 lecture hours • 0 lab hours • 234 total hours**

Students gain “on-the-job” experience through placements at local human service agencies. Students examine their progress towards learning goals through reflection, discussion, and supervision. Students discuss their experiences, challenges, ethics, and boundary issues during the weekly seminar. Students are not paid for their time in the field. Prerequisites: Ethics for the Profession (10-520-102), Issues in ATODA (10-520-103)

10-520-122 Field Study 2**4 credits • 18 lecture hours • 0 lab hours • 234 total hours**

Students demonstrate advanced skills and techniques used in the field. Students examine their progress toward learning goals through reflection, discussion, and supervision. Students discuss their experiences, challenges, ethics, and boundary issues during the weekly seminar. Students are not paid for their time in the field. Prerequisite: Field Study 1 (10-520-121)

10-524-139 PTA Patient Interventions**4 credits • 36 lecture hours • 72 lab hours • 108 total hours**

An introduction to basic skills and physical therapy interventions performed by the physical therapist assistant.

10-524-140 PTA Professional Issues 1**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Introduces the history and development of the physical therapy program, legal and ethical issues, the interdisciplinary health care team, and professional communication skills.

10-524-142 PTA Therapeutic Exercise**3 credits • 18 lecture hours • 72 lab hours • 90 total hours**

Provides instruction on the implementation of a variety of therapeutic exercise principles. Learners implement, educate, adapt, and assess responses to therapeutic exercises. Prerequisite: PTA Applied Kinesiology 1 (10-524-156)

10-524-143 PTA Biophysical Agents**4 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Develops the knowledge and technical skills necessary to perform numerous therapeutic modalities likely to be utilized as a PTA. Prerequisite: PTA Patient Interventions (10-524-139)

10-524-144 PTA Princ of Neuro Rehab**4 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Integrates concepts of neuromuscular pathologies, physical therapy interventions, and data collection in patient treatment. Prerequisites: PTA Patient Interventions (10-524-139) PTA Applied Kinesiology 2 (10-524-157)

10-524-145 PTA Princ of Musculo Rehab**4 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Integrates concepts of musculoskeletal pathologies, physical therapy interventions, and data collection in patient treatment. Prerequisite: PTA Applied Kinesiology 2 (10-524-157)

10-524-146 PTA Cardio & Integ Mgmt**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Integrates concepts of cardiopulmonary and integumentary pathologies, physical therapy interventions, and data collection in patient treatment.

Prerequisites: PTA Patient Interventions (10-524-139) PTA Applied

Kinesiology 2 (10-524-157)

10-524-147 PTA Clinical Practice 1**2 credits • 0 lecture hours • 0 lab hours • 144 total hours**

Provides a part-time clinical experience to apply foundational elements, knowledge, and technical skills pertinent to physical therapy practice.

Prerequisites: PTA Applied Kinesiology 1 (10-524-156)

10-524-148 PTA Clinical Practice 2**3 credits • 0 lecture hours • 0 lab hours • 216 total hours**

Provides another part-time clinical experience to apply foundational elements, knowledge, and technical skills required of the entry level physical therapist assistant in various practice settings. Prerequisites: PTA Princ of Neuro Rehab (10-524-144) PTA Clinical Practice (10-524-147)

10-524-149 PTA Rehab Across the Lifespan**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

A capstone course that integrates concepts of pathology, physical therapy interventions and data collection across the lifespan. In addition the PTA's role in health, wellness, and prevention; reintegration, and physical therapy interventions for special patient populations will be addressed.

Prerequisites: PTA Princ of Neuro Rehab (10-524-144) PTA Princ of Musculo Rehab (10-524-145)

10-524-150 PTA Professional Issues 2**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Incorporates professional development, advanced legal and ethical issues, healthcare management and administration, and further development of professional communication strategies. Prerequisites: PTA Professional Issues (10-524-140)

10-524-151 PTA Clinical Practice 3**5 credits • 0 lecture hours • 0 lab hours • 360 total hours**

Provides a full-time clinical experience to apply foundational elements, knowledge, and technical skills required of the entry level physical therapist assistant in various practice settings. Prerequisites: PTA Princ of Neuro Rehab (10-524-144) PTA Princ of Musculo Rehab (10-524-145)

10-524-156 PTA Applied Kinesiology 1**4 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Introduces basic principles of musculoskeletal anatomy, kinematics, and clinical assessment. Students locate and identify muscles, joints, and other landmarks of the lower quadrant in addition to assessing range of motion and strength. Integrates analysis of gait. Prerequisite: Accepted into Physical Therapist Assistant Program (10-524-1)

10-524-157 PTA Applied Kinesiology 2**3 credits • 18 lecture hours • 72 lab hours • 90 total hours**

Applies basic principles from PTA Applied Kinesiology 1 to the axial skeleton and upper quadrant including location and identification of muscles, joints and other landmarks. Assess range of motion and strength of the axial skeleton and upper quadrant. Integrates analysis of posture. Prerequisites: General Anatomy & Physiology, (10-806-177) PTA Applied Kinesiology 1, (10-524-156) PTA Patient Interventions, (10-524-139) PTA Professional Issues 1, (10-524-140)

10-526-149 Radiographic Procedures 1**5 credits • 72 lecture hours • 36 lab hours • 108 total hours**

Prepares radiography students to perform routine radiographic procedures of the chest, abdomen, upper and lower extremities, and pelvis. Course includes considerations for mobile and trauma procedures. Students apply knowledge of human anatomy to position the patient correctly to achieve and evaluate optimal diagnostic quality images which includes identifying radiographically significant anatomy.

10-526-158 Introduction to Radiography**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Introduces students to the role of radiography in health care. Students apply healthcare communication techniques. Students are introduced to legal and ethical considerations, patient interactions and management, patient and provider safety, and pharmacology.

10-526-159 Radiographic Imaging**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Introduces radiography students to the process and components of imaging. Students determine the factors that affect image quality including receptor exposure, spatial resolution, and distortion.

10-526-168 Radiography Clinical 1**2 credits • 0 lecture hours • 0 lab hours • 144 total hours**

This beginning level clinical course prepares radiography students to perform radiologic procedures on patients with extensive supervision and direction. Students apply radiation protection and standard precautions in the production of radiographic images while adhering to legal and ethical guidelines. An emphasis of the course is the development of communication and critical thinking skills appropriate to the clinical setting.

10-526-174 ARRT Certification Seminar**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Provides preparation for the for the national certification examination prepared by the American Registry of Radiologic Technologists. Simulated registry examinations are utilized.

10-526-189 Radiographic Pathology**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

Prepares radiography students to determine the basic radiographic manifestations of pathological conditions. Students classify trauma related to site, complications, and prognosis and locate the radiographic appearance of pathologies.

10-526-190 Radiography Clinical 5**2 credits • 0 lecture hours • 0 lab hours • 216 total hours**

This fifth level clinical course prepares radiography students to perform radiologic procedures on patients with limited direct and mainly indirect supervision. Students apply radiation protection and standard precautions in the production of radiographic images in a health care setting while adhering to legal and ethical guidelines. Students are encouraged to demonstrate independent judgment in the performance of clinical competencies.

10-526-191 Radiographic Procedures 2**5 credits • 72 lecture hours • 36 lab hours • 108 total hours**

Prepares radiography students to perform routine radiographic procedures of the skull, facial bones, sinus, spine, bony thorax, gastrointestinal, urological, and special studies. Course includes considerations for contrast, mobile, surgical and trauma procedures. Students apply knowledge of human anatomy to position the patient correctly to achieve and evaluate optimal diagnostic quality images which includes identifying radiographically significant anatomy.

10-526-192 Radiography Clinical 2**3 credits • 0 lecture hours • 0 lab hours • 216 total hours**

This second level clinical course continues to prepare radiography students to perform radiologic procedures on patients with considerable direct and limited indirect supervision. Students apply radiation protection and standard precautions in the production of radiographic images in a health care setting while adhering to legal and ethical guidelines. An emphasis of the course is the development of communication and critical thinking skills appropriate to the clinical setting.

10-526-193 Radiography Clinical 3**4 credits • 0 lecture hours • 0 lab hours • 288 total hours**

This third level clinical course prepares radiography students to perform radiologic procedures on patients with varying degrees of direct and indirect supervision. Students apply radiation protection and standard precautions in the production of radiographic images in a health care setting while adhering to legal and ethical guidelines. An emphasis of the course is the demonstration of communication and critical thinking skills appropriate to the clinical setting.

10-526-194 Imaging Equipment Operation**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Introduces radiography students to the principles and application of x-ray technology. Students analyze how x-rays are produced and determine the corrective actions necessary for common equipment malfunction. Prerequisite: Admission to the Radiography Program.

10-526-195 Radiographic Image Analysis**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Prepares radiography students to analyze radiographic images for quality. Students apply quality control tests to determine the causes of image problems including equipment malfunctions and procedural errors. Prerequisite: Admission to the Radiography Program.

10-526-197 Radiation Protection and Biology**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Prepares radiography students to protect themselves and others from exposure to radioactivity. Students examine the characteristics of radiation and how radiation affects cell biology. Students apply standards and guidelines for radiation exposure. Prerequisite: Admission to the Radiography program or department approval.

10-526-198 Radiography Clinical 6**2 credits • 0 lecture hours • 0 lab hours • 216 total hours**

This final clinical course requires students to integrate and apply all knowledge learned in previous courses to the production of high quality images in the clinical setting with minimal direct and primarily indirect supervision. Students apply radiation protection and standard precautions in the production of images in a health care setting while adhering to legal and ethical guidelines. Students are encouraged to demonstrate independent judgment in the performance of clinical competencies.

10-526-199 Radiography Clinical 4**3 credits • 0 lecture hours • 0 lab hours • 360 total hours**

This fourth level clinical course prepares radiography students to perform radiologic procedures on patients. The student transitions from direct to indirect supervision as competency performance increases. Students apply radiation protection and standard precautions in the production of radiographic images in a health care setting while adhering to legal and ethical guidelines. Students are encouraged to demonstrate independent judgment in the performance of clinical competencies.

10-526-230 Advanced Radiographic Imaging**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Explores the factors that impact image acquisition, display, archiving and retrieval. Guidelines for selecting exposure factors and evaluating images within digital systems are discussed. Principles of digital system quality assurance and maintenance are presented. Prerequisite: Admission to the Radiography Program

10-526-231 Imaging Modalities**2 credits • 0 lecture hours • 72 lab hours • 72 total hours**

Introduces radiography students to imaging modalities with an emphasis in computed tomography and cross-sectional anatomy. Prerequisite Admission to the Radiography program or department approval.

10-530-110 Introduction to Cancer Registry Management**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Introduces cancer registries: hospital and central registries, as well as legal issues, confidentiality, types of registries, data usage, other disease registries, and registry operations and functions. Prerequisites: Foundations of HIM (10-530-162) Advanced Anatomy & Physiology (10-806-179)

10-530-111 Cancer Disease Management**4 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Introduces the pathophysiology of cancer and the study of oncology disease processes. Diagnostic and staging procedures include lab, pathology, radiography, and surgical procedures with treatment modalities to include surgery, chemotherapy, radiation therapy, immunotherapy, etc., with emphasis on the major sites of cancer, clinical trials, and research protocols. Prerequisites: Medical Terminology (10-501-101) Advanced Anatomy & Physiology (10-806-179)

10-530-112 Oncology Coding and Staging**4 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Introduces oncology coding and staging systems with a general overview of the International Classification of Diseases for Oncology terminology and classification system, and focuses on coding clinical information from medical records: coding diagnosis, procedures, sequencing, and coding conventions, staging and disease concepts used by physicians and cancer surveillance organizations to determine treatment and survival. Prerequisites: Introduction to Cancer Registry Management (10-530-110) Cancer Disease Management (10-530-111) Advanced Anatomy & Physiology (10-806-179)

10-530-113 Cancer Statistics and Epidemiology**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Introduces cancer statistics, describes and analyzes epidemiology, cancer surveillance, annual reporting preparation, presentation of cancer data, physician, patient, follow-up resources and activities. Prerequisites: Introduction to Cancer Registry Management (10-530-110) Cancer Disease Management (10-530-111) Advanced Anatomy & Physiology (10-806-179) Written Communications (10-801-195) Oral/Interpersonal Communication (10-801-196)

10-530-114 Abstracting Principles and Practice I**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Introduces principles of cancer registry abstracting, identifies and selects appropriate clinical information from medical records in alignment with cancer regulatory core data item requirements: recording, coding, and staging site specific cancer information using manual and computerized applications. Prerequisites: Introduction to Cancer Registry Management (10-530-110), Cancer Disease Management (10-530-111), and Advanced Anatomy & Physiology (10-806-179)

10-530-115 Cancer Patient Follow-up**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Focuses on cancer patient follow-up methodologies, ethical issues, confidentiality, identification of second primaries, recurrence, and spread of disease, survival data with physician and patient follow up resources and activities. Prerequisites: Oncology Coding and Staging (10-530-112) Cancer statistics and Epidemiology (10-530-113) Abstracting Principles and Practice I (10-530-114)

10-530-116 Abstracting Principles and Practice II**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Applies principles of cancer registry abstracting, identifies and selects appropriate clinical information from medical records in alignment with cancer registry core data requirements: recording, coding, and staging site specific cancer information using manual and computerized applications. Prerequisites: Abstracting Principles and Practice I (10-530-114) Advanced Anatomy & Physiology (10-806-179) Intro to Cancer Registry Management (10-530-110) Cancer Disease Management (10-530-111) Oncology Coding and Staging (10-530-112) Cancer Statistic & Epidemiology (10-530-113)

10-530-117 Cancer Registry Management Practicum**3 credits • 0 lecture hours • 0 lab hours • 216 total hours**

Experiential learning in a cancer registry setting to gain hands-on experience of all aspects of registry organizations, operations, and protocols. Supervised clinical experience performing tasks in registry management, quality improvement, and assessment. Prerequisites: Oncology Coding and Staging (10-530-112) Cancer statistics and Epidemiology (10-530-113) Abstracting Principles and Practice I (10-530-114) Intro to Health Informatics (10-530-164) Introduction to Diversity (10-809-172) Introduction to Psychology (10-809-198)

10-530-118 CTR Prep**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

Prepares the student for the Certified Tumor Registrar (CTR) examination. Students will review the CTR Certification Examination Candidate Handbook and complete the exam application, organize open-book resources and study tools, prepare for the exam environment, and complete timed practice quizzes and exams. (Note: Student must have already completed or have concurrent enrollment in 10-530-115, 10-530-116, 10-530-117, and 10-530-161). Prerequisites: Oncology Coding and Staging (10-530-112) Cancer statistics and Epidemiology (10-530-113) Abstracting Principles and Practice I (10-530-114) Intro to Health Informatics (10-530-164)

10-530-159 Health Revenue Management**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Prepares learners to compare and contrast health care payers, evaluate the reimbursement cycle and compliance with regulations. Learners assign payment classifications with entry level proficiency using computerized encoding and grouping software. Pre-requisites: 10-530-162 Foundations of HIM; 10530-197 ICD Diagnosis Coding; 10-530-199 ICD Procedure Coding Co-requisite: 10-530-184 CPT Coding

10-530-161 Health Quality Management**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Explores the programs and processes used to manage and improve healthcare quality. Addresses regulatory requirements as related to performance measurement, assessment, and improvement, required monitoring activities, risk management and patient safety, utilization management, and medical staff credentialing. Emphasizes the use of critical thinking and data analysis skills in the management and reporting of data. Note: HIT program students must have already completed or have concurrent enrollment in Healthcare Stats and Analytics (10-530-163). Prerequisites: Foundation of HIM (10-530-162)

10-530-162 Foundations of HIM**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Introduces learners to the healthcare delivery system and the external forces that influence healthcare delivery. Sets an understanding for the expectations and standards related to professional ethics, confidentiality and security of health information. Differentiates the use and structure of healthcare data elements, data standards, and the relationships between them. Prepares learners to collect and maintain health data to ensure a complete and accurate health record. Note: Students must have already completed or have concurrent enrollment in Digital Literacy for Healthcare (10-501-107).

10-530-163 Healthcare Stats and Analytics**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Explores the management of medical data for statistical purposes focusing on descriptive and inferential statistics including definition, collection, calculation and compilation of numerical data. Examines data analytics, retrieval, presentation, and research methodologies. Prerequisite: Foundations of HIM (10-530-162)

10-530-164 Intro to Health Informatics**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Emphasizes the role of information technology in healthcare through an investigation of the electronic health record (EHR), business, and health information software applications. Learners will develop skills to assist in enterprise information management and database architecture design and implementation. Prerequisites: Digital Literacy for Healthcare (10-501-107) Foundations of HIM (10-530-162)

10-530-165 Intermediate Coding**3 credits • 18 lecture hours • 72 lab hours • 90 total hours**

Prepares students to assign ICD and CPT/HCPCS codes supported by medical documentation and official coding guidance to support appropriate reimbursement. Students will participate in CDI activities, including preparation of appropriate physician queries in accordance with compliance guidelines. Pre-requisite: 10-530-197 ICD Diagnosis Coding Co-requisite: 10-530-184 CPT Coding Note: Students must have already completed or have concurrent enrollment in Healthcare Revenue Management (10-530-159) and ICD Procedure Coding (10-530-199).

10-530-166 HIT Capstone**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

Prepares the student to enter the workforce. Topics may include resume and cover letter writing, interviewing skills, portfolio preparation, and RHIT examination preparation. Corequisites: Health Quality Management (10-530-161) Management of HIM Resources (10-530-167) Prerequisite: Intermediate Coding (10-530-165)

10-530-167 Management of HIM Resources**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Examines the principles of management to include planning, organizing, human resource management, directing, and controlling as related to the health information department. Prerequisite: Foundations of HIM (10-530-162) Intro to Health Informatics (10-530-164)

10-530-178 Healthcare Law & Ethics**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Examines regulations for the content, use, confidentiality, disclosure, and retention of health information. An overview of the legal system and ethical issues are addressed. Prerequisite: Foundations of HIM (10-530-162)

10-530-182 Human Diseases for Hlth Profes**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Prepares learners to interpret clinical documentation that they will encounter in a variety of healthcare settings. Emphasis is placed on understanding the common disorders and diseases of each body system to include the etiology (cause), signs and symptoms, diagnostic tests and results, and medical treatments and surgical procedures. Prerequisites: Medical Terminology (10-501-101) General Anatomy & Physiology (10-806-177) or Basic Anatomy (10-806-189)

10-530-184 CPT Coding**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Prepares learners to assign CPT codes, supported by medical documentation, with entry level proficiency. Learners apply CPT instructional notations, conventions, rules, and official coding guidelines when assigning CPT codes to case studies and actual medical record documentation. Prerequisites: Medical Terminology (10-501-101) General Anatomy & Physiology (10-806-177) or Basic Anatomy (10-806-189)

10-530-196 Professional Practice**3 credits • 0 lecture hours • 72 lab hours • 144 total hours**

Applies previously acquired skills and knowledge by means of clinical experiences in the technical procedures of health record systems and discussion of clinical situations. Student may participate in a supervised clinical experience in healthcare facilities. Note: Students must have already completed or have concurrent enrollment in Health Quality Management (10-530-161) and Management of HIM Resources (10-530-167). Prerequisites: Intro to Health Informatics (10-530-164) Intermediate Coding (10-530-165)

10-530-197 ICD Diagnosis Coding**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Prepares students to assign ICD diagnosis codes supported by medical documentation with entry level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD diagnosis codes to case studies and actual medical record documentation. Note: Students must have already completed or have concurrent enrollment in Human Diseases for the Health Professions (10-530-182). Prerequisites: Medical Terminology (10-501-101) General Anatomy & Physiology (10-806-177) or Basic Anatomy (10-806-189)

10-530-199 ICD Procedure Coding**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Prepares students to assign ICD procedure codes supported by medical documentation with entry level proficiency. Students apply instructional notations, conventions, rules, and official coding guidelines when assigning ICD procedure codes to case studies and actual medical record documentation. Corequisites: Human Diseases for the Health Professions (10-530-182)

10-531-105 Emergency Medical Technician 1**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

This course provides the foundational knowledge for future Emergency Medical Technicians and Emergency Medical Responders. Topics include: basic human anatomy, performing a patient assessment, traumatic injury management, airway management, and Basic Life Support cardiac resuscitation. Upon successful completion, candidates will be eligible to participate in the National Registry of EMTs Emergency Medical Responder exams for Wisconsin EMR certification.

10-531-106 Emergency Medical Technician 2**3 credits • 18 lecture hours • 36 lab hours • 126 total hours**

This course provides the student with the skills to perform patient assessment, stabilize/immobilize injuries and provide basic treatment of medical emergencies at the Emergency Medical Technician Basic (EMT) level. Successful completion of this course makes you eligible to attempt the NREMT cognitive and psychomotor exam at the EMT level. Pre-requisite: Emergency Medical Technician 1 or equivalency. Pre-requisite: Emergency Medical Technician 1 (10-531-105) or equivalency.

10-543-101 Nursing Fundamentals**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Students learn basic nursing concepts that the beginning nurse will need to provide care to diverse patient populations. Learners explore current and historical issues influencing nursing. The nursing process is introduced as a framework for organizing the care of patients with alterations in cognition, elimination, comfort, mobility, integument, and fluid/electrolyte balance, integument, and grief/loss.

10-543-102 Nursing Skills**3 credits • 0 lecture hours • 108 lab hours • 108 total hours**

Students develop clinical and physical assessment skills across the lifespan, including; mathematic calculations and conversions related to clinical skills, blood pressure assessment, aseptic technique, wound care, oxygen administration, tracheotomy care, suctioning, management of central systems, basic medication administration, glucose testing, enemas, ostomy care, and catheterization. Competence obtaining a health history and basic physical assessment skills using a body systems approach is gained. Pre/Corequisite: Complete Math Review for Health Occupations in the Knox Learning Center.

10-543-103 Nursing Pharmacology**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Students are introduced to the principles of pharmacology, including drug classifications, effects on the body, and nursing process when administering medications.

10-543-104 Nursing Intro Clinical Practice**2 credits • 0 lecture hours • 0 lab hours • 108 total hours**

Students learn basic nursing skills and application of the nursing process in meeting the needs of diverse clients including the formation of nurse-client relationships, communication, data collection, documentation, and medication administration.

10-543-105 Nursing Health Alterations**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students advance their concepts of health and illness by applying theories of nursing to the care of clients through the lifespan, and utilizing problem solving and critical thinking. Learners are given an opportunity to study conditions affecting different body systems and apply therapeutic nursing interventions. Students are introduced to the concepts of leadership, team building, and scope of practice. Prerequisite: Nursing Pharmacology (10-543-103)

10-543-106 Nursing Health Promotion**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students explore topics related to health promotion and nursing care in the context of the family, such as reproductive issues, pregnancy, labor and delivery, postpartum, the newborn, and the child. Recognizing the spectrum of healthy families, students learn to discern patterns associated with adaptive and maladaptive behaviors applying mental health principles that support healthy lifestyle choices, including nutrition, exercise, stress management, empowerment, and risk reduction practices. Learners study family dynamics, functions, discipline styles, and stages of development. Prerequisite: Nursing: Intro to Clinical Practice (10-543-104) Nursing Pharmacology (10-543-103)

10-543-107 Nursing Clinical Care Across the Lifespan**2 credits • 0 lecture hours • 0 lab hours • 108 total hours**

Students apply nursing concepts and therapeutic interventions to clients across the lifespan. Learners are introduced to concepts of teaching, and learning, in various care settings. Prerequisite: Nursing: Intro to Clinical Practice (10-543-104)

10-543-108 Intro to Clinical Care Management**2 credits • 0 lecture hours • 0 lab hours • 108 total hours**

Students apply nursing concepts and therapeutic nursing interventions to groups of clients while using leadership, management, and team building skills. Prerequisite: Nursing: Intro to Clinical Practice (10-543-104)

10-543-109 Nursing Complex Health Alterations I**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students expand knowledge from previous courses in caring for clients with alterations in cardiovascular, respiratory, endocrine, and hematologic systems as well as clients with fluid/electrolyte and acid-base imbalance, and alterations in comfort. Prerequisite: Nursing Health Promotion (10-543-106) Nursing: Intro Clinical Care Management (10-543-108)

10-543-110 Mental Health & Community Concepts**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Students explore the delivery of community and mental health care, including the specific health needs of individuals, families, and groups. Learners focus on diverse and at-risk populations, adaptive/maladaptive behaviors and specific mental health disorders. Community resources are examined in relation to specific types of support offered to racial, ethnic, economically diverse individuals and groups. Prerequisite: Nursing Health Promotion (10-543-106)

10-543-111 Nursing Intermediate Clinical Practice**3 credits • 0 lecture hours • 0 lab hours • 162 total hours**

Students advance clinical nursing skills by working with clients with complex health care needs. Learners further develop skills to manage multiple clients and priorities. Using the nursing process, students will gain experience in adapting nursing practice to meet the needs of clients with diverse needs and backgrounds. Prerequisite: Nsg: Intro Clinical Care Mgt (10-543-108)

10-543-112 Nursing Advanced Skills**1 credits • 0 lecture hours • 36 lab hours • 36 total hours**

Students develop advanced clinical skills, including advanced IV skills, blood product administration, chest tube systems, basic EKG interpretation and nasogastric/feeding tube insertion. Prerequisites: Nursing Health Promotion (10-543-106) Nsg: Intro Clinical Care Mgt (10-543-108)

10-543-113 Nursing Complex Health Alterations II**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Learners expand knowledge and skills from previous courses in caring for clients with alterations in the immune, neurosensory, musculoskeletal, gastrointestinal, hepatobiliary, renal/urinary, and the reproductive systems. Students also focus on the management of care of clients with high risk perinatal conditions, high risk newborns, and the ill child. Synthesis and application of previously learned concepts will be evident in the management of clients with critical/life-threatening situations. Prerequisite: Nsg: Complex Health Alterations 1 (10-543-109)

10-543-114 Nursing Management & Professional Concepts**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Students explore nursing management and professional issues related to the role of the RN. Emphasis is placed on preparing for RN practice. Prerequisite: Nsg: Complex Health Alterations 1 (10-543-109) Nsg: Intermed Clin Practice (10-543-111)

10-543-115 Nursing Advanced Clinical Practice**3 credits • 0 lecture hours • 0 lab hours • 162 total hours**

Students integrate concepts from all previous courses in the management groups of clients facing complex health alterations. Students will have the opportunity to further develop critical thinking skills using the nursing process in making clinical decisions. Continuity of care through interdisciplinary collaboration is emphasized. Prerequisite: Nsg: Complex Health Alterations 1 (10-543-109) Nsg: Intermed Clin Practice (10-543-111)

10-543-116 Nursing Clinical Transition**2 credits • 0 lecture hours • 0 lab hours • 108 total hours**

Students integrate knowledge learned in previous courses in transitioning to the role of the graduate nurse by engaging in relatively independent clinical decisions, delegation, and collaboration to achieve client and organizational outcomes. Continued professional development is fostered. Prerequisite: Nsg: Complex Health Alterations 1 (10-543-109) Nsg: Intermed Clin Practice (10-543-111)

10-620-101 DC and AC Fundamentals**5 credits • 54 lecture hours • 72 lab hours • 126 total hours**

Students will explore and apply the principles of DC and AC electricity and components. Major topics of study include: electrical safety, direct current (DC) and its characteristics, resistors and resistance, electrical units of volts, ohms, amps, and watts and their relationships in series, parallel, and series-parallel circuits, test and measurement tools and techniques, circuit analysis using common electrical laws and theorems, alternating current (AC) and its characteristics, capacitors and inductors and the effects of inductance and capacitance in AC circuits. In addition, basic soldering/desoldering, breadboarding, and troubleshooting skills will be practiced.

10-620-107 Hydraulics and Pneumatics**3 credits • 27 lecture hours • 54 lab hours • 81 total hours**

Students examine the principles of fluidic and pneumatic power. Students investigate the operation and applications of devices used in these systems along with the symbolic representation of these devices. Utilizing this information the student will build, analyze, and troubleshoot hydraulic and pneumatic circuits in a laboratory setting. Prerequisites: College Technical Math 1A (10-804-113) or College Technical Math 1 (10-804-115)

10-620-117 Robotics**3 credits • 18 lecture hours • 72 lab hours • 90 total hours**

Students will use the RoboWare Millennium Edition software to program the Mitsubishi RV-Mx and RV-Ex series of industrial robots to perform a variety of specific tasks. Major topics of study include: robot overview, robot components, robot applications, and robot programming using Roboware Millennium Edition software. Prerequisite: Fundamentals of Embedded Systems (10-620-157)

10-620-121 Mechanics and Materials**4 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Learners explore the basic concepts of simple mechanical drives and drive components. Major topics include: V-belt drives, chain drives, and gear drives. Learners install and align mechanical drive system components to specified tolerances using a variety of common and specialized hand tools and measuring instruments including dial calipers, micrometers, levels, and rules.

10-620-123 Construction Electrical Wiring I**1 credits • 9 lecture hours • 18 lab hours • 27 total hours**

Maintaining compliance with the Wisconsin and National Electrical Codes for adhering to OSHA Sub Part S, the student installs, troubleshoots, and maintains electrical equipment for the following: Connection to electrical utility, distribution throughout facility, and control of electrical power. Co-requisite: DC/AC Fundamentals (10-620-101)

10-620-124 Welding for Maintenance**2 credits • 9 lecture hours • 54 lab hours • 63 total hours**

The student creates weldments in flat, vertical, horizontal, and overhead positions; these weldments will utilize SMAW, MIG, TIG, brazing and oxyfuel. All operations will adhere to AWS Code.

10-620-126 Industrial Electrical Wiring**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

The students design, install, and troubleshoot electrical systems for power distribution and motor control within Industrial environments. All functions adhere to NFPA 79 and the National Electrical Code. Prerequisite: Construction Electrical Wiring II(10-620-138)

10-620-131 Electrical Wiring - Basic**1 credits • 9 lecture hours • 18 lab hours • 27 total hours**

Students apply related code applications, OSHA safety standards, and use testing instruments through class participation and simulated field activities. Night class for Plumbing Apprenticeship Program.

10-620-138 Construction Electrical Wiring II**1 credits • 9 lecture hours • 18 lab hours • 27 total hours**

Maintaining compliance with the Wisconsin and National Electrical Codes for adhering to OSHA Sub Part S, the student installs, troubleshoots, and maintains electrical equipment for the following: Connection to electrical utility, distribution throughout facility, and control of electrical power. Co-requisite: Construction Electrical Wiring I (10-620-123)

10-620-148 Intro to Motor Controls**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Students operate, install, and troubleshoot relay and variable frequency drive control of A/C electric motors found in industrial and commercial applications. Students will learn to develop and read schematics, including ladder logic, wire typical relay applications, test and monitor A/C electrical equipment and troubleshoot equipment as necessary. Prerequisite: DC and AC Fundamentals (10-620-101)

10-620-149 Intro to Programmable Controls**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Students design, program, operate, and troubleshoot discrete input/ output PLC functions utilizing Allen Bradley Control Logix programming software. Students will develop ladder logic programs on a PC, transfer them to and from a PLC, and monitor PLC operations. Co-requisites: Machine Control I-A (10-620-127)or Intro to Motor Controls (10-620-148)

10-620-150 Advanced Programmable Controls**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

This course will provide the learner with advanced PLC programming including analog principles and human machine interfaces in conjunction with other advance programming features. Prerequisites: Machine Control I-B (10-620-141) or Intro to Programmable Controls (10-620-149)

10-620-151 Process Control Systems**5 credits • 54 lecture hours • 72 lab hours • 126 total hours**

Students will explore and apply the fundamental concepts, components, and techniques of industrial process control. Major topics of study include: on-off, proportional, and PID control of level, flow, and temperature processes. Prerequisite: DC & AC Fundamentals (10-620-101)

10-620-154 Advanced Calibration Techniques & Analytics**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students will learn industry standard calibration and analytical procedures as it applies to process control. Topics covered include the areas of temperature, pressure, level, and flow. Prerequisite: Process Control Systems (10-620-151)

10-620-156 Fiber Optic Cabling Technician**1 credits • 9 lecture hours • 18 lab hours • 27 total hours**

This course will introduce the learner to the essential knowledge, skills, and abilities required to install and configure fiber optic networking infrastructure in an industrial plant setting. Major topics of study include: using light to transmit information, fiber types, fiber preparation, fiber termination, fiber splicing, fiber inspection and testing, and safety issues and procedures unique to the fiber optic industry. Learners will practice the skills necessary to select, install, terminate, splice, inspect, and test fiber optical cables to EIA/TIA standards using industry standard tools and procedures. This course is a recommended preparation activity for those interested in pursuing the Fiber Optics Association (FOA) Certified Fiber Optic Technician (CFOT) written and hands-on certification exam.

10-620-157 Fundamentals of Embedded Systems**1 credits • 9 lecture hours • 18 lab hours • 27 total hours**

Automobiles, smartphones, E-textiles, and the "Internet of Things". Embedded systems are at the heart of many of the products that surround us in modern life. In this introductory course the learner will explore the role of the invisible, but key component of embedded systems; the microcontroller. Learners will study the architecture, operation, and programming of a small microcontroller as found in many common consumer and industrial products. Major topics of study include: number systems and codes, digital basics, microcontrollers vs. PCs, and basic microcontroller programming. Learners will practice classroom theory by developing a variety of microcontroller based solutions to solve simulated industrial tasks. Note: Learners enrolled in this course are strongly encouraged to bring a laptop with one available USB port and a minimum of Windows XP to this course. Prerequisite: DC & AC Fundamentals (10-620-101)

10-620-159 Introduction to Frequency & Servo Drives**2 credits • 18 lecture hours • 36 lab hours • 54 total hours**

Students operate, wire, program, and troubleshoot variable frequency and servo drives found in industrial and commercial applications. Students will learn to develop and read schematics, wire typical drive applications, troubleshoot and monitor the control of A/C electrical motors. Prerequisites: DC & AC Fundamentals (10-620-101) Intro to Motor Controls (10-620-148) Intro to Programmable Controls (10-620-149) Introduction to Networks (10-150-129)

10-620-162 Manual Machine Shop Fundamentals**3 credits • 18 lecture hours • 72 lab hours • 90 total hours**

This course teaches students to set up and operate engine lathes, band saws, milling machines, and hydraulic surface grinders to fabricate within tolerances specified in projects according to prints provided. Students will use and identify machine shop tooling and measurement equipment.

10-620-163 Intro to Mechatronics**1 credits • 9 lecture hours • 18 lab hours • 27 total hours**

Students will learn foundational information and develop hands-on skill in the areas of Mechanical, Electrical, and Control Technology. Topics covered include the areas of pneumatics, electricity, sensors, actuators, and controls.

10-620-164 Intro to Preventative Maintenance**1 credits • 9 lecture hours • 18 lab hours • 27 total hours**

Students will be familiar with industry trends and predictive maintenance techniques, such as, IR thermography, vibration analysis, oil analysis, and ultrasonic.

10-623-110 Lean Concepts**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Learners will develop techniques to identify and eliminate non-value-added activities in a process using 5S, TPM, Standard Work, and Mistake Proofing. Learners will explore the characteristics of an organizational culture necessary to support and sustain a lean enterprise.

10-625-103 Human Elements-Quality on the Job**1 credits • 18 lecture hours • 0 lab hours • 18 total hours**

Learner will develop a working definition of quality that is appropriate to today's workplace. They will relate the importance of customer focus, prevention quality model, and systems thinking as an approach to continuous quality improvement. They will demonstrate the benefits and challenges of working as a team and appreciate the benefits of diversity on a work team.

10-660-101 Introduction to DC/AC**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Introduces the concepts of DC and AC power and basic circuits. Using a multimeter, students learn about voltage, current, and resistance in both DC and AC circuits.

10-801-136 English Composition 1**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

This course is designed for learners to develop knowledge and skills in all aspects of the writing process. Planning, organizing, writing, editing and revising are applied through a variety of activities. Students will analyze audience and purpose, use elements of research and format documents using standard guidelines. Individuals will develop critical reading skills through analysis of various written documents.

10-801-196 Oral/Interpersonal Communication**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students demonstrate competency in speaking, verbal and nonverbal communication, and listening skills through individual presentations, group activities and other projects.

10-801-197 Technical Reporting**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students prepare and present oral and written technical reports. Students create, but are not limited to the following reports: lab and field reports, proposals, technical letters and memos, technical research reports, case studies, and oral technical presentations. Students enroll in this advanced communication course after having completed at least the prerequisite introductory writing course.

10-801-198 Speech**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students explore the fundamentals of effective oral presentations to small and large groups. Students demonstrate competency through topic selection, audience analysis, methods of organization, research, structuring evidence and support, delivery techniques, and other essential elements of speaking successfully, including the listening process.

10-804-107 College Mathematics**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

This course is designed to review and develop fundamental concepts of mathematics in the areas of algebra, geometry, trigonometry, measurement and data. Algebra topics emphasize simplifying algebraic expressions, solving linear equations and inequalities with one variable, solving proportions and percent applications. Geometry and trigonometry topics include; finding areas and volumes of geometric figures, applying similar and congruent triangles, applying Pythagorean Theorem, and solving right triangles using trigonometric ratios. Measurement topics emphasize the application of measurement concepts and conversion techniques within and between U.S. customary and metric system to solve problems. Data topics emphasize data organization and summarization skills, including: frequency distributions, central tendency, relative position and measures of dispersion. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators.

10-804-113 College Technical Math 1A**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Topics include: solving linear equations; graphing; percent; proportions; measurement systems; computational geometry; and right triangle trigonometry. Emphasis will be on the application of skills to technical problems. Successful completion of College Technical Mathematics 1A and College Technical Mathematics 1B is the equivalent of College Technical Mathematics 1.

10-804-114 College Technical Math 1B**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

This course is a continuation of College Technical Mathematics 1A. Topics include: performing operations on polynomials; solving quadratic and rational equations; formula rearrangement; solving systems of equations; and oblique triangle trigonometry. Emphasis will be on the application of skills to technical problems. Successful completion of College Technical Mathematics 1A and College Technical Mathematics 1B is the equivalent of College Technical Mathematics 1.

10-804-123 Math with Business Applications**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students use real numbers, basic operations, linear equations, proportions with one variable, percents, simple interest, compound interest, annuity, and apply math concepts to the purchasing/buying process, the selling process, and apply basic statistics to business/consumer applications.

10-804-133 Math & Logic**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will apply mathematical problem solving techniques. Topics will include symbolic logic, sets, algebra, Boolean algebra, and number bases.

10-804-189 Introductory Statistics**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students display data with graphs, describe distributions with numbers, perform correlation and regression analyses, and design experiments. They use probability and distributions to make predictions, estimate parameters, and test hypotheses. They draw inferences about relationships including ANOVA.

10-806-109 Fundamentals of Chemistry**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Students convert measurements, design tables and graphs, create models, and use the scientific method. Students interpret a model of the atom and use the periodic table. They distinguish physical, chemical, and nuclear changes and identify properties of common compounds. They analyze chemical equations. Students relate technical applications to common chemical reactions. Students describe basic biomolecules.

10-806-143 College Physics 1**3 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Presents the applications and theory of basic physics principles. This course emphasizes problem solving, laboratory investigation and applications. Topics include laboratory safety, unit conversions and analysis, kinematics, dynamics, work, energy, power, temperature, and heat. Pre-requisites: College Technical Math IA (10-804-113) OR (College Algebra with Applications (10-804-195) AND Trigonometry with Apps (10-804-196)) OR High School Pre-Calculus with a grade of "C" or higher.

10-806-177 General Anatomy & Physiology**4 credits • 54 lecture hours • 36 lab hours • 90 total hours**

Students examine basic concepts of human anatomy and physiology as they relate to health sciences. Students use a body systems approach to analyze the interrelationships between structure and function at the gross and microscopic levels of organization of the entire human body. They apply basic concepts of whole body anatomy and physiology to make informed decisions as health care professionals and to communicate professionally with colleagues and patients. Prerequisites: HESI Score = 76, and High school chemistry or college chemistry with a minimum grade of C, or Fundamentals of Chemistry (10-806-109)

10-806-179 Adv Anatomy & Physiology**4 credits • 54 lecture hours • 36 lab hours • 90 total hours**

Students study using a body systems approach with emphasis on the interrelationships between form and function at the gross and microscopic levels of organization. Students experiment within a science lab including analysis of cellular metabolism, the individual components of body systems such as the nervous, neuromuscular, cardiovascular, and urinary. Students examine homeostatic mechanisms and their relationship to fluid, electrolyte, acid-base balance, and blood. Integration of genetics to human reproduction and development are also included in this course. Students receive instructional delivery within a classroom and laboratory setting. Prerequisite: General Anatomy and Physiology (10-806-177) with a "C" or better.

10-806-186 Intro to Biochemistry**4 credits • 54 lecture hours • 36 lab hours • 90 total hours**

Provides students with skills and knowledge of organic and biological chemistry necessary for application within Nursing and other Allied Health careers. Emphasis is placed on recognizing the structure, physical properties and chemical reactions of organic molecules, body fluids, and acids. Additional emphasis is placed on biological functions and their relationships to enzymes, proteins, lipids, carbohydrates and DNA.

10-806-197 Microbiology**4 credits • 54 lecture hours • 36 lab hours • 90 total hours**

Students examine microbial structure, metabolism, genetics, growth, and the relationship between humans and microorganisms. Students address disease production, epidemiology, host defense mechanisms, and the medical impact of microbes. Students examine the role of microbes in the environment, industry, and biotechnology. Prerequisite: General Anatomy and Physiology (10-806-177) with a "C" or better

10-809-128 Marriage & Family**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

The learner explores the sociological aspects of marriage and family life in contemporary American society. Emphasis is on the study of cognitive, emotional, and behavioral patterns associated with courtship, love, mate selection, sexuality, and marriage. Moreover, the learner will discuss the life span development in the family life cycle, balancing work and family, and parenting based on the premise that human attitudes, feelings, and behaviors are largely shaped and influenced by philosophy, gender, communication, and personal beliefs. Therefore, success in the institutions of marriage and family require knowledge and skills in the roles of spouse and parent and ways to apply concepts to daily life.

10-809-143 Microeconomics**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students examine the behavior of individual decision makers, primarily consumers and firms. Topics include choices of how much to consume and to produce, the functioning of perfectly and imperfectly competitive markets, the conditions under which markets may fail, and arguments for and against government intervention. The student applies the fundamental tools of economics to real world problems. Prerequisite: Economics (10809-195) OR Principles of Macroeconomics (20809-211)

10-809-159 Abnormal Psychology**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students survey the essential features, possible causes, and assessment and treatment of the various types of abnormal behavior from the viewpoint of the major theoretical perspectives in the field of abnormal psychology. Students will be introduced to the diagnosis system of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). In addition, the history of the psychology of abnormality will be traced. Cultural and social perspectives in understanding and responding to abnormal behavior will be explored as well as current topics and issues within abnormal psychology.

10-809-166 Intro to Ethics: Theory & App**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

The learner will engage in the basics of theoretical foundations of ethical thought. Diverse ethical perspectives will be used to analyze and compare relevant issues. Learners will critically evaluate individual, social and/or professional standards of behavior, and apply a systematic decision-making process to these situations.

10-809-172 Introduction to Diversity Studies**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students draw from several disciplines to reaffirm the basic American values of justice and equality by learning a basic vocabulary, a history of immigration and conquest, principles of transcultural communication, legal liability and the value of aesthetic production to increase the probability of respectful encounters among people. In addition to an analysis of majority/minority relations in a multicultural context, the topics of ageism, sexism, gender differences, sexual orientation, the disabled and the American Disability Act (ADA) are explored. Ethnic relations are studied in global and comparative perspectives.

10-809-188 Developmental Psychology**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Developmental Psychology is the study of human development throughout the lifespan. This course explores developmental theory and research with an emphasis on the interactive nature of the biological, cognitive, and psychosocial changes that affect the individual from conception to death. Application activities and critical thinking skills will enable students to gain an increased knowledge and understanding of themselves and others.

10-809-195 Economics**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students will develop analytical skills central to how a market-oriented system operates and the factors that influence national economic policy. Students will apply basic concepts and analyses to a variety of contemporary problems and public policy issues. These concepts include scarcity, resources, alternative economic systems, growth, supply and demand, monetary and fiscal policy, inflation, unemployment, and global economic issues.

10-809-196 Introduction to Sociology**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students explore the basic concepts of sociology: culture, socialization, social stratification, multi-culturalism, and the five institutions, including family, government, economics, religion, and education. Other topics include demography, deviance, technology, environment, social issues, social change, social organization, and workplace issues.

10-809-198 Introduction to Psychology**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students survey the multiple aspects of human behavior. This involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. The student forms an insightful understanding of the complexities of human relationships in personal, social, and vocational settings

10-809-199 Psychology of Human Relations**3 credits • 54 lecture hours • 0 lab hours • 54 total hours**

Students explore the relationship between the general principles of psychology and our everyday lives. Students are given the opportunity to achieve a deepened sense of awareness of themselves and others. This understanding enables students to improve their relationship with others at work, in the family, and in society.

30-316-301 Introduction to the Meat Industry**1 credits • 36 lecture hours • 0 lab hours • 36 total hours**

This course will give students the opportunity to explore the various aspects of the meat industry. Students will gain a broad understanding of the components that comprise the meat industry. An emphasis will be placed on the history of meat science, the modernization that has occurred throughout history and where we are today.

30-316-302 Humane Handling, Slaughter, and Fabrication**2 credits • 36 lecture hours • 72 lab hours • 108 total hours**

This course explores the transition from muscle to meat. Students will gain in-depth knowledge of the importance and principles of humane pre-slaughter handling and stunning with emphasis on compliance with the Humane Slaughter Act and protection of meat quality and worker safety. Sanitary dressing procedures will be presented with emphasis on meat quality, safety, and compliance with inspection-related regulations. Students will gain knowledge and experience in the fabrication and storage of fresh cuts from common meat animal species.

30-316-303 Processed Meat Manufacturing**2 credits • 36 lecture hours • 72 lab hours • 108 total hours**

This course will focus on the study and practice of commercial meat processing methods including curing, smoking, sausage manufacturing and the manufacturing of ready to serve meat products. The production of common types of processed meat products will be included such as fresh sausages, dry and semi-dry sausages and cured meat products. Emphasis will be given to factors influencing final eating quality and food safety.

30-316-304 Meat Marketing and Merchandising**2 credits • 36 lecture hours • 0 lab hours • 36 total hours**

This course introduces students to the subject of meat retail operations. Students will complete hands-on lab activities, lectures, homework, and field trips to develop the skills necessary to properly price meat products for sale as well as how best to market product through direct and retail outlets. Students will actively practice all aspects of meat production, inventory management, and customer service skills. This, with a focus on sanitation, safety, equipment usage, and product storage and handling should leave students with a comprehensive understanding of the requirements for entry-level meat cutting and clerk positions within butcher shop environments as well as developing sales plans for their own products.

30-316-305 Artisanal Modern Meat Butchery Internship**2 credits • 0 lecture hours • 0 lab hours • 216 total hours**

Students will obtain professional work experience with a cooperating employer in meat production and processing. This experience will occur off campus and students will be expected to spend a set amount of time with their assigned employer.

30-443-310 Fundamentals of Building Trades Safety**4 credits • 18 lecture hours • 126 lab hours • 144 total hours**

Students develop safety consciousness and practice approved construction site safety and health procedures. Students protect themselves by using hearing, eye, respiratory, foot, and other personal protection equipment. Students will learn safe and efficient techniques to repair existing building and build new structures.

30-443-311 Basic Carpentry**3 credits • 18 lecture hours • 90 lab hours • 108 total hours**

Students build and repair walls, shelving, and other building related structures. They use a variety of hand and power tools; choose the associated building materials. They repair and install windows, doors, stairs, and other building components.

30-443-312 Basic Electrical**3 credits • 18 lecture hours • 90 lab hours • 108 total hours**

Students repair, replace, and install branch circuits according to NEC requirements. They install and maintain outlets, lighting systems, and other minor building electrical devices. They practice safe use of tools and materials associated with electrical work.

30-443-314 Blueprint Reading for Construction**2 credits • 18 lecture hours • 54 lab hours • 72 total hours**

Students learn basic sketching and print reading as applied to the construction trade. Students develop and read working drawings including specifications, line and symbol identification, dimensions, and scales.

30-443-331 Basic Plumbing**3 credits • 18 lecture hours • 90 lab hours • 108 total hours**

Students install and repair minor plumbing, including faucets, and hot water heaters. They are careful to maintain health and safety. They clean drains and unplug fixtures. They use basic plumbing hand and power tools and materials appropriately.

30-504-500 Overview of Patrol Response**2 credits • 45 lecture hours • 32 lab hours • 77 total hours**

Through classroom lecture, and on-campus lab, and WI Department of Justice integration exercises students will learn and apply skills addressed in the following WI Department of Justice 720 Academy curriculum framework Phase I topics: Critical Thinking and Decision-Making, Basic Response (RESPOND), Radio Procedures, Introduction to TraCS, Traffic Law Enforcement I, First Aid, CPR/AED, and Naloxone/Narcan, and Physical Fitness. This course will also include the WI DOJ 720 Academy Integration Exercises.

30-504-501 Physical Fitness**1 credits • 4 lecture hours • 34 lab hours • 38 total hours**

Through classroom lecture and on-campus lab students will apply Phases I-III Physical Fitness WI Department of Justice 720 Academy curriculum framework program requirements and Officer Wellness Suicide Prevention.

30-504-502 Application of Investigations**1 credits • 18 lecture hours • 20 lab hours • 38 total hours**

Through classroom lecture, on-campus lab, and WI Department of Justice 720 Academy integration exercises students will learn and apply skills addressed in the following Phase III topics of the Department of Justice 720 Academy curriculum framework: Ethics II: Moral Reasoning and Professional Conduct, Cultural Competence II, Interrogations, Testifying in Court, Crimes III and Physical Evidence Collection.

30-504-503 Overview of Criminal Justice**1 credits • 38 lecture hours • 3 lab hours • 41 total hours**

Through classroom lecture, and on-campus lab, and WI Department of Justice integration exercises students will learn and apply skills addressed in the following WI Department of Justice 720 Academy curriculum framework Phase I topics: Critical Thinking and Decision-Making, Basic Response (RESPOND), Radio Procedures, Introduction to TraCS, Traffic Law Enforcement I, First Aid, CPR/AED, and Naloxone/Narcan, and Physical Fitness. This course will also include the WI DOJ 720 Academy Integration Exercises.

30-504-504 Principles of Emergency Vehicle Response**2 credits • 14 lecture hours • 58 lab hours • 72 total hours**

Through classroom lecture, and on-campus lab, and WI Department of Justice 720 Academy integration exercises students will learn and apply skills addressed in the following Department of Justice 720 Academy Phase II topics: Emergency Vehicle Operation and Control (EVOC) and Vehicle Contacts II.

30-504-505 Sensitive Crimes**2 credits • 62 lecture hours • 10 lab hours • 72 total hours**

Through classroom lecture, and on-campus lab and WI Department of Justice 720 Academy integration exercises, students will learn and apply skills addressed in the following Department of Justice 720 Academy curriculum framework Phase III topics: Domestic Violence, Juvenile Law, Victims, Sexual Assault, and Child Maltreatment. The DOJ Phase III Written Examination will be administered in this course.

30-504-506 Overview of Investigations**2 credits • 58 lecture hours • 14 lab hours • 72 total hours**

Through classroom lecture, on-campus lab, and WI Department of Justice 720 Academy integration exercises students will learn and apply skills addressed in the following Department of Justice 720 Academy curriculum framework Phase I topics: Constitutional Law I, Crimes I, Interviews, and Report Writing I. The DOJ Phase I Written Examination will be administered in this course.

30-504-507 Application of Traffic Response**3 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Through classroom lecture, and on-campus lab and WI Department of Justice integration exercises, students will learn and apply skills addressed in the following Phase III topics from the WI Department of Justice 720 Academy curriculum framework: Traffic Law Enforcement - Core and Radar, Traffic Crash Investigations & Incident Management, Operating a Motor Vehicle While Intoxicated (OMVWI), Standardized Field Sobriety Tests (SFST), Hazardous Materials and Weapons of Mass Destruction (WMD), Incident Command Systems and NIMS, and Report Writing.

30-504-508 Principles of Investigations**1 credits • 36 lecture hours • 17 lab hours • 53 total hours**

Through classroom lecture, and on-campus lab, and WI Department of Justice 720 Academy integration exercises students will learn and apply skills addressed in the following Phase II topics of the WI Department of Justice 720 Academy curriculum framework: Constitutional Law II, Physical Evidence Collection, and Crisis Management. The Phase II Written Exam will be given in this course.

30-504-509 Principles of Tactics**5 credits • 12 lecture hours • 183 lab hours • 195 total hours**

Through classroom lecture and on-campus lab and integration exercises, students will learn and apply skills addressed in the following Phase II topics from the Department of Justice 720 Academy curriculum frameworks including: Professional Communication Skills II, DAAT, Firearms II, Tactical Response, and Tactical Emergency Critical Care For Law Enforcement Officers.

30-504-510 Overview of Tactics**1 credits • 29 lecture hours • 21 lab hours • 50 total hours**

Through classroom lecture, and on-campus lab and WI Department of Justice 720 Academy integration exercises, students will learn and apply skills addressed in the following Department of Justice 720 Academy curriculum framework Phase I topics: Fundamentals of Firearms, Vehicle Contacts I, Officer Wellness I, and DAAT I.

30-504-511 Scenario Assessment**1 credits • 0 lecture hours • 48 lab hours • 48 total hours**

Final Scenario Assessment

30-531-305 Emergency Medical Technician 1**2 credits • 36 lecture hours • 36 lab hours • 72 total hours**

This course provides the foundational knowledge for future Emergency Medical Technicians and Emergency Medical Responders. Topics include: basic human anatomy, performing a patient assessment, traumatic injury management, airway management, and Basic Life Support cardiac resuscitation. Upon successful completion, candidates will be eligible to participate in the National Registry of EMTs Emergency Medical Responder exams for Wisconsin EMR certification. Prerequisite: Emergency Medical Technician entry requirements

30-531-306 Emergency Medical Technician 2**3 credits • 50 lecture hours • 58 lab hours • 108 total hours**

This course provides the student with the skills to perform patient assessment, stabilize/immobilize injuries and provide basic treatment of medical emergencies at the Emergency Medical Technician Basic (EMT) level. Prerequisite: Emergency Medical Technician (30-531-3) entry requirements Emergency Medical Technician 1 (30-513-305) or equivalency.

30-543-300 Nursing Assistant**2 credits • 36 lecture hours • 18 lab hours • 81 total hours**

Students examine federal and state requirements to become certified nursing assistants. Students successfully complete the classroom and lab portion of the course before progressing on to an assigned clinical agency for hands-on application. Students demonstrate interpersonal communication skills, personal care skills, and basic nursing skills while providing care to nursing home clients under the supervision of an instructor. Students also provide restorative care, protect client rights, and demonstrate care of the client with dementia. Students demonstrate academic and clinical application competency to prepare for successful completion of the National Nurse Aide Assessment Program (NNAAP) written and skills exam, which is required for entry onto the Wisconsin Nurse Aide Registry. Inclusion on the state registry is necessary for employment as a CNA.

30-812-301 Driver Education Classroom Instruction**3 credits • 72 lecture hours • 0 lab hours • 126 total hours**

The course places emphasis on traffic safety education curriculum information selection, development and use, as well as available instructional resources and materials. Coursework assignments involve the completion of individual observation and teaching activities and the culminating development of an effective driver education classroom curriculum.

30-812-302 Driver Education In-Car Instruction**3 credits • 72 lecture hours • 0 lab hours • 126 total hours**

The course will examine the role, aims and objectives, as well as teaching-based approaches of laboratory-oriented programs in Driver and Traffic Safety Education. Direct observation and practice experience during the behind-the-wheel activities will be required for students with emphasis on incorporating various teaching techniques during this time.

30-812-303 Driver Education Safety**3 credits • 108 lecture hours • 0 lab hours • 108 total hours**

The safety phase of Driver Education will introduce the basic concepts and principles of safety and loss prevention. The application and utilization of these concepts and principles to safety programs within our society is a primary objective of this course. Emphasis will be placed on various teaching techniques as it relates to school and roadway safety, and development of various risk control/safety awareness within that society.

31-404-337 Auto Body Mechanics Chassis**2 credits • 12 lecture hours • 60 lab hours • 72 total hours**

Students evaluate, diagnose, and repair damage to automotive drivetrains, steering and suspension systems, and braking systems as it applies to collision damaged vehicles.

31-404-338 Auto Body Mechanics HVAC & Restraints**2 credits • 12 lecture hours • 60 lab hours • 72 total hours**

Students evaluate, diagnose, and repair damage to automotive cooling, air conditioning, fuel, intake, exhaust, and restraints systems as it applies to collision damaged vehicles.

31-404-347 Electrical Fundamentals**2 credits • 18 lecture hours • 54 lab hours • 72 total hours**

Students gain the ability to apply the fundamentals of electricity and electronics with automotive as its emphasis. Students apply the principles of Ohm's law, circuit requirements, current flow, voltage, electrical schematics and symbols. Students gain a working knowledge of scan tools and test meters. Students recognize the importance of Advanced Driver Assistance Systems and the other electrical safety devices built into the motor vehicle and diagnoses and repairs electrical problems.

31-405-356 Auto Body Welding**3 credits • 20 lecture hours • 88 lab hours • 108 total hours**

The student analyzes damaged vehicles and estimates repair costs with a computer. The student uses electronic measuring systems to diagnose damage to vehicle structure and repairs damage using proper equipment and safety procedures. The student participates in customer service scenarios.

31-405-364 Buffing & Detailing**2 credits • 18 lecture hours • 54 lab hours • 72 total hours**

The student learns safe work procedures and uses vehicle cleaning equipment to detail vehicles. The student learns the proper methods to buff and polish automotive finishes.

31-405-365 Bolt-On Panels & Dent Repair**4 credits • 27 lecture hours • 117 lab hours • 144 total hours**

Students remove, replace and adjust hoods, fenders, bumpers, and doors. They repair minor dents on steel body panels.

31-405-366 Fundamentals of Painting**2 credits • 18 lecture hours • 54 lab hours • 72 total hours**

The student learns safe work procedures for personal safety and environmental compliance. Students perform surface preparation procedures and learn the proper use and care of refinishing equipment. Students mix refinish materials and apply it to practice panels.

31-405-367 Damage Analysis, Estimating, & Customer Service**3 credits • 36 lecture hours • 72 lab hours • 108 total hours**

The student analyzes damaged vehicles and estimates repair costs with a computer. The student uses electronic measuring systems to diagnose damage to vehicle structure and repairs damage using proper equipment and safety procedures. The student participates in customer service scenarios.

31-405-368 Structural Repair**3 credits • 36 lecture hours • 72 lab hours • 108 total hours**

The student uses proper procedures and equipment operation to repair and replace damaged structural panels on unibody and full frame vehicles.

31-405-369 Intermediate Painting**2 credits • 18 lecture hours • 54 lab hours • 72 total hours**

The student safely mixes and applies various refinish products to a vehicle. The student sprays primers, waterborne base colors, and clear coats on vehicles. The student

31-405-370 Advanced Painting**3 credits • 20 lecture hours • 88 lab hours • 108 total hours**

The student inspects and analyzes paint defects and determines corrective action. The student learns to develop a refinish repair plan and perform the proper safety procedures. Matching existing vehicle finish with blending techniques is performed on vehicles.

31-405-371 Auto Collision Internship**1 credits • 0 lecture hours • 0 lab hours • 72 total hours**

In an occupational setting, students apply technical theory and skills by performing light autobody repair. Students practice the necessary personal and professional skills essential to be successful auto collision and refinishing technician.

31-408-301 Bricklaying/Masonry I**5 credits • 27 lecture hours • 153 lab hours • 180 total hours**

Students study the materials and processes used in masonry. Students develop an understanding of masonry work and learn to communicate using trade terms. Students learn to lay bricks and blocks by building straight walls, corners, and jambs. Students develop skills in handling and caring for bricklaying tools, spreading mortar, laying bricks and blocks to a line, and striking joints.

31-408-302 Bricklaying/Masonry II**5 credits • 27 lecture hours • 153 lab hours • 180 total hours**

Students build their masonry knowledge and skills by practicing trade techniques using masonry materials in a variety of bonds and patterns. Students become proficient at mixing mortar and setting up to work. Students learn to recognize quality structures and appreciate the beauty of a properly struck and finished wall. Students build speed and proficiency by completing masonry projects.

31-408-303 Bricklaying/Masonry III**5 credits • 27 lecture hours • 153 lab hours • 180 total hours**

Students develop skill in detailed and technical masonry work including building arches, floors, and fireplaces, as well as walls. Emphasis is on accepted trade standards and practices. Prerequisite: Bricklaying/Masonry II (31-408-302)

31-408-304 Bricklaying/Masonry IV**5 credits • 27 lecture hours • 153 lab hours • 180 total hours**

Students build a major permanent project(s) using masonry materials and tools to develop their skills in plan reading, estimating, and trade techniques. Prerequisite: Bricklaying/Masonry II (31-408-302)

31-408-306 Sketching and Print Reading**2 credits • 18 lecture hours • 54 lab hours • 72 total hours**

Students learn basic sketching and print reading as applied to the masonry trade. Students develop and read working drawings including specifications, line and symbol identification, dimensions, and scales.

31-408-307 Estimating**2 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students apply basic methods of estimating and develop systems for doing quantity surveys. Students learn to use mathematics and their masonry construction knowledge to estimate materials, time, and cost for projects.

31-408-308 Construction Safety and Health**1 credits • 36 lecture hours • 0 lab hours • 36 total hours**

This course introduces students to construction safety principles associated with OSHA, the "Focus Four Hazards" that include fall hazards, caught-in-between hazards, struck-by hazards and electrical hazards. Students will learn to properly utilize personal protective equipment, fall protection, scaffold and ladders, and other construction safety related equipment to help avoid health hazards and injury. Students will have the opportunity to earn the OSHA 10-hour certification credential.

31-413-303 Electric Power Distribution Fund 1A**4 credits • 36 lecture hours • 108 lab hours • 144 total hours**

The student is introduced to basic electrical theory using Ohm's Law to analyze series, parallel and combination circuits. Concepts of work, power, energy, and magnetism will be studied. Student learns basic line construction materials such as insulator design, pole information, and wire size and resistance, with hands on practice on communication signals for line workers. Students will be introduced to GPS and its applications to onsite work. Throughout the course there is an emphasis on safety for line workers.

31-413-304 Electric Power Distribution Fund 1B**4 credits • 36 lecture hours • 108 lab hours • 144 total hours**

The student is introduced to basic A.C. circuits and advances to A.C. circuits with induction and capacitance. The course includes A.C. parallel circuits with resistance, inductive reactance and capacitive reactance. The student learns guying and anchoring concepts. Throughout the course there is an emphasis on safety for line workers.

31-413-305 Electric Power Dist Fund 1C-App Lab**5 credits • 0 lecture hours • 180 lab hours • 180 total hours**

The student is introduced to power line construction techniques including staking/overhead line design, overhead structure specifications, overhead distribution line construction and stringing/sagging overhead line conductors. The course includes basic hydraulics and line truck operation. Ropes, knots, and splices associated with the line workers trade will be learned and used throughout the course. Electrical connectors will also be covered. Students will learn aerial climbing tools and techniques. The student uses electrical test equipment and hand and power tools associated with the line workers trade. Throughout the course there is an emphasis on safety for line workers.

31-413-306 Electric Power Dist Fund 2A**4 credits • 36 lecture hours • 108 lab hours • 144 total hours**

The student is introduced to the theory of three-phase electrical power systems, including wye and delta systems. Student studies single- and three-phase transformer; construction, principles of operation, connections as well as secondary power supply systems. Skills in electrical system grounding principles and over voltage equipment will be developed. Safety topics related to electrical line work will be highlighted. Prerequisite: Electric Power Distribution Fund 1A (31-413-303)

31-413-307 Electric Power Dist Fund 2B**4 credits • 36 lecture hours • 108 lab hours • 144 total hours**

The student is introduced to electrical power line apparatus such as; over current equipment, voltage regulators and kilowatt hour meters. Components and functions of an electrical substation, underground distribution systems, street lighting equipment, along with the sources of communication interference from electrical sources. Safety related topics are included. Prerequisite: Electric Power Distribution Fund 1B (31-413-304)

31-413-308 Electric Power Dist Fund 2C-AppLab**4 credits • 0 lecture hours • 144 lab hours • 144 total hours**

The student integrates lab concepts in advanced levels of topics such as; aerial climbing, rope knots and slices, electrical connectors, electrical test equipment, as well as hand tools. Application and installation of various electrical apparatus in a lab environment is completed by the students. Overhead transmission structures are constructed, protective grounding is introduced and live line work such as; rubber gloving and hot stick use is practiced (de-energized lines). Underground related equipment is introduced including cable terminating tools and cable locating equipment. Student installs UD cable and terminate cable. Student also operates a modern combination trencher-cable plow. Safety for the various lab activities is stressed. Prerequisite: Electric Power Dist Fund 1C-App Lab (31-413-305)

31-420-320 Intro to Print Reading**1 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Introduction to reading and interpreting prints and industrial drawings. Interpretation of views, projection, lines, section, working and assembly drawings relative to manufacturing processes and order of operations. This course integrates math skills with print reading.

31-420-321 Machine Shop Safety Practices & Maintenance**1 credits • 27 lecture hours • 9 lab hours • 36 total hours**

The safety unit includes instruction in topics such as lockout-tagout, personal protective equipment, OSHA compliance, material safety data sheets, handling and storage of materials and emergency response procedures.

31-420-322 Intro to Manual Mill**1 credits • 9 lecture hours • 27 lab hours • 36 total hours**

This course will provide instruction and practice in the use of milling machines and various processes performed on them. Students will learn about mills, associated processes, milling machine tooling, and related safety/maintenance issues.

31-420-323 Intro to Manual Lathe**1 credits • 9 lecture hours • 27 lab hours • 36 total hours**

This course will provide instruction and practice in the use of lathe machines and various processes performed on them. Students will learn about lathe, associated processes, lathe machine tooling, and related safety/maintenance issues.

31-420-324 Manual Machine Speeds & Feeds**1 credits • 18 lecture hours • 18 lab hours • 36 total hours**

Students will determine cutting speeds for high speed steel tooling on manual mill and lathes. Students will calculate feed per tooth and inches per minute for various cutters. Students will calculate proper spindle speeds for twist drills.

31-420-325 Tooling & Materials of Manufacturing**1 credits • 18 lecture hours • 18 lab hours • 36 total hours**

Students will learn about of various types of tooling used in the industry. Students will learn about the materials they are machining and how the materials are processed.

31-420-326 Intro to Quality Practices & Measurement Equipment**1 credits • 18 lecture hours • 18 lab hours • 36 total hours**

Students will perform quality practices used by machine shops for various part checks. Students will learn how to fill out data sheets and use various parts specific measurement equipment.

31-420-327 Intro to Surface Grinding**1 credits • 9 lecture hours • 27 lab hours • 36 total hours**

Students complete basic grinding operations to include installation of grinding wheel, work holding techniques, speeds and feeds and problem solving. Use profilometer to measure roughness average and grind parts specific dimensions.

31-420-328 Intro to Mastercam Mill 2D**1 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Introduction to computer aided machining of 2 dimension parts using CAM software. Students will use CAM software to create and machine pockets, slots, bosses, holes and engraved details in CNC milled parts.

31-420-329 Advanced Manual Mill**1 credits • 9 lecture hours • 27 lab hours • 36 total hours**

This course will be a continuation of Intro to Manual Mill. Students will practice in the use of milling machines and various processes performed on them. Students will learn about rotary tables, t-slot cutters and boring bars. Co-requisite: Intro to Manual Mill (31-420-322)

31-420-330 Advanced Manual Lathe Machine**1 credits • 9 lecture hours • 27 lab hours • 36 total hours**

This course is a continuation of Intro to Manual Lathe Machine. Students will practice the use of lathe machines and various processes performed on them. Students will learn about lathe, four jaw chucks, face plates, taper attachments and collet puller. Co-requisite: Intro to Manual Lathe (31-420-323)

31-420-331 Advanced Print Reading**1 credits • 18 lecture hours • 18 lab hours • 36 total hours**

Print reading is learning a new language in graphic or symbolic form for the purpose of manufacturing or assembling mechanical components. Units include: orthographic projection, sketching, dimensioning, machine process callout, tolerance, finish, title blocks, notes, hole types, threads, symbols and callouts. Corequisite: Intro to Print Reading (31-420-320)

31-420-332 Advanced Measuring Equipment**1 credits • 18 lecture hours • 18 lab hours • 36 total hours**

Provides instruction in the care and use of measurement tools and inspection equipment necessary to maintain quality standards in the manufacturing environment. Semi-precision through high-precision measurement tools, gages, inspection sheets and processes, direct and comparative inspection methods will be covered.

31-420-333 Intro to Mastercam Lathe**1 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Introduction to computer aided machining of 2 dimension parts using CAM software. Students will use CAM software to create lengths, diameters, chamfer, counterbore, external threads and parting off in CNC lathes.

31-420-334 Intro to Computer Numerical Control Prog Mill**1 credits • 18 lecture hours • 18 lab hours • 36 total hours**

Students apply skills in the programming and operation of a machining center using G-code. Explore basic metrology, tool selection and work hold devices. Rapid and Linear Interpolation, Circular Interpolation, Drilling, Bolt Circles, Subroutines and Subprograms, Cutter Compensation and Pocket Milling.

31-420-335 Intro to Computer Numerical Control Prog Lathe**1 credits • 18 lecture hours • 18 lab hours • 36 total hours**

An introduction to planning and writing programs for computer numerically controlled turning centers using G and M code. Students learn to write basic programs for CNC lathes, proof programs and run programs in CNC machine tools. Programming basics will include multiple tool programs, tool nose compensation and canned cycles.

31-420-336 Basic CNC Operation Mill**1 credits • 9 lecture hours • 27 lab hours • 36 total hours**

The setup of CNC Machining centers is covered in this course. Applications include selection of tools and workholding devices, setting tool offsets and work coordinate positions, calling programs, proofing programs, and minor edits and machine adjustments.

31-420-337 Basic CNC Operation Lathe**1 credits • 9 lecture hours • 27 lab hours • 36 total hours**

The setup of CNC turning centers is covered in this course. Applications include selection of tools and workholding devices, setting tool offsets and work coordinate positions, calling programs, proofing programs, and minor edits and machine adjustments.

31-420-340 Geometric Dimensioning & Tolerance**1 credits • 27 lecture hours • 9 lab hours • 36 total hours**

Recognition and interpretation of geometric dimensioning and tolerancing symbols and application as applied to prints for the manufacture of parts. Pre-requisite: Intro to Print Reading (31-420-320)

31-420-341 Fixture Basic Lathe & Mill**1 credits • 9 lecture hours • 27 lab hours • 36 total hours**

The fundamentals of workholding and fixturing for CNC turning and milling are covered in this course. Students will apply what they learn by determining workholding needs, recognizing problems with CNC machine operation, change and adjust tooling and fixtures and perform multiple part setups. Pre-requisite: Basic CNC Operation Mill (31-420-336)

31-420-342 CNC Machine Speeds & Feeds**1 credits • 18 lecture hours • 18 lab hours • 36 total hours**

Students will determine cutting speeds for carbide tooling on mill and lathes. Students will calculate feed per tooth and inches per minute for various cutters and materials. Students will calculate proper spindle speeds for milling and drilling operations.

31-420-343 Processes of Manufacturing**1 credits • 18 lecture hours • 18 lab hours • 36 total hours**

Students learn to apply manufacturing requirements to the design of mechanisms by studying manufacturing disciplines. These disciplines include metallurgy, steel identification, casting, forging, cold working metals, plastics, and other specialized processes. The students will receive hands on work with MIG welding. Tours of various area manufacturing facilities will give the students new insight into various manufacturing processes.

31-420-344 Advanced Mastercam Mill & Lathe**1 credits • 18 lecture hours • 18 lab hours • 36 total hours**

This will be a continuation of Mastercam Mill & Lathe 2D where students will draw within software multiple mill and lathe parts. Then post to CNC machines to finish parts. Prerequisite: Intro to Mastercam Mill 2D (31-420-328) Co-requisite: Intro to Mastercam Lathe (31-420-333)

31-420-345 Precision Machining Internship**2 credits • 0 lecture hours • 0 lab hours • 144 total hours**

Students apply technical theory and skills on the job. Students will setup and perform production part runs. Students will verify critical dimensions on parts and develop appropriate employment attitudes.

31-442-310 Equipment Safety**1 credits • 9 lecture hours • 27 lab hours • 36 total hours**

In this hands-on course students will set up machine guards, identify different personal protective equipment, demonstrate safety using a fork truck, and demonstrate welding safety as well as oxy-fuel safety.

31-442-311 Oxyfuel Gas Cutting & Gouging**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on class students will perform manual and machine (track burner) oxyfuel gas cutting as well as manual and machine oxyfuel gas gouging.

31-442-312 Arc Cutting & Gouging**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on course students will complete air carbon cutting and gouging as well as examine cut surfaces and edges of prepared base metal parts.

31-442-313 Plasma Cutting & Gouging**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on course students will complete plasma arc cutting as well as plasma arc gouging and will examine gouge surfaces and edges of prepared base metal.

31-442-314 Oxyfuel Equipment**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands on course, students will learn how to make external repairs on oxy-fuel equipment components, inspect for safety, and set up oxyfuel equipment for welding.

31-442-315 Oxyfuel Brazing & Welding-Carbon Steel**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on course students will learn how to make surfacing welds in the flat position, make fillet welds, and make groove welds on plain carbon steel.

31-442-316 Oxyfuel Brazing & Welding-Stainless Steel**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on course students will learn how to make fillet and groove welds in all positions on 3XX stainless steel using the Oxyfuel process in accordance with AWS specifications.

31-442-320 SMAW - Equipment**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on course the student will identify SMAW equipment components as well as inspect those components for safety. The student will also set up SMAW equipment for welding plain carbon steel and 3XX stainless steel.

31-442-323 GTAW - Equipment**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on course the student will identify GTAW equipment components as well as inspect those components for safety. The student will also set up GTAW equipment for welding plain carbon steel, aluminum and 3XX stainless steel.

31-442-324 GTAW - Carbon Steel**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on course the learner will learn how to make fillet and groove welds in all positions on plain carbon steel using the GTAW process as well as perform GTAW weldments that pass visual inspection.

31-442-325 GTAW - Aluminum**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on course students will learn to make groove and fillet welds in all positions on aluminum using the GTAW process in compliance with the AWS specifications.

31-442-326 GTAW - Stainless Steel**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on course students will learn how to make fillet and groove welds in all positions on 3XX stainless steel using the GTAW process in accordance with AWS specifications.

31-442-327 GMAW - Equipment**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on course the student will identify GMAW equipment components as well as inspect those components for safety. The student will also set up GMAW equipment for welding plain carbon steel, aluminum and 3XX stainless steel.

31-442-328 GMAW - Carbon Steel (S Process)**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on course student will learn to make fillet and groove welds in all positions on plain carbon steel using the GMAW-S process in accordance with AWS Specifications.

31-442-329 GMAW - Aluminum**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on course student will learn to make fillet and groove welds in all positions on Aluminum using the GMAW process in accordance with AWS Specifications.

31-442-330 GMAW - Stainless Steel**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on course students will learn how to make fillet and groove welds in all positions on 3XX stainless steel using the GMAW process in accordance with AWS specifications.

31-442-331 GMAW - Carbon Steel (Spray Transfer)**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on course student will learn to make fillet and groove welds in all positions on plain carbon steel using the GMAW- Spray Transfer process in accordance with AWS Specifications.

31-442-332 FCAW - Equipment**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on course the student will identify FCAW equipment components as well as inspect those components for safety. The student will also set up FCAW equipment for welding plain carbon steel.

31-442-333 FCAW - Carbon Steel (Gas Shielded)**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on course the learner will learn how to make fillet and groove welds in all positions on plain carbon steel using the FCAW (Gas Shielded) process as well as perform FCAW weldments that pass visual inspection.

31-442-335 Welding for Plumbers**1 credits • 18 lecture hours • 18 lab hours • 36 total hours**

Students perform oxy-fuel brazing in all positions on copper and stainless steel tubing using various filler metals. Students perform Shielded Metal Arc Welding in all positions on steel and stainless steel pipe.

31-442-336 SMAW**2 credits • 8 lecture hours • 64 lab hours • 72 total hours**

In this hands-on course the learner will learn how to fillet and groove welds in all positions on plain carbon steel and 3XX stainless steel using SMAW process as well as perform SMAW weldments that pass visual inspection and in accordance with AWS specifications.

31-457-317 Forming & Folding Metal**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on course students will learn to form and fold metal using a forming roll, power press break, and a box and pan brake. Students will also learn to bend pipe.

31-457-318 Fabricating**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on course students will use different equipment to fabricate, including sawing equipment, drill and tap equipment, and hydraulic iron worker.

31-457-334 Fabrication Planning & Drawing**1 credits • 4 lecture hours • 32 lab hours • 36 total hours**

In this hands-on course students will learn how to properly form blueprints as well as create a project through planning, drawing and fabricating phases.

31-475-312 Introduction to Building Trades**1 credits • 18 lecture hours • 18 lab hours • 36 total hours**

Introduces the learner to the fundamental building materials and methods of residential construction. Students will practice safe operation of hand tools and power tools. Various types of joining methods and general shop safety practices will be covered. Students will apply building trades skills by completing a small wood working project.

31-475-313 Site Layout, Foundations, and Formwork**2 credits • 18 lecture hours • 54 lab hours • 72 total hours**

Students will be introduced to building elevations, measuring and layout methods using a builder's level, laser level, and total station. The construction applications of concrete and concrete forms for footings, foundation walls, and flat work will be analyzed.

31-475-314 Floor and Wall Framing**3 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Students will learn to recognize and apply the materials, methods, and procedures required to frame walls and flooring systems. The safe operation of hand tools and portable power tools will be executed as students measure and layout floor and wall framing.

31-475-315 Blueprint Reading**2 credits • 18 lecture hours • 54 lab hours • 72 total hours**

This course introduces students to blueprint reading and the basic components, including the various types, symbols, and abbreviations. Students will practice analyzing and reading various types of working drawings, detailed drawings, elevations, and floor plans used in residential construction.

31-475-316 Roof Systems**2 credits • 18 lecture hours • 54 lab hours • 72 total hours**

Students will evaluate and apply the principles of roof framing, truss layout, and dormer framing. Various types of roof shapes and pitches are examined. Types of underlayment and the proper installation are explored and practiced. Various connectors and fasteners are utilized. Multiple types of roofing materials and proper installation methods are introduced including wood, architectural metal, and asphalt.

31-475-317 Exterior Finishes**2 credits • 18 lecture hours • 54 lab hours • 72 total hours**

Students will explore and apply methods and materials used in residential structures including: soffit and fascia installation, various types of siding installation and various types of trim. Proper types of fasteners and methods of fastening will also be covered.

31-475-318 Residential Estimating**2 credits • 18 lecture hours • 54 lab hours • 72 total hours**

Students will apply quantity survey and quantity take-off methods of residential estimating through the study and interpretation of construction plans and specifications. Material pricing and projections will be conducted using residential estimating forms, spreadsheet planning tools, and estimating software. Prerequisites: Blueprint Reading (31-475-315), Roof Systems (31-475-316), and Exterior Finishes (31-475-317)

31-475-319 Building Science and Sustainability**1 credits • 18 lecture hours • 18 lab hours • 36 total hours**

Students will explore innovative construction design techniques focused on energy efficient and sustainable conservation practices. Alternative energy systems will be analyzed and differentiated in applied learning lab activities. Prerequisites: Blueprint Reading (31-475-315), Roof Systems (31-475-316), and Exterior Finishes (31-475-317)

31-475-320 Insulation, Drywall Installing, and Finishing**2 credits • 18 lecture hours • 54 lab hours • 72 total hours**

Students will explore and apply best practices in construction insulation methods. Fiberglass, loose-fill, dense pack, batt insulation, rigid polystyrene (EPS) (XPS) (ISO), and spray foam applications will be covered. Drywall installation and finishing will be discussed and practiced in the lab. Methods of patching, repairing, and applying a decorative finish will be covered. Prerequisites: Blueprint Reading (31-475-315), Roof Systems (31-475-316), and Exterior Finishes (31-475-317)

31-475-321 Cabinet Construction and Installation**1 credits • 18 lecture hours • 18 lab hours • 36 total hours**

Students will be introduced to cabinet design and construction methods used in cabinet making and installation. Installation of specialty cabinetry hardware, drawer and case construction and installation will be covered. Prerequisites: Blueprint Reading (31-475-315), Roof Systems (31-475-316), and Exterior Finishes (31-475-317)

31-475-322 Interior Finishes and Stair Construction**3 credits • 36 lecture hours • 72 lab hours • 108 total hours**

This course introduces students to the materials and techniques used to finish the interior of a residential home. Students will apply installation techniques in a base, casing, crown molding, and complete a stair balustrade and hand rail. Prerequisites: Blueprint Reading (31-475-315), Roof Systems (31-475-316), and Exterior Finishes (31-475-317)

31-475-323 Windows, Doors, and Hardware Installation**2 credits • 18 lecture hours • 54 lab hours • 72 total hours**

Students will follow the proper installation techniques for interior and exterior doors and window installation. The various types and installation of door hardware will be analyzed and applied. Prerequisites: Blueprint Reading (31-475-315), Roof Systems (31-475-316), and Exterior Finishes (31-475-317)

31-501-104 Contemporary Healthcare Practices**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

An introduction to contemporary healthcare practices for students interested in a career serving diverse healthcare communities. Learners explore the essential skills required for equitable and inclusive person-centered interactions. Learners examine various health communities, mindful practices, professionalism, problem solving, and patient confidentiality.

31-502-301 Basic Hair Design**5 credits • 144 lecture hours • 36 lab hours • 180 total hours**

Students apply haircutting, hair tapering, razor cutting, beard shaping and shaving techniques, using a variety of methods, products and tools with consideration for customer's needs and expectations. Students will also perform shampooing, conditioning treatments before practicing a variety of hairstyling skills such as thermal waving, blow outs, roller setting, thermal straightening, and pin curl placement to finish the desired design. Students will learn correct placement and care of wigs, hairpieces and extensions. Through analysis and consultation, students will identify scalp disorders so they can recommend hair and scalp treatments. Students also study anatomy and physiology of hair. Pre-requisite: Student must be accepted into the Cosmetology program.

31-502-302 Salon/Spa Science**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Students learn the importance of a professional image, hygiene, grooming, and professional development and ethics necessary for a salon or spa employee. Students perform sanitation and disinfection according to the State of Wisconsin laws to keep the salon clean and safe. Students study anatomy, physiology related to the skin, and basics of chemistry and electricity in the salon clinic. First aid and safety are covered in this course to comply with standards of the industry. Pre-requisite: Student must be accepted into the Cosmetology or Nail Technician program.

31-502-303 Chemical Restructuring**2 credits • 63 lecture hours • 9 lab hours • 72 total hours**

Students perform chemical services using permanent waving and chemical relaxing techniques. Students understand how the hair is restructured chemically through the study of chemistry in this course. Students wrap and process hair to permanently curl hair into different curl and design textures. Students chemically straighten hair using professional tools and products. Students practice client consultations and all safety and sanitation procedures. Pre-requisite: Student must be accepted into the Cosmetology program.

31-502-304 Haircoloring and Techniques**3 credits • 90 lecture hours • 18 lab hours • 108 total hours**

Students practice client analysis and consultations related to haircoloring services. Students study the color wheel and the theory behind the "Law of Color." Students practice communication skills to identify each client's desires and needs. Students mix and apply various types of hair colors, demonstrate foil techniques and corrective color procedures. Students explore different techniques in hair color services related to industry trends. Students practice all safety and sanitation procedures related to the state laws and rules. Pre-requisite: Student must be accepted into the Cosmetology program.

31-502-305 Nail Technology**3 credits • 56 lecture hours • 52 lab hours • 108 total hours**

Students practice client analysis and consultations related to nail services. Students safely prepare working area for nail services. They study nail disorders and diseases and review the anatomy and physiology as related to the hands and feet. Students practice communication skills to identify each client's desires and needs. Students develop skills in manicuring, pedicuring and nail enhancements. Students practice all safety and sanitation procedures related to the state laws and rules. Pre-requisite: Student must be accepted into the Cosmetology or Nail Technician program.

31-502-306 Basic Facials**2 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Students explore the importance of proper skin care services. Students explain pertinent information during a client consultation and skin analysis. Students perform facials including massage, hair removal, makeup and band lash application. Prerequisite: Salon/Spa Science (31-502-302) with a "C" or better.

31-502-307 Salon/Spa Management**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Students learn management, advertising and book keeping skills involved in operating a salon/spa as a business. Students learn how to establish positive customer communications and relationships. Students practice math skills while learning receptionist responsibilities. Students plan a salon/spa business using the requirements of Wisconsin guidelines. Students learn the State of Wisconsin Rules and Regulations guidelines. Students prepare for job opportunities. Pre-requisites: Salon/Spa Science (31-502-302) AND Nail Technology (31-502-305). Both with a "C" or better.

31-502-314 Salon Services I - Fundamentals**3 credits • 6 lecture hours • 102 lab hours • 108 total hours**

Students begin practicing the fundamentals of cosmetology services on customers in a salon environment. They apply knowledge and skills learned in their related theory and lab classes to hands-on work experience. Prerequisites: Basic Hair Design (31-502-301), Salon/Spa Science (31-502-302), Chemical Restructuring (31-502-303), Hair Coloring and Techniques (31-502-304), Nail Technology (31-502-305) with a "C" or better.

31-502-315 Salon Services II - Basic Concepts**4 credits • 6 lecture hours • 138 lab hours • 144 total hours**

Students perform a variety of salon services for customers in a salon setting. Students conduct basic concepts related to professional attitude, ethics, and the practice of salon skills performed in the salon atmosphere. Prerequisite: Salon Services I – Fundamentals (31-502-314) with a "C" or better.

31-502-316 Salon Services III - Skill Building**4 credits • 6 lecture hours • 138 lab hours • 144 total hours**

Students continue performing various salon skills with greater proficiency while building skills performed in salon services. Prerequisite: Salon Services II – Basic Concepts (31-502-315) with a "C" or better.

31-502-317 Salon Services IV - Intermediate Skills**4 credits • 6 lecture hours • 138 lab hours • 144 total hours**

Students develop intermediate skills in service areas of hair cutting, barbering techniques, chemical services, nail technology, and skin care services with increased attention to individual client needs. Prerequisite: Salon Services III – Skill Building (31-502-316) with a “C” or better.

31-502-318 Salon Services V - Proficiency Building**5 credits • 6 lecture hours • 174 lab hours • 180 total hours**

Students continue to develop speed and greater proficiency in all areas of advanced salon services, including chemical services, hair cutting, barbering techniques, color, nail technology, and skin care with increased attention to individual client needs. Students work together as a team and cooperation with other students is assessed along with professional attitude, ethics, and conduct. Prerequisite: Salon Services IV – Intermediate Skills (31-502-317) with a “C” or better.

31-502-319 Salon Services VI - Advanced Techniques**5 credits • 6 lecture hours • 174 lab hours • 180 total hours**

Students perform a variety of advanced techniques and required services. Students show competency in these services and can complete these tasks with additional speed and attention to detail. Students demonstrate salon management skills using computerized appointment booking and attention to closing out the cash register to balance the day's receipts. Students demonstrate competency in running a salon, including paying attention to cleanliness, sanitation, safety, inventory, retail control and organization. Prerequisite: Salon Services V – Proficiency Building (31-502-318) with a “C” or better.

31-502-322 Nail Services**3 credits • 0 lecture hours • 108 lab hours • 108 total hours**

Students practice nail services on customers in a salon environment. They apply knowledge and skills learned in their related theory lab classes to hands-on work experience. Students perform all manicure and pedicure services as well as all nail extension services in a salon atmosphere. Pre-requisites: Salon/Spa Science (31-502-302) Nail Technology (31-502-305) both with a “C” or better. Co-requisites: Salon/Spa Management (31-502-307)

31-508-302 Dental Chairside**5 credits • 90 lecture hours • 90 lab hours • 180 total hours**

Prepares dental assistant student to chart oral cavity structures, dental pathology, and restorations and to assist a dentist with basic dental procedures including examinations, pain control amalgam restoration, and cosmetic restoration. Students will also develop the ability to educate patients about preventive dentistry, brushing and flossing techniques, and dental procedures, using lay terminology. Throughout the course, students will apply decoding strategies to the correct use and interpretation of dental terminology.

31-508-304 Dental & General Anatomy**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Prepares dental assistant students to apply fundamentals of general and dental anatomy to informed decision-making and to professional communication with colleagues and patients.

31-508-306 Dental Assistant Clinical**3 credits • 18 lecture hours • 0 lab hours • 198 total hours**

Students apply skills developed in Dental and General Anatomy, Dental Health Safety, Dental Chairside, Dental Materials, Dental Radiography, and Professionalism in a clinical setting with patients. Emphasizes integration of core abilities and basic occupational skills. Pre-requisite: Must earn at least a grade of C in all classroom/laboratory learning settings to be eligible to work under the direct supervision of a dentist in a four-week externship.

31-508-307 Dental Assistant Professional**1 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Prepares dental assistant students for professional success in a dental practice or another dental health care environment. Students develop professional appearance and image. More importantly, they learn to work within ethical guidelines and legal frameworks. In preparation for entering the work force, dental assistants customize or develop their portfolios and lay out an ongoing professional development plan.

31-509-301 Medical Asst Admin Procedures**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Introduces medical assistant students to office management and business administration in the medical office. Students learn to schedule appointments, perform filing, record keeping, telephone and reception duties, communicate effectively with patients and other medical office staff, and keep an inventory of supplies. Students apply introductory medical coding skills and managed care terminology.

31-509-302 Human Body in Health & Disease**3 credits • 108 lecture hours • 0 lab hours • 108 total hours**

Focuses on diseases that are frequently first diagnosed and treated in the medical office setting. Students learn to recognize the causes, signs, and symptoms of diseases of the major body systems as well as the diagnostic procedures, usual treatment, prognosis and prevention of common diseases.

31-509-303 Medical Asst Lab Procedures 1**2 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Introduces medical assistant students to laboratory procedures commonly performed by medical assistants in a medical office setting. Students perform routine laboratory procedures commonly performed in the ambulatory care setting under the supervision of a physician. Students follow laboratory safety requirements and federal regulations while performing specimen collection and processing, microbiology, and urinalysis testing.

31-509-304 Medical Asst Clin Procedures 1**4 credits • 72 lecture hours • 72 lab hours • 144 total hours**

Introduces medical assistant students to the clinical procedures performed in the medical office setting. Students perform basic examining room skills including screening, vital signs, patient history, minor surgery and patient preparation for routine and specialty exams in the ambulatory care setting.

31-509-305 Medical Asst Lab Procedures 2**2 credits • 36 lecture hours • 36 lab hours • 72 total hours**

Introduces medical assistant students to laboratory procedures commonly performed by medical assistants in a medical office setting. Students perform routine laboratory procedures commonly performed in the ambulatory care setting under the supervision of a physician. Students follow laboratory safety requirements and federal regulations while performing specimen collection and processing, microbiology and urinalysis testing. Prerequisite: Medical Asst Lab Procedures I (31-509-303)

31-509-306 Medical Asst Clin Procedures 2**3 credits • 72 lecture hours • 36 lab hours • 108 total hours**

Prepares medical assistant students to perform patient care skills in the medical office setting. Students perform clinical procedures including administering medications, assisting with minor surgery, performing an electrocardiogram, assisting with respiratory testing, educating patients/community, and maintaining clinical equipment in an ambulatory care setting. Prerequisite: Medical Asst Lab Procedures I (31-509-303) Medical Asst Clin Procedures I (31-509-304)

31-509-307 Med Office Insurance & Finance**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Introduces medical assistant students to health insurance and finance in the medical office. Students perform bookkeeping procedures, apply managed care guidelines, and complete insurance claim forms. Students use medical coding and managed care terminology to perform insurance-related duties.

31-509-308 Pharm for Allied Health**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Introduces students to classifying medications into correct drug categories and applying basic pharmacology principles. Students apply basic pharmacodynamics to identifying common medications, medication preparation, and administration of medications used by the major body systems.

31-509-309 Medical Law, Ethics & Profession**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Prepares students to display professionalism and perform within ethical and legal boundaries in the health care setting. Students maintain confidentiality, examine legal aspects of the medical record, perform risk management procedures, and examine legal and bioethical issues.

31-509-310 Medical Assistant Practicum**3 credits • 0 lecture hours • 0 lab hours • 216 total hours**

Requires medical assistant students to integrate and apply knowledge and skills from all previous medical assistant courses in actual patient care settings. Learners perform medical assistant administrative, clinical, and laboratory duties under the supervision of trained mentors to effectively transition to the role of a medical assistant. Corequisite: Medical Assistant Clinical Procedures 2 (31-509-306)

31-513-181 Quality Lab Microbiology 1**2 credits • 36 lecture hours • 36 lab hours • 72 total hours**

This course provides an overview of microbiological theory, testing, and control. This course will review lab safety, beneficial and pathogenic microorganisms and their detection and control within the industry. Sample collection, handling and preparation, in addition to tests performed to detect microorganisms in raw and manufactured dairy products will be discussed. Corequisite: Basic Lab Skills (10-513-110) QA Lab Math (10-513-113)

31-513-182 Quality Lab Skills 1**1 credits • 0 lecture hours • 36 lab hours • 36 total hours**

The learner will be introduced to dairy food chemistry and applicable laboratory skills. Topics covered will include basic chemistry principles used in dairy food testing and quality analysis. Students will be introduced to testing performed in a dairy food manufacturing lab, standard laboratory methods and proper techniques. Emphasis will be placed on laboratory safety, laboratory equipment utilization, and quality techniques. Two semesters of high school Chemistry could replace the Fundamentals of Chemistry Co-requisite. Corequisites: Basic Lab Skills (10-513-110) QA Lab Math (10-513-113) Fundamentals of Chemistry (10-806-109)

31-513-185 Quality Lab Skills 2**1 credits • 9 lecture hours • 27 lab hours • 36 total hours**

The learner will apply testing techniques used in the dairy food manufacturing and quality industry to ensure product quality and safety. Concepts in data analysis as it relates to documentation of results, quality control testing, calibration, and troubleshooting will be reviewed. Emphasis will be placed on critical thinking, quality of work, and laboratory technique. Prerequisites: Quality Lab Skills 1 (31-513-182)

31-513-186 Quality Lab Microbiology 2**2 credits • 18 lecture hours • 54 lab hours • 72 total hours**

This course will review characteristics of microorganisms pertinent to the food manufacturing and quality testing industry. The learner will apply microbiological testing techniques used in the dairy food manufacturing and quality industry to ensure product quality and safety. Techniques in sampling methods and analysis of plate counts will be explored. Prerequisites: Quality Lab Microbiology 1 (31-513-181)

31-801-310 Workplace Communication**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Students apply oral, written, listening, and non-verbal skills to workplace situations. Students discover how to use communication as the key to solving workplace problems, resolving conflicts, working as members of a team, and effectively giving and receiving criticism. Students develop an understanding of diversity in the workplace, harassment issues, and the impact of substance abuse on the job.

31-804-305 Applied Mathematics**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Students compute with rational numbers. They make and convert various measurements. Students use formulas to solve problems. They compute dimensions of geometric shapes. Students use statistical tools to represent and analyze data. They analyze various financial situations. Students use basic right triangle trigonometry to solve problems. In each topic area, students solve application problems.

32-070-301 Farm Machinery Harvest**5 credits • 54 lecture hours • 126 lab hours • 180 total hours**

Students operate, recondition, adjust, and maintain many of the different types of harvesting equipment used on modern farms. Students diagnose electro-hydraulic systems used on combines and forage harvesters. Students learn the different types of combine construction and how this affects productivity. Students check for field loss and adjust combines to provide maximum efficiency.

32-070-303 Chassis Drive Systems**5 credits • 54 lecture hours • 126 lab hours • 180 total hours**

Students diagnose and repair "live" power train problems which include clutches, transmissions, differentials, and PTOs. Students build skills necessary to diagnose and repair power trains on approved projects. Students use time management techniques during lab instruction while performing diagnostic tests and repairs. Students also use the latest computer resource information to gather parts and service information. Prerequisite: Basic Hydraulics (32-070-341)

32-070-305 Intro to Ag Electrical Systems**3 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Students apply the fundamentals of electricity and electronics as it relates to the tractor electrical system. Students gain an understanding of the basic electrical system, reading schematics used to diagnosis these systems and how to apply test procedures for the circuits being studied. Students will learn the various test equipment and meters. They will apply the proper use of the test equipment while learning the basic electrical systems and repair procedures.

32-070-309 Farm Machinery Maintenance**5 credits • 54 lecture hours • 126 lab hours • 180 total hours**

Students learn to perform preventative maintenance procedures to a variety of agricultural equipment used in production agriculture. During this process the student gains an understanding of belt and chain drives, repair and adjustments, various types of bearings and bearing maintenance, PTO assemblies and associated repair procedures. Basic service maintenance of tractors is covered.

32-070-311 Diesel Engines I**5 credits • 54 lecture hours • 126 lab hours • 180 total hours**

Students learn concepts of the diesel engine operation and diagnostic processes used to locate problems within the engine. Students work with the maintenance and repair of the cooling system, lubrication system, fuel system and intake/exhaust systems. Students will use nozzle testing and repair equipment to make repairs to injection nozzles in the lab. Students will understand proper injection pump failure diagnosis and on tractor adjustments are emphasized as well as an insight into the specialized diesel component repair field that they may find employment in.

32-070-312 Diesel Engines II**5 credits • 54 lecture hours • 126 lab hours • 180 total hours**

Students learn how the internal components of the diesel engine work together in theory and in the lab as they apply repair techniques to a diesel engine overhaul project. Students learn how to properly measure the components and make informed decisions on the repair processes warranted as compared to the equipment specifications. This process includes developing a repair estimate to be shared with the customer.

32-070-314 Ag Shop Safety & Practices**1 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Students learn skills required to become productive and efficient in the Agricultural service center. The skill set will include a working understanding of hand tools, power tools, lifting equipment, general shop equipment, fastener applications and the proper torqueing procedures for the various fasteners and gasket/sealant application. The student's skills are improved through practice and evaluation in a safety conscious manner. Students will gain a further understanding of employment opportunities, customer and employer expectations as well as the policies and procedures related to the operation of an Agricultural dealership.

32-070-341 Basic Hydraulics**4 credits • 36 lecture hours • 108 lab hours • 144 total hours**

Students disassemble, inspect, and repair hydraulic cylinders, pumps, and valves. Students apply hydraulic theory and principles by drawing hydraulic systems using ISO symbols. Students operate open and closed center hydraulic simulators to relate to the differences in pressure and flow.

32-070-343 Applied Hydraulics**4 credits • 36 lecture hours • 108 lab hours • 144 total hours**

Students learn the working fundamentals of hydraulic systems found on today's agricultural equipment including tractors, combines, skid steers loaders and related equipment through class discussion and lab demonstrations. Students will use hydraulic pressure gauges, flowmeters, diagnostic flow charts and manufacturer technical manuals as they apply theory to lab projects to enforce theory discussion and develop hands-on skills. Students also use the latest computer resource information available to gather parts and service information as it pertains to their lab project. Pre-requisite: Basic Hydraulics (32-070-341)

32-070-344 Air Conditioning**2 credits • 18 lecture hours • 54 lab hours • 72 total hours**

Students diagnose air conditioning system problems and make necessary repairs. Students will apply the laws and requirements set forth by state and federal agencies and are given the opportunity to take the state mobile air conditioning certification test to repair air conditioning systems upon satisfactory completion of this program.

32-070-345 Advanced Electrical Systems**4 credits • 36 lecture hours • 108 lab hours • 144 total hours**

Students build on fundamental electrical skills learned in the Starting and Charging Systems course. Students work with simulators and prior approved projects to develop diagnostic skills and repair techniques while learning and making repairs to lighting, control, and monitoring circuits. Students use onboard diagnostics systems and scan tools as an integral part of this course as well as factory technical manuals, online resources, and computer programs to access service and parts information to complete lab projects.

32-070-346 Consumer Equipment Maintenance & Repair**3 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Students learn the repair concepts of home owner consumer products including Lawn & Garden tractors, riding lawn mowers, snow blowers, string trimmers, and chainsaws. Students learn basic design concepts and the repair and maintenance of the equipment found in everyday residences for home upkeep. Prerequisites: Ag Shop Safety and Practice (32-070-314) OR Farm Shop Safety and Maintenance (10-070-103) OR Ag Safety, Electrical, & Maintenance (10-070-104)

32-070-347 Farm Equipment I**3 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Students learn the principles of field operation and reconditioning of tillage and planting equipment. Students learn methods of testing, calibrating, adjusting and maintaining the different types of seeding equipment. Emphasis is placed on getting the planting unit field-ready, and how to instruct the customer on proper field operation of the seeding equipment. Prerequisites: Ag Shop Safety and Practice (32-070-314)

32-070-348 Farm Equipment II**3 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Students learn the principles of the field operation and reconditioning of hay harvesting equipment. Students learn the different designs of hay cutting equipment and the maintenance procedures associated with the different designs found today. They move through the course to the hay harvesting equipment including small square balers, large square balers, round balers. Students will learn the repair and field adjustment to the knotters used on small and large balers and the wrapping options found on round balers.

32-070-350 Ag Power Occup Internship**2 credits • 0 lecture hours • 0 lab hours • 144 total hours**

Students apply technical theory and skills on the job. Students diagnose and repair agricultural tractors and equipment. Students practice good communication and customer relation skills. Students develop appropriate employment attitudes. Prerequisite: Farm Equipment II (32-070-348)

32-404-310 Auto Electrical I**3 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Students focus on developing the skills needed to diagnose, service, and repair electrical and electronic systems. Students learn the fundamental concepts of electrical systems and understand wiring schematics. Learners utilize basic and digital test equipment, and apply Ohm's Law to electrical circuit diagnosis.

32-404-311 Auto Electrical II**3 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Students focus on developing the skills needed to diagnose, service, and repair electrical and electronic systems, including batteries, starting, charging, lighting, and computer control systems. Students utilize advanced techniques to diagnose and repair circuit faults.

32-404-312 Auto Electrical III**3 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Students focus on developing the skills needed to diagnose and repair automobile electrical accessories, including cruise control, windshield wipers, electric windows, electric door locks, instrumentation and power antennas. Students utilize test lights, digital test equipment and wiring schematics to employ a logical diagnostic procedure for determining electrical system problems. Prerequisite: Auto Electrical II (32-404-311)

32-404-314 Automotive Maintenance**3 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Students perform routine maintenance of the automobile including new and used car preparation, fluid checks and service, interior and exterior considerations, replacing filters and small parts, repairing tires, replacing belts, replacing wiper blades, and other repairs to maintain acceptable automobile performance.

32-404-315 Engine Repair**5 credits • 36 lecture hours • 144 lab hours • 180 total hours**

Students apply information and skills in repairing automotive engines, including in-car repairs, removal and replacement of parts, and cylinder head rebuilding. Complete engine disassembly is discussed and performed.

32-404-321 Automatic Transmissions**5 credits • 36 lecture hours • 144 lab hours • 180 total hours**

Students diagnose, service, and repair automatic transmissions. Students practice safe and practical shop procedures through automatic transmission disassembly, cleaning, inspection, and reassembly.

32-404-322 Suspension & Steering**5 credits • 36 lecture hours • 144 lab hours • 180 total hours**

Students learn the fundamental concepts of suspension geometry and will analyze, diagnose, and repair automotive suspension and steering systems. Learners diagnose driving and handling concerns caused by steering and suspension system problems and misalignment concerns. Students operate computerized alignment equipment to perform four-wheel alignments on automobiles and operate wheel balancing equipment.

32-404-323 Emission Control Systems**2 credits • 18 lecture hours • 54 lab hours • 72 total hours**

Students diagnose and service emission control systems and perform exhaust gas analysis on automobiles and light trucks. Co-requisite: Auto Engine Performance (32-404-326)

32-404-326 Auto Engine Performance**4 credits • 36 lecture hours • 108 lab hours • 144 total hours**

Students perform ignition and fuel system maintenance and diagnostic procedures using a variety of diagnostic tools and test equipment. Students apply engine operating principles to perform diagnostic procedures on systems related to engine performance and emission control. Corequisite: Auto Electrical III (32-404-312)

32-404-327 Climate Control Systems**3 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Students service, repair, and maintain automotive air conditioning systems using knowledge of how the system operates. Students diagnose problems using the appropriate equipment. Students test systems for leaks, recycle and recharge refrigerant, and remove and replace system components. Students will diagnose and service High Voltage air conditioning and heating components.

32-404-328 Hybrid and Electric Vehicles**2 credits • 18 lecture hours • 54 lab hours • 72 total hours**

Students will understand low voltage and high voltage systems within hybrid and electric vehicles. Student will inspect, remove, disassembly, and installation of high voltage component includes HV batteries, inverters, and motors. Supporting cooling systems and low voltage electrical will also be diagnosed.

32-404-329 Advanced Engine Systems**4 credits • 36 lecture hours • 108 lab hours • 144 total hours**

Students apply related theory and diagnostic procedures to properly service and repair computerized control systems found on the modern day automobiles utilizing various types of diagnostic test equipment. Testing will occur on GM, FCA, Ford, and Import vehicles, including Hybrid and Electric.

32-404-334 Automotive Service Fundamentals**3 credits • 54 lecture hours • 54 lab hours • 108 total hours**

Students practice basic skills encountered as a technician servicing automobiles and light trucks including metal work; handtool, powertool, and fastener usage; measuring techniques, hoist operation, gasket/sealer application; and oxyacetylene and mig welding techniques. Students' skills are improved through practice in a safety conscious manner. Students examine employment opportunities, employer and customer expectations, and policies and procedures related to the operation of an auto service shop.

32-404-335 Automotive Brakes**3 credits • 36 lecture hours • 72 lab hours • 108 total hours**

Students service and repair brake system problems using knowledge of brake system operation. Students use proper service tools and equipment to perform safe and quality brake system repair including disc brakes, drum brakes, parking brakes, and the brake hydraulic system. Students diagnose antilock brake system problems and perform necessary repairs.

32-404-336 Advanced Braking Systems**1 credits • 12 lecture hours • 24 lab hours • 36 total hours**

Students diagnose, service, and repair electrical and electronic systems relating to anti-lock brakes and electronic stability control systems. Students will learn the theory of operation, perform diagnostic procedures and practice problem-solving methods.

32-404-337 Drivetrain Systems**4 credits • 36 lecture hours • 108 lab hours • 144 total hours**

Students will perform service, diagnostic and repair procedures on manual transmission/transaxles, drive axles, differentials and transfer cases. Students will perform service, diagnostic and repair procedures on High Voltage axles, transmission and other components in the driveline system.

32-404-350 Auto Tech Occupational Internship**2 credits • 0 lecture hours • 0 lab hours • 144 total hours**

Students apply technical theory & skills, by maintaining, diagnosing and repairing automobiles and light trucks. Students practice the necessary personal and professional skills essential to be successful as an Automotive Technician.

32-442-301 Related Welding**2 credits • 18 lecture hours • 54 lab hours • 72 total hours**

The student creates weldments in flat, vertical, horizontal, and overhead positions. These weldments will utilize SMAW, MIG, TIG, brazing and oxyfuel. All operations will adhere to AWS Code.

32-442-308 Blueprint Reading-Welding 1**1 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Students learn the basic concepts and fundamentals of blueprint reading. Students apply the use of basic mechanical drafting skills to basic shop sketching. Students develop skills in recognizing basic lines and views in reading a welding print.

32-442-309 Blueprint Reading-Welding 2**1 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Students interpret the use of a wide variety of symbols and abbreviations used in welding and how they are applied to assembly and detailed prints. Students use their knowledge of welding symbols to assemble projects.

32-806-303 Science of Mechanics**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Students compute work, power, acceleration, heat, pressure, and other physical quantities. They explore simple machines and their applications. Students apply those physical quantities to automotive and agricultural power situations. Prerequisites: Applied Mathematics (31-804-305) or Math-Occupational (30-804-313) and Occupational Math-Technical (31-804-315) with a "C" or higher

50-413-501 Industrial Electrician I**4 credits • 144 lecture hours • 0 lab hours • 144 total hours**

Students demonstrate electrical safety and first aid; choose and properly utilize tools of the trade for installation, repair and test electrical devices; apply basic electrical theory to basic wiring; and begin to use the National Electric Code. Students must be indentured in the Industrial Electrician Apprenticeship Program.

50-413-502 Industrial Electrician II**4 credits • 144 lecture hours • 0 lab hours • 144 total hours**

Students apply the theory of magnetism and electromagnetism (generation and utilization) to motor control, line diagrams and devices using basic trigonometry, and code wiring methods. Students must be indentured in the Industrial Electrician Apprenticeship Program.

50-413-503 Industrial Electrician III**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Students apply AC theory while measuring AC resistive, inductive, capacitive and combination circuits, using various measuring instruments and math formulas.

50-413-504 Industrial Electrician IV**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Students examine advanced motor control (contractors, magnetic starters, timers and other control devices), along with transformers for control and distribution of electricity.

50-413-505 Industrial Electrician V**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Students apply power factor correction, recognize the different types of AC motors (single phase), power distribution systems, specialty transformers, and code sections covering them.

50-413-506 Industrial Electrician VI**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Students work with 3-phase motors, look up and apply the National Electric Code sections covering motor installation, electromechanical and solid state motor control.

50-413-507 Industrial Electrician VII**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Students control processes using industrial solid state devices and apply digital fundamentals theory for industrial uses.

50-413-508 Industrial Electrician VIII**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Students program electronically programmable devices, smart motor controllers and programmable logic controllers.

50-413-521 Construction Electrician I**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Students practice basic and electrical safety, choose and properly utilize hand and power tools of the trade, and begin to use the National Electric Code and basic math.

50-413-522 Construction Electrician II**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Students apply basic electrical theory and test equipment, look up and apply the National Electric Code covering devices of the trade beginning with commercial and residential wiring.

50-413-523 Construction Electrician III**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Students apply electrical AC theory while using DC-AC motors to explore grounding, conduit bending, boxes and fitting.

50-413-524 Construction Electrician IV**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Students examine conductor installation, cable traps, conductor termination and splices to be used in the installation of electrical services, circuit breakers and fuses, motor control devices, and electric lighting.

50-413-525 Construction Electrician V**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Students gain knowledge in loading calculations, conductor selection, over current protection, raceways and boxes, wiring devices, and distribution equipment.

50-413-526 Construction Electrician VI**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Students work with distribution system transformers, basic lighting, motor calculations, motor maintenance, motor controls, electricity in HVAC, and hazardous locations.

50-413-527 Construction Electrician VII**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Students gain knowledge in load calculations, commercial/industrial lighting, specialty lighting, standby and emergency systems, and basic electronic theory.

50-413-528 Construction Electrician VIII**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Students work with fire alarm systems, specialty transformers, advanced solid state controls, HVAC controls, welding machinery, heat tracing, and freeze protection.

50-427-512 Level & Transit Plumbers**0.75 credits • 24 lecture hours • 0 lab hours • 24 total hours**

Students practice using the builder's level, transit, and laser to layout building lines, grades, set pipe runs, and measure elevations and distances. Prerequisites: Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-558 Isometric Interpretation & Drawing**0.5 credits • 18 lecture hours • 0 lab hours • 18 total hours**

This course will instruct the apprentice in the different areas of paper and pencil drawing. By using drafting tools the apprentice will draw plan view, isometric, cross section, elevation, and detail drawings. Using industry standards, the apprentice will label the drawings they have completed. The drawings will also be sized and vented per Wisconsin Administrative Code, Chapters 81-87.

50-427-751 Sanitary Drains 1**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Plumbing related instruction of sanitary drain systems. Course includes a review of codes and trade practices related to sanitary drains, drainage systems, components and applications. Prerequisites: Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-752 Vents and Venting Systems**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

This course is designed to provide the apprentice with the skills to identify and design sanitary vent piping in a plumbing system in accordance with the Wisconsin Plumbing Code. The course focuses on theory, work experience, and the application of plumbing code principles through discussions, drawing exercises, work sheets, and evaluations. Prerequisites: Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-753 Water Distribution 1**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

This course provides the apprentice with the skills to identify, design, install and service various applications for water supply systems that are listed in plumbing codes. Apprentices will use the code language and tables to in various plumbing systems in accordance with the Wisconsin Plumbing Code. Course topics will include commercial to single family and private well pump systems. The course focuses on theory, work experience, and the application of plumbing code principles through discussions, drawing exercises, work sheets, and evaluations. Prerequisites: Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-754 Water Distribution 2**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

This course provides the apprentice with the skills to identify, design, install and service cross connection controls, water treatment equipment and multi-purpose piping systems in various plumbing systems in accordance with the Wisconsin Plumbing Code. The course focuses on theory, work experience, and the application of plumbing code principles through discussions, drawing exercises, work sheets, and evaluations. Prerequisites: Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-755 Sanitary Drains 2**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

This course provides the apprentice with the skills to identify, design, install and service various applications for storm water, clear water, and drainage systems. Apprentices will use the code language and tables to in various plumbing systems in accordance with the Wisconsin Plumbing Code. The course focuses on theory, work experience, and the application of plumbing code principles through discussions, drawing exercises, work sheets, and evaluations. Prerequisites: Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-756 Private On-site Wastewater Treatment Systems (POWTS)**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

This course provides the apprentice with the skills to identify, design, install and service various applications for private onsite wastewater treatment systems that are listed in plumbing codes or individual component manuals. Apprentices will use the code language and tables to in various plumbing systems in accordance with the Wisconsin Plumbing Code. Other topics will include pretreatment, soil evaluation, site planning and new technologies. The course focuses on theory, work experience, and the application of plumbing code principles through discussions, drawing exercises, work sheets, and evaluations. Prerequisites: Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-757 Green Plumbing Applications**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

This course provides plumbing apprentices with an introduction to green applications. Apprentices will be instructed on how to identify, install and maintain a variety of green products and systems. They will apply the Wisconsin Plumbing Code to various installations. This introduction will give an apprentice the basic knowledge to study for a variety of green certifications. Prerequisites: Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-758 Plumbing Advanced Topics/TSA**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

This course provides the apprentice with the opportunity to select and complete an applied plumbing project in collaboration with the instructor. Projects will apply the skills required to identify, design, install and service various plumbing applications that are listed in plumbing codes. Apprentices will use the code language and tables to in various plumbing systems in accordance with the Wisconsin Plumbing Code. The course builds upon the theory, work experience, and the application of plumbing code principles addressed in previous coursework to support completing an applied hands-on project. Prerequisites: Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-760 Plumbing Applications**1 credits • 18 lecture hours • 18 lab hours • 36 total hours**

Examines a variety of real-life applications used in the plumbing trades and typically covered in paid related instruction. The units address the hows and whys behind joints and connections, rigging and signaling, hydraulics and pneumatics, plumbing and the environment, gas pipe applications, and applied electricity for plumbers. Prerequisites: Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-761 Plumbing Service and Repair**1.25 credits • 23 lecture hours • 23 lab hours • 46 total hours**

This course is designed to provide apprentices with the academic and hands-on experience needed to perform plumbing service and repair tasks. Emphasis is placed on the safe and responsible use of tools and equipment. Topics include clogged drains, garbage disposers, water treatment equipment, water closets, urinals, flush valves, cold weather plumbing problems, water systems, pumps and faucets. Prerequisites: Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-762 Plumbing Blueprint Reading**1.25 credits • 22 lecture hours • 23 lab hours • 45 total hours**

Provides instructional material for plumbing apprentices to develop the ability to interpret trade blueprints and to plan the installation of the required plumbing. Skills covered include identifying blueprint features, interpreting specifications, reading a blueprint for the purpose of layout work, listing material from print, and coordinating installation of piping with other trades. Blueprint reading practice will be offered while working with an actual print. Prerequisites: Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-763 Plumbing PRI Independent Study**1 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Provides additional hours for plumbing apprentices who require time to complete their 572 hours of paid related requirement. Up to 72 hours can be scheduled as need in an independent study format. Course hours can be used to make up for time lost due to injury or illness, or to catch-up apprentices who start mid-term for example. Prerequisites: Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-427-770 Plumbing PRI Independent Study - Makeup Hours**0.5 credits • 18 lecture hours • 0 lab hours • 18 total hours**

Provides additional hours for plumbing apprentices who require time to complete their 572 hours of paid related requirement. Up to 72 hours can be scheduled as need in an independent study format. Course hours can be used to make up for time lost due to injury or illness, or to catch-up apprentices who start mid-term for example. Prerequisites: Wisconsin indentured plumbing apprentice with a current state plumbing apprentice license.

50-620-701 Trade Math Review for Mechatronics Apprentices**1 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Course competencies include building apprentice skills working with fractions, decimals, formulas and ratios commonly used by the trade. Measurement, tolerances and interpreting trade related information will help apply math concepts to industrial and manufacturing work processes. Basic algebra, geometry and trigonometry will be applied to mechatronics job duties and tasks. Converting between US and metric units is also included. Course provides a foundation for mechanical and electrical problem-solving involving math. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-702 Mechatronic Principles**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Course learning outcomes will examine both introductory mechanical & electrical concepts as a foundation for future coursework and on-the-job learning. Troubleshooting principles associated with mechatronics will also be introduced. Apprentices will explore safety, rigging, measurement, mechanical principles, electrical principles, mechanisms, metallurgy, and troubleshooting. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-703 DC Electricity for Mechatronics**1 credits • 36 lecture hours • 0 lab hours • 36 total hours**

This course introduces the fundamental concepts and computations related to DC electricity. Emphasis is placed on circuit analysis and the problem-solving skills necessary for the maintenance of mechatronic systems and manufacturing equipment. Competencies related to metering and safe use of measuring devices are included. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-704 AC Electricity for Mechatronics**1 credits • 36 lecture hours • 0 lab hours • 36 total hours**

This course is designed to introduce the mechatronic technician apprentice to the basic concepts of alternating current. Emphasis is placed on circuit analysis and the problem-solving skills necessary for the maintenance of mechatronic systems and manufacturing equipment. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-705 Motors & Motor Control for Mechatronics**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

This course examines the fundamentals of electric motors and motor control. Apprentices will learn to recognize and draw basic symbols, use the language of motor control, and apply these in industry adopted formats. Apprentices will also learn to draw and read ladder and wiring diagrams, and be introduced to the logic used in motor control. Learners will apply this logic to correctly interpret, install, service, and wire control circuits. Wiring of panels, machines, and systems will also be examined. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-706 Electrical Codes for Mechatronics**1 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Apprentices will examine the National Electric Code and apply information to work practices involving mechatronic systems. Terminology needed to communicate and coordinate electrical work with other trades will be explored. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-707 Welding Basics for Mechatronics**1 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Course compares common welding processes and develops apprentice skills related to welding, cutting, heating and using oxy-gas. Welding with arc and MIG will help develop competency working with metal. Additional course learning outcomes may include common cutting and joining techniques associated with applicable trade work processes. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-708 Fluid Power Systems for Mechatronics Apprentices**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Course learning outcomes include inspecting, testing, servicing, and troubleshooting hydraulic, pneumatic, compressed air, and vacuum systems. Apprentices will review safety procedures for various common maintenance tasks. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-709 Servos and Drives for Mechatronics**1 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Course introduces concepts, terminology, and safety associated with drives and servos used in industry and manufacturing. Course is designed to give the apprentice the knowledge required to program, service and maintain variable frequency drives and related equipment. Course learning outcomes include setting up and programming drives in a lab, shop or training center setting. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-710 Power Transmission Systems for Mechatronics**1 credits • 36 lecture hours • 0 lab hours • 36 total hours**

Course learning outcomes include examining mechanical power transmission systems and components. Belts, chain drives, gears & gear drives, couplings, and clutches & brakes will be examined. Apprentices will develop skills inspecting, installing, and maintaining power transmission systems and troubleshooting failures. Apprentices will also learn about safety, documenting work performed, communicating the status of work, and working collaboratively. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-711 Machining Concepts for Mechatronics**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Course introduces cutting, drilling, lathes, and milling operations to apprentices in mechatronics. Course topics also include work holding devices, measuring tools and measurement, safety, machine guards, tooling, print reading, and speeds & feeds. Math skills will be applied to machining related work practices. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-712 Introduction to Programmable Logic Controllers**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

This course is designed to teach the fundamentals of programmable logic controller and its programming software. The course will introduce terminology, concepts, schematic reading and basic programming. Technologies and PLC use in manufacturing and mechatronic systems will be emphasized. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-714 HMI Technologies & PLC Applications for Mechatronics**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Human machine interface devices, software and technologies will be examined for mechatronic systems. Apprentices will work in a lab/shop/training center setting to create touchscreens, set-up networks, and configure systems. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-715 Introduction to Robotic Systems for Mechatronics**2 credits • 72 lecture hours • 0 lab hours • 72 total hours**

Course introduces the apprentice to the robot teach pendant and methods of robot jogging. Learners will be taught to replace servo motors, re-master the robot, and back up robot software and programs. Maintenance, servicing and safety will be emphasized. Cable management systems will be examined. Students must be indentured in the Mechatronics Technician Apprenticeship Program.

50-620-716 Introduction to Robotic Integration**3 credits • 108 lecture hours • 0 lab hours • 108 total hours**

Mechatronic apprentices will explore offsets, vision systems and system integration using robotic simulation and capstone project. The project will tie everything learned during their apprenticeship together – safety, machine integration, vision systems, CNC, machine applications for robotics, troubleshooting, and work documentation. Students must be indentured in the Mechatronics Technician Apprenticeship Program.



Southwest Wisconsin Technical College is one of the 10 finalists out of nearly 1,200 two-year colleges for the Aspen Prize for Community College Excellence. The Aspen Prize honors colleges with outstanding achievement in five critical areas: teaching and learning, certificate and degree completion, transfer and bachelor's attainment, workforce success, and equity for students of color and students from low-income backgrounds.

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