



FOX VALLEY CAREER CENTER

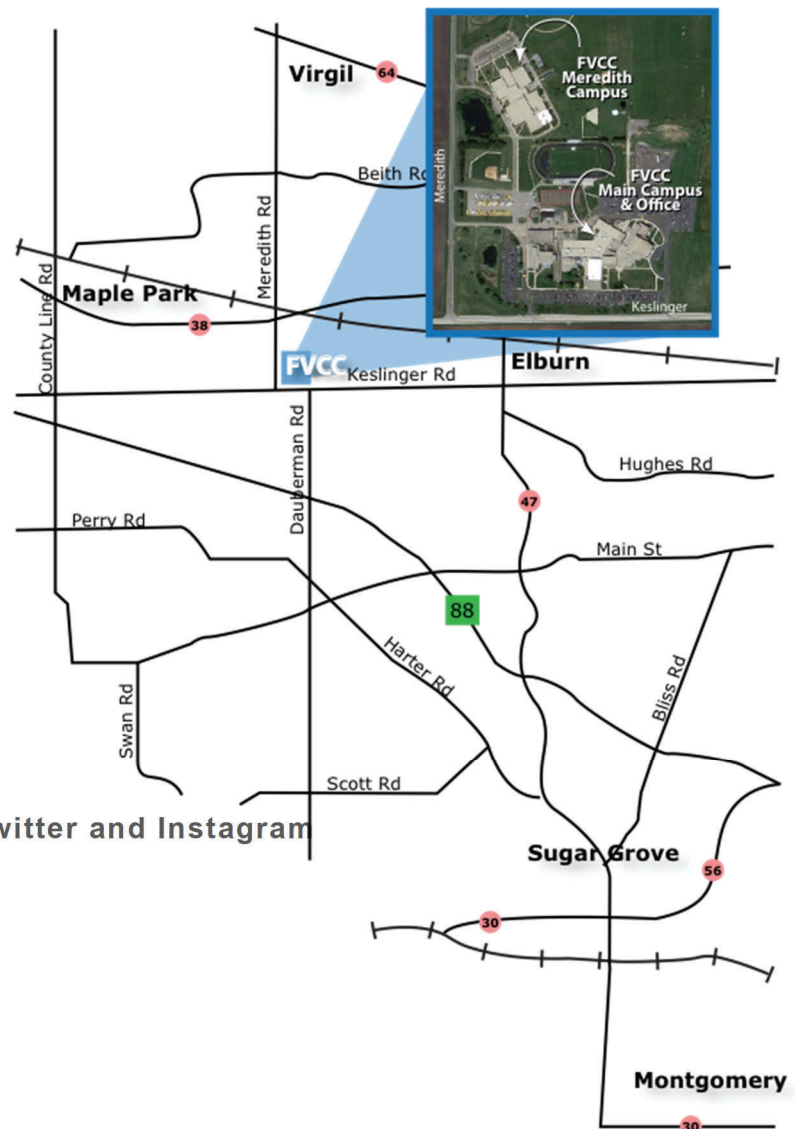


PURPOSE

This Course Guide has been prepared to provide students and parents/guardians information about Fox Valley Career Center (FVCC) programs. It describes the Career Center's procedures, services, program descriptions and awards.

This information has been prepared to help every student become aware of the opportunities available at Fox Valley Career Center.

Fox Valley Career Center can help students: Explore and make decisions about careers they may pursue in the future; make a successful transition to entry-level employment opportunities, unions, technical schools, 2-year (community) colleges, or 4-year colleges/universities.



Find us www.foxvalleycc.org, Facebook, Twitter and Instagram



Table of Contents

Welcome	1
Table of Contents.....	2
General Information.....	3
REGISTER ONLINE: www.foxvalleycc.org	3
Internships and Job Shadowing	4
Student Awards	5
FVCC WCC College Credit Classes	6-7
Automotive Technology	8
AUTOMOTIVE TECHNOLOGY I	8
AUTOMOTIVE TECHNOLOGY II	8
Computer Technology.....	9-10
PC REPAIR(COMPTIA A+.....	9
CYBERSECURITY (COMPTIA Security+)	10
GAME PROGRAMMING and TECHNOLOGIES	9
NETWORKING (COMPTIA Networking+).....	10
Cosmetology	11
COSMETOLOGY I	11
COSMETOLOGY II	11
Directed Study	12
Electrical Systems	13
ELECTRICAL SYSTEMS I.....	13
ELECTRICAL SYSTEMS II	13
Emergency Medical Technician	14
EMT - EMERGENCY MEDICAL TECHNICIAN	14
Fire Science.....	15
FIRE SCIENCE I	15
FIRE SCIENCE II.....	15
Foundations of Education	16
FOUNDATIONS OF EDUCATION I	16
FOUNDATIONS OF EDUCATION II	16
Health Occupations	17-18
BASIC NURSE ASSISTANT TRAINING (BNAT)	17
EXPLORING MEDICAL CAREERS (EMC)	17
Law Enforcement	19
LAW ENFORCEMENT I.....	19
LAW ENFORCEMENT II.....	19
Project Lead The Way: Biomedical Sciences	20
PRINCIPLES OF BIOMEDICAL SCIENCES (PBS).....	20
HUMAN BODY SYSTEMS (HBS).....	20
MEDICAL INTERVENTIONS (MI)	20
BIOMEDICAL INNOVATION (BI)	20
Small Engines & Equipment Technology	21
SMALL ENGINES & EQUIPMENT TECHNOLOGY I.....	21
SMALL ENGINES & EQUIPMENT TECHNOLOGY II	21
Welding Technology.....	22
WELDING I	22
WELDING II.....	22

GENERAL INFORMATION REGISTRATION

Registration is a two-step process. High school students register for an FVCC class by filling out the FVCC Course Request form available at foxvalleycc.org and registering for classes through their home school.

Students should fill out their demographic information as accurately as possible when submitting their FVCC Course Request. Guidelines concerning admissions to our programs are established by each member high school.

Parents/ guardians complete registration paperwork late spring to provide/ update demographic information to FVCC before the school year begins.

When students complete a program at FVCC, they receive a certificate of completion and earn credit toward graduation from their high school.

CAREER PLACEMENT SERVICES

The Center's career placement services function is to provide students with information and employment skills that will assist them with their education and career plans.

Guest speakers, Field trips, Job shadowing, internships and apprenticeships are coordinated through our career placement coordinator.

CREDITS

Students enrolled in FVCC classes usually earn 2 ½ -3 credits per year.

SATELLITE PROGRAMS

Satellite programs are off-campus programs taught at sites other than Fox Valley Career Center. Other schools and industrial sites may be selected for such programs to provide a more centralized location, access to facilities for FVCC students which are not available on-campus, and make more efficient utilization of staff, equipment and facilities.

SATELLITE PROGRAMS continued

Students are responsible for providing their own transportation to and from these programs. Session schedules may vary depending on home school or satellite location schedules.

SCHOOL DAY

There are four daily sessions during the school year:

<u>1st session</u>	7:45 a.m. - 9:25 a.m.
<u>2nd session</u>	9:30 a.m. - 11:10 a.m.
<u>3rd session</u>	11:15 a.m.-12:55 p.m.
<u>4th session</u>	1:00 p.m. - 2:40 p.m.

Not all programs are offered every session.

*Off-campus classes have different schedules in order to accommodate student travel times.

SUPPORT SERVICES

A career placement coordinator is available who works with the student and the student's home school counselor to meet each student's unique and individual vocational, occupational and career needs.

INDIVIDUALS WITH SPECIAL NEEDS

It is the mission of Fox Valley Career Center to deliver the same educational opportunities to students of all abilities. If you have questions about your students IEP or 504 plan, please contact our Assistant Director, Ms. Vida Martin at 84536@kaneland.org or (630) 365- 8245.

REGISTER ONLINE @
FOXVALLEYCC.ORG
& click on 23-24 Course
Request Form

INTERNSHIPS and JOB SHADOWING

FVCC also offers off-campus internships and apprenticeships in advanced level classes during which the student spends time in his/her career specialty in the workplace.

This involves hands-on experiences, problem solving techniques, improvement of written and oral communication skills, and learning Essential Employability Skills necessary to be successful in today's job market.

Students will be chosen to take part in job shadowing, internships and apprenticeships based on the recommendations of their instructors, counselors, career placement coordinator, employers, and most importantly, the desire of the student to participate in these programs. In the 21st century work-place, employers are looking for employees that have developed their skills and can exhibit those skills on the job.

Internships

Internships may take place during the students' regularly scheduled FVCC classes or during non-FVCC school hours either on campus or off campus. If the internship takes place during the student's class time, the intern may be released from the Fox Valley Career Center program for two or three days a week to be at the business site. The scheduled time an internship takes place during non-FVCC school hours will be determined by the program instructor, career placement coordinator and employer. The internship may be for a nine-week period, semester, or in some cases may last the entire school year. An internship may only be permitted with the consent of the FVCC program instructor and the career placement coordinator.

As part of their internship, students are required to work with their instructor to complete a training plan. The intern will also be required to keep an attendance log, monthly wage (when applicable)/hourly report, and a final evaluation of his or her training experience. These requirements will be monitored by the career placement coordinator. The business employer will also give a final evaluation of the student's performance.

The program instructor, career placement coordinator, and/or business representative may terminate an internship at any time if the student is not fulfilling internship requirements and obligations. Interns may or may not be paid for their services. No additional credit will be earned for an internship.

Job Shadowing

Job shadowing gives FVCC students an opportunity to observe a business and receive information about that business from the employer. This opportunity usually takes place during the time the student would attend Fox Valley Career Center. This experience will help the student make informed decisions about career choices as well as about post-secondary education opportunities to further their education after graduating from high school.

Students will be contacted by the career placement coordinator about job shadowing opportunities. If a student is interested in the opportunity, he or she will then complete the job shadowing form and return the completed form at least three days before the scheduled experience. Once a student has completed the job shadowing experience, he or she should turn in a report on what they observed during the shadowing experience to their instructor.

STUDENT AWARDS

Students enrolled in classes at Fox Valley Career Center can achieve recognition for achievement in several ways; as individuals, as a member of a class, and as a school. The following provides a brief description of the various honors which are available. There are additional scholarships and awards available through technical schools, 2-year colleges, and 4-year colleges/universities; see each schools website for additional information.

ACHIEVEMENT AWARD

This award program reinforces important employability skills and gives special recognition to all FVCC students who not only complete Career Center programs but also:

1. earn at least a “B” average in their program or course;
2. have a 95% attendance or better; and
3. have not had any discipline problems.

NATIONAL TECHNICAL HONOR SOCIETY

Students that qualify for NTHS membership are nominated by their instructors/counselors. Students must have an overall 3.0 high school (B) average including the first semester of this school year (5th/7th semester GPA). Students must also have a 4.0 grade point in their vocational program area at the end of the 5th/7th semester. Students must be enrolled in a sequence of classes in vocational-technical subject areas. Students qualify by having no unexcused absences through their attendance office. Students cannot have any discipline referrals from their dean’s office or Fox Valley Career Center.

PROGRAM COMPLETION CERTIFICATE

Each student who successfully completes a FVCC program receives a certificate of completion at the end of the school year.

STUDENT OF THE MONTH

Fox Valley Career Center teachers developed this award to give recognition to students who are working hard and achieving positive results in their specialty programs.

Each instructor may select one student per month, or in unusual circumstances, two students. A student may only be selected one time per course during the school year.

Home school principals are notified so the student’s name may be acknowledged for their achievement at their home school, and a letter is sent to the student’s parents acknowledging the achievement of the student.

A picture of the student is placed in Fox Valley’s hall display case along with a quote from the teacher describing the student’s accomplishments. Each student receives a certificate of recognition and a Student of the Month t-shirt.

STUDENT OF THE YEAR SCHOLARSHIP

The Fox Valley staff presents the Student of the Year with a plaque and \$500 that will be sent to the college or trade school of the student’s choice to help offset expenses incurred in their continuing education.

Each class at Fox Valley may nominate an outstanding student. These nominees complete a written information form and are evaluated on their knowledge, character, attendance, cooperation and activities. The top ten nominees are interviewed by a panel of school board members from each of the six member school districts.

The plaque and scholarship are presented at the honors assembly of the winning student’s school.

LOCAL, REGIONAL, AND STATE COMPETITIONS

There are competitions specifically related to each career field covered at Fox Valley Career Center. We have implemented local competitions with schools and career centers that have been recognized by professionals in that specific field.

Each year many students join the Fox Valley Career Center SkillsUSA student organization in order to participate in local, regional, state and national activities. Over the years, Fox Valley Career Center SkillsUSA members have earned numerous 1st, 2nd and 3rd place regional, state and national awards.

OTHER SCHOLARSHIPS

Scholarships are available to students at Fox Valley Career Center. Some scholarships are offered through professional organizations, local civic groups, and different schools in program specialty areas. Check with the Fox Valley Career Center office for further details.

FVCC WCC COLLEGE CREDIT CLASSES

Waubonsee Community College: Articulated or Dual Credit

Waubonsee Community College awards college credit when learning experiences at the high school level duplicate those at the college level.

Articulated credit enables students to save time and money, and avoid duplication of curriculum already learned in high school. Students must earn an A or B in the Fox Valley Career Center class each semester and apply to the college for their credit within two years after graduation. Following is a list of courses at FVCC for which articulated credit can be earned. See your School Counselor or career/technical instructor for the "College Credit Articulation Forms." For a complete list of requirements call the VALEES office at (630) 466-2474 or visit their web site at www.valees.org.

Dual credit programs are programs for which students receive both high school AND college credit. Students must complete the dual credit paperwork and pay the dual credit processing FVCC Course Fee on the Waubonsee Community College timeline. Fire Science students receive articulated credit OR dual credit but cannot receive both. Electrical Systems students can receive dual credit.

Indicate Classes Taken	Fox Valley Career Center	Waubonsee Community College	Articulated Credit	Dual Credit
	Automotive Technology II (20104A002)	Maintenance and Light Repair (AUT100)	2	
	Computer Technology - Web Development (10201A001)	Intro to Windows (CIS105) *and Web Development with HTML/XHTML (WEB110)	1 3	
	Electrical Systems I	Intro to HVAC (HVA110)		3
	Electrical Systems II	HVAC/R Electrical Systems (HVA120) EPA Refrigerant Certification (HVA160) HVAC/R Safety (HVA165)		3 1 2
	Emergency Medical Technician-Basic (14055A001)	Emergency Medical Technician Basic (EMT120)	9	
	Exploring Medical Careers	Medical Terminology (HIT110)		3
	Fire Science I (15152A001)	Basic Operations Firefighter A (FSC105) Basic Operations Firefighter B (FSC115) Basic Operations Firefighter C (FSC118) Vehicle Operations (FSC215) Hazardous Materials Operations (FSC120)	4 4 4.5 0.5 3	4 4 4.5 0.5 3
	Fire Science II (15152A002)	Fire Apparatus Engineer (FSC140) Vehicle and Machinery Operations (FSC150) Advanced Technician Firefighter (FSC125)	4 3 4	4 3 4
	Foundations of Education I (19151A001)	Introduction to Education (EDU200)		3
	Health Occupations - Basic Nurse Assistant Training (BNAT) (14051A001)	Basic Nurse Assistant Training (NAS101)	6	

Automotive Technology

THIS PROGRAM IS FOR YOU IF YOU:

- Like to work on cars
- Have a solid base in mathematical and reading skills
- Can assume responsibility and follow a job through to completion
- Have the ability to work as a team member and use time wisely
- Want to use state-of-the-art diagnostics to help in problem solving

PROGRAM DESCRIPTION

Automotive Technology students have the opportunity to develop skills necessary to obtain employment in the automobile industry. An automobile technician services and repairs mechanical, electrical, and computer driven parts on different types of automotive equipment. After making necessary inspections and tests to determine the cause of the faulty operation, the technician then replaces the defective parts to restore the vehicle to the proper operating condition. Students may have the opportunity to take industry-recognized ASE certification exams.

AUTOMOTIVE TECHNOLOGY I

Grades: 11, 12

Prerequisite: None. Any previous Industrial Technology course recommended.

2-1/2 Credits

Automotive Technology I introduces a student to the wide field of auto repair. The class is divided into four main areas of study: brakes; steering and suspension; electrical; and engine repair and computer controls. Students will receive classroom instruction and time in lab to complete hands on repairs to vehicles. Students will also be instructed on how to locate service data, determine what is important and use that information to troubleshoot and repair automobiles. Students must supply their own safety glasses and steel toe shoes/boots. Tools will be provided.

FVCC Course Fee: \$45.00.

AUTOMOTIVE TECHNOLOGY II

Grade: 12

Prerequisite: Successful completion of Automotive Technology I and teacher recommendation.

2-1/2 Credits

Automotive Technology II is an extension of Automotive Technology I. While the focus is still on the four main areas of study from Auto I, the course is project based, and students are allowed input into what topics are covered. Students are encouraged to suggest or bring in their own projects and are given more time in the lab to complete larger repairs. However, all projects must be approved by the instructor. Students must supply their own safety glasses and steel toe shoes/boots. Tools will be provided.

FVCC Course Fee: \$45.00.

IF YOU HAVE COMPLETED: FVCC AUTOMOTIVE PROGRAM

You could qualify for a position such as:

- Auto Technician Apprentice
- Parts Counter Trainee
- Tire Service Technician
- Auto Service Trainee

ASSOCIATE OF APPLIED SCIENCE

You could qualify for a position such as:

- Automotive Technician
- Automatic Transmission Rebuilder
- Automotive Repair Service Estimator
- Certified Auto Technician
- Insurance Claim Adjuster
- Service Manager
- Diesel Technician

BACHELOR DEGREE

You could qualify for a position such as:

- Insurance Claim Manager
- Dealership Service Manager
- Dealership Sales Manager
- Design Researcher
- Manufacturer's Representative
- Auto/Diesel Instructor

Computer Technology

THIS PROGRAM IS FOR YOU IF YOU:

- Like to problem solve
- Enjoy working with your hands and mind
- Can effectively follow both written and verbal instructions
- Can assume responsibility
- Desire a job with good salary and potential for advancement

PROGRAM DESCRIPTION

Students have the opportunity to learn a wide variety of computer technology skills. Computer Technology provides many computer related experiences designed for entry into the job market. All students gain practical hands-on knowledge using state-of-the-art computer technology systems.

PC REPAIR (COMPTIA A+)

Grades: 11, 12

Prerequisites: Keyboarding and Data Processing Recommended.

2-1/2 Credits

Do you like to take things apart, figure things out and experiment with technology? This course is for you! We practice the following hands-on skills: soldering, wiring, computer repair, building computers, software installation, and the finer points of Microsoft Windows. Our goal is to prepare for the Comp TIA A+ Exam. The A+ exam is the industry standard for IT professionals. Other amazing opportunities include field trips, guest speakers, Arduino building/programming, and Lego Robotics. Students who compete this class with a grade of B or better can receive credit for Waubensee College courses.

FVCC Course Fee: \$30.

GAME PROGRAMMING AND TECHNOLOGIES

Grades: 11, 12

Prerequisites:

- Completion of proficiency testing administered by FVCC with a score of 80% or better; OR
- Completing a Programming Course; OR
- Successful completion of Algebra I.

2-1/2 Credits

Students who enroll in Game Technologies will study various game genres, purposes and platforms. The class will learn the basics of C# and use this language to create simple games. Students will have an opportunity to experience the many careers associated with game development, including most aspects of game design and development, including most aspects of game design and development. Professional design documents will be developed, and students will use those documents to create various gaming environments. The more popular game technology tools will be taught, including various game engines and 2D and 3D tools. There will be a unit on Blender and the Unreal engine.

FVCC Course Fee: \$30 plus required USB flash drive.

Computer Technology classes continued on the next page.

CYBERSECURITY (COMPTIA SECURITY+)

Grades: 11, 12

Prerequisites:

Completion of FVCC PC Repair; OR
Completion of FVCC Game Programming; OR Completion
of a programming course with a C or better at your
home school

2-1/2 Credits

Students who enroll in Cybersecurity will be studying For the CompTIA Security+ exam. This exam is the industry standard for Cybersecurity professionals. This course includes simulations and multiple operating systems. The class will study units in understanding attacks, defense planning, access control, cryptography, network monitoring, security policies, risk management, and social engineering. Our class will also enter Cybersecurity competitions such as US Cyber Challenge. Students will gain hands on knowledge of cybersecurity tools, as well as the opportunity to earn certification for future employment.

FVCC Course Fee: \$30 plus a USB flash drive is required for the class

NETWORKING (COMPTIA NETWORKING+)

Grades: 11, 12

2 1/2 credits

Students who enroll in Networking will be training and studying to pass the CompTIA Networking+ exam. The class will study units in; cabling, firewalls, switching, routing, wireless, WANs, network management, security, and troubleshooting. Our class will also enter Networking Security competitions such as National Cyber League. Students will gain hands-on knowledge of networking tools, as well as the opportunity to earn certification for future employment.

FVCC Course Fee: \$30 plus a USB flash drive is required for the class

IF YOU HAVE COMPLETED: FVCC COMPUTER PROGRAM

You could qualify for a position such as:

- Computer Maintenance Technician
- LAN Technician
- LAN Administrator
- Microcomputer Support Specialist
- Web Designer
- Web Developer
- Game Tester

ASSOCIATE OF APPLIED SCIENCE

You could qualify for a position such as:

- LAN Technician
- Small Business Owner
- Computer Operator

BACHELOR DEGREE

You could qualify for a position such as:

- Information Systems Analyst
- Computer Programmer
- Network Engineer
- IT Manager
- e-commerce Specialist
- Security Specialist
- Game Programmer
- Game Designer

Cosmetology

- THIS PROGRAM IS FOR YOU IF YOU:
- Are creative
- Like working with your hands
- Like keeping up with the latest trends in hair styles, nails, and skin care
- Are social and enthusiastic

PROGRAM DESCRIPTION

Cosmetology is defined as the art and science of beauty care involving the care of skin, scalp, and nails. The 1500-hour cosmetology program is divided into five basic areas for state regulation. Each unit of study relates to one of the five basic areas. The five basic units include: hairdressing, hair treatment, sanitation, facials, and related electives. After completion of the program, the student will be able to demonstrate job entry skills in required subjects, take, and pass a final school examination in both theoretical and practical skills to enable them to qualify to take the examination to obtain an Illinois Culture License. Cosmetology training is made available at three different locations contracted by the Fox Valley Career Center to deliver instruction.

COSMETOLOGY I

Grades: 11, 12

Off Campus Class (Various Locations)

Prerequisite: None

3 Credits

Cosmetology I is divided into several units of study that include hair shaping, hair styling, draping, shampooing, blow dry styling, manicuring, facials, waving and sanitation. Chemistry and professional ethics will be taught in conjunction with the above units. Laboratory work and classroom instruction help students learn the theory required for licensing. Students must complete 750 hours to continue in the program. Students are required to furnish their own transportation to the training schools, buy uniforms, shoes, cosmetology kit, and pay the required registration and lab fees.

COSMETOLOGY II

Grade: 12

Off Campus Class (Various Locations)

Prerequisite: Cosmetology I and teacher recommendation.

3 Credits

Students will continue work to obtain the required 1500 hours and meet the state requirements for licensing testing. After completing the second year of cosmetology curriculum and the 1500 required lab hours, students may take the Cosmetology Licensing Exam and become a licensed cosmetologist. Students are required to furnish their own transportation to the training schools, replenish any supplies needed, buy uniforms, shoes, and pay the required lab fees.

IF YOU HAVE COMPLETED: FVCC COSMETOLOGY PROGRAM

You could qualify for a position such as:

- Cosmetologist
- Hair Dresser
- Manicurist
- Barber
- Nail Technician
- Color Technician

ASSOCIATE OF APPLIED SCIENCE

You could qualify for a position such as:

- Cosmetologist
- Cosmetology Instructor
- Electrologist
- Salon Manager
- Nail Technician

Directed Study

Grade: Typically 12th Grade

Prerequisite: Successful completion of competencies in appropriate courses as determined by the instructor.

2-1/2 Credits

The Directed Study program is for students who have completed or are completing course work in an approved program at Fox Valley Career Center. Students enrolled in this program have the opportunity to participate in advanced learning and experiences in occupations provided through private and public sector internships or community college course work supported by the local school district. An education plan is developed which addresses individual student career goals. This course can be repeated with credits awarded at 1.25/semester.

Any transportation required for participation in this program is the responsibility of the student. In many cases, regular schedules will have to be adjusted for participation and travel times if activities are scheduled during school hours.

Electrical Systems and Residential Wiring

THIS PROGRAM IS FOR YOU IF YOU:

- Enjoy working with your hands and power tools
- Like to assemble and build
- Desire to work in the building trades
- Are self-motivated and can work as part of a team or alone
- Have good hand-eye coordination, mathematical and problem-solving skills
- Are interested in pursuing a career in the electrical field
- Are interested in becoming an Electrician
- Are interested in Heating and Air Conditioning

PROGRAM DESCRIPTION

The Electrical Systems program is designed to help students decide if they would like to pursue a career as an Electrical Systems or in the electrical field. This program is a great jump start to training in the electrical field. Students who do well in this program are very desirable in the work force. Some students have even gone on to own their own electrical contracting businesses. The demand for qualified Electricians is growing, and so is the pay. Students will learn terms, circuits, install meter sockets and breaker panels, lighting systems, outlet systems, industrial motor controls, trouble shooting, and communications systems, along with reading and understanding blueprints, bending conduit, and studying the National Electrical Code. Courses are 80% hands-on and 20% book work.

ELECTRICAL SYSTEMS I- RESIDENTIAL WIRING

Grades: 11, 12

Prerequisite: None, but a solid math background is very helpful. 2-1/2 Credits

The primary focus of Electrical Systems I is residential wiring. The course covers a variety of wiring practices involving the use of Romex cable and conduit to construct most of the lighting and receptacle outlet circuits found in modern homes. The course also includes units on basic DC electrical circuits, magnetic motor control circuits and components, National Electrical Code rules, blueprint reading, and circuit breaker panel wiring. Students must supply their own safety glasses and boots.

FVCC Course Fee: \$45.00

ELECTRICAL SYSTEMS II- HVAC

Grade: 12

Prerequisite: Electrical Systems I and teacher recommendation.

2-1/2 Credits

The Electrical Systems II course is an extension of the Electrical Systems I course with a heavy emphasis residential Air Conditioning, with the goal of passing the EPA 608 refrigeration certification exam. Most projects will require reading schematics and circuits that are more complex. Students will learn the basics of installing a residential split A/C system including

brazing copper. The course will also include work on 220 volt circuit breaker panel wiring as well as more detailed blueprint reading. The students will design, analyze data, and complete a class project that will incorporate what they have learned to date. Students must supply their own safety glasses and boots.

FVCC Course Fee: \$45.00.

IF YOU HAVE COMPLETED: FVCC ELECTRICAL SYSTEMS PROGRAM

You could qualify for a position such as:

- Apprentice Electrician
- Line Installer and Repairer
- Electrical Repairer
- Manufacturing Tester
- HVAC Apprentice

ASSOCIATE OF APPLIED SCIENCE

You could qualify for a position such as:

- Apprentice Electrician
- Electrical Control Assembler
- Electrical Technician
- HVAC Technician
- Refrigeration Technician
- Automation Installer
- Alarm Systems Technician

BACHELOR DEGREE

You could qualify for a position such as:

- Electrical Engineer
- Design Engineer
- Research Engineer

Emergency Medical Technician

THIS PROGRAM IS FOR YOU IF YOU:

- Are interested in health care
- Get satisfaction from helping people in need
- Can remain calm under pressure

PROGRAM DESCRIPTION

This is an entry level program for the emergency medical services. Students will learn through classroom and guided practice activities. The basics of emergency medical care are covered and include: medical terminology, legal and ethical aspects of medicine, patient assessment of medical and trauma patients, vital signs, communication, documentation skills, CPR, packaging, bandaging of patients. These skills will prepare the students for certification, licensure and employment opportunities.

EMT - EMERGENCY MEDICAL TECHNICIAN

GRADE: 12

PREREQUISITE: Grade of B or greater in Biology OR consent from instructor

2-1/2 Credits

The Emergency Medical Technician (EMT) education program is a National Registry course that will prepare students to become competent, entry-level EMTs in order to serve in volunteer and/or professional career positions in the United States .

EMT program fulfills the prescribed requirements by Illinois Department of Public Health (IDPH) and prepares students to practice the art and science of pre-hospital medicine in conjunction with medical direction. The goal is to prevent and reduce mortality and morbidity due to illness and injury. An EMT primarily provides care to emergency patients in a pre-hospital setting and serves as a vital member of the health care team.

This program is available to students who plan to go into the health care or fire science fields, or another

area of emergency medical services. Upon completion of EMT, the student is prepared to take the National Registry EMT exam for certification.

Special Requirements: All students must purchase a FVCC uniform top, pants, ID badge, stethoscope, watch with second hand and textbook. In addition, students must complete and pass an American Heart Association health care provider CPR class. As part of the EMT class, students will complete a minimum of twenty- five (25) hours of emergency room clinical in the prescribed time indicated by the instructor. The law requires all persons involved in patient care at any health agency to have a 2-step tuberculin skin test, proof of vaccinations for MMR (mumps, measles, and rubella), hepatitis B and flu vaccine. The students must also pass a drug screen and criminal background check.

FVCC Course Fee: \$30.00 plus costs for manual/workbook, drug screen, TB test, flu vaccine and background check. Uniform cost is approximately \$100.00, and the EMT textbook and supply fee is \$227.

When students are taking part in the clinical hours at an area hospital, they will be required to provide their own transportation to the health care facility.

IF YOU HAVE COMPLETED: FVCC EMT PROGRAM

You could qualify for a position such as:

- Volunteer EMT
- Contract EMT
- Hospital EMT
- Fire Department EMT
- ER Technician
- Private Ambulance companies

ASSOCIATE OF APPLIED SCIENCE

You could qualify for a position such as:

- Paramedic AAS
- Medical Assistant

Fire Science

THIS PROGRAM IS FOR YOU IF YOU:

- Enjoy a physical challenge
- Get satisfaction in helping people in need
- You can remain calm under pressure

PROGRAM DESCRIPTION

This program is designed to prepare students for entry-level fire fighter positions. Students will be engaged in classroom, online and guided practice activities for the essentials of fire, rescue, EMS and hazardous materials scene operations. Operational activities will include: hazardous materials, vehicle extrication, fire behavior, building construction, fire code enforcement, public education activities, use of personal protective equipment, coordinated fire suppression activities, aerial/ground ladder use, search, rescue, and fire service vehicle operator. This is a physically involved program that involves the development of leadership and communication skills through scenario based evolutions to prepare students for employment opportunities with local fire departments.

FIRE SCIENCE I

Grades: 11, 12

Prerequisite: None 2-1/2 Credits

All first-year students (whether junior or senior) follow the complete OSFM Basic Operations Firefighter curriculum which will include the cognitive and psychomotor components to Basic Operations Firefighter, Hazardous Materials Awareness and Operations, Fire Service Vehicle Operator, Technical Rescue Awareness, Basic First Aid, AHA CPR and AED, and NIMS 100 and 700. Students will engage in simulated firefighting activities. As students' progress through graduated skill evolution, drills are added with increasing complexity to challenge and evaluate firefighter capabilities. Drills combine students from Fire Science I, Fire Science II and the EMT program to simulate real life emergency scene situations. Fire Science is a dual credit program with Waubonsee Community College.

*There is a processing fee per credit hour for college credit.

FVCC Course Fee: \$45.00+ uniform cost

College Credit Processing Fee is determined by WCC.

FIRE SCIENCE II

Grade: 12

Prerequisite: Fire Science I and teacher recommendation.

2-1/2 Credits

Second year students follow OSFM Advanced Technician Firefighter Curriculum including the cognitive and psycho-motor components relevant to a journeyman firefighter as outlined by NFPA 1001. In addition, students will receive complete training toward OSFM certification in Vehicle Machinery Operations (vehicular extrication), Fire Apparatus Engineer (Pump Operator), and NIMS 200. Students will engage in live simulated activities. As students' progress through graduated skill evolution, drills are added with increasing complexity to challenge and evaluate firefighter capabilities. Drills combine students from Fire Science I, Fire Science II and the EMT program to simulate real life emergency scene situations. Fire Science is a dual credit program with Waubonsee Community College.

*There is a processing fee per credit hour for college credit.

FVCC Course Fee: \$45.00+ uniform cost

IF YOU HAVE COMPLETED: FVCC FIRE SCIENCE PROGRAM

You could qualify for a position such as:

- Volunteer Fire Fighter First Responder
- Probationary Fire Fighter

ASSOCIATE OF APPLIED SCIENCE

You could qualify for a position such as:

- Contract Fire Fighter
- Industrial Fire Fighter

BACHELOR DEGREE

You could qualify for a position such as:

- Career Fire Fighter Chief
- Fire Service Officer
- Senior Fire Service Officer
- Fire Investigator
- Fire Fighting Instructor
- Specialty Certification

Foundations of Education

THIS PROGRAM IS FOR YOU IF YOU:

- Enjoy working with children
- Are interested in a job in the Education field
- Want to develop your leadership and presentation skills

PROGRAM DESCRIPTION

This course provides opportunity for students to develop the skills to teach and guide others by learning to create developmentally appropriate lessons with clear teaching objectives. Through a combination of classroom and field experiences, students will gain skilled knowledge and an understanding of the education profession. Students will have the opportunity to observe teachers and other education specialists in classrooms at all levels through active job shadowing; strengthen their time management skills and explore various teaching strategies in order to meet the academic needs of all students.

FOUNDATIONS OF EDUCATION I

GRADES: 11, 12

PREREQUISITE: None

2.5 Credits

This course introduces students to the principles underlying teaching & learning, responsibilities & duties of teachers, and strategies & techniques to deliver knowledge and information. A combination of classroom and field experiences will enable the student to gain skilled knowledge and understanding of the education profession. Course content includes projects designed to develop an understanding of the learner and the learning process, instructional planning, the learning environment, assessment and instructional strategies, career opportunities in the field of education and Illinois licensing requirements.

FVCC Course Fee: \$35

Foundations of Education I is a dual credit class through Waubensee Community College; EDU200- Introduction to Education. Dual credit classes are college classes taken by high school students that count as both high school credit and college credit. As a result, this is a college level course and expectations will be higher in this class than other high school classes.

FOUNDATIONS OF EDUCATION II

Grade: 12

Prerequisite: Foundations of Education I and teacher recommendation

2.5 credits

This course provides the opportunity for students to further develop skills to teach and guide others. Coursework includes opportunities for students to create and develop teaching objectives, design lesson plans, and experience teaching in a controlled environment. Through experiential learning students will examine and practice teaching strategies for different learning styles, classroom management, evaluation and assessment techniques. Students will explore career opportunities and develop or expand their career portfolios by spending scheduled time in the classroom setting of their choice.

FVCC Course Fee: \$35.00

IF YOU HAVE COMPLETED: FVCC FOUNDATIONS OF EDUCATION PROGRAM YOU COULD RECEIVE:

ASSOCIATE OF APPLIED SCIENCE

You could qualify for a position such as:

- Child Care Center Director
- Child Care Assistant Director
- Infant/ Toddler/ Preschool Teacher
- Paraprofessional
- Staff positions within schools

BACHELOR DEGREE

You could qualify for a position such as:

- Certified Teacher

MASTERS DEGREE

You could qualify for such a position as:

- School Counselor
- School Psychologist
- School Social Worker
- School Administrator

Health Occupations

THIS PROGRAM IS FOR YOU IF YOU:

- Are in good physical condition
- Like to care for people
- Have good communication skills
- Have good organizational skills
- Like to work with a team

PROGRAM DESCRIPTION

Health Occupations is a broad title for a multitude of occupations in the Health Care System. A student in the Health Occupations program is trained in basic patient care and medical terminology.

Special Requirements for Health Occupations:

All students must purchase a FVCC scrub uniform and white shoes, ID badge, gait belt and vital sign equipment for clinical sites. Also, a watch with a second hand is mandatory to take vital signs. The law requires all persons involved in patient care at any health agency to have updated vaccinations such as a 2-step tuberculin skin test, hepatitis B vaccination series, MMR, and varivax vaccination series as part of their yearly physical exam. Students must also pass a drug screen and health care worker criminal background check. Students who receive a grade of B or better can receive college credit.

Students must provide their own transportation to off-campus clinical sites.

BASIC NURSE ASSISTANT TRAINING PROGRAM (BNAT)

Grades: 11, 12

Prerequisites: Read at an eighth-grade level, perform basic math skills, lift 50 pounds with no restrictions, be 16 years of age, and have a valid social security number. Students should show emotional maturity and be in good physical health.

Note: This is a full year course with clinicals.

2-1/2 Credits

Health Occupations introduces the student to various health concepts and trains them to work as a Certified Nursing Assistant (CNA). The CNA is responsible for giving nursing care. This program is available to students who plan to go into the health care system. Upon completion of Health Occupations - BNAT, the student is prepared to take the Nurse Aide Training Competency Exam which allows for certification from the Illinois Department of Public Health.

FVCC Course Fee: \$30.00 plus \$200 for supplies and a textbook/workbook, drug screen, TB test and background check. Uniform and equipment approximately \$190. FVCC covers the State CNA examination fee and provides each eligible BNAT student with a voucher for the CNA exam.

Students must provide their own transportation to off-campus clinical sites. Students must pass CPR for Health Care Providers with an 84% or better and pass all units with a 70% or better to be eligible to sit for the IDPH Nurse Assistant Exam. In addition, **students may not miss more than 12 classroom days and 3 clinical days to remain eligible to sit for the exam.**

EXPLORING MEDICAL CAREERS (EMC)

Grades: 11, 12

Prerequisite: Health Occupations (BNAT) is recommended but not required. Students should have good reading and writing skills, good physical health and emotional maturity.

2-1/2 Credits

The Health Occupations - Exploring Medical Careers class is designed for students who are interested in exploring health related career opportunities.

Students learn anatomy/physiology, medical terminology, as well as techniques and procedures while visiting various health care facilities for a first-hand view of careers. First semester concentrates on exploring career areas of interest

such as physical therapist, physician, registered nurse, radiological technician, respiratory therapist, pharmacist, and electrocardiogram technician. Second semester provides an internship experience which allows the student to choose careers of interest and do an in-depth study of the profession in various health care facilities. **Students must provide their own transportation to off-campus clinical sites.**

FVCC Course Fee: \$30.00, plus \$200 for supplies and a medical terminology text/workbook and background check.

Additional costs include uniform and drug screen and TB test for clinicals.

IF YOU HAVE COMPLETED: FVCC HEALTH OCCUPATIONS PROGRAM

You could qualify for a position such as:

- Certified Nursing Asst. (CNA)
- Health Care Assistant
- Pharmacy Technician
- Transporter
- Patient Care Technician
- Dietary Aide
- Unit Clerk

ASSOCIATE OF APPLIED SCIENCE

You could qualify for a position such as:

- Occupational Therapy Assistant
- Dental Hygienist
- Dietetic Technician
- Registered Nurse
- Physical Therapist Assistant
- Medical Laboratory Technician
- Respiratory Technician
- Massage Therapist

BACHELOR DEGREE

You could qualify for a position such as:

- Dietician
- Medical Technician
- Nursing Administrator
- Nursing Instructor
- Registered Nurse
- Athletic Trainer

Law Enforcement

THIS PROGRAM IS FOR YOU IF YOU:

- Are interested in a career in the Criminal Justice System
- Are a social person who likes to work with people
- Are detail-oriented
- Are able to work under stress
- Are able to make sound judgments

PROGRAM DESCRIPTION

Students will learn about the philosophy of law enforcement and criminal justice systems. The organization of local, state, and federal agencies and their jurisdictions will be discussed. In addition, students will also survey professional career opportunities and qualifications. Areas addressed will include patrolling, use of force, report writing, situational awareness, and de-escalation. This program allows students the opportunity to learn essential knowledge for preparedness to work in policing but does not cover the professional course that leads to police licensing.

LAW ENFORCEMENT I

Grade: 11, 12

Prerequisite: Criminal background check might be required.

2-1/2 Credits

The Law Enforcement program is designed to prepare people for careers in federal, state, and local law enforcement agencies, in correctional agencies and institutions, and in private security agencies. Students will be introduced to the criminal justice system, local, state and federal agencies and their jurisdiction responsibilities. Communication skills, observation, reporting and record keeping as they pertain to law enforcement will be studied. Students will also be introduced to patrolling and field operations. Students will be involved in interviewing techniques, searches, preliminary investigations, police security, pursuit and arrest. Students will be introduced to additional training for people already involved in law enforcement that lead to administration, correctional administration, forensic science, and security management. Students study the roles and activities of people with regard to maintaining law and order, providing services, protecting lives and property, and conducting administration, planning and research. Students may participate in off-campus activities such as demonstrations and tours.

FVCC Course Fee: \$25.00+ book+ uniform fee

LAW ENFORCEMENT II

Grade: 12

Prerequisite: Law Enforcement I and instructor recommendation. Criminal background check might be required.

2-1/2 Credits

The Law Enforcement II course is an extension of the Law Enforcement I course with a Heavy emphasis on report writing, crime scene investigating and processing, and patrolling and field operations. There is also a major overview and analysis of the juvenile justice system in the United States covering the history and the philosophies of society's reaction to juvenile behavior and problems. Interaction among the police, judiciary, and corrections are examined within the context of cultural influences. Theoretical perspectives of causation and control are introduced. Upon successful completion of the program the student will be able to: clearly understand the framework of the juvenile justice system. Students will finish the second half of the year in the field of Corrections. This area will include the overview and analysis of the United States correctional system covering the history, evolution, and philosophy of punishment and treatment; operation and administration in institutional settings, and issues in constitutional law. Students will identify the structure and operations in the correctional system for adults and youth.

FVCC Course Fee: \$25.00+ book+ uniform fee

IF YOU HAVE COMPLETED: FVCC CRIMINAL JUSTICE / LAW ENFORCEMENT PROGRAM

You could qualify for a position such as:

- Security Personnel
- Investigation Technician
- Compliance Officer

ASSOCIATE OF APPLIED SCIENCE

You could qualify for a position such as:

- Corrections Officer
- Police Officer
- State Trooper
- Sheriff's Deputy

BACHELOR DEGREE

You could qualify for a position such as:

- Supervisor
- Criminologist

Project Lead The Way: Biomedical Sciences

THIS PROGRAM IS FOR YOU IF YOU:

- Are interested in a career in health sciences or research, personal health, and the human body
- Love to solve real-world problems
- Are interested in medical technology
- Are interested in public health issues

PROGRAM DESCRIPTION

The Fox Valley Career Center's Biomedical Sciences Program is a sequence of four courses which follow the proven Project Lead the Way program's hands-on, real-world problem-solving approach to learning. Students explore the concepts of human medicine and are introduced to bioinformatics, including mapping and analyzing DNA. Through activities, like dissecting of a heart, students examine the processes, structures and interactions of the human body - often playing the role of biomedical professionals to solve mysteries. They also explore the prevention, diagnosis and treatment of disease working

These classes are **one semester classes**.

PRINCIPLES OF THE BIOMEDICAL SCIENCES (PBS)

Grades: 9, 10, 11, 12

Prerequisite: Be able to work independently, strong study skills, good attendance, and can work independently and as part of a group.

1- 1/4 Credits

Students investigate the human body systems and various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia and infectious diseases. They determine the factors that led to the death of a fictional person, and investigate lifestyle choices and medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, medicine, research processes and bioinformatics. Key biological concepts including homeostasis, metabolism, inheritance of traits and defense against disease are embedded in the curriculum. Engineering principles including the design process, feedback loops and the relationship of structure to function are also incorporated. This course is designed to provide an overview of all the courses in the Biomedical Sciences Program and lay the scientific foundation for subsequent courses.

FVCC Course Fee: \$30.00

* Textbook and supplies; this includes cost for safety goggles, will cost an additional \$25.00 (subject to change based on enrollment)

HUMAN BODY SYSTEMS (HBS)

Grade: 10, 11, 12

Prerequisite: Principles of Biomedical Sciences or completed Biology

1- 1/4 Credits

Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Exploring science in action, students build organs and tissues on skeletal models, use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration, and take on the roles of biomedical professionals to solve real-world medical cases.

Fee: \$30

* Textbook and supplies; this includes cost for safety goggles, will cost an additional \$25.00 (subject to change based on enrollment)

MEDICAL INTERVENTIONS (MI)

Grades: 11, 12

Prerequisite: Human Body Systems

1- 1/4 Credits

Students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through cases, students learn about a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.

FVCC Course Fee: \$30.00

BIOMEDICAL INNOVATIONS (BI)

Grade: 12

Prerequisite: Completion of all Biomedical Sciences Foundation Courses

1- 1/4 Credits

In the final course of the Biomedical Science sequence, students build on the knowledge and skill gained from previous courses to design innovative solutions of the most pressing health challenges of the 21st century. Students address topics ranging from public health and biomedical engineering to clinical medicine and physiology. Students have the opportunity to work on an independent research project with a mentor or advisor from a university, medical facility, or research institution.

FVCC Course Fee: \$30.00

Small Engines & Equipment Technology

THIS PROGRAM IS FOR YOU IF YOU:

- Enjoy problem solving and detail work
- Have good manual dexterity
- Have mechanical aptitude
- Have good mathematical, reading and communication skills

PROGRAM DESCRIPTION

This is a course designed for the student who desires to learn about the mechanical principles of engines and related equipment. Emphasis is centered on the theory, design and operation of small air and liquid cooled engines and related components and systems. We will focus on 2 and 4 cycle engines and how to do repairs on all types of machinery and equipment such as: ATVs, dirt bikes, snowmobiles, jet skis, lawn equipment, golf equipment, generators, etc. Each student will be assigned multiple engines to fully rebuild. Students are also encouraged to bring in their own engines/projects to work on during shop time.

SMALL ENGINES & EQUIPMENT TECHNOLOGY I

Grades: 11, 12

Prerequisite: None, but Introductory Industrial Technology courses are recommended.

2-1/2 Credits

Emphasis is placed on the parts and operation of both two- and four-cycle engines ranging from lawn mowers to high performance dirt bikes, snowmobiles, jet skis, motorcycles and ATVs. Students learn proper repair procedures and other modifications to enhance the performance of various small engine vehicles on the current market. Students must supply their own safety glasses and steel toe shoes/boots.

FVCC Course Fee: \$45.00

SMALL ENGINES & EQUIPMENT TECHNOLOGY II

Grade: 12

Prerequisite: SE&ET I and teacher recommendation.

2-1/2 Credits

Emphasis is placed on further developing the skills learned in SE&ET I. Students have more time for projects as well as live jobs from customers. Students are also required to diagnose mechanical and electrical problems and make proper repairs in a minimum amount of time. Students continue to learn more in-depth repair procedures and performance modifications of various power sport vehicles on the current market. Students must supply their own safety glasses and steel toe shoes/boots.

FVCC Course Fee: \$45.00.

IF YOU HAVE COMPLETED: FVCC SMALL ENGINES PROGRAM

You could qualify for a position such as:

- Equipment Technician
- Entry Level Small Engine Technician

ASSOCIATE OF APPLIED SCIENCE

You could qualify for a position such as:

- Equipment Technician
- Small Engine Technician
- Repair Shop Owner

BACHELOR DEGREE

You could qualify for a position such as:

- Repair Shop Service Manager
- Repair & Performance Shop Owner
- Product Testing Specialist
- Corporation/Factory Representative

Welding Technology

THIS PROGRAM IS FOR YOU IF YOU:

- Are interested in mechanical things
- Are accurate and careful
- Have the ability to concentrate on detail work
- Have good eye-hand coordination
- Have good manual dexterity

PROGRAM DESCRIPTION

Welding is the term used to describe numerous methods of joining metals. Welding is the primary process of repairing and fabricating metal components. There are many challenging career opportunities in this field and all indications show an increase in openings as the 21st century moves forward.

Welding students may earn college credit. Please refer to the Articulated Credit pages in this book for college credit information.

WELDING I

Grades: 11, 12

Prerequisite: None, but Introductory Industrial Technology courses are recommended.

2-1/2 Credits

This introductory course is designed to help students' master skills in the following areas: shielded arc welding, gas metal arc welding, tungsten metal arc welding, oxyacetylene welding, brazing, flame cutting and the fundamentals of weld shop fabrication. Other manufacturing skills include shop and machine maintenance, welding materials and blueprint reading. Welding I students will complete a competency chart. Students must supply their own steel toe shoes/boots, safety glasses, heavy leather gloves, work shirt, and necessary tools/materials. FVCC Course Fee: \$45.00+ \$60.00 supply fee

WELDING II

Grade: 12

Prerequisite: Welding I and teacher recommendation. 2-1/2 Credits

This course will utilize the concepts practiced in Welding I with more in-depth specialization. A higher level of competency is expected. The course material will be developed around problem solving fabrication equipment, operational procedures, production layout, technical function, pipe welding, and necessary tools/materials. Students must supply their own steel toe shoes/boots, safety glasses, heavy gloves, work shirt, and necessary tools/materials.

FVCC Course Fee: \$45.00+ \$60.00 supply fee

Welding students may earn college credit. Please refer to the Articulated Credit pages in this book for college credit information.

IF YOU HAVE COMPLETED:

FVCC WELDING PROGRAM

You could qualify for a position such as:

- Pipe Welder
- Arc Welder
- Spot Welder
- Tungsten Metal Arc Welder
- Fabricator
- Weld Shop Owner

ASSOCIATE OF APPLIED SCIENCE

You could qualify for a position such as:

- Construction Welder
- Production Welder

BACHELOR DEGREE

You could qualify for a position such as:

- Welding Instructor
- Welding Engineer