



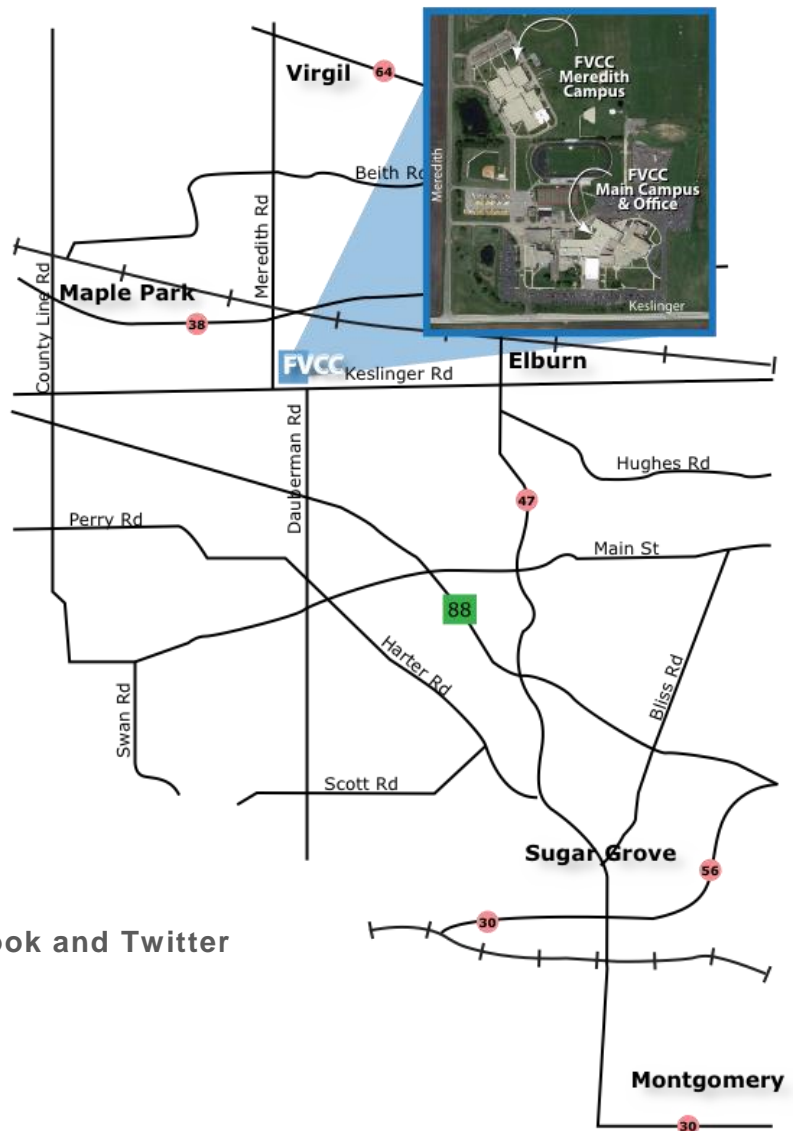
Welcome to Fox Valley Career Center

PURPOSE

This Course Registration 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 recognition awards.

Information has been prepared to help each student become fully aware of the many opportunities available at Fox Valley Career Center.

The Center can help students:
Explore and make decisions about careers they may pursue in the future;
Make a successful transition to 4-year colleges, community colleges; technical or trade schools, or become successful employees; and acquire basic employability skills that will prepare students for employment opportunities.



Find us www.foxvalleycc.org or on Facebook and Twitter



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GENERAL INFORMATION

ADMISSIONS

High school students register with their home school counselor. Guidelines concerning admissions to our programs are established by each member high school. 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 along with assisting them in securing temporary, part-time, or full-time employment. Job shadowing, internships and apprenticeships are coordinated through our career placement coordinator.

CREDITS

Students may enroll in classes usually earning 2 ½ -3 credits per year. 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.

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.

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

SCHOOL DAY

Currently, there are three 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.

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

SUPPORT SERVICES

Fox Valley Career Center provides a wide range of career guidance counseling services and support services for students. A guidance 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

Individuals with disabilities should notify the Director's office at (630) 365-5113 if they have a disability which will require special assistance or services and, if so, what services are required. This notification should occur as soon as possible before the school-sponsored function, program or meeting.

REGISTER ONLINE HERE:

<https://goo.gl/forms/UjdGCRbqSxc87Jgt1>

INTERNSHIPS and JOB SHADOWING

Students attending programs through Fox Valley Career Center may be given an opportunity to go off campus and see what the world of business is all about. This involves hands-on experiences, problem solving techniques, improvement of writing and communication skills, and learning specific job 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 young men and women who have developed their skills and can exhibit those skills in job situations.

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 a daily diary, 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 normally be attending Fox Valley Career Center. This experience will help the student make educated decisions about career choices as well as about schools they would like to attend for further education after high school.

Students will be contacted by the Career Placement Coordinator about "shadowing" opportunities. If a student is interested in the opportunity, he or she will then complete the "shadowing" form and return the completed form at least three days before the scheduled experience. Once a student has completed the "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 are eligible to win 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. It does not include the many scholarships which students may receive from private technical schools or colleges.

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

The Fox Valley 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 during the school year.

Home school principals are notified so the student’s name may be read over the intercom, 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 special certificate of recognition and a 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

Among these activities are competitions which are specifically related to each career field covered at Fox Valley Career Center. We have implemented other 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

Numerous 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 guidance counselor for further details.

FVCC WCC COLLEGE CREDIT CLASSES

Waubonsee Community College & Kishwaukee College

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 receive advanced placement, to save time and money, and avoid duplication of curriculum already learned in high school. Students must earn an A or B in the high school class 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 guidance 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 post-secondary credit. Fire Science students receive dual credit in place of articulated credit. Automotive Technology II students who attend WCC can choose articulated credit OR dual credit but cannot receive both.

Indicate Classes Taken	Fox Valley Career Center	Waubonsee Community College	Articulated Credit	Dual Credit
	Automotive Technology II (20104A002)	Fund. of Automotive Technology (AUT100)	2	2
	PC Repair & Computer Science Principles (10252A002)	PC Hardware Essentials (CIS190) and Intro to Windows (CIS105)*	3 1	
	Computer Technology - Web Development (10201A001)	Intro to Windows (CIS105) *and Web Development with HTML/XHTML (WEB110)	1 3	
	Early Childhood I (19054A001)	Career Explorations in Early Childhood (ECE102)	3	
	Early Childhood II (19055A001)	Introduction to Early Childhood Education (ECE101)	3	
	Emergency Medical Technician-Basic (14055A001)	Emergency Medical Technician Basic (EMT120)	9	
	Fire Science I (15152A001)	Basic Operations Firefighter A (FSC105) Basic Operations Firefighter B (FSC115) Technical Rescue and Vehicle Operations (FSC215) Hazardous Materials Operations (FSC120) Basic Operations Firefighter C (FSC118)		4 4 1 3 3
	Fire Science II (15152A002)	Fire Apparatus Engineer (FSC140) Vehicle and Machinery Operations (FSC150) Advanced Technician Firefighter (FSC125)		4 3 4
	Graphic Communications I (11154A001)	Computer Illustrator* (GRD160)	3	
	Graphic Communications II (11154A002)	Digital Image (GRD170) and Desktop Publishing (GRD135) and Computer Illustrator* (GRD160)	3 3 3	
Credit listings continued on next page				

Indicate Classes Taken	Fox Valley Career Center	Waubonsee Community College	Articulated Credit	Dual Credit
	Health Occupations - BNAT (14051A001)	Nurse Assistant Skills (NAS101)	7	
	Health Occupations - EMC (14002A002)	Medical Terms for Health Occupations (HIT105)	1	
	Welding I (13207A001)	Survey of Welding (WLD100) and Oxy-Fuel Welding & Cutting (WLD115)	3 3	
	Welding II (13207A002)	Shielded Metal Arc Welding (WLD120)	3	
	Small Engines & Equipment Technology I & II (2 Units) (20110A002)	Small Engine Maintenance & Repair (DPT199)	3	

*Credits for this class can be earned only once.

FVCC ECC COLLEGE CREDIT CLASSES

Elgin Community College

Elgin Community College and Fox Valley Career Center, based upon our mutual concern for the continued growth of students who wish to pursue career/technical and academic education, and in an effort to provide a continuing articulated program that builds on past learning experiences and eliminates unnecessary duplication of instruction, mutually subscribe to the following: Students who complete each semester of high school course(s) listed below with a “B” or better final grade will be granted college credit for Elgin Community College. High school students who complete the FVCC courses will have learned and be able to demonstrate proficiency in the Elgin Community College course(s) Learning Outcomes and Topical Outline Summary. A student must become a registered student at Elgin Community College within 27 months following high school graduation. Following is a list of courses at FVCC for which articulated credit can be earned. See your guidance counselor or career/technical instructor for the “College Credit Articulation Forms.” For a complete list of requirements call the Elgin tech prep office at (847) 214-7584 or visit their web site at www.elgin.edu/techprep.

SUBJECT TO REVISION PER FVCC/ECC AGREEMENTS

Indicate Classes Taken	Fox Valley Career Center	Elgin Community College	Articulated Credit	Dual Credit
	Automotive Technology I	Automotive Engine Service and Repair (AUT 151)	7	
	Automotive Technology II	Vehicle Maintenance and Tune-Up (AUT 152)	3	
	Criminal Justice/Law Enforcement	Intro to Corrections (CRJ 110)	3	
	Criminal Justice/Law Enforcement	Intro to Criminal Justice (CRJ 101)	3	
	Early Childhood I	Intro to Early Childhood Education (ECE102)	3	
	Early Childhood II	Curriculum Planning for the Young Child (ECE124)	3	
	EMT	EMT (FSS215)	8	
	Fire Science I	Intro to Fire Science (FSS101)	3	
	PC Repair & Computer Science Principles	Operations Systems 1 (OAT 144)	1	
	Small Engines & Equipment Technology I & II	Small Engine Tune-up Overhaul & Diagnosis (AUT 100)	4	
	Health Occupations (BNAT)	Basic Nurse Assistant Training Program (NUS 105)	7	
	Web Design	CIS Internet Publishing (CIS 147)	1	
	Welding I (grade of A only)	Welding I (WEL 101)	2	
	Welding II	Welding II (WEL 102)	4	

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 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.

AUTOMOTIVE TECHNOLOGY I

Grades: 11, 12

Prerequisite: None. Any previous Industrial Technology course recommended.

2-1/2 Credits

VALEES #: 20104A001

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. Fee: \$45.00.

AUTOMOTIVE TECHNOLOGY II

Grade: 12

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

2-1/2 Credits

VALEES #: 20104A002

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. 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

BACCALAUREATE 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 AND COMPUTER SCIENCE PRINCIPLES (PLTW)

Grades: 11, 12

Prerequisites: Keyboarding and Data Processing Recommended.

2-1/2 Credits

VALEES #: 10252A002

Calling all tinkers! Do you like to take things apart, figure things out and experiment with technology? This course is for you! We start the year building our own computers, then move on to software installation and the finer points of Microsoft Windows. Other amazing opportunities include field trips, guest speakers, Arduino building/programming, Lego Robotics, and laptop repair.

This course will now also include PLTW (Project Lead The Way) Computer Science Principles. Using Python as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. Computer Science Principles helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cybersecurity, and simulation. PLTW is recognized by the College Board as an endorsed provider of curricular and professional development for AP Computer Science Principles (AP CSP). This endorsement affirms that all components of PLTW CSP's offerings are aligned to the AP Curriculum Framework standards and the AP SCP assessment. Students who compete this class with a grade of B or better can receive credit for Waubensee College

courses. Students will be prepared to take the Computer Science Principles (AP CSP) exam. Fee: \$30.

WEB DEVELOPMENT

Grades: 11, 12

Prerequisites: Keyboarding and Data Processing Recommended.

2-1/2 Credits

VALEES #: 10201A001

Students of this course will learn Hypertext Markup Language (HTML5) and Cascading Style Sheets (CSS3). Web design techniques will be analyzed and implemented. We will also spend time learning Dreamweaver. The goal of this course will be to design and create fully functional websites. The training students receive here at Fox Valley Career Center can help qualify them for entry-level positions in the field of Computer Technology or give them a head start toward college education in this field. Students who complete this course with a B or better can receive credit for Waubensee Community College courses. 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
- have successfully completed Algebra I.

2-1/2 Credits

VALEES #: 10152A002

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. Articulation is in progress. Fee: \$30 plus required USB flash drive.

ROBOTICS AND COMPUTER SCIENCE A (PLTW)

Grades: 11, 12

Prerequisites:

- Completion of FVCC PC Repair/Computer Science Principles; OR
- Completion of FVCC Game Programming; OR
- Completing a programming course with a C or better at your home school

2-1/2 Credits

VALEES #: 21009A001

Students who enroll in Robotics/PLTW will study the basics of robotics. The class will use VEX robotics kits and curriculum. Students will have an opportunity to learn about simple machines, mechanisms and programming with a robot. There will be a possibility for VEX competitions.

This course will also include PLTW (Project Lead The Way) Computer Science A. This curriculum focuses on further developing computational-thinking skills through the medium of Android App development for mobile platforms. The course utilizes industry-standard tools such as Android Studio, Java programming language, XML, and device emulators. Students collaborate to create original solutions to databases. This course aligns with the AP CS A course. Students will be prepared to take the Computer Science (CS A) exam.

Fee: \$30 plus a required USB flash drive.

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

BACCALAUREATE 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

VALEES #: 19101A001

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

VALEES #: 19101A002

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

Criminal Justice / 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 and record keeping. 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.

CRIMINAL JUSTICE / LAW ENFORCEMENT

Grade: 11, 12

Prerequisite: Criminal background check might be required.

2-1/2 Credits

VALEES #: 15051A003

Programs in Criminal Justice / Law Enforcement are 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, preliminary investigations, police security, pursuit and arrest. Students will be introduced to additional training for people already involved in law enforcement 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. Fee: \$25.00

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
- Bailiff
- State Trooper
- Sheriff's Deputy

BACCALAUREATE DEGREE

You could qualify for a position such as:

- Supervisor
- Criminologist

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. Students enrolled in secondary programs may earn both secondary and community college credit.

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.

Early Childhood

THIS PROGRAM IS FOR YOU IF YOU:

- Desire a job that provides the opportunity to have a positive impact on the lives and futures of young children
- Respect children and their families
- Are flexible and adapt well to the needs and requirements of others
- Are energetic, spontaneous, compassionate and have a good sense of humor
- Want to develop skills in planning and leading activities

PROGRAM DESCRIPTION

Students who successfully complete this program are prepared for employment in various entry level careers that involve working with young children.

Small World Learning Center

Small World Learning Center, located in the Early Childhood Department at Fox Valley Career Center, provides a lab experience for students enrolled in the early childhood classes. Small World Learning Center is licensed by the Illinois Department of Child and Family Services to provide education and care for 8 infants and toddlers and 16 preschool children ages 6 weeks through 5 years. The center is open every day from 6:45 a.m. to 4:15 p.m.

EARLY CHILDHOOD EDUCATION I

GRADES: 11, 12

PREREQUISITE: NONE

2-1/2 Credits

VALEES #: 19054A001

Early Childhood I provides students with the knowledge and practical experiences needed to develop skills required to work effectively with young children ages 2-5. Classroom studies include philosophies of early development, management of childcare centers, and state regulations governing childcare centers. A primary learning experience involves working with children in Small World Learning Center, the child care center at Fox Valley Career Center. Students plan developmentally appropriate learning activities and present them to the young children that promote growth in all areas; social, emotional, cognitive and physical. These experiences include literacy, transitions, art, dramatic play, blocks, small manipulatives, science, math, music and movement. Additionally, students are given an opportunity to earn the Illinois Gateways Level I Early Childhood Education Credential. This program is an important component to the curriculum and costs an additional fee for materials. However, the state

recognized professional development credential offers students with additional knowledge and experience as well as provides opportunities in the early childhood education field upon graduation. Furthermore, students also prepare a professional portfolio which includes a resume, samples of teaching experiences, and class work. Students earning a grade of B or better can receive college credit for the course, ECE 102: Career Explorations in Early Childhood, at Waubensee Community College or ECE 102: Intro to Early Childhood Education at Elgin Community College. Fee: \$35.00

EARLY CHILDHOOD EDUCATION II

GRADE: 12

PREREQUISITE: Early Childhood I and teacher recommendation.

2-1/2 Credits

VALEES #: 19055A001

Early Childhood II is a continuation of Early Childhood I. Emphasis is placed on working with infants, children with special needs, and elementary school children. Students are provided opportunities to work in the infant-toddler room at Small World Learning Center or serve as interns in area schools throughout the community. Students explore food and nutrition, various child care programs (Montessori, Head Start, etc.), early childhood theorists and research career opportunities. Students earning a grade of B or better can receive credit for ECE 101: Intro to Early Childhood Education at Waubensee Community College or ECE 124: Curriculum Planning for the Young Child at Elgin Community College. Fee: \$35.00

IF YOU HAVE COMPLETED: FVCC EARLY CHILDHOOD PROGRAM

You could qualify for a position such as:

- Teacher's Aide
- Assistant Teacher
- Before/After School Care Program

ASSOCIATE OF APPLIED SCIENCE

You could qualify for a position such as:

- Center Director
- Assistant Director
- Infant/Toddler/Preschool Teacher

BACCALAUREATE DEGREE

You could qualify for a position such as:

- Franchise District Manager
- Birth - 3rd Grade Teacher

Electrical Systems

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

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 blue prints and studying NEC and local codes.

ELECTRICAL SYSTEMS I

Grades: 11, 12

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

VALEES #: 17102A001

The Electrical Systems I 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 includes units on basic electrical circuits, magnetic motor control circuits and components, National Electrical Code rules, blueprint reading, and meter box and circuit breaker panel wiring. Students must supply their own safety glasses and steel toe shoes/boots. Fee: \$30.00.

ELECTRICAL SYSTEMS II

Grade: 12

Prerequisite: Electrical Systems I and teacher recommendation.

2-1/2 Credits

VALEES #: 17102A002

The Electrical Systems II course is an extension of the Electrical Systems I course with a heavy emphasis placed on conduit work, more complex circuits and components and a more comprehensive study of state and national electrical codes. The course will also include work on 200-amp service entrance meter box and 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 steel toe shoes/boots. Fee: \$30.00.

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

ASSOCIATE OF APPLIED SCIENCE

You could qualify for a position such as:

- Apprentice Electrician
- Electrical Control Assembler
- Electrical Technician

BACCALAUREATE 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 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

VALEES #: 14055A001

The Emergency Medical Technician (EMT) education program will prepare students to become competent, entry-level EMTs in order to serve in volunteer and/or professional career positions in the State of Illinois and area communities.

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 EMT State Exam which allows for certification from the IDPH.

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 (20) 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.

Fee: \$30.00 plus costs for manual/workbook, drug screen, TB test, flu vaccine and background check. Additionally, uniform and equipment costs are approximately \$100.00.

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 Dept. EMT
- ER Technician

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

VALEES #: 15152A001

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

FVCC Course Fee: \$45.00

College Credit Processing Fee is determined by WCC.

FIRE SCIENCE II

Grade: 12

Prerequisite: Fire Science I and teacher recommendation.

2-1/2 Credits

VALEES #: 15152A002

Second year students follow OSFM Advanced Technician Firefighter Curriculum including the cognitive and psychomotor 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 Waubensee Community College. *There is a processing fee per credit hour for college credit.

FVCC Course Fee: \$45.00.

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

BACCALAUREATE 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

Graphic Communications

THIS PROGRAM IS FOR YOU IF YOU:

- Are interested in multi-media, digital media, graphic design, animation, cross-media, motion graphics, advertising, marketing, publishing, journalism, small business ownership
- Are like working with computers
- Are detail oriented
- Want to learn how to print on t-shirts
- Want to print posters, brochures & flyers
- Want to explore a field that can help you in whatever you choose to do

PROGRAM DESCRIPTION

The student will gain an understanding and working knowledge of the Graphic Communications and Printing Industries. The student will have the opportunity to learn art, graphic design, and applications for imaging, drawing and page layout. Graphic Artists & Designers portray ideas through artwork generated with the application software described to call attention to products and services. They create artwork for newspapers, the internet, magazines, books, television, exhibits & packaging. During printing production, students will operate and maintain equipment used for image transfer to a wide variety of substrates all the way through to a completed product.

VISUAL COMMUNICATIONS

Grades: 11 & 12

Prerequisite: None. Art, Drawing & Computer courses can be helpful.

1 Credit

VALEES #: no articulated credit

Visual Communications is a 50-minute course that explores the conveyance of ideas and information through a visual aid expressed through items such as signs, typography, drawing, graphic design, illustration, advertising, or animation. Students will be exposed to concepts, theories, and skills through industry software (such as Illustrator, Photoshop, and InDesign) and practical application. The course will build a student's skills so they can work with a client to create a finished product. This course is beneficial to anyone pursuing a career in graphic communications, print, web design, multi-media, publishing, advertising, industrial design, animation, illustrating, or marketing. Articulated credit is NOT available for this course but this course does count as a prerequisite for Graphic Communications II which does offer articulated Waubonsee credit. Fee: \$15.00

GRAPHIC COMMUNICATIONS I

Grades: 11 & 12

Prerequisite: None. Art, Drawing & Computer courses can be helpful. 2-1/2 Credits

VALEES #: 11154A001

Graphic Communications I is a comprehensive introduction to the Graphic Communication Industry. Emphasis is placed upon the theories and processes that make up production printing. Instruction and practice will be given in digital printing, digital workflow, and screen printing, which include: imposition, multi-color, step and repeat work, multi-page layout, multi-color press operation, paper identification, estimating and management, and advanced finishing processes. Using these processes, students will design and produce printed materials for real customers and for personal promotion in future job assessment activities and in the Graphic Industry, Graphic Design techniques with industry standard software, computer illustration, advanced typography, digital imaging, scanning, halftones, duo tones, posterizations, and special effects will be explored. Articulated credit from Waubonsee is available. Fee: \$30.00

GRAPHIC COMMUNICATIONS II

Grades: 12

Prerequisite: Graphic Communications I; OR Visual Communications; AND teacher recommendation.

2-1/2 Credits

VALEES #: 11154A002

Graphic Communications II is an extension of Visual Communications and Graphic Communications I in a production oriented environment. The course content includes the following broad areas of emphasis: further career education opportunities, planning for the future, job seeking skills, personal development, human relations, legal protection and responsibilities, economics and the job, organization and job completion. Articulated Credit from Waubonsee Community College is available. Fee: \$30.00

IF YOU HAVE COMPLETED: FVCC GRAPHICS PROGRAM

You could qualify for a position such as:

- Bindery Production
- Independent Contracting
- Digital Press Assistant
- Screen Printing Assistant
- Digital Imaging/Electronic Prepress

ASSOCIATE OF APPLIED SCIENCE

You could qualify for a position such as:

- Graphic Designer
- Interactive Media Designer
- Prepress Manager
- Web Press Operator
- Bindery Manager
- Scheduler
- Visual Communications

BACCALAUREATE DEGREE

You could qualify for a position such as:

- Multi-Media Designer
- Graphic Designer
- Advertising Director
- Art Director
- Visual Communications
- Quality Control Technician
- Printing Management
- Customer Service Representative
- Color Consultant
- Estimator

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 a chest X-ray or 2-step tuberculin skin test and a hepatitis B vaccination series as part of their yearly physical exam. Students must also pass a drug screen and health care worker criminal background check. Homeschools do not provide transportation for this course. Students who receive a grade of B or better can receive college credit.

Students must provide their own transportation to classes and 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

VALEES #: 14051A001

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. Fee: \$30.00 plus costs for a textbook, workbook, drug screen, TB test and background check. Uniform and equipment approximately \$60. There will be a State CNA examination fee to be determined by the state.

Students must provide their own transportation to classes and 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

VALEES #: 14002A002

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 classes and off-campus clinical sites.** Fee: \$30.00 plus costs for a medical terminology text/workbook, drug screen, TB test and background check. Uniform and equipment approximately \$60.

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

BACCALAUREATE DEGREE

You could qualify for a position such as:

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

Horticulture

THIS PROGRAM IS FOR YOU IF YOU:

- Like growing plants and flowers
- Like working with nature
- Like working with people
- Are interested in nursery/greenhouse operations
- Are interested in landscaping/turf management
- Are interested in floral design
- Are interested in Agricultural Sciences

PROGRAM DESCRIPTION

The Horticulture program prepares students to plant, grow, and care for flowers, shrubs, trees and houseplants. Students will learn how to price, market, and sell horticultural products and services. Landscape design and floral design techniques are taught and practiced through school projects and competitions. Plant science and emerging biotechnology techniques will support the curriculum.

HORTICULTURE I

Grades: 11, 12

Prerequisite: None

2-1/2 Total Credits

VALEES #: 18051A001

This course offers instruction in landscaping, greenhouse, indoor plant care, floral design and tissue culture. Units of study during the first semester include plant science, landscape maintenance and pruning, landscape design and installation, and holiday floral design and sales. Second semester features greenhouse crops, care and handling of cut flowers, floral design, tissue culture, propagation, marketing and sales. This is a project-based course, so students will be able to work on horticulture projects in their area of interest. Improving computer and workplace skills will be a focus. Participation in FFA activities (high school agriculture student organization) and SAE (Supervised Agricultural Experience) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts.

Fee: \$25.00

HORTICULTURE II

Grade: 12

Prerequisite: Horticulture I and teacher recommendation.

2-1/2 Credits

VALEES #: 18054A001

This course focuses on the landscape, nursery and turf segments of the horticulture industry. Units of study include identifying landscape plants, designing landscape plans using computer design programs, hardscape construction techniques, and installing landscape plants. Agribusiness units will cover calculating prices for work, managing a horticulture business, advertising and sales. Improving computer and workplace skills will be a focus. Participation in FFA (high school agriculture student organization) activities and SAE (Supervised Agricultural Experience) projects is an integral course component for leadership development, career exploration and reinforcement of academic concepts. Fee: \$25.00

IF YOU HAVE COMPLETED: FVCC HORTICULTURE PROGRAM

You could qualify for a position such as:

- Nursery Worker
- Golf Course Worker
- Fertilizer Plant Worker
- Landscape Worker
- Grounds Keeper
- Floral Shop Worker

ASSOCIATE OF APPLIED SCIENCE

You could qualify for a position such as:

- Landscaper
- Florist
- Garden Center Manager

BACCALAUREATE DEGREE

You could qualify for a position such as:

- Green House Manager
- Nursery Manager
- Greens Superintendent

Project Lead The Way: Biomedical

THIS PROGRAM IS FOR YOU IF YOU:

- Are interested in a career in health sciences or research
- 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

PRINCIPLES OF THE BIOMEDICAL SCIENCES (PBS)

Grades: 9, 10, 11, 12

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

1 Credit

VALEES #: 14252A001

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.

Fee: \$30

* Textbook and supplies will cost an additional \$15.00 (subject to change based on enrollment)

HUMAN BODY SYSTEMS (HBS)

Grade: 10, 11, 12

Prerequisite: Principles of Biomedical Sciences or completed Biology

1 Credit

VALEES #: 14251A001

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 will cost an additional \$15.00 (subject to change based on enrollment)

MEDICAL INTERVENTIONS (MI)

Grades: 11, 12

Prerequisite: Human Body Systems

1 Credit

VALEES #: TBD

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.

Fee: \$30

BIOMEDICAL INNOVATION (BI)

(Available 2019/2020 school year)

Grade: 12

Prerequisite: Completion of all Biomedical Sciences Foundation Courses

1 Credit

VALEES #: TBD

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.

Small Engines & Equipment Technology

THIS PROGRAM IS FOR YOU IF YOU:

- Enjoy problem solving
- Enjoy 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

VALEES #: 20110A001

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.

Fee: \$40.00.

SMALL ENGINES & EQUIPMENT TECHNOLOGY II

Grade: 12

Prerequisite: SE&ET I and teacher recommendation.

2-1/2 Credits

VALEES #: 20110A002

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.

Fee: \$40.00.

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

BACCALAUREATE DEGREE

You could qualify for a position such as:

- Repair Shop Service Manager
- Repair & Performance Shop Owner
- Product Testing Specialist
- Corp/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 refabricating 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 (Waubensee CC or Elgin CC) 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

VALEES #: 13207A001

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, bronzing, 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 gloves, work shirt, and necessary tools/materials.

Fee: \$45.00

WELDING II

Grade: 12

Prerequisite: Welding I and teacher recommendation.

2-1/2 Credits

VALEES #: 13207A002

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.

Fee: \$45.00

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

ASSOCIATE OF APPLIED SCIENCE

You could qualify for a position such as:

- Construction Welder
- Production Welder
- Oxyacetylene Welder

BACCALAUREATE DEGREE

You could qualify for a position such as:

- Welding Instructor
- Welding Engineer