

LACC is designed to help students find their place in the ever-changing workforce. Through practical application and hands-on learning, we can help a student find their way to an amazing career or continue their education once they graduate. The content of our programs is designed to engage the student in the process of active learning, enriching your experience.

Enrollment in the Career Center is an excellent way for eligible high school students to get a jumpstart on their college education, engage in career exploration, prepare for a community college or four-year university, and develop skills needed in today's global economy and workforce. Specialized programs of study are available to high school juniors and seniors. Students are instructed by many of the area's top career and technical educators. Students use state-of-the-art equipment and experience hands-on skills learning.

#### Why Choose a Career Center Course:

- "Jumpstart" a college education by earning college credit while in high school.
- Tuition and transportation are provided by the student's high school.
- Whether a student plans to pursue a certificate, two or four year degree, or perhaps enter the world of work after completion of high school, the Career Center can help students develop skills.
- Students with a 3.3 GPA and enrolled in a Career Center course qualify to apply for National Technical Honor Society (NTHS).
- Each year the Director of the Career Center awards LACC scholarships to outstanding students representing each of the career and technical education programs.
- Many LACC programs have internship opportunities for second-year students.

#### College Credit Agreements

Livingston Area Career Center has worked with the area community colleges to establish opportunities that will allow students to earn college credit while still in high school. LACC is primarily served by three community colleges.

To take advantage of the dual credit programs, an academically qualified student enrolls in a college level course. Upon successful course completion, the student earns college credit while earning high school credit.

Agreements are continually updated and new programs are being added each year. Interested students should contact LACC to receive current information.

Certification: LACC instructors work with business partners to implement industry certifications. These certifications will assist students with the next phase of their career. The following chart shows dual credit and certifications for each LACC program:

COURSE NAME	CERTIFICATIONS	DUAL CREDIT
Automotive & Diesel Technology	Valvoline Education Certification	
Certified Nurse Assistant (C.N.A.)	Certified Nurse's Assistant *American Heart Association Health Care Provider BLS CPR	Heartland Community College <b>8 Credits</b> – NURS 110
Computer Maintenance	COMP/TIA A+ Certification	Heartland Community College <b>10 Credits</b> - CSCI 101, NETW150,NETW151
Construction Trades	National Center for Construction Education & Research Core Certification (NCCER)	
Criminal Justice	*American Heart Association Health Care Provider BLS CPR	Heartland Community College <b>3 Credits</b> – CRJ 101
Culinary Arts	ServSafe Manager Certification IDPH Food Safety Sanitation Manager Certification	Joliet Junior College <b>2 Credits</b> – CA106
Cyber Security/Networking	CCNA (CISCO Certified )	Heartland Community College <b>19 Credits</b> – CSCI 101, NETW 150, NETW 121, NETW 122, NETW 160, NETW166
Digital Media/Graphics		
Early Childhood Education	Early Childhood Education – Level I (Illinois Gateway to Opportunity) CPR/First Aid	Heartland Community College <b>6 Credits</b> – CHLD 101; CHLD 102
Emergency Medical Technician (EMT)	*American Heart Association Health Care Provider BLS CPR *Eligible for Illinois Dept. of Public Health EMT Basic license exam	College Credit <b>1.8 Credits</b> Heartland Community College – <b>8 credits</b>
Engineering & Architectural Design	Auto Desk: Auto CAD; Inventor; Revit	Heartland Community College <b>9 Credits</b> – CAD 101, CAD 235, TECH 114
Fire-Fighting	*American Heart Association Health Care Provider BLS CPR	
Inter-Related Coop		
Manufacturing		Heartland Community College – <b>6 credits</b>
Medical Terminology & Health Careers	*American Heart Association Health Care Provider BLS CPR *HIPPA Training/Certification	Heartland Community College <b>3 Credits</b> -HLTH 110
Welding	AWS Certification OSHA 10 CPR/First Aid	Heartland Community College <b>9 Credits</b> – WELD 110, WELD 116, MFTG 115; <b>1 Credit</b> OSHA Certification

**AUTOMOTIVE & DIESEL TECHNOLOGY I**

(828, 829)

**Class Level: 11, 12****Credit: 2****Prerequisite: None**

Automotive and Diesel Technology I incorporates Basic Automotive, Diesel Repair, and Agriculture Repair. This class gives students the opportunity to visit all aspects of the automotive industry. The amount of technician jobs in the industry is growing at an alarming rate, and students are prepared for these opportunities. The students will learn air conditioning systems, brakes, and diesel engine fuel systems and electronics. The second semester will focus on electrical diagnostics, data logging computers, and in depth engine repair. Integration of math, reading, communication, logical thinking, and teamwork are a part of this class. The lab area will allow students to get real world experiences and many more opportunities to have hands-on training. The student will be expected to develop good habits in the areas of work ethic, cooperation, attendance, attitude, leadership, and organization. This course is prelude to Automotive & Diesel Technology II.

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**AUTOMOTIVE & DIESEL TECHNOLOGY II**

(830, 831)

**Class Level: 12****Credit: 2****Prerequisite: C or better in Auto I is recommended**

Automotive & Diesel Technology II is an extension of the first year class. This course will prepare a student for an entry-level position in the automotive field or additional schooling. Outside resources are utilized as a part of this class. Students will focus on in-depth problem solving and becoming more advanced in engine, electrical, and hydraulic systems. The students will get real automotive and diesel technology issues and will work together on problem solving skills. Classroom activities include group projects, individual critical thinking activities, and study materials used by the ASE (Automotive Service Excellence). Lab activities include a challenging list of automotive repair items. Second year students work on personal and community vehicles. Students will also help mentor the first year students which incorporates leadership and management traits into the class.

Valvoline Oil Education Certification

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**CERTIFIED NURSE ASSISTANT**

(870, 871)

**Class Level: 11, 12****Credit: 2****Prerequisite: None**

The course is composed of a combination of subject matter and experiences designed to perform tasks of individuals receiving nursing services. The student learns those competencies needed to perform as a nurse assistant under the direction of the registered nurse. The units of instruction should include the role of the nurse assistant while covering general health care topics: medical terminology; patients/clients and their environment; special feeding techniques; psychological support and, in long term and terminal illness, death and dying (e.g., chronically ill, children, new mothers, and so on); and all other basic nursing skills. Topics covered typically include normal growth and development; feeding, transporting patients, hygiene, and disease prevention; basic pharmacology; first aid and CPR; observing and reporting; care of equipment and supplies; doctor, nurse, and patient relationships and roles; procedure policies; medical and professional ethics; and care of various kinds of patients. This program is approved by Illinois Department of Public Health. Upon successful completion, the student is eligible to sit for the competency exam.

**\*This course has been dual credited with Heartland Community College.**

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**COMPUTER MAINTENANCE I**

(806, 807)

**Class Level: 11, 12****Credit: 2****Prerequisite: None**

This course is designed to provide students with the skills needed to install, setup, configure, test, troubleshoot, and maintain personal computers and peripherals. Instruction includes assembling, maintaining, and upgrading personal computers. Students learn how to install, upgrade, and troubleshoot various hardware components such as motherboards, hard drives, CD-ROMS, memory, power supplies, video cards, sound cards, and network cards. Students install and configure various desktop operating systems such as Windows, Apple, and Linux. The course includes adding and removing software programs, installing and updating system drivers, creating startup and recovery disk, and updating the BIOS and CMOS. Students learn to conduct preventive maintenance and perform system backups, data transfer, and recovery routines as well as use diagnostic utilities to troubleshoot hardware and software problems. Students also learn how to disassemble, clean, troubleshoot, and reassemble peripherals such as printers.

**\*This course has been dual credited with Heartland Community College.**

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**COMPUTER MAINTENANCE II**

(808, 809)

**Class Level: 12****Credit: 2****Prerequisite: C or better in Computer Maint. I is recommended**

This course builds on the skills introduced in Computer Maintenance I. Students learn how to connect and install multiple computers and peripherals together to create a computer network. Students build, configure, and maintain network servers along with installing and configuring various network operating systems such as Novell, Windows, and Linux. Students learn to use troubleshooting services, system monitoring utilities, and data backup and recovery systems. Other topics include learning how to connect various network components such as servers, computers, and printers together using data cabling, hubs, and switches. Students learn to run, terminate, and troubleshoot data cabling. In addition, students learn how to install and upgrade software across the network, as well as map drives and share resources such as printers, software, and files. The course includes setting up and configuring various network services such as TCP/IP, DHCP, DNS, VPN, terminal services, e-mail, and web services. Students learn how to secure and protect network servers and data as well as setting up and configuring a firewall, intrusion detection system, and encryption software for identifying and preventing potential network attacks.

**\*This course has been dual credited with Heartland Community College.**

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**CONSTRUCTION TRADES I**

(800, 801)

**Class Level: 11, 12****Credit: 2****Prerequisite: None**

This course provides experiences related to the erection, installation, and maintenance of residential buildings and related fixtures. Planned learning activities allow students to understand fundamental principles and methods, and develop technical skills related to masonry, carpentry, and finish work. Instruction includes safety principles and practices, recognition of standard lumber sizes, foundation layout methods, building concepts and procedures, local, state and national codes, cost estimating, and blueprint reading.

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**CONSTRUCTION TRADES II**

(802, 803)

**Class Level: 12****Credit: 2****Prerequisite: Construction Trades I**

This course provides learning experiences related to the erection, installation, maintenance, and repair of building structures and related utilities. Student technical skill experiences include instruction and activities in safety principles and practices, performing maintenance control functions, joining pipes, building water distribution lines and drains, installing and maintaining plumbing fixtures and systems, installing switch and outlet boxes, light fixtures, service entrances, roughing in and trimming out electrical devices and appliances, preparing foundations and footings, constructing residential chimneys and fireplaces, laying, jointing and pointing brick, and advanced building and construction methods and codes. All learning experiences are designed to allow the student to acquire job-entry skills and knowledge.

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**CRIMINAL JUSTICE I**

(872, 873)

**Class Level: 11, 12****Credit: 2****Prerequisite: None**

Criminal Justice I is an introductory course designed to prepare students for an exciting career in the field of law or law enforcement. Students will be introduced to the history of the criminal justice system and the advancements in these ever-changing fields. Instruction will also include questioning procedures, legal rights, examination of routine police, court, and corrections procedures. Students will have the opportunity to meet professionals in the field, participate in simulated scenarios, demonstrations, and tour pertinent law enforcement sites. This course is a must have for those interested in the world of criminal justice. **This course has been dual credited with Heartland Community College.**

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**CRIMINAL JUSTICE II**

(874, 875)

**Class Level: 12****Credit: 2****Prerequisite: Criminal Justice I**

Criminal Justice II is an opportunity for those who have successfully completed Criminal Justice I to continue their exciting exploration of the field of law enforcement. Students will participate in an extended campus job shadowing experience with

many local law enforcement agencies including careers in police work, telecommunications, courts, corrections, and probation. Students will research infamous killers and illicit drugs and present on their findings. Students will learn the 10-codes, the phonic alphabet, and the many forms police officers use on a regular basis. Students will conduct simulated traffic stops and will investigate simulated crimes. Professionals in the field will be brought in to share their insights and expertise bringing the real world to our classroom. Field trips will cap off the experience to give each student a well-rounded perspective of the criminal justice system.

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### **CULINARY ARTS I**

(890, 891)

**Class Level:** 11, 12

**Credit:** 2

**Prerequisite:** None

Culinary Arts I provides students with information and experience relating to the planning, selecting, purchasing, preparing and serving of foods. Coursework includes the study of terminology, nutritional values, culinary math, quantity cooking, storage, equipment, sanitation, and knife skills. Instruction is geared to prepare students for entry level positions into occupations in the food industry. Students develop skills through practical experience in the lab and on extended campus. Additional content may include: catering, event planning, customer service, food service styles, menu styles, baking and pastry arts, hors d'oeuvres, breakfast cookery, meat selection and preparation, soups, and sandwiches.

**\*This course has been dual credited with Joliet Junior College.**

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### **CULINARY ARTS II**

(892, 893)

**Class Level:** 12

**Credit:** 2

**Prerequisite:** Culinary Arts I

Culinary Arts II places emphasis for students to develop operational management skills. Content includes organization of food service systems, human relations, personnel training, and supervision. Students will continue to develop skills through more in depth practical experiences in both the lab and on extended campus opportunities. Additional topics may include: taking inventory, advertising, menu development, and individual mastery of culinary techniques. Employability skills will be emphasized throughout the two year sequence.

**\*This course has been dual credited with Joliet Junior College.**

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### **CYBER SECURITY/NETWORKING I**

(810, 811)

**Class Level:** 11, 12

**Credit:** 2

**Prerequisite:** Geometry or Administrative Consent

Computer Networking I is a skill-level course designed to provide students with the skills needed to setup, configure, test, troubleshoot, maintain, and administer a data network using various network operating systems such as Windows and Linux. Instruction will include network planning decisions, such as choosing an appropriate network configuration, determining the performance level requirements considering the differences among operating systems, and recommending network interface cards and cabling. Students will also learn how to setup and manage file systems and resources, and network topologies, protocols, and system utilities to efficiently run software applications on a network. Students will learn to use basic operating system commands, install and configure networks, set up user accounts and rights, and establish user security and permissions.

**\*This course has been dual credited with Heartland Community College.**

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### **CYBER SECURITY/NETWORKING II**

(812, 813)

**Class Level:** 12

**Credit:** 2

**Prerequisite:** Computer Networking I

Computer Networking II is a skill-level course for students who have completed Computer Networking I. Students will continue to learn skills to set up, configure, test, troubleshoot, maintain, and administer a data network using various network operating systems such as Windows and Linux. Students will learn to use troubleshooting services, system monitoring utilities, and data backup and recovery systems. Instruction will include setting up and configuring various network services such as TCP/IP, DHCP, DNS, VPN, terminal services, e-mail, content filtering, and web services. Students will learn techniques to secure and protect network servers and data. Students will be introduced to some basic concepts regarding web server configuration. Students will also learn to use standard software tools to determine system vulnerabilities and correct these vulnerabilities by reconfiguring the operating system. Students will diagnose network problems using public domain network sniffers such as Ethereal. Instruction will include setting up and configuring a firewall, intrusion detection system, and encryption software for identifying and preventing potential network attacks.

**\*This course has been dual credited with Heartland Community College.**

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**DIGITAL MEDIA/GRAPHICS**

(856, 857)

**Class Level: 11, 12****Credit: 2****Prerequisite: None**

This course is designed to provide students with the skills needed for a career in the fields of advertising, commercial art, graphic design, website development, and graphic illustrator. Students learn to apply artistic design and layout principles along with text, graphics, drawing, rendering, sound, video, and 2D/3D animation integration to develop various print, video, and digital products. Students use hardware and software programs to create, manipulate, color, paint, and layer scanned images, computer graphics, and original artwork. Students will use hardware and software to capture, edit, create, and compress audio and video clips. They will apply artistic techniques to design and create advertisements, displays, publications, technical illustrations, marketing brochures, logos, trademarks, packaging, video graphics, and computer-generated media. Students will work in a project-based environment to create a variety of interactive online products and will create dynamic web pages and sites using HTML, HTML editors, and graphic editors. Instruction includes client interviewing skills, product proposal development, product presentation techniques, and how to create a product portfolio. Digital Media/Graphics is a two-year program, although students can take one year.

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**EARLY CHILDHOOD EDUCATION I**

(880, 881)

**Class Level: 11, 12****Credit: 2****Prerequisite: None**

This course presents the history and philosophy of early childhood education. Areas of development from birth through age 5 are covered. Curriculum styles and observation methods are introduced and practiced. Students prepare for operation of a lab preschool. Career interests and opportunities are covered. Students prepare a professional portfolio including resume, cover letter, lesson plan samples, and class work. Students earn a Level I Early Childhood Education Credential.

**\*This course has been dual credited with Heartland Community College.**

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**EARLY CHILDHOOD EDUCATION II**

(882, 883)

**Class Level: 12****Credit: 2****Prerequisite: ECE I**

This course is a continuation of Early Childhood Education I. Emphasis is placed on the management aspects of the lab preschool as well as various early childhood programs. Students explore program types including philosophies and goals, program quality, licensing and registration laws, budgeting, staffing, inventory management, and public relations. Students continue the development of their professional portfolio. Students in good standing will be given the opportunity to intern at local early childhood sites.

**\*This course has been dual credited with Heartland Community College.**

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**EMERGENCY MEDICAL TECHNICIAN**

(864, 865)

**Class Level: 12****Credit: 2****Prerequisite: None**

The EMT-Basic course is a cooperative joint venture between OSF Saint James Medical Center and LACC and will be taught in accordance with the 1994 EMT-Basic National Standard Curriculum, and includes a minimum of 120 hours core didactic (classroom) hours and 20 ED non-classroom clinical hours. Classes will be comprised of lectures, demonstrations, and practical given by the instructors approved by the Illinois Department of Public Health and the Emergency Medical Services System. At successful completion of the course, the students will have the opportunity to challenge the state of Illinois written exam and be licensed as an EMT-Basic. (The student must be 18 years of age within 90 days of completion of the course to take the state exam.)

**\*This course has been dual credited with Heartland Community College.**

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**ENGINEERING AND ARCHITECTURAL DESIGN I**

(814, 815)

**Class Level: 11, 12****Credit: 2****Prerequisite: None**

This course is designed for students who are interested in exploring careers in engineering and architecture. Students will gain hands-on experience with using 3D printers and CNC machines. The 3D printer can make almost anything out of plastic,

while the CNC can cut out objects using wood, plastic and thin metal. During the first semester, students become proficient at designing 2D and 3D models using programs like AutoDesk AutoCAD and Inventor. Throughout this process, they will learn problem-solving design processes and how it is applied in industry to manufacture a product. In the second semester, students will create residential architecture using drafting techniques and the industry leading program Revit, which creates floor plans, section views, elevations, and realistic representations of their houses. In this class, students have the opportunity to gain certification in AutoCAD, Inventor, and Revit, attend competitions, field trips, and problem-solving activities. Students can earn up to 6 college credits.

**\*This course has been dual credited with Heartland Community College.**

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## **ENGINEERING AND ARCHITECTURAL DESIGN II**

(816, 817)

**Class Level: 12**

**Credit: 2**

**Prerequisite: Eng/Arch Design I**

Students in this course learn how to use the 3D modeling program *Inventor* to apply core principles of Science, Technology, Engineering and Mathematics (STEM). Students will also make many projects using the CNC machine and 3D printer. Each project consists of applying problem solving skills to create inventions and innovations to prototypes in order to solve problems. In the second semester, students build on their architectural knowledge by studying structural commercial design process while developing Building Information Models that could be used to design their own building. Similar to Engineering and Architectural Design I, students will have an opportunity to earn certifications in *Inventor* and *Revit*, attend competitions, field trips, and problem-solving activities. Students can earn up to 3 college credits.

**\*This course has been dual credited with Heartland Community College.**

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## **FIRE-FIGHTING I**

(860, 861)

**Class Level: 11, 12**

**Credit: 2**

**Prerequisite: None**

This course is designed to provide the student with information in the history, traditions, terminology, organization, and roles and operation of the fire service. In addition, the class covers principles of combustion and building construction characteristics. The class also contains typical job and operational functions that should provide insight into the inner workings of the fire service.

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## **FIRE-FIGHTING II**

(862, 863)

**Class Level: 12**

**Credit: 2**

**Prerequisite: Fire-Fighting I**

This course is designed to provide the student with the information needed in transitioning from firefighter level tasks into a supervisory role as a company officer. In addition, the class will cover basic principles in leadership, supervision, management, and instructing the Fire-Fighting I students during company drills. The class will also contain typical administrative duties in addition to the daily emergency operations that a company officer may encounter while working in the fire service.

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## **INTER-RELATED COOPERATIVE EDUCATION**

(920, 921)

**Class Level: 12**

**Credit: 3**

**Prerequisite: Senior status**

This course is designed to help students bridge the gap between school and the world of work. The course includes making decisions about the work place, career planning, entering the work force, the individual as a worker, and making financial decisions. Students also study different types of training, completing job resumes, applying for jobs, working with others, using credit, and buying insurance. The purpose of this course is twofold; students are provided practical work experience while still in high school and gain practical experience in applying for and interviewing for jobs. This work experience provides on-the-job training in the career area of the student's choice. The students will take regularly scheduled classes part of the day and a co-op work experience the other part of the day totaling a minimum of 15 hours per week. Students must apply through the LACC and will be interviewed.

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**MEDICAL TERMINOLOGY AND HEALTH CAREERS**

(866, 867)

**Class Level: 11, 12****Credit 2****Prerequisite: None**

This course will provide a solid foundation of Medical Terminology and relate that terminology to various health related careers. Emphasis will be placed on correct spelling, pronunciation and abbreviation use. Combining prefixes, roots, and suffixes to form appropriate terminology and relate that terminology to body structure and function, disease and disorder processes, and medical/surgical procedures will be the structure of the course. The course is focused on providing the student with a basic working knowledge of medical terms and applying those terms to the health care field. It will also provide a foundation of knowledge for the student to build on. Students will also explore many related career opportunities in health related fields. Clinical experience and job shadowing will be offered as part of the course.

**\*This course has been dual credited with Heartland Community College.**

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**MANUFACTURING I**

(840, 841)

**Class Level: 11, 12****Credit: 2****Prerequisite: None**

This course provides an overview of how robotics and computer numerically controlled machines (CNC) drive the manufacturing of a variety of industrial and commercial products we use every day. Students will learn how to read blueprints; use precision instruments, scanners, and run a robot and CNC. Students will use their skills on hands-on projects and feel confident to continue their education after high school with an apprenticeship or associate's degree for even greater opportunities.

**\*This course has been dual credited with Heartland Community College.**

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**WELDING TECHNOLOGY I**

(850, 851)

**Class Level: 11, 12****Credit: 2****Prerequisite: None**

This course assists students in gaining the knowledge and developing the basic skills needed to be successful in welding technology. Units of instruction include SMAW and MIG welding, metallurgy, cutting metal using arc, plasma and oxy-gas. In addition, students learn the basics of blueprint reading, applied math including use of formulas, geometry, and conversions, precision measuring, applied reading, material layout, and production process planning.

**\*This course has been aligned with the American Welding Societies (AWS) S.E.N.S.E. program, and students are given the opportunity to become an AWS entry level certified welder with the completion of this program.**

**\*This course has been dual credited with Heartland Community College.**

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**WELDING TECHNOLOGY II**

(852, 853)

**Class Level: 12****Credit: 2****Prerequisite: Welding Technology I**

This course builds on the skills and concepts introduced in Welding I and provides more in-depth skill development in various types of welding including horizontal, vertical, overhead, and circular techniques. Students also explore the use of robotic and automated production welding.

**\*This course has been aligned with the American Welding Societies (AWS) S.E.N.S.E. program, and students are given the opportunity to become an AWS entry level certified welder with the completion of this program.**

**\*This course has been dual credited with Heartland Community College.**

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