

TECHNOLOGY CAMPUS

The Lake County High Schools Technology Campus in Grayslake, Illinois offers a variety of highly specialized courses designed to provide Junior and Senior students with applied career skills. A limited number of junior and senior students who have completed required courses at Mundelein High School and demonstrated an interest in vocational preparation will be enrolled.

Mundelein High School students must fill out an application and be accepted in order to attend. Students will be accepted into a specific program on a first come, first served basis once the Technology Campus has received a completed application. Excessive absences from both Mundelein High School and the Technology Campus will interfere with a student's acceptance or continuation in the program.

Students who attend the Technology Campus programs will earn three (4) credits for successful completion of a one (1) year program. Cosmetology students will earn four (5) credits.

Many Tech Campus courses require students to purchase clothing and equipment at the student's expense. The clothing and equipment are specific to the course and may include: tools, safety items, shoes, and uniforms which students keep. Financial assistance is not available through Tech Campus. Financial assistance *may* be available through Mundelein High School. Visit the Technology Campus website at www.techcampus.org for more information. Costs of fees/materials are subject to change.

TECHNOLOGY CAMPUS PLACEMENT CRITERIA

All placements will be made based on approval of the Technology Campus Committee (comprised of MHS counselors and administration).

1. All placements will be made based on approval of the Technology Campus Committee (comprised of MHS counselors and administration).
2. All Students must have obtained a minimum number of credits by the beginning of the school year they wish to attend Tech Campus. Juniors = 12 credits, Seniors = 17 credits
3. All students' attendance and discipline at MHS will be reviewed by the Committee prior to approving a student's application for Tech Campus (students may be denied enrollment into Tech Campus for poor attendance or discipline issues that occurred at MHS).
4. Any student that fails the first year of Tech Campus will be ineligible for the second year.
5. Students dropped from Tech Campus for disciplinary reasons, lack of attendance, or lack of interest will be subject to pay the Tech Campus tuition incurred by District 120.

MHS/TECHNOLOGY CAMPUS INFORMATION

1. Bus transportation from Mundelein High School is **REQUIRED** for students attending Tech Campus. Any deviation from this practice **MUST** be by **prior written approval** between Mundelein High School administration and the Technology Campus administration.
2. The bus times for Tech Campus will always remain the same despite the MHS bell schedule:
Session 1 departure 7:50 am arrival 10:50 am
Session 3 departure 12:40 pm arrival 3:25 pm (5:00pm for Cosmetology)
3. On late start days ("F" schedule) AM Tech Campus students will need to provide their own transportation to MHS to take the bus to Tech Campus.
4. To report an absence the parent/guardian **must** call Mundelein High **and** Technology Campus.

INFORMATION TECHNOLOGY

<p>GAME PROGRAMMING AND VIRTUALIZATION/</p> <p>Prerequisite: Algebra and basic programming Open to: Grades 11-12 Length: Full year Credits: 3.0 Fee: \$5.00 Lab fee Supplies purchased by student required</p> <p>Course Number: TE3650</p>	<p>This program is designed to provide instruction in the computer science field. Students will be able to develop video games & professional programs using realistic hands-on interdisciplinary exercises. The game programming curriculum will focus on industry standard coding languages. Additional training will cover 2D and 3D animation. Additionally, students will work with virtual reality technologies providing experience in virtualizations allowing complex data or situations in a simulated real-world application.</p> <p>*Students may be eligible for up to 3 dual credits with the College of Lake County.</p>
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<p>3D GAMING AND CYBERSECURITY</p> <p>Prerequisite: Algebra and basic programming Open to: Grades 11-12 Length: Full year Credits: 3.0 Fee: \$5.00 Lab fee Supplies purchased by student required</p> <p>Course Number: TE4650</p>	<p>Students learn to think and act as innovators, adept at using a variety of technologies and processes to express ideas and solve gaming and mobile media design problems, as well as execute security measures to keep your data secure. This program will prepare students to develop software applications and other interactive media for mobile devices such as smartphones, tablets, and 3-D Game Applications that can run on a variety of platforms.</p> <p>*Students may be eligible for up to 9 dual credits with the College of Lake County.</p>
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VISUAL ARTS

<p>MULTIMEDIA 1 & 2</p> <p>Prerequisite: Computer Applications Open to: Grades 11-12 Length: Full year Credits: 3.0 Fee: \$55.00 Lab fee (1st year students) \$50.00 Lab fee (2nd year students) \$5.00 lock replacement fee Supplies purchased by student required</p> <p>Course Number: TE3700, TE4700</p>	<p>This program prepares students for a variety of design careers in photography, desktop publishing, graphic design, entry-level animation and digital film editing. Students will design and produce a variety of print and digital media utilizing a variety of software applications including but not limited to: Adobe® Illustrator®, Adobe® Photoshop®, Adobe® InDesign® and Adobe® Premier.</p> <p>*Students may be eligible for up to 9 dual credits with the College of Lake County.</p>
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COMPUTER NETWORKING

<p>COMPUTER SUPPORT SERVICES 1 & 2</p> <p>Prerequisite: None Open to: Grades 11-12 Length: Full year Credits: 3.0 Fee: \$35.00 Lab fee Supplies purchased by student required</p> <p>Course Number: TE3250, TE4250</p>	<p>This program will prepare students for careers in the computer field. Students will install, maintain, upgrade, and repair computer hardware and software on workstations and network systems. This program will prepare students for the A+ Certification Exam. Upon successful completion of this program, students will be able to diagnose hardware or software failures and perform the actions necessary to correct the problems based on knowledge of the system's operation. Additionally, students will learn how to provide the necessary support services to system users. Internships are available to students with local business partners.</p> <p>*Students may be eligible for up to 3 dual credits with the College of Lake County.</p>
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<p>LASER TECHNOLOGY 1 & 2</p> <p>Prerequisite: Algebra 1 and Geometry-enrolled in Algebra 2, two years of science Open to: Grades 11-12 Length: Full year Credits: 3.0 Fee: \$15.00 Lab notebook</p> <p>Course Number: TE3950, TE4950</p>	<p>This program will offer students hands on learning with state-of-the art optical and laser equipment. Photonics is the technology of generating and harnessing light and other forms of radiant energy whose quantum unit is the photon. Photonics involves cutting-edge uses of lasers, optics, fiber-optics, and electro-optical devices in numerous and diverse fields of technology, manufacturing, health, telecommunication, environment monitoring, homeland security, aerospace, green construction and many others.</p> <p>*Students may be eligible for up to 16 dual credits with the College of Lake County.</p>
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HUMAN SERVICES

<p>CERTIFIED NURSE ASSISTING</p> <p>Prerequisite: None Open to: Grade 12 Length: Full year Credits: 3.0 Fee: \$73.00 Lab fee (1st year students) \$53.00 Lab fee (2nd year students) \$5.00 Lock replacement fee Supplies purchased by student required</p> <p>Course Number: TE4100</p>	<p>This program is designed to prepare students for employment as nurse assistants and for future entry into nursing education programs. This program leads to a CNA certification. Training will include the development of basic nursing and cardiopulmonary resuscitation skills through lecture, laboratory demonstrations, laboratory practice, and clinical experience. Instruction in this program includes a minimum of forty clinical hours held in long-term facilities in the community. Upon successful completion of this program, students will be eligible to take the written examination for the nurse assistant state certification. Students in this program must be seniors.</p> <p>*Students may be eligible for up to 7 dual credits with the College of Lake County.</p>
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<p>COSMETOLOGY 1 & 2</p> <p>Prerequisite: None Open to: Grades 11-12 Length: Full year Credits: 4.0 Fee: \$320.00 Kit fee (1st year students) Replacement items (2nd year students) \$5.00 Lock replacement fee Supplies purchased by student required</p> <p>Course Number: TE3300, TE4300</p>	<p>The Tech Campus offers a Cosmetology program that includes nail technology. Students will acquire the 1500 hours of experience required for licensing while learning how to perform shampoos, makeovers, facials, hair-styling, manicuring, sculptured nails, permanent waving, hair coloring, and cutting. You will also learn 21st Century soft skills like putting together a resume and cover letter. Following the lab phase of the program, students will reinforce their training by working on clients in the Tech Campus Creations Salon.</p> <p>The Cosmetology program is only offered 3rd session (12:30-5:00 pm). Cosmetology students are required to attend Saturday sessions and Summer School.</p>
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<p>CRIMINAL JUSTICE</p> <p>Prerequisite: None Open to: Grades: 11-12 Length: Full year Credits: 3.0 Fee: \$48.00 Lab fee (1st year students) \$23.00 Lab fee (2nd year students) \$20.00 Program polo shirt \$5.00 Lock replacement fee Supplies purchased by student required</p> <p>Course Number: TE3350</p>	<p>This program prepares students for a career in the Criminal Justice field. Using the constitution and current laws, students will gain the police skills and legal knowledge needed to take a case from investigations to arrests and through the court trial process, finishing with corrections. Additional areas of interest will include current and past court cases, along with role-play opportunities. We will put you through police scenarios and mock trials to ensure you know every aspect of the criminal justice system.</p> <p>*This course may be eligible for articulated credit with the College of Lake County.</p>
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<p>Law Enforcement and CSI</p> <p>Course Number: TE3355</p>	<p>This program prepares students for careers in the policing field. The class will focus on police procedures that are standard to a new police officer and the steps that are necessary to take to continue into a career of policing. The class will also explore basic crime scene investigation, interview and interrogation methods, and a study of criminal investigation.</p> <p>A police background check is required to participate in job shadows, internships, and ride alongs at local police departments.</p>
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<p>LAW ENFORCEMENT & CRIME SCENE INVESTIGATION</p> <p>Prerequisite: None Open to: Grades: 11-12 Length: Full year Credits: 3.0 Fee: \$48.00 Lab fee (1st year students) \$23.00 Lab fee (2nd year students) \$20.00 Program polo shirt</p>	<p>This program prepares students for careers in the policing field. The class will focus on police procedures that are standard to a new police officer and the steps that are necessary to take to continue into a career of policing. The class will also explore basic crime scene investigation, Interview and interrogation methods, and a study of criminal investigation.</p>
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<p>\$5.00 Lock replacement fee Supplies purchased by student required</p> <p>Course Number: TE4350</p>	<p>*This course may be eligible for articulated credit with the College of Lake County.</p>
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<p>CULINARY ARTS 1 & 2</p> <p>Prerequisite: None Open to: Grade 11-12 Length: Full year Credits: 3.0 Fee: \$123.00 Lab fee (1st year students) \$42.00 Lab fee (2nd year students) Fee for uniform replacement if necessary \$5.00 Lock replacement fee Supplies purchased by student required</p> <p>Course Number: TE3400, TE4400</p>	<p>The Tech Campus Culinary program will provide you with college level technical skills in food production and food operations and will prepare you for higher education in Hospitality and Culinary management. Students will gain skills and knowledge in cold and hot food preparation, nutrition, baking, pastry, menu planning, sanitation, equipment operation, inventory control, purchasing, and front-of-the-house customer service skills. Skills will be practiced in planning, organizing, and preparing culinary creations for special events, competitions and the Tech Campus Deli.</p> <p>*Students may be eligible for up to 10 dual credits with the College of Lake County.</p>
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<p>EARLY EDUCATION & TEACHING 1 & 2</p> <p>Prerequisite: Child Development Open to: Grades 11-12 Length: Full year Credits: 3.0 Fee: \$42.00 Lab fee (1st year students) \$15.00 Lab fee (2nd year students) \$5.00 Lock replacement fee Supplies purchased by student required</p> <p>Course Number: TE3500, TE4500</p>	<p>This program is designed to prepare students for a variety of careers serving children. Students will develop skills to plan and implement age-appropriate activities in one of the two operating preschool labs. These skills include developing educational activities for the preschool children in creative arts, math, science, music, and language. Instruction will focus on the positive guidance of child behavior and all aspects of their development.</p> <p>*Students may be eligible for up to 9 dual credits with the College of Lake County.</p>
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<p>EMERGENCY MEDICAL SERVICES</p> <p>Prerequisite: None Open to: Grade 12 Length: Full year Credits: 3.0 Fee: \$145.00 Lab fee (1st year students) \$75.00 Lab fee (2nd year students) \$20.00 Program polo \$5.00 Lock replacement fee Supplies purchased by student required</p>	<p>This program prepares students to take the licensure examination of the Illinois Department of Public Health to become certified as an EMT-B. Activities include clinical experiences in a hospital emergency room and ride alongs with local Fire/EMS departments. Students will learn American Heart Association Healthcare Provider CPR, patient assessment, stabilization, and initial pre hospital medical treatment of injured and ill patients. Students in this program must be a senior in high school.</p> <p>*Students may be eligible for up to 7 dual credits with the</p>
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Course Number: TE4550	College of Lake County.
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<p>FIREFIGHTING 1 & 2</p> <p>Prerequisite: None Open to: Grades 11-12 Length: Full year Credits: 3.0 Fee: \$119.00 Lab fee (with optional textbook) \$59.00 Lab fee (w/out optional textbook) \$20.00 Program polo \$9.00 Lock & safety glass replacement fee Supplies purchased by student required</p> <p>Course Number: TE3600, TE4600</p>	<p>This program is designed to prepare students for entry-level fire fighter positions. Skills taught are: understanding fire chemistry, wearing personal protective clothing, identifying ropes, tying knots, using fire extinguishers, performing forcible entry, carrying and raising ladders, operating self-contained breathing apparatus, employing search and rescue techniques, working with ventilation tools, and practicing hose evolutions on an operating fire engine. Leadership and communication skills help prepare the student for future certification.</p> <p>*Students may be eligible for up to 3 dual credits with the College of Lake County</p>
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<p>MEDICAL ASSISTING</p> <p>Prerequisite: None Open to: Grades 11-12 Length: Full year Credits: 3.0 Fee: \$100.00 Lab fee Supplies purchased by student required</p> <p>Course Number: TE3750</p>	<p>This program introduces students to a wide variety of careers in the allied health field including medical lab technician, medical assistant, and medical office professional. Training will include medical terminology, communication, body structure and function, vital sign measurement, principles of infection control, medical instrumentation, pharmacy technology, medical office assistant certification procedures, and microscope usage.</p> <p>*Students may be eligible for up to 6 dual credits with the College of Lake County.</p>
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MANUFACTURING/INDUSTRIAL

<p>WELDING AND FABRICATION 1 & 2</p> <p>Prerequisite: Intro. to Industrial Tech. or Geometry Open to: Grades 11-12 Length: Full Year Credits: 3.0 Fee: \$130.00 Lab fee (1st year students) Replacement items (2nd year students) \$9.00 Lock & safety glass replacement fee Students must purchase their own tools</p> <p>Course Number: TE3900, TE4900</p>	<p>This program provides hands-on experiences gained from extensive practice and application of knowledge in shop safety, oxy-fuel welding and burning, arc welding (stick, MIG, TIG), plasma arc cutting, and automatic shape cutting. Layout and fit-up, blueprint reading, and weld symbols are used to fabricate a variety of metal projects. The American Welding Society (AWS) recognizes the Tech Campus Welding program as an Educational Instruction Member.</p> <p>*Students may be eligible for up to 12 dual credits with the College of Lake County.</p>
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<p>MACHINING TECHNOLOGY</p>	<p>NEW COURSE FOR 2020-2021 SCHOOL YEAR! This program develops the knowledge and skills necessary to</p>
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Prerequisite: None Open to: Grades 11-12 Length: Full Year Credits: 3.0 Course Number: TE5450	perform machining operations in order to strengthen American manufacturing by building a globally competitive machining workforce. Students learn to read and interpret blueprints, use lathes, milling and CNC machines, set up and operate metal cutting machines and use precision measuring instruments. This program meets the demands of employers for solid training in this specialized field of metal cutting operations for the creation of machined parts, specialized tooling molds, dies and prototypes.
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TRANSPORTATION

AUTOMOTIVE COLLISION REPAIR 1 & 2 Prerequisite: None Open to: Grades 11-12 Length: Full year Credits: 3.0 Fee: \$120.00 Lab fee (1st year students) \$33.00 Lab fee (2nd year students) \$9.00 Lock & safety glass replacement fee Course Number: TE3150, TE4150	This program provides students with the fundamental skills of the automotive collision repair industry. Instruction in the program emphasizes both the repair and the refinishing skills associated with restoring a damaged automobile to factory specifications. Using an industry-endorsed curriculum, students will develop core skills in automobile construction, sheet metal damage repair, MIG welding, and basic refinishing. Upon mastery of the skills in core areas, students will gain skills in damage estimating, shop management, heavy collision repair, and finish matching. *Students may be eligible for up to 9 dual credits with the College of Lake County.
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AUTOMOTIVE SERVICE 1 & 2 Prerequisite: None Open to: Grades 11-12 Length: Full year Credits: 3.0 Fee: \$111.50 Lab fee (1st year students) \$50.00 Lab fee (2nd year students) \$9.00 Lock & safety glass replacement fee Students must purchase their own tools Course Number: TE3000, TE4000	This program will provide students with a solid foundation of skills to enter the automotive service industry. Training in the program emphasizes the development of skills in the core service areas utilizing factory procedures and industry standards in the school's fully operational repair shop. Instruction will feature training on brakes, steering and suspension, electrical systems, and engine performance. Upon successful completion of this program, students will be prepared to take the ASE (Automotive Service Excellence) certification exams in the areas emphasized in the program. *Students may be eligible for up to 4 dual credits with the College of Lake County.
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PROJECT LEAD THE WAY (Specialization Courses)

INTRODUCTION TO ENGINEERING DESIGN (Semester 1) Prerequisite: None Open to: Grades 11-12 Length: 1 Semester Credits: 1.5 Fee: Course Number: TE5050	Discover the roles of an engineer and engineering technician in taking an idea from design to manufacturing or production. Using Inventor – 3D design software from Auto Desk – work on projects, activities and problems not only of interest to you, but that have global and human impacts. Work in teams to design and improve products, document your solutions, and communicate them to others. Students will learn to use 3D Printers and a Laser Engraver. This course includes about 70% computer work and 30% hands-on activities. Students are encouraged to pursue side projects in their spare time.
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<p>PRINCIPLES OF ENGINEERING (Semester 2) Prerequisite: None Open to: Grades 11-12 Length: 1 Semester Credits: 1.5 Fee: Course Number: TE5000</p>	<p>Master basic concepts needed to continue your education in engineering or engineering technology – then apply them! Students will build simple and compound machines, electric circuits, power systems, hydraulic systems, and control systems that include Vex robotics materials and RobotC software. This course includes about 60% hands-on projects and 40% computer work and engineering math applications. Students are encouraged to pursue side projects in their spare time.</p>
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<p>PRINCIPLES OF BIOMEDICAL SCIENCE Prerequisite: None Open to: Grades 11-12 Length: 1 semester (Semester 1) Credits: 1.5 Fee: Course Number: TE5350</p>	<p>This program introduces biomedical science through exciting hands-on projects and problems. Students investigate concepts of biology and medicine as they explore health conditions including heart disease, diabetes and sickle cell disease, among others. They will work to investigate the causes of these diseases and how they may ultimately lead to illness and harm.</p>
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<p>HUMAN BODY SYSTEMS Prerequisite: None Open to: Grades 11-12 Length: 1 semester (Semester 2) Credits: 1.5 Fee: Course Number: TE5080</p>	<p>In this course, students examine the interactions of body systems as they explore identity, communication, power, movement, protection and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions, such as muscle movement, reflex and voluntary action and respiration. Exploring science in action, students build organs and tissues on a skeletal model, perform four organ dissections, work through interesting real-world cases and play the role of biomedical professional to solve medical mysteries.</p>
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ROBOTICS/CIM/CEA

<p>ROBOTICS AND AUTOMATION Prerequisite: Open to: Grades 11-12 Length: Full Year (1st session only) Credits: 3.0 Fee: \$9.00 Lab fee (1st year students) \$9.00 Lock & safety glass replacement fee Students must purchase their own tools Course Number: TE5300</p>	<p>Design your robots on the computer, and then build them in real life. Start from scratch as you code on the computer, and then work with your hands in conjunction with numerous machines. You will work with CNC machines, laser machines, 3D printers and more. We will introduce you to the latest technology as you take the next step towards an engineering manufacturing career. *Students may be eligible for up to 4 dual credits with the College of Lake County.</p>
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<p>COMPUTER INTEGRATED MANUFACTURING (CIM) (Semester 1) Prerequisite: Open to: Grades 11-12 Length: 1 semester (3rd session only)</p>	<p>Students learn about the history of manufacturing, robotics and automation, manufacturing processes, computer modeling, manufacturing equipment, and flexible manufacturing systems. Students will continue to build systems using the Vex Robotics materials and RobotC software. Students will learn to program and operate a CNC machine.</p>
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Credits: 1.5 Fee: Course Number: TE 5150	
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CIVIL ENGINEERING AND ARCHITECTURE (CEA) (Semester 2) Prerequisite: Open to: Grades 11-12 Length: 1 semester (3 rd session only) Credits: 1.5 Fee: Course Number: TE5100	Students learn about various aspects of civil engineering and architecture and apply their knowledge to the design and development of residential and commercial properties and structures. In addition, students use Revit 3D design software to design and document solutions for major course projects.
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CONSTRUCTION SKILLS AND MANAGEMENT

CONSTRUCTION SKILLS AND MANAGEMENT 1 Prerequisite: Open to: Grades 11-12 Length: Full year Credits: 3.0 Fee: Course Number: TE5200	This course provides students with an introduction to careers in the field of architecture, construction contracting, and civil engineering technology, including surveying. The program offers an overview and analysis of conventional construction methods with a focus on carpentry, HVAC, electrical, plumbing, environmental impacts on construction and overall construction safety. The hands-on use of building materials and tools in various construction systems is emphasized, including basic design of temporary structures. To further enrich students' experience, case studies and guest speakers are utilized to expose students to various professions and careers in the field. The course also provides students with resources for interdisciplinary academic success. *Students may be eligible for up to 4 dual credits with the College of Lake County.
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CONSTRUCTION SKILLS AND MANAGEMENT 2 Prerequisite: Open to: Grades 11-12 Length: Full year Credits: 3.0 Fee: Course Number: TE5250	This course provides students with fundamental knowledge and skills in job planning and scheduling. Students will be involved in all phases of planning and scheduling from the process of listing and sequencing to the development of the more complicated critical path network. In addition, students will review construction specifications and how they relate to national, state, and local building codes. Topics related to job safety and Occupational, Safety, and Health Administration (OSHA) regulations will be discussed. *Students may be eligible for up to 4 dual credits with the College of Lake County.
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