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 (3) credits for successful completion of a one (1) year program. Cosmetology students will earn four (4) 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 = 14 credits, Seniors = 20 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 2	departure	10:00am	arrival	12:40pm
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

GAME PROGRAMMING AND VIRTUALIZATION/ 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 Course Number: TE3650 (Game Programming),	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. *Students may be eligible for up to 9 dual credits with the College of Lake County.

APP DEVELOPMENT AND 3D GAMING 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 Course Number: TE4650 (3D Gaming)	Mobile Media Programmers become creative coders competent in applying interactive principles and theories to mobile and 3D game development. Students learn to think and act as innovators, adept at using a variety of technologies and processes to express ideas and solve gaming as well as mobile media design problems. We prepare students to develop software applications and other interactive media for mobile devices such as: smartphone, tablets, and 3-D Game Applications that can run on a variety of platforms. *Students may be eligible for up to 9 dual credits with the College of Lake County.

VISUAL ARTS

MULTIMEDIA DESIGN 1 & 2 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 Course Number: TE3700, TE4700	This program prepares students for a variety of design careers including desktop publishing, web design, graphic design for games, and entry-level animation. Students will design and produce a variety of print and digital publications utilizing a variety of software applications and technologies including but not limited to: Adobe® Illustrator®, Adobe® Photoshop®, Adobe® InDesign®, Adobe® Flash®, Adobe® Dreamweaver®, XHTML, and CSS. *This course may be eligible for articulated credit with the College of Lake County.

PHOTOGRAPHIC DESIGN 1 & 2 Prerequisite: Photography 1 Open to: Grades 11-12 Length: Full year Credits: 3.0 Fee: $55.00 Lab fee (1st year students) $75.00 Lab fee (2nd year students) $5.00 lock replacement fee	This program provides an understanding of the photography and digital imaging industry. Students will receive extensive training in traditional black and white photography which includes taking pictures, developing in the program's dark room, and printing black and white photographs. Digital photography, portrait photography, and advertising photography skills are taught as part of the program. Photography studio skills taught include techniques for camera use, lighting placement, background, props, and layout. A major emphasis will be on digital imaging using the

Supplies purchased by student required Course Number: TE3850, TE4850	program Adobe® Photoshop™ for photograph restoration, special effects, touch ups, and manipulation. *This course may be eligible for articulated credit with the College of Lake County.

COMPUTER NETWORKING

COMPUTER SUPPORT SERVICES 1 & 2 Prerequisite: None Open to: Grades 11-12 Length: Full year Credits: 3.0 Fee: $35.00 Lab fee Supplies purchased by student required Course Number: TE3250, TE4250	This program will prepare students for careers in Computer and Electronic repair. Through "hands on" work, students will use various types of test equipment to diagnose, adjust, test and repair computers and electronic devices. Microelectronics, solid-state devises, numbering systems, and logic circuits relating to digital computers will be mastered. Students will install, maintain, upgrade, and repair microcomputer hardware and software on workstations and network systems. This program will prepare students for the A+ Certification Exam, which is a nationally recognized industry based certification for computer technicians capable of providing technical support and service in all PC environments. 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 the 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. *Students may be eligible for up to 3 dual credits with the College of Lake County.

PHOTONICS 1 & 2 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 Course Number: TE3950, TE4950	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. *Students may be eligible for up to 16 dual credits with the College of Lake County.

HUMAN SERVICES

CERTIFIED NURSE ASSISTING 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)	This program is designed to prepare students for employment as nursing 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

$5.00 Lock replacement fee Supplies purchased by student required Course Number: TE4100	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. *Students may be eligible for up to 7 dual credits with the College of Lake County.

COSMETOLOGY 1 & 2 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 Course Number: TE3300, TE4300	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, make-overs, facials, hair-styling, manicuring, sculptured nails, permanent waving, hair coloring, and cutting. Following the lab phase of the program, students will reinforce their training by working on clients in the Tech Campus Creations Salon. The Cosmetology program is only offered 3rd session (12:30-5:00 pm). Cosmetology students are required to attend Saturday sessions and Summer School.

INTRODUCTION TO CRIMINAL JUSTICE 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 Course Number: TE3350	The class will cover ethical considerations for criminal justice professionals and challenges to police officers as well as constitutional considerations for policing. The class will also cover functions and structure of the court and judicial system. Further topics will include correctional institutions, current and pending court cases, juvenile justice and role playing opportunities related to criminal justice. *Students may be eligible for up to 6 dual credits with the College of Lake County

INTRO TO POLICING 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 Course Number: TE3350	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. *Students may be eligible for up to 6 dual credits with the College of Lake County

CULINARY ARTS 1 & 2 Prerequisite: None Open to: Grade 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 Course Number: TE3400, TE4400	This program provides culinary and hospitality education designed to prepare students for the many positions in the hospitality industry. 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. *Students may be eligible for up to 10 dual credits with the College of Lake County.
EARLY CHILDHOOD EDUCATION 1 & 2 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 Course Number: TE3500, TE4500	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. Internships, job shadows, portfolio development. *Students may be eligible for up to 6 dual credits with the College of Lake County.
EMERGENCY MEDICAL SERVICES Prerequisite: None Open to: Grades 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 Course Number: TE4550	This program prepares students to take the licensure examination of the Illinois Department of Public Health to become 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 may be eligible for up to 7 dual credits with the College of Lake County.
FIREFIGHTING 1 & 2 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	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.

Supplies purchased by student required Course Number: TE3600, TE4600	*Students may be eligible for up to 3 dual credits with the College of Lake County

MEDICAL ASSISTING Prerequisite: None Open to: Grades 11- 12 Length: Full year Credits: 3.0 Fee: $100.00 Lab fee Supplies purchased by student required Course Number: TE3750	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. *This course may be eligible for articulated credit with the College of Lake County.

MANUFACTURING/INDUSTRIAL

AUTOMATION, ROBOTICS, AND MECHATRONICS 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	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.

WELDING AND FABRICATION 1 & 2 Prerequisite: Intro. to Industrial Tech. or Geometry Open to: Grades 11- 12 Length: 1 Semester Credits: 1.5 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 Course Number: TE3900, TE4900	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. *Students may be eligible for up to 8 dual credits with the College of Lake County.

TRANSPORTATION

AUTOMOTIVE SERVICE 1 & 2 Prerequisite: None Open to: Grades 11- 12 Length: Full year	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.

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	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. *This course may be eligible for articulated credit with the College of Lake County.

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 21 dual credits with the College of Lake County.

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	In this course students use 3D solid modeling design software to help them design solutions to solve proposed problems. Students will learn how to document their work and communicate solutions to peers and members of the professional community. The major focus of the IED course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards and technical documentation.

PRINCIPLES OF ENGINEERING (Semester 2) Prerequisite: None Open to: Grades 11- 12 Length: 1 Semester Credits: 1.5 Fee: Course Number: TE5000	In this course students will be exposed to some of the major concepts encountered in a postsecondary engineering course of study. Students have an opportunity to investigate engineering and high tech careers along with developing skills and understanding of course concepts. Students employ engineering and scientific concepts t find solutions to engineering design problems. They develop problem solving skills and apply their knowledge of research and design to create solutions to various challenges. Students also learn how to document their work and communicate their solutions to peers and members of the professional community.

COMPUTER INTEGRATED MANUFACTURING (Semester 1) Prerequisite: Open to: Grades 11- 12 Length: 1 semester (3rd session only) Credits: 1.5	This course identifies the opportunities related to understanding manufacturing by providing students with the opportunities to come up with ideas, testing scientific principles and perfecting the product engineering. At the same time, teaching students about manufacturing processes, product design, robotics, and automation. Students can earn

Fee: Course Number: TE 5150	a virtual manufacturing badge recognized by the National Manufacturing Badge system.

CIVIL ENGINEERING AND ARCHITECTURE (Semester 2) Prerequisite: Open to: Grades 11-12 Length: 1 semester (3rd session only) Credits: 1.5 Fee: Course Number: TE5100	In this course students will get a chance to discover Architecture and Engineering from the perspective of making a difference and the potential to enrich the human experience with structures by grasping the understanding of building and site development. In addition students will apply math, science and standard engineering practices to design both residential and commercial projects through the use of REVIT a 3D architecture design software.

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 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.

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 skill in job planning and scheduling, while continuing skill growth from year I. 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 also be discussed.

ARTICULATED CREDIT WITH THE COLLEGE OF LAKE COUNTY

Lake County High Schools Technology Campus Program		CLC Course		Dual Credits
Auto Collision Repair Technology		ABR 110	Non-Structural Repair I	5
		ABR 111	Non-Structural Repair II	5
		ABR 130	Automotive Refinishing I	3
		ABR 131	Automotive Refinishing II	5
		ABR 215	Automotive Detailing	3
Auto Service		AUT 170	Introduction to Automotive	4
Construction Skills		CMT 115	Carpentry I	3
		CMT 116	Carpentry II	3
Certified Nurse Assisting		NUR 110	Nurse Assisting	7
Computer Support Services		CIT 130	Operating Systems for A+ Certification	3
		ELT 151	PC Hardware Fundamentals	3
		ELT 152	PC Peripherals and Troubleshooting	3
Criminal Justice Program		CRJ 121	Introduction to Criminal Justice	3
		CRJ 122	Introduction to Policing	3
Culinary Arts		HCM 110	Introduction to Hospitality Industry	3
		HCM 113	Serv-Safe: Food Service Sanitation	1
		HCM 111	Culinary Principles I	3
Early Childhood Education		ECE 116	Creative Activities	3
Emergency Medical Services		EMT 111	Emergency Medical Technician - Basic	7
Fire Fighting Program		FST 111	Introduction to Fire Science	3
Multimedia Design		DMD 111	Introduction to Digital Media	3
		DMD 116	Web Design and Development	3
Medical Assisting		MOA 111	Introduction to Medical Assisting	4

DUAL CREDIT WITH THE COLLEGE OF LAKE COUNTY

Lake County High Schools Technology Campus Program		CLC Course		Dual Credits
Auto Collision Repair Technology		ACR 110	Introduction to Collision Repair	3
Auto Collision Repair Technology		ACR 131	Automotive Refinishing I	3
Auto Collision Repair Technology		ACR 215	Automotive Detailing	3
Construction Skills and Mgt.		CMT 115	Carpentry I	3
Construction Skills and Mgt.		CMT 116	Carpentry II	3
Certified Nurse Assisting		NUR 110	Nurse Assisting	7
Computer Support Services		CIT 130	Operating Systems for A+ Certification	3
Criminal Justice Program		CRJ121	Introduction to Criminal Justice	3
Criminal Justice Program		CRJ122	Introduction to Policing	3
Culinary Arts		HCM110	Introduction to the Hospitality Industry	3
Culinary Arts		HCM113	Serv-Safe: Food Service Sanitation	1
Culinary Arts		HCM111	Culinary Principals I	3
Culinary Arts		HCM212	Menu Marketing and Management	3
Early Childhood Education		ECE 116	Creative Activities	3
Emergency Medical Services		EMT 111	Emergency Medical Technician - Basic	7
Fire Fighting Program		FST111	Introduction to Fire Science	3
3D Game Programming and App Development		CIT120	Introduction to Computers	3
3D Game Programming and App Development		CIT 177	3D Game Development	3
Game Programming and Virtualization		CIT176	2D Game Development	3
Mechatronics		ARM 116	Mechatronics Graphics I	1
Mechatronics		ARM 117	Mechatronics Graphics II	1
Mechatronics		ARM 118	Mechatronics Graphics III	1
Mechatronics		MET 299	Mechatronics Engineering Technology	1
Multi Media Design		DMD 233	Digital Video Editing	3

Articulation agreement

An articulation agreement is a written, formal document that specifies the process by which a high school student may earn college credit through successful completion of certain high school courses where students achieve learning outcomes, skills and abilities comparable to those covered in a college course. The process allows high school students to move smoothly into postsecondary education without experiencing delay or duplication of courses. Generally, the college credit is not awarded until the student is enrolled at the college issuing the articulation agreement and until the student has satisfactorily completed a designated number of credit hours or terms. Because the courses involved are at the high school level, the student pays no tuition.

Dual Credit

Dual credit provides the opportunity for high school students to enroll in courses approved by a postsecondary institution for college credit. The student is able to receive credit toward a high school diploma for such courses and upon graduating from high school receives college credit from the postsecondary institution involved and other colleges and universities, which accept transfer credit from that postsecondary institution. Dual credit courses are generally advanced-level courses and are open to students who qualify for admission for college-level work. The high school student generally pays tuition, though it may be reduced, for dual credit courses. In order for the course to meet the dual credit criteria, the postsecondary institution may dictate the textbook, syllabus, grading system, teacher qualifications and other course requirements.