

**PROGRAM GUIDE** 

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For the latest offerings, visit www.techcampus.org/programs

# **ABOUT US**





### **LOCATED IN GRAYSLAKE, ILLINOIS**

2,000+ JUNIORS AND SENIORS FROM

LAKEAND **MCHENRY** COUNTY.



While at Tech Campus, students can compete at SkillsUSA at the State and National levels. Over the past 20+ years, Tech Campus has won several titles, ranking us among the best CTE schools in the country.



**PROGRAMS** IN A VARIETY OF CAREER PATHWAYS.

**BUSINESS AND INDUSTRY** 350+ **PARTNERS.** 









OF STUDENTS PARTICIPATE IN 50% INTERNSHIPS,
JOB SHADOWS OR JOB SHADOWS OR APPRENTICESHIPS.



**COLLEGE CREDITS** 

AVAILABLE ACROSS 19 PROGRAMS.

**CERTIFICATIONS** AVAILABLE ACROSS 17 PROGRAMS.

> For the latest numbers, visit www.techcampus.org



# **3D GAMING & CYBERSECURITY**

#### **PROGRAM OVERVIEW**

This program is designed to give you a practical perspective on computer security, and approaches it in a way that anyone can understand. Learn how networks handle routing, DNS, load-balancing, and more. You'll receive light training in software development applications for mobile devices and gaming applications that can run on a variety of platforms, then execute security measures to keep that data secure.

### WHAT WILL MY CLASSES BE LIKE?

Explore the fundamental building blocks of Cybersecurity. We will delve into Cybersecurity, giving a working knowledge of the vocabulary and the practice of protecting systems, networks, and programs from digital attacks. These cyberattacks are usually aimed at accessing, changing, or destroying sensitive information, extorting money from users, or interrupting normal business processes. This program will help you discover what cyber path is right for you!





## **AUTOMOTIVE COLLISION REPAIR**

#### **PROGRAM OVERVIEW**

Instruction in this two-year program emphasizes both the repair and the refinishing skills associated with restoring a damaged automobile to factory specifications. Using an industry-endorsed curriculum, you will develop core skills in automobile construction, sheet metal damage repair, MIG welding, and basic refinishing. Upon mastery of the skills in core areas, you'll advance into damage estimating, shop management, heavy collision repair, and finish matching.

### WHAT WILL MY CLASSES BE LIKE?

In this program, you'll learn sheet metal and welding techniques, body alignment, finishing, and painting to get cars back on the road looking good. Internships take your hands and mind to the extreme, helping you discover which area of auto body is for you. Employers are always looking for highly qualified technicians – why can't it be you?







# **AUTOMOTIVE SERVICE**

#### **PROGRAM OVERVIEW**

This two-year program will provide you with a solid foundation of skills to enter the automotive service industry. Instruction will feature training on brakes, steering and suspension, electrical systems, and engine performance. Upon successful completion of this program, you'll be prepared to take the ASE (Automotive Service Excellence) certification exams in the areas emphasized in the program.

### WHAT WILL MY CLASSES BE LIKE?

The four phases of our Automotive Service program (brakes, steering and suspension, electrical systems, and engine performance) will better prepare you for today's employers. You may even have a chance to work in a dealership as a paid intern while attending the Tech Campus. The program covers all the basics you need to start as an automotive technician. So gear up and strap yourself in for a high performance career.



#### **PROJECT LEAD THE WAY:**

# **BIOMEDICAL SCIENCE**





#### **PROGRAM OVERVIEW**

In year one, you'll begin with Principles of Biomedical Science (PBS) and Human Body Systems (HBS). In PBS, you'll investigate concepts of biology and medicine as you explore health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. In HBS, you'll build organs and tissues on a skeletal model, perform 4 organ dissections, work through interesting real-world cases, and play the role of a biomedical professional to solve medical mysteries.

In year two, you'll study Medical Interventions and Biomedical Innovation. Medical Interventions will have you exploring 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. You'll build on the knowledge and skills gained from previous sections in Biomedical Innovation to design innovative solutions for the most pressing health challenges of the 21st century.





# **CERTIFIED NURSE ASSISTING**

#### **PROGRAM OVERVIEW**

Training in this program 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, you will be eligible to take the written examination for the nurse assistant state certification. *Students must be 16 years of age*.

#### WHAT WILL MY CLASSES BE LIKE?

You will study how to help people recovering from sickness and those that are disabled or injured. Practice these skills in a real hospital setting or in a nursing home on clinical internships. Turn your passion for helping others into a state nurse assistant certification while still in high school. Certified Nurse Assistants are in high demand. Your heart for helping others can make a big difference!





## **COMPUTER SUPPORT SERVICES**

#### **PROGRAM OVERVIEW**

This two-year program will prepare you for careers in the computer field. You will learn how to install, maintain, upgrade, and repair computer hardware & software on workstations and network systems. It will also prepare you for the A+ Certification Exam. Upon successful completion of this program, you'll 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.

#### WHAT WILL MY CLASSES BE LIKE?

Does the challenge of dismantling a computer and putting it back together sound cool to you? As a computer technician, you'll have to know how to fix basic and advanced computer problems. You will learn how to troubleshoot hardware and software issues and how to upgrade computers for the latest high powered applications. Before you know it, you'll be able to build your own computer.





### **CONSTRUCTION SKILLS & MANAGEMENT**

### **PROGRAM OVERVIEW**

The first year of this 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 your experience, case studies and guest speakers are utilized to expose you to various professions and careers in the field.

In year two, you will learn all phases of planning and scheduling from the process of listing and sequencing to the development of the critical path network. In addition, you 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.



# COSMETOLOGY





#### **PROGRAM OVERVIEW**

The Tech Campus offers a two-year Cosmetology program that includes nail technology. Over the course of the program, you 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. Following the lab phase of the program, you'll reinforce your training by working on clients in the Tech Campus Creations Salon and Spa.

### WHAT WILL MY CLASSES BE LIKE?

You'll keep pace with the fashion world through practice, instructor demonstrations, and working on clients in the Tech Campus Creations Salon and Spa. Internships in local salons are a great way to help you decide on your specialty. Our program puts you a cut above the rest as a hair stylist, nail technician, manicurist, makeup artist, or even a skin care specialist.

#### **JOB OPPORTUNITIES**

Color/Perm Specialist
Esthetician
Hair Designer
Hair Stylist
Makeup Artist
Manicurist
Nail Technician
Platform Artist
Product Representative
Salon Owner
TV/Movie Studio Artist







### **CRIMINAL JUSTICE**

#### **PROGRAM OVERVIEW**

This program will cover ethical considerations for criminal justice professionals and challenges to police officers as well as constitutional considerations for policing. It 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.

#### WHAT WILL MY CLASSES BE LIKE?

You will learn the legal process starting from the investigation, to the arrest, and the law behind it all. You will practice police tactical response maneuvers, courtroom proceedings through mock trials, and collecting evidence at a crime scene. All of this will bring you one step closer to becoming a police officer enforcing the law, a lawyer safeguarding the judicial process, or a correctional officer providing rehabilitation.



## **CULINARY ARTS**





#### **PROGRAM OVERVIEW**

This two-year program provides culinary and hospitality education designed to prepare you for the many positions in the hospitality industry. You'll 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 will be practiced in planning, organizing, and preparing culinary creations for special events, competitions, and the Tech Campus Café.

#### WHAT WILL MY CLASSES BE LIKE?

First you'll learn what it takes to operate a safe and sanitary kitchen. Then knife skills, food preparation, cooking methods, nutrition, menu planning, and inventory control follow. After that, you'll serve up your tasty creations in the Tech Campus Café. Imagine yourself as a chef at a fine restaurant, a pastry artist at a four star hotel, the owner of a catering company, or working on a cruise ship while experiencing the taste of success!





## **EARLY EDUCATION & TEACHING**

#### **PROGRAM OVERVIEW**

This two-year program is designed to prepare you for a variety of careers serving children. You'll learn how to plan and implement age-appropriate activities in creative arts, math, science, music, and language for preschool children in the Tech Campus Preschool. Instruction will focus on the positive guidance of child behavior and all aspects of their development.

#### WHAT WILL MY CLASSES BE LIKE?

Start off by discovering how to guide child behavior and promote child safety and nutrition. Plan activities in art, music, science, math, language, large motor, and drama in one of our two preschool labs. Once you understand the emotional, social, intellectual, and physical aspects of young children, you can play an important role in making a positive difference in a child's life.





## **EMERGENCY MEDICAL SERVICES**

#### **PROGRAM OVERVIEW**

This program prepares you 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. You'll also 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 seniors.

#### WHAT WILL MY CLASSES BE LIKE?

Learn how teamwork can make a lifesaving difference by mastering rescue techniques used by EMTs. Lessons in anatomy show you how the human body works, transforming you into an expert first responder. You'll also work alongside emergency room doctors, nurses, and paramedics in area hospital emergency rooms and fire departments during your required 40 hour internship.







## **FIREFIGHTING**

### **PROGRAM OVERVIEW**

This program is designed to prepare you for entry-level firefighter positions. Topics covered include fire chemistry, personal protective clothing, identifying ropes, tying knots, using fire extinguishers, performing forcible entry, carrying and raising ladders, operating a self-contained breathing apparatus, employing search and rescue techniques, working with ventilation tools, and practicing hose evolutions on an operating fire engine.

### WHAT WILL MY CLASSES BE LIKE?

As you train to become a firefighter, you'll learn how to extinguish, confine, or escape from fire. Begin by learning fire suppression, fire chemistry, forcible entry, and search and rescue techniques. Then practice what you've learned by performing drills with ropes, ladders, hoses, and a fire engine, and ride along with local fire departments to see the skills you've learned in action.





### **GAME PROGRAMMING & VIRTUALIZATION**

#### **PROGRAM OVERVIEW**

This program is designed to provide instruction in the computer science field. You'll 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. You'll also work with virtual reality technologies that provide experience using complex data in a simulated real-world application.

#### WHAT WILL MY CLASSES BE LIKE?

First, you'll start with the fundamentals of programming. You're able to work at your own pace to understand the basics of programming and develop problem solving skills. Once you have mastered the basics, you'll learn what it takes to design a video game from scratch. You will also learn how to create 3D characters and how to animate them. Combine all your skills to explore a career in game or mobile app development.





# **INDUSTRIAL TECHNOLOGY**

#### **PROGRAM OVERVIEW**

Our Industrial Technology program, located at the College of Lake County's new Advanced Technology Center, will prepare you to work in a modern manufacturing environment, developing the skills you need to maintain, repair, and operate machinery and equipment in a high-tech, industrial setting. You'll gain hands-on experiences in hydraulics, machine alignment, electricity, and mechanical fundamentals. After acquiring skills in electronics, computerized equipment maintenance and preventative/predictive maintenance, you'll have the confidence and ability to work for industrial manufacturing companies, food manufacturing/processing plants, farms, industrial contract service providers, machine shops, construction companies, and welding/fabrication shops.







## LASER TECHNOLOGY

#### **PROGRAM OVERVIEW**

Held at the College of Lake County, this two-year program provides training in photonics using state-of-the-art optical and laser equipment. Photonics is the technology of harnessing light and other energy whose quantum unit is the photon. It involves cutting-edge uses of lasers, optics, fiber-optics, and electro-optical devices in diverse fields of manufacturing, healthcare, telecommunication, environment monitoring, homeland security, aerospace, green construction and many others.

#### WHAT WILL MY CLASSES BE LIKE?

First, you will learn electronic laboratory techniques focusing on DC and AC circuit fundamentals using what you've learned in algebra and geometry. Then comes the principles of generating and harnessing light through the use of lasers and optics, fiber optics, solar cells and other applications. Light up your career prospects by learning photonics!





# **LAW ENFORCEMENT & CSI**

### **PROGRAM OVERVIEW**

This program prepares you 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 continue into a policing career. The class will also explore basic crime scene investigation, interview and interrogation methods, and a study of criminal investigation. A police background check is required to participate in job shadows, internships, and ride-alongs at local police departments.

#### WHAT WILL MY CLASSES BE LIKE?

Have you ever seen *Chicago PD* or *CSI* on television and wondered how the crime was solved or why the judge withdrew evidence? You will learn the legal process starting from the investigation, to the arrest, and the laws behind it all. You will practice police tactical response maneuvers, courtroom proceedings through mock trials, and collecting evidence at a crime scene. Find out which profession is right for you!



# **MEDICAL ASSISTING**





#### **PROGRAM OVERVIEW**

This program introduces you 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.

#### WHAT WILL MY CLASSES BE LIKE?

You'll be trained to work closely with physicians, physician assistants, and nurses through hands-on activities on how to read vital signs, sterilize medical equipment, and perform diagnostic testing. You'll learn about human anatomy, how to receive patients, and how to transcribe medical records. Join the growing healthcare field today!







## **MULTIMEDIA DESIGN**

#### **PROGRAM OVERVIEW**

In the first year of Multimedia Design, you'll be introduced to design, art, and digital media through the exploration of 2D and 3D composition. Software programs such as Adobe Photoshop, Illustrator, and InDesign will be utilized to teach design concepts and create compositions. You'll also cover the basics of HTML website creation and the process of creating complex websites through the Adobe XD software. After second semester, you'll become certified in Adobe applications.

The second year has been developed to introduce you to digital video editing and other areas in the field of multimedia that coincide with the video editing process. You'll explore the art of video creation from capturing imagery, sound, editing, and exporting video. You'll also explore the world of 2D animation from scriptwriting, storyboarding, transferring drawings to digital renderings, working with different file formats, and more.





# **WELDING & FABRICATION**

#### **PROGRAM OVERVIEW**

This two-year 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.

#### WHAT WILL MY CLASSES BE LIKE?

You'll learn MIG, TIG, stick, plasma, laser beam, electron beam, oxyacetylene, and electric arc techniques to join metals like steel and aluminum together. From ocean liners to mountain bikes, construction equipment to race cars, and oil platforms to space shuttles, welding holds the world together, so get fired up about a hot career in welding!



#### BENEFITS TO ATTENDING TECH CAMPUS

Hands-On Training
Internships
College Credit
Career Expositions
Certifications
Relationship Building
Free Tuition

#### **HOW TO ENROLL**

- 1. Pick a program
- 2. Meet with your high school counselor to put a Tech Campus program into your schedule
- 3. Submit an application at www.techcampus.org
- 4. Come to Tech!

### **PARTICIPATING HIGH SCHOOLS**

Alden-Hebron Libertyville
Antioch Mundelein
Deerfield North Chicago
Grant Richmond-Burton

Grayslake Central Round Lake Grayslake North Stevenson Highland Park Vernon Hills

Johnsburg Warren
Lake Forest Waukegan
Lake Zurich Wauconda
Lakes Zion-Benton

### **EQUAL OPPORTUNITY STATEMENT**

It is the policy of the Lake County Tech Campus not to discriminate on the basis of race, color, age, sex, religious beliefs, creed, ancestry, national origin, physical and mental handicap or disability, sexual orientation, status as homeless, or actual or potential marital or parental status, including pregnancy with respect to its educational programs, enrollments, activities or employment policy. This policy of non-discrimination is in compliance with Titles VI and IX and Section 504.



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