

# Cleveland

CITY SCHOOLS

Career and Technical Education



# **ABOUT US**

Cleveland's Career & Technical Education consists of 12 nationally recognized career clusters with the ultimate goal of preparing students for success at the postsecondary level and in their chosen careers. These programs offer students a direct pathway to college and/or career and lead to meaningful, high-wage employment. Students in our CTE programs graduate with industry licenses and certifications as well as college credit.

Cleveland City Schools is pleased to offer a large variety of "hands on" career and technical education classes. Newly remodeled classrooms and labs, as well as state of the art equipment are available at no cost to high school students in the Cleveland area.

We invite you to sign up for any classes that you are interested in. To enroll, visit with your school counselor.

Any course throughout this course catalog marked with an astric(\*) is available for students at the 9th grade level.

# PREPARING STUDENTS FOR HIGH-SKILL, HIGH-WAGE, AND IN-DEMAND CAREERS

## **DUAL CREDIT/DUAL ENROLLMENT**

Dual Credit and Dual Enrollment courses prepares students for the transition to college by earning college credit in high school, and helps students jump ahead in their post-secondary education.

### INDUSTRY CERTIFICATIONS

Industry certifications (IC) are earned through career and technical education programs and courses. High school students are encouraged to focus their elective credits on robust, career-aligned learning pathways. As it pertains to industry certifications, all department-promoted certifications are aligned with postsecondary and employment opportunities and with the competencies and skills that students should have acquired through their chosen programs of study. Cleveland High School offers Industry Certifications in the following career pathways:

- Automotive
- Culinary Arts
- Digital Media
- · Health Science

- Business
- Cybersecurity
- Engineering
- Robotics

## **CAREER & TECHNICAL STUDENT ORGANIZATIONS**

An integral part of CTE is vibrant student organizations which engage students in leadership and skill development, service learning, and competitions with students at other schools at the district, state and national level. These activites give students recognition and help them develop cofidence and skills that prepare young people to become productive citizens and leaders in their communities.



























Are you looking for a place to belong that begins your first day in high school? Do you want to have fun in class and with your fellow students after school? If so, then Air Force Junior ROTC is the program for you. Participation in extracurricular activities is not required and students can simply take the class, but if you want to enjoy the full extent of the program we offer activities such as, Marksmanship, Raiders, Color Guard, Drill, Cyber Patriot, Academic Team and more. AFJROTC is a national-level citizenship program that will build leadership and character traits that colleges look for on a college resume. AFJROTC is grounded in the Air Force core values of "integrity first, service before self, and excellence in all we do." You'll be joining a program of more than 880 Air Force Junior ROTC units world-wide and over 125,000 high school cadets in the program. Most JROTC Cadets return to our program for one reason... the sense of family. Will you join our family? Courses Offered

AFJROTC - Fall\* AFJROTC - Spring\*







Automotive Technology is a fun filled class packed with lots of hands-on learning,

Including: learning how to use these tools and equipment.

- \*\*Above Ground Vehicle Hoist.
- \*\*Impact-Wrench to take Wheels off of a vehicle & perform a brake job or do a tire rotation,
- \*\*Sockets & Wrenches to do things like a Tune-Up or an Oil Change. We also learn how to use the Autel MaxiSys Elite Scan Tool which is a handheld computer that hooks up to the car's on-board computer and talks to it. This scan tool tells you what the car is doing correctly and also what it is doing wrong. CHS Automotive will give you the hands-on skills you need to either enter the job force during & after high school or transfer from high school to a technical college like TCAT Athens.

### Courses Offered

Automotive 1\*
Automotive 2
Automotive 3 - Automotive 3 DE
Automotive 4 - Automotive 4 DE
Work-Based Learning







Aviation is a course offered at Cleveland High School that enables the student to learn and experience flight, without ever leaving the classroom. Through the courses offered students will have the chance to explore many different aspects and careers offered in the Aviation industry. Our goal through these Aviation courses is to open your eyes to the many different possibilities within the Aviation community. By the end of the courses you should feel prepared and ready to take your next step towards becoming a pilot or UAS operator and exploring the career opportunities available.

### Courses Offered

Aviation 1 Introduction to Aviation Aviation 2 Principles of Flight DC Aviation 3 Advanced Flight

# **3USINESS**







Computer applications is a class that creates awe inspiring opportunities for young youths' options and careers. There are numerous skills that, by this point in the semester, our students have been equipped to be proficient in; Microsoft Word, Powerpoint, and Excel. Along with these useful and career inclusive programs, this class has taught proper presentation etiquette, how to apply said skills in the workforce, and how to apply these skills in a resume.

The education and experience provided in this class will give these students the tools to do something amazing. All the hope and faith for the continuing future goes into our youth and how they will better the world, and their lives, with the tools provided

### **Courses Offered**

from this class.

Computer Applications DC\*
Business Communications DC
Business Management DC
Business & Entrepreneurship Practicum
Work-Based Learning







Cosmetologists are trained and licensed to perform cosmetic treatments to the hair, skin, and nails. This can be expanded into multiple parts including cutting and chemically treating hair, chemical hair removal, fashion trends, wigs, nails and skin care, skin and hair analysis; relaxation techniques including head, neck, scalp, hand and feet basic massage and aroma therapies; plus the ability to expertly apply makeup applications to cover or promote and can expand into further specialties such as reflexology; theatrical applications; cosmetics and more. The Cosmetology program at Cleveland High School allows students to earn hours needed for licensure. Those hours can be transferred after graduation to several Cosmetology schools in our area.

### Courses Offered

Cosmetology 1 DC\*

Cosmetology 2 DC

Cosmetology 3 DC - Cosmetology 3 DE

Cosmetology 4 DC - Cosmetology 4 DE







Criminal Justice is a fun place to be!
Every day we start with a positive Life Skill,
Study Skill or Love Dare. After that we investigate
every area of Law Enforcement and the Criminal
Court System. The Criminal Justice room has a
jail and a courtroom. It is my goal that you
fall in love with Criminal Justice and if not then
we identify what you are interested in. This is a
hands on class with REAL LIFE scenarios to solve.
Hope to see you soon.

### **Courses Offered**

Criminal Justice 1\* Criminal Justice 2 Criminal Justice 3 DC





Food is fundamental to life. Not only does it feed our bodies, but it's often the centerpiece for family gatherings and social functions. In this course, students learn all about food, including food culture, food history, food safety, and current food trends. They also learn about the food service industry and prepare some culinary dishes. Through hands-on activities and in-depth study of the culinary arts field, this course helps students hone their cooking skills and gives them the opportunity to explore careers in the food industry.



### Courses Offered

Culinary Arts 1\*
Culinary Arts 2
Culinary Arts 3 DC
Culinary Arts 4 DC
Work-Based Learnin







Creating apps, games, and learning about the world of hacking is all part of the Computer Science and Cybersecurity program at CHS. Students will be able to use programming to code interactive games and apps all while learning how computers work. Computer Science gives you the chance to explore coding where you can eventually develop your own apps or games. Cybersecurity lets students understand how the world engages in protecting people online and what goes into keeping data safe. Explore the world of technology through these areas all while creating in code!

### **Courses Offered**

Computer Science Foundations\*
Cybersecurity I
Computer Science AP (Principles)
Cybersecurity I DE







The A/V Production program of study is designed for students interested in a range of entertainment and news media fields. Course content centers on production of various television, cinema, radio, and other audio and video products, including commercials, music, news, interactive programming, and film. Students complete all phases of the production process including planning, coordinating, capturing, editing, and distributing productions. Topics include but are not limited to concept creation, scripting, interviewing, budgeting, scheduling, set design, engineering, field and studio production, and editing, and, as well operating production equipment such as cameras, lights, and audio equipment.

### Courses Offered

Digital Media Production 1
Digital Media Production 2
Digital Media Production 3

Digital Media Production 3 DE

Digital Media Production 4 H - WBI





From launching space explorations to delivering safe, clean water to communities, engineers find solutions to pressing problems and turn their ideas into reality. PLTW Engineering empowers students to step into the role of an engineer, adopt a problem-solving mindset, and make the leap from dreamers to doers. The program's courses engage students in The program compelling, real-world challenges that help them become better collaborators and thinkers. Students take from the courses in-demand knowledge and skills they will use in high school and for the rest of their lives, on any career path they take.



## Courses Offered

Introduction to Engineering Design DC\*
Principles of Engineering
Principles of Engineering DE
Civil Engineering & Architecture DC
Civil Engineering & Architecture DE
Engineering Design & Development DE
Engineering Design & Development H
Engineering Work-Based Learning







If you are interested in helping create a better life for people, and developing innovative products this course is for you. Students work in collaborative teams for a 75% project based course which places health science and engineering students in groups. Orthopedic implants are designed and printed, prosthetics are created and tested, genetic engineering is demonstrated while removing the glow gene from a jellyfish and inserting it into bacteria, robotic surgery devices are designed and tested, brain scans are tested, heart pumps and valves are designed and tested as well as many other activities involving biomaterials and testing. Biomedical engineers have the ability to impact the future of medicine and humanity greatly! Don't be afraid, earn honors credit and come ioin our STEM think tank for medicine!

### Courses Offered

Health Science\* Anatomy and Physiology Biomedical Engineering







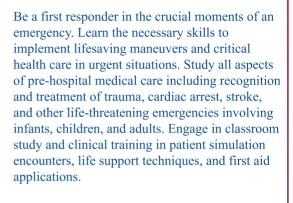
Have you ever wondered how they diagnose illnesses using x rays, CAT scans, MRI's and more? How would you draw blood for analysis? How would you test for strep throat? How are specimens analyzed in the laboratory? How are all the specimens obtained and used for diagnosis? How can you tell if there is heart damage by looking at an EKG? How would you administer an EKG? This class is essential for anyone looking to enter the fields of radiology, medicine, nursing, and more. It will take you from specimen collection, to analysis to diagnosis of real world patients. There are numerous hands on skills nearly every day. You have the option to earn your EKG technician certification while taking this class.

### **Courses Offered**

Health Science\* Anatomy and Physiology Diagnostic Medicine Clinical Internship









### Courses Offered

Health Science\* Anatomy and Physiology Medical Therapeutics Emergency Medical Services







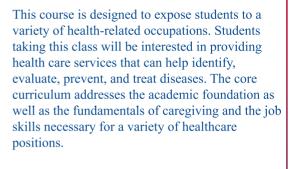
This class is for students interested in going into the medical field. It is also great for students that just want to learn more about the medical field. You will learn many of the skills that are used by healthcare professionals such as doctors, nurses, and pharmacists. These are just a few of the many careers that work in the hospital and medical office setting that you will learn about. Examples of the skills students will learn is a head to toe assessment of the body, starting an IV, giving injections, how to take care of a patient in a coma. We do a Labor and delivery unit where you learn to take care of a newborn baby. You can become CPR certified. We do a surgery unit where you will learn how to close an incision with stitches. We have a state of the art lab that has 8 hospital beds where students do many of the simulation labs. These are just a few of the many hands on labs you get to do in the class.

### **Courses Offered**

Health Science\* Anatomy and Physiology Medical Therapeutics Clinical Internship









### Courses Offered

Health Science\* Anatomy and Physiology Medical Therapeutics Nursing Services







Sports Medicine and Rehabilitation and Work-Based learning course give students the opportunity to explore rehab careers, tools of the trade and learn to perform skills used in the real world of healthcare. Some of the exciting opportunities include learning how to care for injured athletes, massage therapy, sports medicine preventative care such as athletic taping, stretching and joint mobility. In our Work based Learning experiences Students get onto the sports field or court and work alongside Athletic trainers. Physical therapists and into the barn working with professionals in therapy using horses. If you enjoy helping others, being active and movement centered learning, hands on skills practice, these classes may be for you!

### Courses Offered

Health Science\* Anatomy and Physiology Medical Therapeutics Sports Medicine Work-Based Learning







Do you like working Robots and building things with your hands? Then, Robotics at Cleveland High School is for you! Robotics a lab-based course that uses a hands-on approach to introduce the basic concepts of robotics, focusing on the construction and programming of autonomous mobile robots.

Robotics include computer-controlled machines used to make manufacturing more efficient, productive, and safe. Robots are also used to assist people with disabilities in hospitals to help with surgery, to deliver food, or to dispense medications. Robots are becoming popular household helpers, performing chores like vacuuming and mowing lawns.

### Courses Offered

Robotics 1 DC\*

Robotics 2 DC

Robotics 3 - Robotics 3 DE

Robotics 4 - Robotics 4 DE





Teaching as a Profession is designed for students interested in becoming an educator. In this program of study, course content covers the components of instruction, teaching strategies, types of assessments, student learning, special populations, educational technology, classroom management, lesson planning, professionalism, and more. Upon completion of this POS, students will have participated in an internship placement and built a professional portfolio in preparation for advanced training as future educators at the postsecondary level.



### Courses Offered

Fundamentals of Education\* Teaching as a Profession I Teaching as a Profession II Teaching Capstone



Web Design is a course intended to provide students with exposure to various information technology occupations and pathways related to Web Design, and Cybersecurity. Web Design allows students to understand basic concepts related to Web Design through hands-on experiences.



### Courses Offered

Computer Science Foundations' Web Design 1 Web Design 2 Web Design 3

# MELDING







The Welding program of study is designed to prepare and certify students as entry-level welders. The welding program provides students with the basic and advanced techniques of the welding procedures and processes common in industry. Specific operations such as grinding, flame cutting, metal preparation and the use of tools and equipment related to welding are included. Instruction in related math, blueprint reading, physical properties of metal, effects of heat shrinkage, basic joint designs, structural shapes, material design, layout and fabrication is included.

### **Courses Offered**

Principles of Manufacturing<sup>,</sup> Welding 1 Welding 2 Welding Capstone





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