



Architectural Design

Build Your Home from the Ground Up



Automotive Technology Maintenance & Light Repair

Learn About What Drives You



Climate Control and Energy Systems

Heat up your passion for **Climate Control**



Arts

Culinary

A Recipe for Success



Game and Web Design

Level Up in Life



Graphic Communications

Add Color to Your Life



Hospitality

Discover **Your Journey**



Medical/STNA

The Heart of Healthcare/STNA



Medical/Medical Assistant

Caring about Your Future

Robotics

Electronic skillset for an

electronic age



Pre-Engineering



Calling all **Problem Solvers**





Fitness First



Video Production

Storyboard your Life's Plan



Welding

Your Future Burns Bright



Career & Technical Education

Lorain City Schools is committed to preparing all of its students for the rigorous demands of college coursework and the world of work. Career & Technical Education offers a variety of course options for all students—those interested in entering the workforce immediately upon graduation, or those entering college to further develop the skills they learned in high school. Courses in Career & Technical Education are designed to teach students the practical knowledge, skills and attitude necessary to function successfully on the job site, and the academic knowledge and skills necessary to enter college and succeed in college classes. For students interested in post-secondary education, many programs are offered as College Tech Prep. College Tech Prep affords students the opportunity to earn college credit while still in high school. Such an option is possible because Lorain City Schools (LCS), Lorain County Community College (LCCC) and other colleges/universities have entered into an agreement to work together to guarantee that coursework provided in high school meets the high standards of the Associate Degree coursework at the college or university. Each program is served by an advisory committee that monitors workforce trends, ensures the program stays current, and assists in the placement of students into college or the workplace.

Career θ Technical Education is an option for every high school student, and it can be taken in conjunction with the College Credit Plus program that is offered. Students choosing one of the available programs will gain valuable, relevant, rigorous preparation for entry into college or into the world of work upon high school graduation. These pathways prepare our students for the rapidly changing demands of today's workforce.



Career & Technical Education Program Guide Ohio College Tech Prep

Architectural Design

Build Your Home from the Ground Up



Students in the architectural design program learn how to design their living space both inside and outside. In these classes you get to design plumbing, electrical and HVAC plans. Through computer aided drafting you will work on residential housing plans, interior design and room layouts. We also teach you about choosing the right materials to design and decorate your living space. From picking floor coverings to paint colors, you will learn how to master the finishing touches on any home.

You will learn how to do this on:

- Plumbing equipment
- HVAC (heating, ventilation and air conditioning) equipment
- Electrical equipment and components
- Computer design software programs

Some courses also qualify as college credit!

College or Trade School Program Options for Architectural Design High School Majors

Lorain High's Architectural Design curriculum prepares you for entry into secondary education degree programs such as architecture, landscape architecture, interior design, construction, residential building and renovation and more. You can choose either a trade school or traditional college to complete a certification or go into an associate, bachelor's or master's level programs.

Estimated time of completion for a full-time student:

Certification | One year or less Associate degree | Two years Bachelor's degree | Four years Master's degree | Six years



Career Possibilities

Multiple career options exist for students in this field of study. Some careers require certification completion, while others require a master's degree. Possible Job titles for you after college could be interior designer, construction manager, HVAC technician, electrician or plumber. Visit the Bureau of Labor Statistics @ www.bls.gov and type in your career area of interest for the most up-to-date information on these careers, pay scale, employment outlook and more.

Welding

Your Future Burns Bright



Students in this program learn both the art and science of welding. Prepare to get your hands dirty as you cut metal with power tools and use fire to melt it back together again. Allow us to introduce you to our PlasmaCam that is used for cutting custom parts and our Virtual Reality Welder that is used for simulating situations where multiple welding skills are utilized. All of this is housed in our brand-new, state-of-the-art facility right here at Lorain High. Expect to learn all about reading blueprints and drawings. You will be trained to use those skills and measure with precision so that every cut is done once and meets industry standards every time.

You will learn how to do this on:

- Gas metal arc welding equipment
- Gas tungsten arc welding equipment
- Shielded metal arc welding equipment
- Flux core arc welding equipment
- Plasma arc cutting

College or Trade School Program Options for Welding High School Majors

Lorain High's Welding program prepares you for entry into secondary education degree programs in welding. You can choose either a trade school or traditional college to complete a certification or go into an associate, bachelor's or master's level program.

Estimated time of completion for a full-time student:

Certification | One year or less Associate degree | Two years Bachelor's degree | Four years Master's degree | Six years



American Welding Society

Career Possibilities

college credit

Multiple career options exist for students in this field of study. Some careers require certification completion, while others require higher-level degrees. Career industries that use welders include aerospace building, agricultural, mining, shipping and fabrication. Possible job titles for you after college could be underwater welder, rig welder or automotive welder. Visit the Bureau of Labor Statistics a www.bls.gov and type in your career area of interest for the most up-to-date information on these careers, pay scale, employment outlook and more.

Lorain City Schools | Career & Technical Education

Career & Technical Education | Lorain City Schools

Video Production

Storyboard vour Life's Plan



Students in the Video Production program will learn how to create content and edit video and audio for broadcast. Internet and interactive multimedia applications. We are calling all creative people with a flair for video to come join this program Come and learn about the technical aspects of the production process: terminology, camera operation, replay, editing equipment and switcher use. Our industry-savvy instructor will get you up to speed on framing and selecting shots, use of proper lighting, writing, editing and storyboarding. You will even get the chance to apply this knowledge in the real world. Students get the opportunity to produce content that can be aired on Lorain City Schools TV20 channel. Also prepare to take part in multiple projects such as commercials, music video and short films. Come and learn about special effects, motion graphics and digital design while preparing for Adobe Certified Associate certification!

You will learn how to do this on:

College or Trade School Program Options

for Video Production High School Majors

Lorain High's Video Production curriculum

education degree programs in graphic design

or communications. You can choose either a

trade school or traditional college to complete a

certification or go into an associate, bachelor's or

prepares you for entry into secondary

- iMac computers
- Tricaster 850 studio production
- 3 Play instant replay
- Teleprompters
- Audio mixers
- Nikon DSLR cameras
- Panasonic P2 cameras
- Adobe Creative Suite software

Career Possibilities

Career Possibilities
Multiple career options exist
for students in this field of
study. Some careers require
certification completion,
while others require higherlevel degrees. Possible job
titles for you after college
could be a television
producer, editor, production
assistant/control room/
audio, field reporter/anchor,
videographer, photographer,
social media producer. Visit voucegrapher, protographer, social media producer. Visit the Bureau of Labor Statistics @ www.bls.gov and type in your career area of interest for the most up-to-date information on these careers, pay scale, employment outlook and more.

master's level programs. Estimated time of completion

for a full-time student:

Certification | One year or less Associate degree | Two years Bachelor's degree | Four years Master's degree | Six years



Automotive Technology Maintenance & Light Repair

Learn About What Drives You



Students in the Automotive Technology program learn how to repair and maintain automobiles in a fast-paced and constantly changing environment. In this program we teach you everything you need to know about fixing cars with a hands-on approach. Get your hands dirty alongside our A.S.E. master-certified instructors as we teach you how to balance tires and repair engines. We will teach you how to keep those engines running in our new auto tech lab. You will learn how to run diagnostics on automobiles with a snap-on scanner, prolong the life of a car's brakes by using a brake lathe and how to flush your brakes with a brake bleeder machine. All of this and much more will be taught to you in our state-of-the art facility. If you have a passion for cars and improved auto performance, then this program is for you.

You will learn how to do this on:

- Scanners
- Fuel systems
- Exhaust systems
- OEN service literature
- Front end alignment equipment
- Hand tools
- · Air tools

College or Trade School Program Options for Automotive Technology High School Majors

Lorain High's Automotive Technology curriculum prepares you for entry into secondary education degree programs in automotive technology. You can choose either a trade school or traditional college to complete a certification or go into an associate, bachelor's or master's level program.

Estimated time of completion for a full-time student:

Certification | Two years, consider getting certified through National Institute for Automotive Service Excellence (ASE).

Associate degree | Two years Bachelor's degree | Four years Master's degree | Six years

Career Possibilities

Multiple career options exist for students in this field of study. Some careers require certification completion. while others require higherlevel degrees. Possible job titles for you after college could be automotive safety inspector, diesel mechanic, motorcycle repair technician, automotive service manager, automotive service technician, small engine specialist, automotive service writer, parts and service manager, or marine maintenance technician. Visit the Bureau of Labor Statistics @ www.bls.gov and type in your career area of interest for the most up-to-date information on these careers, pay scale, employment outlook and more

Climate Control and Energy Systems

Heat up your passion for Climate Control



Students in the climate control and energy systems program learn about the highs and lows of heating and cooling. We teach you how to install heating and cooling equipment and how to repair heating and cooling equipment. Our program also teaches you about solar and wind energy. These natural resources not only come from above but below as well. You will explore geothermal systems and learn how the ground beneath your feet can help heat and cool a home. Our dedicated and knowledgeable instructor guide you through this curriculum while simultaneously preparing you for HVAC (Heating, Ventilation and Air Conditioning) Federal #608 license and OSHA10 (Occupational Safety and Health Administration) certifications.

You will learn how to do this on:

- Furnace and air conditioning equipment
- Sheet metal fabrication equipment
- Electrical equipment

Plumbing equipment

- Hand and power tools
- Solar and wind energy equipment

College or Trade School Program Options for Climate Control and **Energy Systems Majors**

Lorain High's Climate Control and Energy Systems program prepares you for entry into secondary education degree programs in construction engineering, construction management, residential building and renovation. You can choose either a trade school or traditional college to complete a certification or go into an associate, bachelor's or master's level programs.

Estimated time of completion for a full-time student:

Certification | One year or less, consider getting ESCO #608 licensure to work with federally regulated refrigerants. te degree | Two years Bachelor's degree | Four years

Master's degree | Six years



Career Possibilities

Multiple career options exist for students in this field of study. Some careers require certification completion, while others require higherlevel degrees. Possible job titles for you after college could be electrician, plumber, HVAC specialist, construction management or alternative energy specialist. Visit the Bureau of Labor Statistics @ www.bls.gov and type in your career area of interest for the most up-to-date information on these careers, pay scale, employment outlook and more

Sports, Health and Fitness

Fitness First



Students in the Sports, Health and Fitness program will learn the basics of how the body functions. In-depth understanding of this concept allows our students to better understand how sports-related injuries occur and how to treat them. You will be on the front line during lessons about strength and conditioning. Check out how health, wellness and nutrition are directly connected to sports and fitness management. Experience, first-hand, our brand-new exercise facility. Learn how to take care of your own body, become stronger and teach others to do the same. Tackle classes like exercise physiology and biochemistry in a fun and enjoyable environment. Our industry-certified instructor will walk through this program every healthy step of the way.

You will learn how to use:

- CPR and AED training devices · Blood pressure cuffs
- · Free weights and machines
- · Bikes, treadmills and ellipticals Body composition and analysis tools
- Stethoscopes
- Anatomical charts and models
- · Tape, bandages and splintering materials
- Rehabilitation equipment

College or Trade School Program Options for Sports, Health and Fitness High School Majors

Lorain High's Sports, Health and Fitness curriculum prepares you for entry into secondary education degree programs in physical therapy, physical therapy assisting, occupational therapy, occupational therapy assisting, athletic training, personal training or strength and conditioning specialist. You can choose either a trade school or traditional college to complete a certification or go into an associate, bachelor's or master's level programs.

Estimated time of completion for a full-time student: Associate degree | Two years Bachelor's degree | Four years Master's degree | Six years

Career Possibilities

Multiple career options exist for students in this field of study. Some careers require certification completion, while others require higherlevel degrees. Possible job titles for you after college could be physical therapist, physical therapy assistant, occupational therapist, occupational therapist assistant, athletic trainer, personal trainer, strength and conditioning specialist. Visit the Bureau of Labor Statistics @ www.bls.gov and type in your career area of interest for the most up-to-date information on these careers, pay scale, employment outlook and more

Lorain City Schools | Career & Technical Education

Career & Technical Education | Lorain City Schools

Robotics

Electronic skillset for an electronic age



Students in the Robotics program will learn about robotics. Let us introduce you to robotic and manufacturing simulation and manipulation. Learn how to operate tools like lathes, milk, routers and grinders through Computer Numeric Control (CNC). Let us introduce you to computer-aided design (CAD), which replaces manual drafting with automated drafting, and watch your 3D models or 2D drawings come to life. In this program you will also use digital electronics and electronic bread boards so you can see how the circuits on your robot function.

You will learn how to do this on:

- Industrial robots and robot simulators
- Arduino and Raspberry Pie micro controllers

 C++ and LabVIEW programming language Some courses also qualify as college credit!

College or Trade School Program Options for Robotics High School Majors

Lorain High's Robotics curriculum prepares you for entry into secondary education degree programs in electronics, industrial programming or engineering technology. You can choose either a trade school or traditional college to complete a certification or go into an associate, bachelor's or master's level programs.

Estimated time of completion for a full-time student:

Certification | One year or less Associate degree | Two years Bachelor's degree | Four years Master's degree | Six years



Multiple career options exist for students in this field of study. Some careers require certification completion, while others require higher-level degrees. Possible job titles for you after college could be robotic programmer, CNC programmer, engineering technician or robotic engineer. Visit the Bureau of Labor Statistics @ www.bls.gov and type in your career area of interest for the most up-to-date information on these careers, pay scale, employment outlook and more.





Culinary Arts

A Recipe for Success



Students in the culinary arts program learn about the fundamentals of food preparation and safety in the kitchen. In this challenging program you will learn about contemporary cuisine and the baking and pastry arts. Learn how to properly store food and cater events. Feel free to express yourself in a fun and creative environment where you will learn about food design and presentation. Our industry-certified instructor will help you accomplish your culinary goals in our state-of-the-art facility. Enjoy working with new cutlery, ovens and mixers. Let us teach you how to operate our new salamander—a culinary grill primarily used in professional kitchens. Our students have access to the most modern equipment in the industry. If you can stand this heat, then we welcome you into our kitchen!

You will learn how to do this on:

- Commercial gas fryer
- Gas char-broiler
- Gas flattop griddle
- Vitamix mixer

- Commercial dish machine
- Convection oven

Some courses also qualify as college credit

College or Trade School Program Options for Culinary Arts High School Majors

Lorain High's Culinary Arts curriculum prepares you for entry into secondary education degree programs in culinary arts or restaurant management. You can choose either a trade school or traditional college to complete a certification or go into an associate, bachelor's or master's level program.

Estimated time of completion for a full-time student:

Certification | One year or less, consider getting your NRAEF Prostart National Certificate of Achievement

Associate degree | Two years Bachelor's degree | Four years Master's degree | Six years





Career Possibilities

Multiple career options exist for students in this field of study. Some careers require certification completion, while others require higher-level degrees. Possible job titles for you after college could be chef, pastry chef, sous chef, line cook, baker's assistant, restaurant manager, caterer or prep cook. Visit the Bureau of Labor Statistics @ www.bls. gov and type in your career area of interest for the most up-to-date information on these careers, pay scale, employment outlook and more.

Game and Web Design

Level Up in Life



Students in the game design program learn about website development and game design – and they do it from scratch. We will teach you the fundamentals of coding. You will create basic website structure through Hypertext Markup Language (HTML), design your page layout by using Cascading Style Sheets (CSS) and use Java Script to add interactivity. In addition to creating your own web page, you can create your own game. Invent a virtual world, a reality of your choosing by learning about simulation design. Learn about the language of computers by taking our programming courses. Develop the skills essential for real game development that will prepare you for the next generation of technological advancement. Students in this program also have the opportunity to acquire Adobe Certified Associate Certification and they can earn college credit.

You will learn how to do this on:

- iMac computers
- Open source and commercial software
- Adobe Creative Suite software

Some courses also qualify as college credit!

College or Trade School Program Options for Game and Web Design High School Majors

Lorain High's Game and Web Design curriculum prepares you for entry into secondary education degree programs in computer games and simulation design or web design. You can choose either a trade school or traditional college to complete a certification or go into an associate, bachelor's or master's level programs.

Estimated time of completion for a full-time student:

Certification | One year or less Associate degree | Two years Bachelor's degree | Four years Master's degree | Six years



Career Possibilities

Multiple career options exist for students in this field of study. Some careers require certification completion, while others require higher-level degrees. Possible job titles for you after college could be game/simulation designer, game/computer programmer, game/computer programmer, game developer. Visit the Bureau of Labor Statistics @ www.bls.gov and type in your career area of interest for the most up-to-date information on these careers, pay scale, employment outlook and more.

Pre-Engineering

Calling all Problem Solvers



Students in the Pre- Engineering program will learn how to design and develop product. In this project-based learning environment, you will collaborate with your peers to solve problems, invent and innovate. We will teach you Computer Aided-Design and Computer-Aided Manufacturing. Our instructor will take you through the manufacturing design and simulation process. If you have a penchant for math and science, then this is the program for you.

You will learn how to do this on:

- . Shop Bot CNC Router
- · Lab Volt CNC Mills and Lathes
- Solid Works
- Auto CAD Inventor

Some courses also qualify as college credit!

College or Trade School Program Options for Pre-Engineering High School Majors

Lorain High's Pre- Engineering program prepares you for entry into secondary education degree programs in manufacturing engineering, engineering technology and engineering. You can choose either a trade school or traditional college to complete a certification or go into an associate, bachelor's or master's level programs.

Estimated time of completion for a full-time student:

Certification | One year or less Associate degree | Two years Bachelor's degree | Four years Master's degree | Six years



Career Possibilities

Multiple career options exist for students in this field of study. Some careers require certification completion, while others require higher-level degrees. Possible job titles for you after college could be engineer, engineering technician, product design engineer, computer aided drafter. Visit the Bureau of Labor Statistics (a www.bls.gov and type in your career area of interest for the most up-to-date information on these careers, pay scale, employment outlook and more.



Medical/STNA

The Heart of Healthcare/STNA



Students in the Medical/STNA (State Tested Nursing Assistant) Program learn both the hands-on and administrative aspects necessary for success in this field. You will learn about the body and how drugs, disease and aging affect it. You will learn how to monitor heart rate and blood pressure and how to administer hearing and vision testing. Additionally, students get to experience preparing, handling and processing specimens. We will learn about the human body through the use of models, centrifuges, instruments and CPR mannequins. This hands-on approach is complemented by a thorough instruction on medical terminology and medical document translation training. Come and learn CPR, x-ray analysis and sonography while completing your state certification nursing assistant exam all right here at Lorain High.

You will learn how to do this on:

- Clay models
- · Life-size mannequins
- Computer software
- Microscopes

College or Trade School Program Options for Medical High School Majors

Lorain High's Medical curriculum prepares you for entry into secondary education degree programs in pharmacology, medicine, radiology, sonography, x-ray technician, nursing, biology, chemistry or phlebotomy. You can choose either trade school or traditional college to complete a certification or go into an associate, bachelor's or master's level program.

Estimated time of completion for a full-time student:

Certification | One year or less Associate degree | Two years Bachelor's degree | Four years Master's degree | Six years



Career Possibilities

Multiple career options exist for students in this field of study. Some careers require certification completion, while others require higher level degrees. Possible job titles for you after college could be doctor, radiologic technician, physical therapist, dentist, dental hygienist, lab technician, nurse, sonographer, medical assistant or biomedical engineer. Visit the Bureau of Labor Statistics @ www.bls.gov and type in your career area of interest for the most up-to-date information on these careers, pay scale, employment outlook and more.

Communications

Add Color to Your Life



Students in the graphic communications program use design software to bring their visions to life. We will teach you how to use the most recent versions of Adobe software programs. You will learn how to manipulate images, create marketing materials and design artwork in Photoshop, Illustrator and InDesign. You will have the opportunity to use our cutting-edge equipment to create logos, window graphics, vinyl electronic device covers, T-shirt and clothing designs, large-scale vinyl signage and movie posters. Our industry-certified instructor shows students how to create a brand and takes you through that process from concept to completion. Students in this program may also qualify for the highly sought-after industry standard Adobe Software Certification.

You will learn how to do this on:

- iMac computers
- · Graphic arts software
- Digital cameras/scanners
- Vinyl printing and cutting equipment
- · Color laser and larger scale printers
- Offset printing press
- · Bindery equipment

T-Shirt presses

College or Trade School Program **Options for Graphic Communications High School Majors**

Lorain High's Graphic Communications curriculum prepares you for entry into secondary education degree programs in computer art, graphic design or commercial art. You can choose either a trade school or traditional college to complete a certification or go into an associate, bachelor's or master's level programs.

Estimated time of completion for a full-time student:

Certification | One year or less Associate degree | Two years Bachelor's degree | Four years Master's degree | Six years



CERTIFIED ASSOCIATE

Career Possibilities

Multiple career options exist for students in this field of study. Some careers require certification completion. while others require higher-level degrees. Possible job titles for you after college could be graphic designer commercial artist/designer vinyl sign installation specialist, photographer, offset press operation, binder/finisher or desktop publisher. Visit the Bureau of Labor Statistics @ www.bls.gov and type in your career area of interest for the most up-to-date information on these careers, pay scale, employment outlook and more.

Hospitality

Discover Your Journey



Students in the Hospitality program learn about restaurant and hotel management. In this hands-on environment, students get the opportunity to work in a real, on-site restaurant, the Lighthouse Grill located at Lorain High School. We invite you to learn about the fundamentals of food production and service in our brand-new, professional-grade kitchen. Access to such facilities allows our experienced and industry-certified instructor to properly teach you about the hospitality industry, catering and banquet business, and commercial restaurant trade. You will learn on our state-of-the-art Point of Sale (POS) system and be familiarized with other specialized equipment used in the industry. Hospitality courses allow you to interact and feel connected with quests and develop customer service skills. This program will provide you with the certifications—such as Serv Safe Manager Certification (Food Safety and Sanitation)—and the communication skills you need to be an effective event planner.

You will learn how to do this on:

- · Culinary lab (restaurant)
- · Commercial restaurant equipment
- Point of Sale system
- Professional grade espresso machine
- Catering and banquet equipment

College or Trade School Program Options for Hospitality High School Majors

Lorain High's Hospitality curriculum prepares you for entry into secondary education degree programs in hospitality management, business management, culinary arts or travel and tourism management. You can choose either a trade school or traditional college to complete a certification or go into an associate, bachelor's or master's level programs.

Estimated time of completion for a full-time student:

Certification | One year or less Associate degree | Two years Bachelor's degree | Four years Master's degree | Six years





Career Possibilities

Multiple career options exist for students in this field of study. Some careers require certification completion, while others require higher-level degrees. Possible job titles for you after college could be concierge, customer service representative, marketing associate, event planner, front house associate, housekeeping operations, conference and meeting management, food and beverage management or sales associate. Visit the Bureau of Labor Statistics @ www.bls.gov and type in your career area of interest for the most up-to-date information on these careers, pay scale, employment outlook and more.

Medical/Medical Assistant

Caring about Your Future

Students in the Medical Program learn about the challenging and life-changing opportunities available in this field. We will teach you both the hands-on and administrative aspects necessary for success. You will learn about the body and how drugs, disease and aging affect it. You will learn how to monitor heart rate and blood pressure in addition to administering hearing and vision testing. Students also get to experience preparing, handling and processing specimens. We will teach you about the human body through the use of models, centrifuges, instruments and CPR mannequins. This hands-on approach is complemented by a thorough instruction on medical terminology and medical document translation training. Come and learn CPR, x-ray analysis and sonography all right here at Lorain High.

You will learn how to do this on:

- · Clay models
- Life-size mannequins
- Computer software
- Microscopes

College or Trade School Program Options for Medical High School Majors

Lorain High's Medical curriculum prepares you for entry into secondary education degree programs in pharmacology, medicine, radiology, sonography, x-ray technician, nursing, biology, chemistry or phlebotomy. You can choose either trade school or traditional college to complete a certification or go into an associate, bachelor's or master's level program.

Estimated time of completion for a full-time student:

Certification | One year or less Associate degree | Two years Bachelor's degree | Four years Master's degree | Six years



Career Possibilities

Multiple career options exist for students in this field of study. Some careers require certification completion, while others require higher-level degrees. Possible job titles for you after college could be doctor, radiologic technician, physical therapist, dentist, dental hygienist, lab technician, nurse, sonographer, medical assistant or biomedical engineer. Visit the Bureau of Labor Statistics @ www.bls.gov and type in your career area of interest for the most up-to-date information on these careers, pay scale, employment outlook and more