

PROGRAM OF STUDY: AIR CONDITIONING AND REFRIGERATION

Skills Obtained:

The program prepares students for employment in the installation, operation, maintenance and repair of heating, air conditioning and refrigeration systems. Course instruction includes electrical controls, EPA refrigerant handling practices, refrigeration theory, gas piping practices and furnace operation.

Key Concepts and Outcomes:

- Installation, service and maintenance of refrigeration, air and heating units.
- Fundamentals and theory of electricity.
- Electric schematic and wiring diagram reading.

Recommended level of reading proficiency for this program:

The full-time courses at Autry Technology Center require workplace reading that includes the ability to understand and interpret various documents including diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications.

Recommended level of math proficiency for this program:

The full-time courses at Autry Technology Center require workplace math skills that include a basic understanding of mathematical computations and concepts such as making change, calculating percentages, applying discounts, basic addition, subtraction, division, and multiplication.

Occupational characteristics for program:

Heating, air conditioning, and refrigeration mechanics and installers work in homes, retail establishments, hospitals, office buildings, and factories—anywhere there is climate-control equipment that needs to be installed, repaired, or serviced. They may be assigned to specific job sites at the beginning of each day or may be dispatched to a variety of locations if they are making service calls.

Technicians may work outside in cold or hot weather or in buildings that are uncomfortable because the air conditioning or heating equipment is broken. In addition, technicians might work in awkward or cramped positions and sometimes are required to work in high places. Hazards include electrical shock, burns, muscle strains, and other injuries from handling heavy equipment. Appropriate safety equipment is necessary when handling refrigerants because contact can cause skin damage, frostbite, or blindness. Inhalation of refrigerants when working in confined spaces also is a possible hazard.

The majority of mechanics and installers work at least a 40-hour week. During peak seasons, they often work overtime or irregular hours. Maintenance workers, including those who provide maintenance services under contract, often work evening or weekend shifts and are on call. Most employers try to provide a full workweek year-round by scheduling both installation and maintenance work, and many manufacturers and contractors now provide or even require year-round service contracts. In most shops that service both heating and air conditioning equipment, employment is stable throughout the year.

What physical activity is needed in this program:

- Ability to climb ladders and work at heights
- Possess average strength
- Tolerate small and enclosed spaces
- Able to work in extreme hot and cold temperatures

Computer Skills needed for this program:

Coursework, including daily assignments, quizzes, and tests, are completed on Autry Tech's Learning Module System, LMS. Computers are an integral part of completing program coursework. Students should possess a basic understanding of computers.

Industry Certification/s available for this program:

- Environmental Protection Agency for Refrigerant Handlers (EPA)
- Oklahoma Construction Industries Board Mechanical Apprentice Registration
- Partnership for Air Conditioning, Heating and Refrigeration Accreditation (PAHRA)

Accommodations allowed by certifying entity:

None found

Requirements for certification:

- Must be 18 or older for certain certifications

Do any of the above courses have unique requirements:

N/A

Business and Industry Partners (this is not an all-inclusive list):

- Dense
- Luckinbill
- Brandon's Comfort Solutions

PROGRAM OF STUDY: AUTOMOTIVE TECHNOLOGY

Skills Obtained:

Extensive training in leading-edge automotive diagnostic and repair techniques is offered in this program. Specialty areas covered are electrical systems, brakes, steering, suspension, AC/heating, engine repair and engine performance.

Key Concepts and Outcomes:

- ASE-certified program
- Work on a variety of vehicles

Recommended level of reading proficiency for this program:

The full-time courses at Autry Technology Center require workplace reading that includes the ability to understand and interpret various documents including diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications.

Recommended level of math proficiency for this program:

The full-time courses at Autry Technology Center require workplace math skills that include a basic understanding of mathematical computations and concepts such as making change, calculating percentages, applying discounts, basic addition, subtraction, division, and multiplication.

Occupational characteristics for program:

Automotive service technicians inspect, maintain, and repair automobiles and light trucks that run on gasoline, electricity, or alternative fuels such as ethanol. Automotive service technicians' and mechanics' responsibilities have evolved from simple mechanical repairs to high-level technology-related work. The increasing sophistication of automobiles requires workers who can use computerized shop equipment and work with electronic components while maintaining their skills with traditional hand tools. As a result, automotive service workers are now usually called technicians rather than mechanics.

Today, integrated electronic systems and complex computers regulate vehicles and their performance while on the road. Technicians must have an increasingly broad knowledge of how vehicles' complex components work and interact. They also must be able to work with electronic diagnostic equipment and digital manuals and reference materials.

What physical activity is needed in this program:

- Good manual dexterity
- Ability to work on feet for long periods of time
- Ability to lift heavy objects

Computer Skills needed for this program:

Coursework, including daily assignments, quizzes, and tests, are completed on Autry Tech's Learning Module System, LMS. Computers are an integral part of completing program coursework. Students should possess a basic understanding of computers.

Industry Certification/s available for this program:

- Forklift Safety
- Snap-On Meter Certification
- Rotor Matching Technician - Pro-Cut International
- Fluke Meter Safety Certification
- ALLDATA: Automotive Information Specialist

MOBILE AIR CONDITIONING SOCIETY (MACS)

- Refrigerant Recycling and Recovery

ASE EDUCATION FOUNDATION & NATIONAL AUTOMOTIVE TRAINING AND EDUCATION FOUNDATION (NATEF)

- AST: Brakes (ASE Student)
- AST: Engine Performance (ASE Student)
- AST: Steering and Suspension (ASE Student)
- AST: Engine Repair (ASE Student)
- AST: Electrical and Electronic Systems (ASE Student)
- AST: Heating & Air Conditioning (ASE Student)

Accommodations allowed by Certifying entity:

ASE provides testing accommodations, under the provisions of the Americans with Disabilities Act (ADA), to individuals who need accommodations to take the ASE certification tests. [Click HERE for link to request](#)

Requirements for certification:

N/A

Do any of the above courses have unique requirements:

N/A

Business and Industry Partners (this is not an all-inclusive list):

- Janes Machine Shop
- Stevens Ford
- Skyway Honda
- Janzen GMC

PROGRAM OF STUDY: BUSINESS AND OFFICE SERVICES

Skills Obtained:

Students work with the most up-to-date software and technology as they gain knowledge in office administration, management, accounting, finance, and customer service.

Key Concepts and Outcomes:

- Hands-on experience using state-of-the-art equipment and current software.
- Industry recognized and competency certifications.
- Development of work ethics and leadership skills through the student organization, Business Professionals of America.
- Supervised work experience and job shadowing available.
- Personal Finance Education (Dave Ramsey)

Recommended level of reading proficiency for this program:

The full-time courses at Autry Technology Center require workplace reading that includes the ability to understand and interpret various documents including diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications.

Recommended level of math proficiency for this program:

The full-time courses at Autry Technology Center require workplace math skills that include a basic understanding of mathematical computations and concepts such as making change, calculating percentages, applying discounts, basic addition, subtraction, division, and multiplication.

Occupational Characteristics:

Business & Office Services students perform highly specialized work requiring knowledge of technical terminology, customer service, office/business practices, billing and bookkeeping, scheduling, maintaining accurate records, accounting processes, and managing finances.

What physical activity is needed in this program:

- Ability to sit at a desk for long periods of time

Computer Skills needed for this program:

Coursework, including daily assignments, quizzes, and tests, are completed on Autry Tech's Learning Module System, LMS. Computers are an integral part of completing program coursework. Students should possess a intermediate understanding of computers.

Industry Certification/s available for this program:

- Administrative Assistant Certification (CAA)
- Certified Bookkeeper
- Fundamental Payroll Certification
- Intuit QuickBooks Certified User
- MOS Excel
- MOS Excel Expert
- MOS PowerPoint
- MOS Word

- MOS Word Expert

Accommodations allowed by Certifying entity:

Microsoft: [Click Here](#)

Certification Requirements:

- Parent or Guardian permission is needed for national certification tests if the student is a minor.

Do any of the above courses have unique requirements:

N/A

Business and Industry Partners (this is not an all-inclusive list):

- Dillingham Insurance
- Jiffy Trip/Hammer Williams Company
- Scates Agency Inc. Farmers Insurance

PROGRAM OF STUDY: CLINICAL MEDICAL ASSISTING

Skills Obtained:

Clinical Medical Assistants are multi-skilled health professionals who measure patients' vital signs, record medical histories, prepare examination rooms, disinfect medical instruments, draw blood, give injections, and administer medication. The opportunity to participate in a work-site learning component is available to the student as well as practice in a variety of settings as chosen by the instructor.

Key Concepts and Outcomes:

- Anatomy and physiology
- Medical terminology
- Healthcare provider CPR/First Aid
- Patient-care management
- Clinical procedures
- Clinical experience

Recommended level of reading proficiency for this program:

The full-time courses at Autry Technology Center require workplace reading that includes the ability to understand and interpret various documents including diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications.

Recommended level of math proficiency for this program:

The full-time courses at Autry Technology Center require workplace math skills that include a basic understanding of mathematical computations and concepts such as making change, calculating percentages, applying discounts, basic addition, subtraction, division, and multiplication.

Occupational Characteristics:

Clinical medical assistants perform administrative and clinical tasks to keep the offices of physicians, podiatrists, chiropractors, and other health practitioners running smoothly. The duties of clinical medical assistants vary from office to office, depending on the location and size of the practice and the practitioner's specialty. In small practices, clinical medical assistants usually do many different kinds of tasks, handling both administrative and clinical duties and reporting directly to an office manager, physician, or other health practitioner. Those in large practices tend to specialize in a particular area, under the supervision of department administrators. Clinical medical assistants should not be confused with physician assistants, who examine, diagnose, and treat patients under the direct supervision of a physician.

What physical activity is needed in this program:

- Finger dexterity
- Hand-eye coordination

Computer Skills needed for this program:

Coursework, including daily assignments, quizzes, and tests, are completed on Autry Tech's Learning Module System, LMS. Computers are an integral part of completing program coursework. Students should possess a basic understanding of computers.

Industry Certification/s available for this program:

- American Heart Association-BLS Healthcare Provider CPR
- American Heart Association-BLS Healthcare Provider First Aid
- Certified Clinical Medical Assistant (CCMA)

Accommodations allowed by Certifying entity:

None available

Certification requirements:

- High school diploma, by completion of program

Do any of the above courses have unique requirements:

- Must be 18 years of age by March 1st.
- Drug testing, background check and TB required prior to admission to the program.
- Immunizations current and provide copy for clinical sites

Business and Industry Partners (this is not an all-inclusive list):

- Great Salt Plains
- Integris clinics
- St. Mary's Physician and Associates
- Northwest pediatrics.

PROGRAM OF STUDY: COLLISION TECHNOLOGY

Skills Obtained:

This program provides students with training to repair or replace auto body parts using hand and power tools. Students also learn to refinish surfaces through painting or spot painting. Some topics covered are safety, welding and cutting techniques, identification and analysis of damage, measuring and texturing systems, and refinishing from minor repairs to total paint jobs. Students will gain hands-on training in oxy-fuel cutting torches and handheld plasma cutter operation, poly-advanced plastic welding, structural and non-structural repair, painting and refinishing, mechanical and electrical repair and damage analysis and estimating.

Key Concepts and Outcomes:

- Sheet metal
- Plastics and fiberglass repair
- Glass and trim replacement
- Auto detailing
- Estimate writing

Recommended level of reading proficiency for this program:

The full-time courses at Autry Technology Center require workplace reading that includes the ability to understand and interpret various documents including diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications.

Recommended level of math proficiency for this program:

The full-time courses at Autry Technology Center require workplace math skills that include a basic understanding of mathematical computations and concepts such as making change, calculating percentages, applying discounts, basic addition, subtraction, division, and multiplication.

Occupational Characteristics:

Each damaged vehicle presents different challenges for repairers. Using their broad knowledge of automotive construction and repair techniques, automotive body repairers must decide how to handle each job based on what the vehicle is made of and what needs to be fixed. They must first determine the extent of the damage and order any needed parts.

Repairers work indoors in body shops that are noisy with the clatter of hammers against metal and the whine of power tools. Most shops are well ventilated to disperse dust and paint fumes. Body repairers often work in awkward or cramped positions, and much of their work is strenuous and dirty. Hazards include cuts from sharp metal edges, burns from torches and heated metal, injuries from power tools, and fumes from paint. However, serious accidents usually are avoided when the shop is kept clean and orderly and safety practices are observed.

What physical activity is needed in this program:

- Ability to work on feet for long periods
- Enjoyment of hands-on work
- Hand-eye coordination

Computer Skills needed for this program:

Coursework, including daily assignments, quizzes, and tests, are completed on Autry Tech's Learning Module System, LMS. Computers are an integral part of completing program coursework. Students should possess a basic understanding of computers.

Industry Certification/s available for this program:

PROMETRIC/ AUTOMOTIVE SERVICE EXCELLENCE (ASE) & NATIONAL AUTOMOTIVE TRAINING AND EDUCATION FOUNDATION (NATEF)

- CRR: Non-Structural Analysis & Damage Repair
- CRR: Mechanical & Electrical Components
- CRR: Painting & Refinishing
- CRR: Structural Analysis & Damage Repair
- CRR: Damage Analysis & Estimating
- I-CAR ProLevel 1 Non-Structural
- I-CAR ProLevel 1 Refinish

Accommodations allowed by Certifying entity:

ASE provides testing accommodations, under the provisions of the Americans with Disabilities Act (ADA), to individuals who need accommodations to take the ASE certification tests. [Click HERE for link to request](#)

Do any of the above courses have unique requirements:

Students MUST possess a valid Oklahoma driver's license (or valid Oklahoma permit with driver's license by program completion).

Business and Industry Partners (this is not an all-inclusive list):

- Clay's Collision Center
- Steven's Ford
- Enid Auto body
- Northcutt's Chevrolet
- Elite Collision center

PROGRAM OF STUDY: COMPUTER AIDED DRAFTING AND DESIGN

Skills Obtained:

Learn drafting and design basics and beyond. Emphasis is placed on the theoretical and practical approach to engineering drawing with instruction covering basic techniques such as architectural drafting, illustration and Computer-Aided Drafting & Design (CADD).

Key Concepts and Outcomes:

- Mechanical drafting
- Architectural drafting
- Pipe drafting • Civil drafting
- 3-D modeling
- Animation

Recommended level of reading proficiency for this program:

The full-time courses at Autry Technology Center require workplace reading that includes the ability to understand and interpret various documents including diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications.

Recommended level of math proficiency for this program:

The full-time courses at Autry Technology Center require workplace math skills that include a basic understanding of mathematical computations and concepts such as making change, calculating percentages, applying discounts, basic addition, subtraction, division, and multiplication.

Occupational Characteristics:

Drafters prepare technical drawings and plans, which are used to build everything from manufactured products such as toys, toasters, industrial machinery, and spacecraft to structures such as houses, office buildings, and oil and gas pipelines.

In the past, drafters sat at drawing boards and used pencils, pens, compasses, protractors, triangles, and other drafting devices to prepare a drawing by hand. Now, most drafters use Computer Aided Design and Drafting (CADD) systems to prepare drawings. Consequently, some drafters may be referred to as CADD operators.

With CADD systems, drafters can create and store drawings electronically so that they can be viewed, printed, or programmed directly into automated manufacturing systems. CADD systems also permit drafters to quickly prepare variations of a design. Although drafters use CADD extensively, it is only a tool. Drafters still need knowledge of traditional drafting techniques, in addition to CADD skills. Despite the nearly universal use of CADD systems, manual drafting and sketching are used in certain applications.

What physical activity is needed in this program:

- Hand-eye coordination
- Finger dexterity

Computer Skills needed for this program:

Coursework, including daily assignments, quizzes, and tests, are completed on Autry Tech's Learning Module System, LMS. Computers are an integral part of completing program coursework. Students should possess an intermediate understanding of computers.

[Industry Certification/s available for this program:](#)

American Design and Drafting Association

- Certified Apprentice Drafter- Architectural
- Certified Apprentice Drafter- Mechanical
- Certified Solidworks Associate- Academic
- Certified User AUTOCAD
- Inventor Certified User
- Revit Architecture Certified User

[Accommodations allowed by Certifying entity:](#)

[AUTOCAD—Click Here](#)

Solidworks: Accommodations request should be submitted to certifying entity prior to written/online portions of exams.

[Do any of the above courses have unique requirements:](#)

N/A

[Business and Industry Partners \(this is not an all-inclusive list\):](#)

- PT Coupling
- Easley Associates
- Ditch Witch

PROGRAM OF STUDY: COMPUTERIZED MACHINING (CNC)

Skills Obtained:

Students will gain knowledge and proficiency in design processes using software, such as SolidWorks and Fusion 360 CAD/CAM. Blueprint reading, applied math, precision measurement, and proper tool usage are tools of the trade, as students learn to write programs from blueprints, work with computer-aided machining (CAM) software, and learn quality control techniques in operating engine lathes, vertical mills, computer numerical control turning centers (lathes), and computer numerical control vertical machining centers (mills).

Key Concepts and Outcomes:

- Blueprint Reading
- 3 Axis CNC Milling
- Programing CNC Controllers (Fanuc & Haas)
- 5 Axis CNC Milling • Selecting Feed Rates
- CNC Lathe Operation
- Manual Mill Operation
- Precision Part Measuring
- Manual Lathe Operation
- Lean Manufacturing Concepts

Recommended level of reading proficiency for this program:

The full-time courses at Autry Technology Center require workplace reading that includes the ability to understand and interpret various documents including diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications.

Recommended level of math proficiency for this program:

The full-time courses at Autry Technology Center require workplace math skills that include a basic understanding of mathematical computations and concepts such as making change, calculating percentages, applying discounts, basic addition, subtraction, division, and multiplication.

Occupational Characteristics:

Machinists use machine tools, such as lathes, milling machines, and grinders, to produce precision metal parts. Many machinists must be able to use both manual and CNC machinery. CNC machines control the cutting tool speed and do all necessary cuts to create a part. The machinist determines the cutting path, the speed of the cut, and the feed rate by programming instructions into the CNC machine.

Although workers may produce large quantities of one part, precision machinists often produce small batches or one-of-a-kind items. The parts that machinists make range from simple steel bolts to titanium bone screws for orthopedic implants. Hydraulic parts, antilock brakes, and automobile pistons are other widely known products that machinists make.

Some machinists repair or make new parts for existing machinery. After a broken part is discovered in a machine or piece of equipment, a machinist remanufactures the part. The machinist refers to blueprints and performs the same machining operations that were used to create the original part to create the replacement.

Because machinists and tool and die makers work around machine tools that may present hazards, these workers must follow precautions to avoid injuries. For example, workers must wear protective equipment, such as safety glasses, to shield against bits of flying metal, earplugs to dampen the noise produced by machinery, and masks to limit their exposure to fumes.

Although many machinists and tool and die makers work full time during regular business hours, some work evenings, and weekends because facilities may operate around the clock. Some work more than 40 hours a week.

What physical activity is needed in this program:

- Stand for extended periods
- Excellent Vision

Computer Skills needed for this program:

Coursework, including daily assignments, quizzes, and tests, are completed on Autry Tech's Learning Module System, LMS. Computers are an integral part of completing program coursework. Students should possess an intermediate understanding of computers.

Industry Certification/s available for this program:

- OSHA General Safety
- Measurement, Materials & Safety
- CNC Milling Operations
- CNC Turning Operations
- Job Planning, Benchwork & Layout
- Drill Press Skills 1
- Manual Milling Skills 1
- Grinding Skills 1
- Turning Operations: Turning Between Centers

Accommodations allowed by Certifying entity:

None available

Do any of the above courses have unique requirements:

N/A

Business and Industry Partners (this is not an all-inclusive list):

- PT Coupling
- Aircraft Structures
- Covington Cycle



PROGRAM OF STUDY: CONSTRUCTION TECHNOLOGY

Skills Obtained:

This program teaches the hands-on training required for entry into the construction trades industry. Skills developed are in the areas of blueprint reading, site layout, estimating, foundation work, framing, interior and exterior work, and using both hand and power tools for residential and commercial projects.

Key Concepts and Outcomes:

- Floor and wall framing
- Blueprint reading
- Site layout
- Estimating
- Foundation work
- Roof framing / roofing
- Interior wall finishing
- Exterior trim
- Cabinetmaking

Recommended level of reading proficiency for this program:

The full-time courses at Autry Technology Center require workplace reading that includes the ability to understand and interpret various documents including diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications.

Recommended level of math proficiency for this program:

The full-time courses at Autry Technology Center require workplace math skills that include a basic understanding of mathematical computations and concepts such as making change, calculating percentages, applying discounts, basic addition, subtraction, division, and multiplication.

Occupational Characteristics:

Carpenters are involved in many kinds of construction, from the building of highways and bridges to the installation of kitchen cabinets. Carpenters construct, erect, install, and repair structures and fixtures made from wood and other materials.

Each carpentry task is somewhat different, but most involve the same basic steps. Working from blueprints or instructions from supervisors, carpenters first do the layout—measuring, marking, and arranging materials—in accordance with local building codes. They cut and shape wood, plastic, fiberglass, or drywall using hand and power tools, such as chisels, planes, saws, drills, and sanders. They then join the materials with nails, screws, staples, or adhesives. In the last step, carpenters do a final check of the accuracy of their work with levels, rules, plumb bobs, framing squares, and surveying equipment, and make any necessary adjustments.

Some carpenters do many different carpentry tasks, while others specialize in one or two. Carpenters who remodel homes and other structures, for example, need a broad range of carpentry skills. As part of a single job, for example, they might frame walls and partitions, put in doors and windows, build stairs, install

cabinets and molding, and complete many other tasks. Because these carpenters are so well-trained, they often can switch from residential building to commercial construction or remodeling work, depending on which offers the best work opportunities.

What physical activity is needed in this program:

- Enjoy hands-on work
- Good manual dexterity
- Ability to work on feet for long periods of time

Computer Skills needed for this program:

Coursework, including daily assignments, quizzes, and tests, are completed on Autry Tech's Learning Module System, LMS. Computers are an integral part of completing program coursework. Students should possess a basic understanding of computers.

Industry Certification/s available for this program:

- Level 1 United Brotherhood of Carpenters
- Level 2 United Brotherhood of Carpenters
- Level 3 United Brotherhood of Carpenters
- OSHA 10
- Forklift Safe

Accommodations allowed by Certifying entity:

- OSHA 10-No accommodations from testing entity

Do any of the above courses have unique requirements:

N/A

Business and Industry Partners (this is not an all-inclusive list):

- Pioneer Construction
- Lowe's of Enid
- Roland's Remodeling
- Countertop Shop
- Cabinets by Wayland

PROGRAM OF STUDY: COSMETOLOGY

Skills Obtained:

This program prepares students for employment in the cosmetology field by teaching the curriculum, skills and work behaviors governed by the Oklahoma State Board of Cosmetology and Barbering. Students practice haircutting and styling, coloring and permanent waving as well as manicuring, pedicuring and performing facials.

Key Concepts and Outcomes:

- Nail care/artificial nails
- Scalp treatments, shampooing, conditioning rinses
- Brow/arching, waxing/hair removal
- Facial massage, treatments, and makeup
- Customer service/ hair care maintenance
- Restructuring/coloring techniques
- Hair design for facial shapes and lifestyles

Recommended level of reading proficiency for this program:

The full-time courses at Autry Technology Center require workplace reading that includes the ability to understand and interpret various documents including diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications.

Recommended level of math proficiency for this program:

The full-time courses at Autry Technology Center require workplace math skills that include a basic understanding of mathematical computations and concepts such as making change, calculating percentages, applying discounts, basic addition, subtraction, division, and multiplication.

Occupational Characteristics:

Barbers and cosmetologists focus on providing hair care services to enhance the appearance of consumers. Other personal appearance workers, such as manicurists and pedicurists, shampooers, theatrical and performance makeup artists, and skin care specialists provide specialized beauty services that help clients look and feel their best.

Hairdressers, hairstylists, and cosmetologists offer a wide range of beauty services, such as shampooing, cutting, coloring, and styling of hair. They may advise clients on how to care for their hair at home. In addition, cosmetologists may be trained to give manicures, pedicures, and scalp and facial treatments; provide makeup analysis; and clean and style wigs and hairpieces.

A number of workers offer specialized services. Manicurists and pedicurists, called nail technicians in some states, work exclusively on nails and provide manicures, pedicures, polishing, and nail extensions to clients. Another group of specialists is skin care specialists, or estheticians, who cleanse and beautify the skin by giving facials, full-body treatments, and head and neck massages as well as apply makeup. They also may remove hair through waxing or, if properly trained, laser treatments. Theatrical and performance makeup artists apply makeup to enhance performing artists' appearance for movie, television, or stage performances. Finally, in larger salons, shampooers specialize in shampooing and conditioning hair.

What physical activity is needed in this program:

- Ability to stand for long periods of time
- Good hand-eye coordination

Computer Skills needed for this program:

Coursework, including daily assignments, quizzes, and tests, are completed on Autry Tech's Learning Module System, LMS. Computers are an integral part of completing program coursework. Students should possess a basic understanding of computers.

Industry Certification/s available for this program:

- Cosmetologist
- Cosmetology Master Instructor

Accommodations allowed by Certifying entity:

None allowed by the Oklahoma State Board of Cosmetology

Do any of the above courses have unique requirements:

Requirements to Enroll in the program:

- Social Security number
- Minimum of 8th grade education, transcript must be provided
- State issued ID and or birth certificate for proof of age. Must be 16 before November 1st of the enrolling school year
- If a convicted felon, criminal history pre-determination from Oklahoma State Board of Cosmetology

To become a licensed cosmetologist, a student must pass the Oklahoma State Board written and practical exams with a score of at least 75 percent on each exam.

Business and Industry Partners (this is not an all-inclusive list):

- Great Clips
- Sports Clips
- Ulta Salon
- Tonya's Massage & Spa
- GK Stylz
- BK Beauty
- State Beauty Supply
- Armstrong McCall
- Beyond Beauty

PROGRAM OF STUDY: CULINARY ARTS

Skills Obtained:

This course of study encompasses various aspects of the culinary arts industry. The cafeteria-style facility provides opportunities that include performance in quantity food production, state-of-the-art equipment operation, banquet/ catering experiences and competencies involving diverse cuisine.

Key Concepts and Outcomes:

- Food handling/storage
- Weights/measures/conversions
- Menu planning
- Foodborne illness prevention
- Safety/sanitation
- Recipe use
- Table service/settings
- Nutritional requirements

Recommended level of reading proficiency for this program:

The full-time courses at Autry Technology Center require workplace reading that includes the ability to understand and interpret various documents including diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications.

Recommended level of math proficiency for this program:

The full-time courses at Autry Technology Center require workplace math skills that include a basic understanding of mathematical computations and concepts such as making change, calculating percentages, applying discounts, basic addition, subtraction, division, and multiplication.

Occupational Characteristics:

Chefs, cooks, and food preparation workers prepare, season, and cook a wide range of foods—from soups, snacks, and salads to entrees, side dishes, and desserts. They work in a variety of restaurants and other food services establishments. Chefs and cooks create recipes and prepare meals, while food preparation workers peel and cut vegetables, trim meat, prepare poultry, and perform other duties, such as keeping work areas clean and monitoring temperatures of ovens and stovetops.

Larger restaurants and food services establishments tend to have varied menus and larger kitchen staff. Staff often include several chefs and cooks, sometimes called assistant or line cooks. Each chef or cook works an assigned station that is equipped with the types of stoves, grills, pans, and ingredients needed for the foods prepared at that station. Job titles often reflect the principal ingredient prepared or the type of cooking performed—vegetable cook, fry cook, or grill cook, for example. These cooks also may direct or work with other food preparation workers.

What physical activity is needed in this program:

- Ability to stand for long periods of time

Computer Skills needed for this program:

Coursework, including daily assignments, quizzes, and tests, are completed on Autry Tech's Learning Module System, LMS. Computers are an integral part of completing program coursework. Students should possess a basic understanding of computers.

Industry Certification/s available for this program:

- Basic Culinary Arts
- ServSafe - Food Handler
- ServSafe – Allergens
- ServSafe - Manager
- Culinary Arts
- Certified Culinarian
- American Heart Association- CPR/ AED
- American Heart Association- First Aid

Accommodations allowed by Certifying entity:

ServSafe-[See page 40 HERE](#)

Do any of the above courses have unique requirements:

N/A

Business and Industry Partners (this is not an all-inclusive list):

PROGRAM OF STUDY: DENTAL ASSISTING

Skills Obtained:

To prepare individuals to enter the healthcare industry as competent, entry-level healthcare providers. Instruction includes patient records, legal and ethical issues affecting the dental profession, and the study of the head and neck anatomy, tooth identification and morphology, dental terminology, infection control and instrumentation. Chair-side procedures practiced in the classroom, lab, and at dental offices include digital and manual x-rays, impressions, study models, dental charting, suctioning, and passing instruments.

Key Concepts and Outcomes:

- Taking digital and manual x-rays
- Developing and mounting x-ray films
- Mixing filling materials
- Taking impressions, pouring and trimming study models
- Developing administrative procedures
- Preparing patient records, including charting, patient entries
- Practicing infection control in dentistry
- Identifying dental instruments
- Recommended level of math, science, English for this program:

Recommended level of reading proficiency for this program:

The full-time courses at Autry Technology Center require workplace reading that includes the ability to understand and interpret various documents including diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications.

Recommended level of math proficiency for this program:

The full-time courses at Autry Technology Center require workplace math skills that include a basic understanding of mathematical computations and concepts such as making change, calculating percentages, applying discounts, basic addition, subtraction, division, and multiplication.

Occupational Characteristics:

Dental assistants work closely with, and under the supervision of, dentists. Dental assistants should not be confused with dental hygienists, who are licensed to perform different clinical tasks. Dental assistants sterilize and disinfect instruments and equipment, prepare and lay out the instruments and materials required to treat each patient, and obtain patients' dental records. Assistants make patients as comfortable as possible in the dental chair and prepare them for treatment. During dental procedures, assistants work alongside the dentist to provide assistance. They hand instruments and materials to dentists and keep patients' mouths dry and clear by using suction or other devices. They also instruct patients on postoperative and general oral health care.

Dental assistants may prepare materials for impressions and restorations, take dental x-rays, and process x-ray film as directed by a dentist. They also may remove sutures, apply topical anesthetics to gums or cavity-preventive agents to teeth, remove excess cement used in the filling process, and place rubber dams on the teeth to isolate them for individual treatment. Some states are expanding dental assistants' duties to include

tasks such as coronal polishing and restorative dentistry functions for those assistants that meet specific training and experience requirements.

What physical activity is needed in this program:

- Ability to stand for long periods of time
- Good eye-hand coordination
- Manual/finger dexterity

Computer Skills needed for this program:

Coursework, including daily assignments, quizzes, and tests, are completed on Autry Tech's Learning Module System, LMS. Computers are an integral part of completing program coursework. Students should possess a basic understanding of computers.

Industry Certification/s available for this program:

- Dental Assistant Permit (Oklahoma Board of Dentistry/Oklahoma Dental Foundation)
- Radiation Safety Course Certificate
- American Heart Association-BLS Healthcare Provider CPR
- American Heart Association-BLA Healthcare Provider First Aid
- Accommodations allowed by Certifying entity:

How much homework or study is required:

Do any of the above courses have unique requirements:

- Drug Screening
- State Issued ID
- Must be 18 years old by last 9 weeks of program
- To be hired after completion of program, will need Social Security Number

Business and Industry Partners (this is not an all-inclusive list):

- TLC Dental
- Enid Family Dental
- Orthodontic Solutions
- Rose Rock Orthodontics
- Facial Surgery Center

PROGRAM OF STUDY: DIESEL TECHNOLOGY

Skills Obtained:

Develop a solid technical background in the areas of engine overhaul, electrical systems, hydraulics, and air conditioning. Students learn to maintain, diagnose, and repair diesel engines.

Key Concepts and Outcomes:

- Hands-on experience
- Computerized diagnostics
- Work on current equipment
- State-of-the-art learning environment
- Agricultural equipment service
- Heavy equipment service
- Diesel truck service

Recommended level of reading proficiency for this program:

The full-time courses at Autry Technology Center require workplace reading that includes the ability to understand and interpret various documents including diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications.

Recommended level of math proficiency for this program:

The full-time courses at Autry Technology Center require workplace math skills that include a basic understanding of mathematical computations and concepts such as making change, calculating percentages, applying discounts, basic addition, subtraction, division, and multiplication.

Occupational Characteristics:

Diesel-powered engines are more efficient and durable than their gasoline-burning counterparts. These powerful engines are standard in our Nation's trucks, locomotives, and buses and are becoming more prevalent in light vehicles, including passenger vehicles, pickups, and other work trucks.

Diesel service technicians and mechanics, including bus and truck mechanics and diesel engine specialists, repair and maintain the diesel engines that power transportation equipment. Some diesel technicians and mechanics also work on other heavy vehicles and mobile equipment, including bulldozers, cranes, road graders, farm tractors, and combines. Other technicians repair diesel-powered passenger automobiles, light trucks, or boats.

Increasingly, diesel technicians must be versatile to adapt to customers' needs and new technologies. It is common for technicians to handle all kinds of repairs, working on a vehicle's electrical system one day and doing major engine repairs the next. Diesel maintenance is becoming increasingly complex, as more electronic components are used to control the operation of an engine. For example, microprocessors now regulate and manage fuel timing, increasing the engine's efficiency. Also, new emissions standards require mechanics to retrofit engines with emissions control systems, such as emission filters and catalysts, to comply with pollution regulations. In modern shops, diesel service technicians use hand-held or laptop computers to diagnose problems and adjust engine functions.

What physical activity is needed in this program:

- Coordination

Computer Skills needed for this program:

Coursework, including daily assignments, quizzes, and tests, are completed on Autry Tech's Learning Module System, LMS. Computers are an integral part of completing program coursework. Students should possess a basic understanding of computers.

Industry Certification/s available for this program:

- Forklift Safety & Operator
- Brakes Technician (MHT)
- Heating, Ventilation, & Air Conditioning Repair Technician (MHT)
- MHT: Diesel Engines (ASE Student)
- MHT: Electrical/Electronics Student (ASE Student)
- MHT: Suspension & Steering (ASE Student)
- MHT: Brakes (ASE Student)
- MHT: Inspection Maintenance & Minor Repair MOBILE AIR CONDITIONING SOCIETY
- Refrigerant Recycling & Recovery - Section 609

Accommodations allowed by Certifying entity:

ASE provides testing accommodations, under the provisions of the Americans with Disabilities Act (ADA), to individuals who need accommodations to take the ASE certification tests. [Click HERE for link to request](#)

Do any of the above courses have unique requirements:

Students can obtain ASE Student certification, good for 2 years. ASE Professional certification is obtainable once an individual has worked in the industry for a minimum of 2 years.

Business and Industry Partners (this is not an all-inclusive list):

- Yellowhouse Machinery
- Bruckner truck
- Warren Cat
- Holt Truck Centers
- Hamm & Phillips

PROGRAM OF STUDY: EARLY CARE AND HOSPITALITY

Skills Obtained:

This program prepares students for a rewarding career that shapes the lives of young children. It highlights classroom management along with child development, health, safety, and nutrition. Students work with children, ages infant to five-years-old, in community early care and education centers, and local elementary schools. They create lesson plans that provide fun and instructional activities for the children.

Key Concepts and Outcomes:

- Developmental stages of children
- Age-appropriate activities
- Job interview and etiquette skills
- Safe food handling
- Family business/financial planning
- Menu planning/nutritional requirements
- Hands-on experience in foods lab
- The program includes observation and work experience in local early care centers and elementary schools.

Recommended level of reading proficiency for this program:

The full-time courses at Autry Technology Center require workplace reading that includes the ability to understand and interpret various documents including diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications.

Recommended level of math proficiency for this program:

The full-time courses at Autry Technology Center require workplace math skills that include a basic understanding of mathematical computations and concepts such as making change, calculating percentages, applying discounts, basic addition, subtraction, division, and multiplication.

Occupational Characteristics:

Early Care & Education workers nurture and care for children who have not yet entered formal schooling. They also supervise older children before and after school. These workers play an important role in children's development by caring for them when parents are at work or away for other reasons. In addition to attending to children's basic needs, child care workers organize activities and implement curricula that stimulate children's physical, emotional, intellectual, and social growth. They help children explore individual interests, develop talents and independence, build self-esteem, and learn how to get along with others.

Early Care & Education workers generally are classified into three different groups based on where they work: private household workers, who care for children at the children's home; family child care providers, who care for children in the provider's own home; and child care workers who work at separate child care centers.

What physical activity is needed in this program:

- Must be able to bend and kneel

Computer Skills needed for this program:

Coursework, including daily assignments, quizzes, and tests, are completed on Autry Tech's Learning Module System, LMS. Computers are an integral part of completing program coursework. Students should possess a basic understanding of computers.

Industry Certification/s available for this program:

- OKDHS-Entry Level Child Care Training
- OKDHS-Teacher Assistant
- OKDHS-Master Teacher
- OKDHS-Infant/Toddler Child Care Provider
- OKDHS-Child Care Director
- Heartsaver-CPR/AED Adult/Child/Infant
- Food Handlers
- Early Learning Guidelines for Infants, Toddlers and Twos
- Early Learning Guidelines for 3-5 year olds
- Safe Sleep Training
- Accommodations allowed by Certifying entity:

Do any of the above courses have unique requirements:

N/A

Business and Industry Partners (this is not an all-inclusive list):

- Carver/Fowler Education Centers
- Villagio Montessori
- Big 5 Headstart
- Busy Bee Learning Center
- Kinder Konnection
- Applewood

PROGRAM OF STUDY: GRAPHIC ARTS

Skills Obtained:

Students will develop the skills and techniques used in the graphic arts industry including graphic design and layout, composition, web design, digital prepress operation, large format printing/ framing, dry mounting, graphics and imaging dye sublimation, bindery, finishing, photography, image editing, videography and video editing.

Key Concepts and Outcomes:

- Graphic design
- Electronic publishing
- Digital print production
- Digital SLR photography
- Bindery and finishing operations
- Color management
- Videography Video editing
- Large format printing
- Vinyl Installation
- Graphic imaging sublimation

Recommended level of reading proficiency for this program:

The full-time courses at Autry Technology Center require workplace reading that includes the ability to understand and interpret various documents including diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications.

Recommended level of math proficiency for this program:

The full-time courses at Autry Technology Center require workplace math skills that include a basic understanding of mathematical computations and concepts such as making change, calculating percentages, applying discounts, basic addition, subtraction, division, and multiplication.

Occupational Characteristics:

Graphic designers—or graphic artists—plan, analyze, and create visual solutions to communications problems. They find the most effective way to get messages across in print, electronic, and film media using a variety of methods such as color, type, illustration, photography, animation, and various print and layout techniques. Graphic designers develop the overall layout and production design of magazines, newspapers, journals, corporate reports, and other publications. They also produce promotional displays, packaging, and marketing brochures for products and services, design distinctive logos for products and businesses, and develop signs and signage systems—called environmental graphics—for business and government. An increasing number of graphic designers also develop material for Internet Web pages, interactive media, and multimedia projects. Graphic designers also may produce the credits that appear before and after television programs and movies.

The first step in developing a new design is to determine the needs of the client, the message the design should portray, and its appeal to customers or users. Graphic designers consider cognitive, cultural, physical, and social factors in planning and executing designs for the target audience. Designers gather relevant

information by meeting with clients, creative or art directors, and by performing their own research. Identifying the needs of consumers is becoming increasingly important for graphic designers as they continue to develop corporate communication strategies in addition to creating designs and layouts.

Graphic designers prepare sketches or layouts—by hand or with the aid of a computer—to illustrate their vision for the design. They select colors, sound, artwork, photography, animation, style of type, and other visual elements for the design. Designers also select the size and arrangement of the different elements on the page or screen. They may create graphs and charts from data for use in publications, and they often consult with copywriters on any text that accompanies the design. Designers then present the completed design to their clients or art or creative director for approval. In printing and publishing firms, graphic designers also may assist the printers by selecting the type of paper and ink for the publication and reviewing the mock-up design for errors before final publication.

What physical activity is needed in this program:

- Ability to sit for long periods of time

Computer Skills needed for this program:

Coursework, including daily assignments, quizzes, and tests, are completed on Autry Tech's Learning Module System, LMS. Computers are an integral part of completing program coursework. Students should possess an intermediate understanding of computers.

Industry Certification/s available for this program:

- Adobe Animate ACA
- Adobe InDesign ACA
- Adobe Illustrator ACA
- Adobe Photoshop ACA
- Adobe Premier Pro ACA

Accommodations allowed by Certifying entity:

Adobe: [Click Here](#)

Do any of the above courses have unique requirements:

N/A

Business and Industry Partners (this is not an all-inclusive list):

- PDQ Printing
- Atwoods Corporate Office Marketing Department
- Enid News & Eagle Graphics Department
- Vance Air Force Base Marketing Department
- Autry Technology Center Marketing Department

PROGRAM OF STUDY: HEALTH CAREERS (HIGH SCHOOL ONLY)

Skills Obtained:

This program provides an overview of health careers while teaching basic health care skills and laboratory techniques. The combination of theory, laboratory skills and clinical observations provide optimal learning allowing students to experience the health care field firsthand. High school students earn an anatomy credit. Upon successful completion of the curriculum, students will be eligible to test for the Long-Term Care Certification (LTCNA).

Key Concepts and Outcomes:

- Anatomy and physiology
- Medical terminology
- Body mechanics
- Safety
- Assessment of vital signs
- Patient care
- Cultural diversity
- Social/community health

Recommended level of reading proficiency for this program:

The full-time courses at Autry Technology Center require workplace reading that includes the ability to understand and interpret various documents including diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications.

Recommended level of math proficiency for this program:

The full-time courses at Autry Technology Center require workplace math skills that include a basic understanding of mathematical computations and concepts such as making change, calculating percentages, applying discounts, basic addition, subtraction, division, and multiplication.

Occupational Characteristics:

Some of these workers are nursing aides, home health aides, building cleaning workers, dental assistants, medical assistants, and personal and home care aides. Nursing or home health aides provide health-related services for ill, injured, disabled, elderly, or infirm individuals either in institutions or in their homes. By providing routine personal care services, personal and home care aides help elderly, disabled, and ill persons live in their own homes instead of in an institution. Although some of these workers are employed by public or private agencies, many are self-employed. With experience and, in some cases, further education and training, service workers may advance to higher level positions or transfer to new occupations.

Most workers in health care jobs provide clinical services, but many also are employed in occupations with other functions. Numerous workers in management and administrative support jobs keep organizations running smoothly. Although many medical and health services managers have a background in a clinical specialty or training in health care administration, some enter these jobs with a general business education.

Each segment of the health care industry provides a different mix of wage and salary health-related jobs.

What physical activity is needed in this program:

- Ability to stand and lift 50 pounds

Computer Skills needed for this program:

Coursework, including daily assignments, quizzes, and tests, are completed on Autry Tech's Learning Module System, LMS. Computers are an integral part of completing program coursework. Students should possess a basic understanding of computers.

Industry Certification/s available for this program:

- Long Term Care Nurse Aide (LTCNA)
- American Heart Association:
- Basic Life Support (BLS)
- Adult, Child & Infant CPR/AED
- Healthcare Provider First Aid

Accommodations allowed by Certifying entity:

None available

Do any of the above courses have unique requirements:

- State issued ID
- Parents/Guardians must sign an affidavit for students to take the LTCNA exam.

Business and Industry Partners (this is not an all-inclusive list):

- Greenbrier Nursing Home
- Golden Oaks Nursing Home
- Arbors Assisted Living Center
- 4RKids
- The Commons Nursing Home

PROGRAM OF STUDY: INFORMATION TECHNOLOGY

Skills Obtained:

To prepare individuals to succeed in today's fast-paced competitive world of work. Students learn to install, configure and troubleshoot software and hardware on networks, desktop and mobile devices, manage various network protocols on both Local Area Networks and Wide Area Networks, and to configure, maintain and virtualize servers, routers and switches. Cybersecurity curriculum is designed to provide a solid theoretical understanding of challenges, tools and techniques, and to develop the foundations of a skill set that can be applied to network environments such as Enterprise IT, Industrial/ Utility, Medical Network and Data Security.

Key Concepts and Outcomes:

- Hands-on experience using state-of-the-art equipment and current software.
- Industry recognized certification.
- Development of work ethics and leadership skills through the student organization, Business Professionals of America.
- Supervised work experience and job shadowing available.
- By participating in CyberPatriot competition, high school students are introduced to an exciting and lucrative career path. They develop teamwork and organizational skills that set them apart in the STEM job market.
- Personal Finance Education (Dave Ramsey)

Recommended level of reading proficiency for this program:

The full-time courses at Autry Technology Center require workplace reading that includes the ability to understand and interpret various documents including diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications.

Recommended level of math proficiency for this program:

The full-time courses at Autry Technology Center require workplace math skills that include a basic understanding of mathematical computations and concepts such as making change, calculating percentages, applying discounts, basic addition, subtraction, division, and multiplication.

Occupational Characteristics:

Computer repairers, also known as computer service technicians or data processing equipment repairers, service mainframe, servers, and personal computers; printers; and auxiliary computer equipment. These workers primarily perform hands-on repair, maintenance, and installation of computers and related equipment. Workers who provide technical assistance, in person or by telephone, to computer system users are known as computer support specialists or computer support technicians.

Computer repairers typically replace subsystems instead of repairing them. Commonly replaced subsystems include video cards, which transmit signals from the computer to the monitor; hard drives, which store data; and network cards, which allow communication over the network. Replacement is common because subsystems are usually inexpensive and businesses are reluctant to shut down their computers for time-consuming repairs. Defective modules may be given to bench technicians, who use software programs to diagnose the problem and who may repair the modules, if possible.

What physical activity is needed in this program:

- Ability to climb ladders and work at heights
- Tolerate small and enclosed spaces
- Ability to sit for long periods of time

Computer Skills needed for this program:

Coursework, including daily assignments, quizzes, and tests, are completed on Autry Tech's Learning Module System, LMS. Computers are an integral part of completing program coursework. Students should possess an intermediate understanding of computers.

Industry Certification/s available for this program:

- A+
- Network+
- Security+
- CCNA - Cisco Certified Network Associate
- Cisco CyberOps Associate
- ITS: Networking
- ITS: Networking Security
- ITS: Device Configuring and Management
- ITS: Cybersecurity

Accommodations allowed by Certifying entity:

Cisco: [Click Here](#)

Person Vue—A+: [Click Here](#)

Do any of the above courses have unique requirements:

N/A

Business and Industry Partners (this is not an all-inclusive list):

- St. Mary's Regional Medical Center
- Enid Public Schools
- Groendyke
- Stride Bank
- Atwoods

PROGRAM OF STUDY: MEDICAL FRONT OFFICE

Skills Obtained:

To prepare individuals for entry-level employment in a variety of healthcare facilities as a medical office receptionist or medical front office specialist. No blood. No guts. Just glory. Interested in working in the medical industry, but not excited about dealing with blood, urine or other bodily fluids? Students will learn medical terminology, patient billing, medical coding, office procedures, customer service, telephone etiquette and the importance of teamwork.

Key Concepts and Outcomes:

- Hands-on experience using state-of-the-art equipment and current software.
- Industry recognized and competency certifications.
- Development of work ethics and leadership skills through the student organization, Business Professionals of America.
- Supervised work experience and job shadowing available.
- Personal Finance Education (Dave Ramsey)

Recommended level of reading proficiency for this program:

The full-time courses at Autry Technology Center require workplace reading that includes the ability to understand and interpret various documents including diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications.

Recommended level of math proficiency for this program:

The full-time courses at Autry Technology Center require workplace math skills that include a basic understanding of mathematical computations and concepts such as making change, calculating percentages, applying discounts, basic addition, subtraction, division, and multiplication.

Occupational Characteristics:

Medical Front Office students perform highly specialized work requiring knowledge of technical terminology, customer service, office/business practices, billing and bookkeeping, scheduling, maintaining accurate records, accounting processes, managing finances, developing a business plan, and integrating the latest technology and social media into business functions

What physical activity is needed in this program:

- Ability to sit for long periods of time

Computer Skills needed for this program:

Coursework, including daily assignments, quizzes, and tests, are completed on Autry Tech's Learning Module System, LMS. Computers are an integral part of completing program coursework. Students should possess an intermediate understanding of computers.

Industry Certification/s available for this program:

- Certified Billing and Coding Specialist (CBCS)
- Certified Medical Administrative Assistant (CMAA)
- Microsoft Office Word
- Microsoft Office Excel
- Certified Professional Coder-Apprentice (CPC-A)

Accommodations allowed by Certifying entity:

CCMA and CBCS: [Click HERE](#)

CPC-A: [Click HERE](#)

Do any of the above courses have unique requirements:

- High School Diploma/GED

Business and Industry Partners (this is not an all-inclusive list):

- St. Mary's
- Integris Health-Enid
- Great Salt Plains

PROGRAM OF STUDY: ROBOTICS AND ELECTRONIC AUTOMATION

Skills Obtained:

To prepare students for a career in robotics, industrial maintenance, process control or electronics. Industry requires technicians to install, troubleshoot, maintain, and repair automated equipment controlled by electronic and computer systems used in a variety of applications. High School students in this program build four- and six-wheel ground drones as well as quadcopter aerial drones. Adult students install, calibrate, and troubleshoot process control loops, motor controls, PLC's, hydraulic and pneumatic systems.

Key Concepts and Outcomes:

- **MECHATRONICS TECHNICIAN**

- Ground drones
- Direct current
- Digital circuits
- Aerial drones
- Robotics
- Mechatronics Lab
- Programming

- **MECHATRONICS SPECIALIST**

Prerequisite: Mechatronics Technician

- Direct current
- Alternation current
- Programming
- Hydraulics & pneumatics
- Digital circuits
- Motor control
- Precision measurement
- Mechanical systems
- PLC
- Instrumentation
- Robotics
- Automation controls
- Communications
- Process control

Recommended level of reading proficiency for this program:

The full-time courses at Autry Technology Center require workplace reading that includes the ability to understand and interpret various documents including diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications.

Recommended level of math proficiency for this program:

The full-time courses at Autry Technology Center require workplace math skills that include a basic understanding of mathematical computations and concepts such as making change, calculating percentages, applying discounts, basic addition, subtraction, division, and multiplication.

Occupational Characteristics:

Imagine an automobile assembly line: a large conveyor system moves unfinished automobiles down the line, giant robotic welding arms bond the different body panels together, hydraulic lifts move the motor into the body of the car, and giant presses stamp body parts from flat sheets of steel. All of these machines—the hydraulic lifts, the robotic welders, the conveyor system, and the giant presses—sometimes break down. When the assembly line stops because a machine breaks down, it costs the company money. Industrial machinery mechanics and machinery maintenance workers maintain and repair these very different, and often very expensive, machines.

The most basic tasks are performed by machinery maintenance workers. These employees are responsible for cleaning and lubricating machinery, performing basic diagnostic tests, checking performance, and testing damaged machine parts to determine whether major repairs are necessary. In carrying out these tasks, maintenance workers must follow machine specifications and adhere to maintenance schedules. Maintenance workers may perform minor repairs, but major repairs are generally left to machinery mechanics.

Industrial machinery mechanics, also called industrial machinery repairers or maintenance machinists, are highly skilled workers who maintain and repair machinery in a plant or factory. To do this effectively, they must be able to detect minor problems and correct them before they become major. Machinery mechanics use technical manuals, their understanding of the equipment, and careful observation to discover the cause of the problem. For example, after hearing a vibration from a machine, the mechanic must decide whether it is due to worn belts, weak motor bearings, or some other problem. Mechanics need years of training and experience to diagnose problems, but computerized diagnostic systems and vibration analysis techniques provide aid in determining the nature of the problem.

What physical activity is needed in this program:

- Ability to climb ladders and work at heights
- Tolerate small and enclosed spaces
- Normal color perception

Computer Skills needed for this program:

Coursework, including daily assignments, quizzes, and tests, are completed on Autry Tech's Learning Module System, LMS. Computers are an integral part of completing program coursework. Students should possess an intermediate understanding of computers.

Industry Certification/s available for this program:

- FANUC Robotics Certification
- Snap-on Meter Certification

Accommodations allowed by Certifying entity:

FANUC: [Click Here](#)

Do any of the above courses have unique requirements:

N/A

Business and Industry Partners (this is not an all-inclusive list):

- KOCH
- OG&E
- Tyson

PROGRAM OF STUDY: WELDING TECHNOLOGY

Skills Obtained:

To prepare students to enter the welding field. This program highlights gas and arc welding with mig, tig, stick, flux core and submerged arc welding practices. Students will learn the theory of symbols, blueprint reading and pipe layout

Key Concepts and Outcomes:

- Basic safety guidelines
- Gas, MIG, pipe welding and TIG
- Structural welding
- Pipe and combo-pipe welding
- Pipe fitting
- CNC operations of plasma cutting
- Fabrication
- Units assembly
- Automated welding equipment
- Preparation for a variety of certifications

Recommended level of reading proficiency for this program:

The full-time courses at Autry Technology Center require workplace reading that includes the ability to understand and interpret various documents including diagrams, directories, correspondence, manuals, records, charts, graphs, tables, and specifications.

Recommended level of math proficiency for this program:

The full-time courses at Autry Technology Center require workplace math skills that include a basic understanding of mathematical computations and concepts such as making change, calculating percentages, applying discounts, basic addition, subtraction, division, and multiplication.

Occupational Characteristics:

Welding is the most common way of permanently joining metal parts. In this process, heat is applied to metal pieces, melting, and fusing them to form a permanent bond. Because of its strength, welding is used in shipbuilding, automobile manufacturing and repair, aerospace applications, and thousands of other manufacturing activities. Welding is also used to join beams when constructing buildings, bridges, and other structures and to join pipes in pipelines, power plants, and refineries.

There are over 80 different welding processes that a welder can employ. Some are performed manually, and the work is entirely controlled by the welder. Others are semiautomatic, and the welder uses machinery, such as a wire feeder, to perform welding tasks.

One of the most common types of welding is arc welding. Standard arc welding involves two large metal alligator clips that carry a strong electrical current. One clip is attached to any part of the piece being welded. The second clip is connected to a thin welding rod. When the rod touches the piece, a powerful electrical circuit is created. The massive heat created by the electrical current causes both the piece and the steel core

of the rod to melt together, cooling quickly to form a solid bond. The speed with which the welder works can affect the strength of the weld.

Two common and advanced types of arc welding are Tungsten Inert Gas (TIG) and Metal Inert Gas (MIG) welding. TIG welding is often used with stainless steel or aluminum. The welder holds the welding rod in one hand and an electric torch in the other hand. The torch is used to simultaneously melt the rod and the piece. MIG uses a spool of continuously fed wire instead of a rod, which allows the welder to join longer stretches of metal without stopping to replace a rod. The welder holds the wire feeder, which functions like the alligator clip in arc welding.

What physical activity is needed in this program:

- Good eyesight and concentration
- Ability to work in heat and sparks
- Willingness to work in extreme conditions

Computer Skills needed for this program:

Coursework, including daily assignments, quizzes, and tests, are completed on Autry Tech's Learning Module System, LMS. Computers are an integral part of completing program coursework. Students should possess a basic understanding of computers.

Industry Certification/s available for this program:

- 1 Fillet Weld to 4 Fillet Weld
 - 1F Flat - 2F Horizontal - 3F Vertical - 4F Overhead
- 1 Groove Weld to 4 Groove Weld
 - 1G Flat - 2G Horizontal - 3G Vertical - 4G Overhead
- 2, 5 & 6 Groove Weld on Pipe
 - 2G Horizontal - 5G Vertical - 6G 45-degree angle
- OSHA 10
- Forklift Safety
- American Heart Association - CPR/AED Training

Accommodations allowed by Certifying entity:

None available

Do any of the above courses have unique requirements:

- Must be legal resident of the United States for licensure

Business and Industry Partners (this is not an all-inclusive list):

- Marsau
- Rite Way
- Silver Arc
- Bruckners
- Ditch Witch