AUTRY
TECHNOLOGY CENTER
THE WORKFORCE CAPITAL

ROBOTICS AND ELECTRONIC AUTOMATION

$16-33 PER HOUR
(OK SALARY RANGES)

☑ **To prepare students for a career in robotics, industrial maintenance, process control or electronics.**

Robotics and automation have become vital to the success of global business. Technicians install, troubleshoot, maintain and repair automated equipment controlled by electronic and computer systems used in a variety of applications. High School students will build four and six wheel ground drones as well as quadcopter aerial drones. Adult students will install, calibrate and troubleshoot process control loops, motor controls, PLC's, hydraulics and pneumatic systems. High demand areas include petroleum, manufacturing, medical equipment, renewable energy, food processing, aerospace, defense and telecommunications. This is an excellent foundation for students working toward a degree in engineering.

CAREERS AVAILABLE IN THE INDUSTRY:

- I & E technician
- Electrical/Instrumentation technician
- Instrumentation technician
- Industrial automation technician
- Industrial maintenance technician
- Biomedical technician
- Communications technician
- Electronics technician
- Maintenance technician
- Field service technician

LICENSURE / CERTIFICATIONS:

- FANUC Robotics Certification
- Snap-on Meter Certification

Customer Service Training

"I chose to attend Autry because I was interested in learning new skills that would better prepare me for my future job."
- Levi M.

CONTACT STUDENT SERVICES

for current tuition rates and enrollment information.

580.242.2750

☑ Oklahoma's Promise Availability

**Tuition is free for in-district high school students.
Tuition for in-district adults is $2.00/hour.**
***2016 Oklahoma salary ranges were obtained from O*Net OnLine**

COMMUNITY WORKFORCE RESOURCE | CULTIVATING ENDLESS POSSIBILITIES

COURSE LENGTH/IN-DISTRICT TUITION AND COSTS

Aug-May M-F   High School: 8:15-10:45am/12:30-3:15pm
         M-F   Adult: 8:15-11:15am/12:30-3:30pm

Tuition: In-District / Out-of -District $1050 / $2100 Half Day
           or $2100/ $4200 Full Day

Who Can Enroll:
Adults and High School Juniors & Seniors
Additional cost of books and supplies approx.: $809

HIGHLIGHTS

HIGH SCHOOL STUDENT HIGHLIGHTS

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

ADULT STUDENT HIGHLIGHTS

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

AREAS OF INTEREST & HELPFUL SKILLS

- Normal color perception
- Ability to climb ladders and work at heights
- Possess average strength and intelligence
- Tolerate small and enclosed spaces
- Ability to work in teams

This program is accredited by the Oklahoma State Department of Education and the Oklahoma Board of Career and Technology Education.

APPLICATION POLICY

High school juniors and seniors make application for Autry enrollment during their high school spring and/or fall enrollment **(in-district only)**.

Adults make application for enrollment following the completion of high school spring enrollment (in-district only). Out-of-district adults may make application for enrollment after the completion of in-district enrollment.

ADMISSION PROCEDURES

Who can enroll: Adults and High School Juniors & Seniors

Graduating seniors and high school students submit standardized test results, attendance records, and transcripts with their application forms. Before being admitted, a career counselor will interpret the results of standardized tests and review transcripts, attendance, and behavior to determine interest and suitability for enrollment. If current standardized testing is not available, an ACT WorkKeys Curriculum assessment may be required. A personal interview will be conducted with each applicant.

Adults applying for admission must take the ACT WorkKeys Curriculum assessment if current standardized testing is not available. An Autry career counselor will interpret the results of the assessment to determine interest and suitability for enrollment. A personal interview will be conducted with each applicant.

ENROLLMENT INFORMATION

Financial Aid: There are financial aid options available for qualified students. Contact the financial aid office at Autry Technology Center for more information.

Autry Scholarship: This scholarship is available to high school graduates who: (1) live in the Autry district (2) lived in the Autry district their senior year in high school, and (3) meet enrollment guidelines. This scholarship covers 100% tuition for up to three years immediately following high school graduation. The cost of books and supplies is the responsibility of the student. Scholarship eligibility will be reviewed each semester.

Tuition: In-district high school students pay no tuition for full-time career programs. In-district adult students pay in-district rates. In-district adults are defined as post-secondary individuals who have established legal/permanent residence in the Autry district. All others pay out-of-district rates.

Expenses: May include, but are not limited to, textbooks and supplies available at **http://autrytech.edu/student-services/books-supplies/.**

autrytech.edu

ROBOTICS AND ELECTRONIC AUTOMATION

CAREER PATHWAY: MAINTENANCE, INSTALLATION, AND REPAIR
ADULT PROGRAM : ROBOTICS AND ELECTRONIC AUTOMATION `DISCLOSURE`

potential courses
Direct Current
Alternation Current
Programming
Hydraulics & Pneumatics
Digital Circuits
Analog Circuits
Motor Control
Precision Measurement
Mechanical Systems
PLC
Instrumentation
Robotics
Automation Controls
Communications
Process control
Microsoft Office
Total Class Hours - 2100

CAREER PATHWAY: MAINTENANCE, INSTALLATION, AND REPAIR
HIGH SCHOOL PROGRAM : ROBOTICS AND ELECTRONIC AUTOMATION

potential courses
Ground drones
Direct current
Digital circuits
Aerial drones
Robotics
Programming
Mechatronics Lab
Students choose 262 hours of training from the following list:
   -Hydraulics
   -Mechanical systems
   -CAD/CAM
   -PLC
   -Motor control
   -Precision measurement
   -Pneumatics
   -CNC
   -Solidworks
   -Sensors
   -Residential wiring

Total Class Hours - 1050

For further information regarding Gainful Employment in the program, please access the following link:

http://autrytech.edu/student-services/gainful-employment-disclosures/

- **EMPLOYMENT OPPORTUNITIES**
  The Job Developer with Autry Technology Center works diligently to match students with jobs available in industry. Any questions regarding current employment opportunities should be directed to the Job Developer.

- **SALARY RANGE**
  Listed below is the salary range in Oklahoma for Robotics and Electronic Automation obtained from O*Net OnLine.

2016			
	Lowest 10%	Median	Highest 10%
Hourly	$15.60	$27.17	$34.52
Annually	$32,440	$56,510	$71,800

- **OCCUPATIONAL CHARACTERISTICS**
  (Information obtained from the US Dept. of Labor Statistics Occupational Outlook Handbook)
  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.

- **ACCREDITATIONS**
  Oklahoma Board of Career and Technology Education
  Oklahoma State Department of Education

INSTRUCTOR(S)

MONTE ROGGOW
Monte Roggow has been a part of the Autry Technology Center team since 1986. Through various organizations prior to Autry, Mr. Roggow worked on hard disk drives, high speed anti-radiation missiles, and traffic light controls and communication systems. He is a graduate of Oklahoma State University. During the evenings, Mr. Roggow also teaches courses to Autry's industry partners.

What to Disclose, When & to Whom	Brief Description of Information to be Disclosed	Where to Find Full Disclosure Information
What: **Institutional Information** When: Upon Request To: Enrolled Students Prospective Students	• Cost of attending Autry Technology Center i.e.: Tuition and Fees • Institutional Refund Policy/Requirements for officially withdrawing from school • Information regarding the school's programs & academic support • Entities that accredit, approve, or license the school & its programs & procedures for reviewing accreditation, approval, or licensing documentation • Description of any special services & facilities for students with disabilities • Titles & availability of employees responsible for dissemination of institutional & financial assistance information & how to contact them • Penalties & institutional policies on copyright Infringement, including unauthorized peer-to-peer file sharing • Net Price Calculator • Constitution Day/Voter Registration/Vaccination Polices • Grievance Procedures	• Autry Website www.autrytech.edu • Student Handbook • Consumer Information Guide • Autry Course Catalog • Program Description Handouts
What: **Financial Assistance Information** When: Upon Request To: Enrolled Students Prospective Students	• Description of all available federal, state, local, private & institutional financial assistance, & a description of: (1) application form & procedures; (2) student eligibility requirements; (3) selection criteria; & (4) criteria for determining the amount of a student's award • Rights & responsibilities of students receiving Title IV & other financial aid, including: (1) criteria for continued eligibility; (2) satisfactory academic progress (SAP) standards; (3) criteria to re-establish eligibility if student fails to maintain SAP; (4) method & frequency of financial aid disbursements; (5) books & supplies policy • Procedures for the Return of Title IV Aid and Repayments by withdrawn students	• Autry Website www.autrytech.edu • Student Handbook • Consumer Information Guide • FAFSA website: www.fafsa.gov • Financial Aid Policy & Procedures

What: **Family Education Rights and Privacy Act (FERPA)**
 	
When: Upon Request,
    Annually Local Newspaper
 	
To: Enrolled Students
    Parents of enrolled students under the age of 18 Perspective Students
	• Right to & procedures for inspecting & reviewing student's education records
	• Right to & procedures for requesting amendment of student's education records believed to be inaccurate or misleading
	• Right to file a complaint with the Department of Education for alleged school's or educational agency's failure to comply with FERPA requirements
	• Right of school to disclose personally identifiable information contained in student's education records without prior consent (34 CFR §99.31)
	• Students right & procedures for directory information to not be disclosed
		• Student Handbook
		• Consumer Information Guide
		• Board of Education Policy and Procedure Manual
		• http://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html

What: **Completion/Graduation Rate, Retention Rate, & Transfer Out Rate**
 	
When: Ongoing
    Upon Request
 	
To: Enrolled Students
    Prospective Students
	• The institution's completion rate for full-time, first-time, certificate seeking students enrolled at the post-secondary level who completed their career major within 150% of the normal time (scheduled length of career major) for completion
	• Transfer-out rate is not applicable to Technology Centers since it applies to schools whose mission includes providing substantial preparation for students to enroll in another eligible institution
	• Information on student body diversity in the categories of gender & ethnicity of enrolled students who receive Federal Pell Grants
	• Retention rates of certificate seeking first-time full-time students as reported to the Integrated Postsecondary Education Data System (IPEDS)
		• U.S. Dept. of Ed's College Opportunities On-Line website: nces.ed.gov/collegenavigator
		• Autry ODCTE Profile

What : **Drug & Alcohol Abuse Prevention** When: Annually & Upon Enrollment or Hire To: Enrolled Students Current Employees	• Information on preventing drug & alcohol abuse • Standards of conduct that clearly prohibit, at a minimum, the unlawful possession, use, or distribution of drugs & alcohol by students & employees on the school's property, or as part of the school's activities • A description of the sanctions under local, state & federal law for unlawful possession, use or distribution of illicit drugs & alcohol • A description of drug & alcohol abuse education programs, counseling, treatment, or rehabilitation programs available to students & employees • A description of the health risks associated with the use of illicit drugs & alcohol • A clear statement that the school will impose sanctions on students & employees for violations of the standards of conduct (consistent with local, state & federal law) & a description of these sanctions, up to & including expulsion, termination of employment, & referral for prosecution	• Autry Website www.autrytech.edu • Student Handbook • Consumer Information Guide • Board of Education Policy and Procedure Manual

What: **Campus Security Report**
When: Annually by October 1
To: Enrolled Students
    Current Employees
When: Upon Request
To: Prospective Students
    Prospective Employees
When: Annually by date specified
To: U.S. Dept. of Education
	• Crime statistics for 3 most recent years concerning the occurrence on campus, in or on non-campus buildings or property & public property reported to campus security authority or local police. Policies concerning the security of & access to campus facilities & procedures to report campus crimes or other emergencies
	• Disciplinary actions regarding the possession, use & sale of alcoholic beverages & illegal drugs & enforcement of state underage drinking laws & federal & state drug laws
	• Programs to inform students & employees about campus security policies, procedures & practices & encourage responsibility for the prevention of crime.
	• Policies regarding sex offenses & where to obtain information concerning registered sex offenders.
	• Emergency response & evacuation policy, procedures & programs
	• Campus Sexual Violence Elimination Act and Violence Against Women Reauthorization Act information, policies, and procedures
		• Autry Website www.autrytech.edu
		• Student Handbook
		• Consumer Information Guide
		• Emergency Handout for Staff

What: **Gainful Employment** To: Prospective/Enrolled Students	• Information on graduation rates, the median debt of students completing the program, program costs, job placement, types of employment, etc.	• Autry Website: www.autrytech.edu/student-services/gainful-employment-disclosures

Paper copies of Disclosure Information available from Student Services.
This notice is distributed annually to all current and prospective students. It is also located on Autry's website, in the Student Handbook, and Consumer Information Guide.