

## The Drake Advantage

Students who attend Drake State Technical College will receive a quality education utilizing a combination of traditional lecture style classes, computer labs as well as hands on experience in our on-site training facilities. Class sizes are typically much smaller than other area institutions of higher education allowing for more one-on-one faculty-student interaction. When we say "Our Graduates Work", we stand behind a commitment to provide the educational opportunities to prepare our students for immediate entry into the workforce.

### Getting Started at Drake State

If this is the program you select to pursue at Drake State, getting started is easy.

- **Complete an Application for Admission** and submit to the Admissions Office - Building E.
- Take the **COMPASS Entrance Exam (Room E-5)**. Testing will take approximately one hour.
- **Complete the Free Application for Federal Student Aid (FAFSA)** online @ [www.http://studentaid.ed.gov](http://studentaid.ed.gov).
- **Attend the New Student Orientation** session held prior to the first day of Regular Registration each semester. This session is designed to provide an overview of the College and the registration process. An academic advisor will help interpret assessment scores.
- **Register for classes** with an advisor.
- **Pay Remaining Fees** in the Business Office - Building A to complete the registration process.

This brochure serves as basic information for those interested in the programs outlined within. For an all-inclusive list of classes and required course numbers, the J.F. Drake State Student Catalog provides the "official" requirements for graduation as outlined by the Alabama Department of Postsecondary Education. A catalog is available from the Admissions Office or online @ [www.drakestate.edu](http://www.drakestate.edu).

For specific questions about this program, contact Collis Sims at 256.551.3157 or [collis.sims@drakestate.edu](mailto:collis.sims@drakestate.edu)

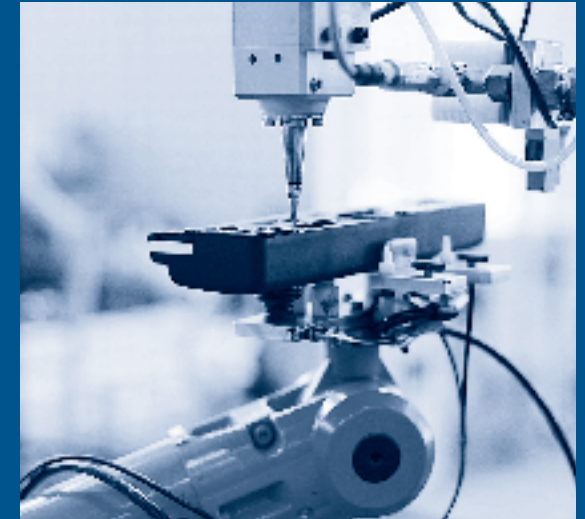


**Equal Employment/Opportunity Institution  
Accredited by:**

**Council on Occupational Education  
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Atlanta, Georgia 30346 • 800.917.2081**

# INDUSTRIAL SYSTEMS TECHNOLOGY

## Our Graduates Work.



**3421 Meridian Street, North • Huntsville, AL 35811  
Phone 256.539.8161 • Fax 256.539.6439  
1.888.41.drake (37253) • [www.drakestate.edu](http://www.drakestate.edu)**

## Program Description:

The Industrial Systems Technology Program includes classes from the electricity, heating and air conditioning, machine tool and welding areas. Anyone who successfully completes the program will be a multi-craft individual. This does not mean an individual is an expert in one particular area, but someone who understands several areas and is able to perform general maintenance duties.

## Career Opportunities:

As a graduate of the Industrial Systems Technology program, you can become employed as an industrial maintenance technician, industrial machinery mechanic or industrial machinery repairer.

## Expected Earnings/Salary

Earnings of Industrial Machinery Mechanics as reported by the 2008-2009 Occupational Outlook Handbook are as follows:

The median hourly earnings are \$19.74 an hour.

The middle 50 percent earn between \$15.87 and \$24.46 per hour.

The highest 10 percent earn more than \$29.85 per hour.

## Skills Needed

In order to be a successful Industrial Maintenance Technician you must have good mechanical aptitude and manual dexterity. Good physical condition and agility are also important traits to have in this occupation.

## Types of Programs Offered

There are three different levels of training in the Industrial Systems Technology Program:

**Career Skills Certificate in Industrial Maintenance or Industrial Robotics**

**Career Entry Certificate - Industrial Maintenance**

**Associate in Applied Technology Degree**

The varied levels of certification allow each student to customize the amount of training he/she desires based on individual career goals. The basic Career Skills certificate may be utilized as a means for immediate entry into the workforce or serve as a starting point for the Career Entry Certificate. In most cases, the credits received from one certificate level will transfer to a program of a higher level.

### Courses for Career Skills Certificate

*Areas I-IV are required general education courses. Refer to the Drake State Catalog for specific course titles and credit hours.*

- Area I English/Communications
- Area II Natural Sciences/Math/Computer Science
- Area VI Core/Technical Concentration
  - Industrial Maintenance*(sample topic selections)*

Industrial Pneumatics & Hydraulics  
Fundamentals of AC & DC  
Principles of Industrial Mechanics  
Metal Welding & Cutting Techniques  
Precision Machining Fundamentals

### OR

Core/Technical Concentration

- Industrial Robotics

Fundamentals of Industrial Pneumatics & Hydraulics  
Industrial Motor Controls  
Principles of Programmable Controllers  
Industrial Robotics  
Robot Maintenance & Troubleshooting  
Advanced Programmable Controllers

Additional requirements include 1 credit hour for Orientation, 1 credit hour for Workplace Skills Preparation and a non-credit entry for Graduation.

**Approximate Credit Hours Required: 29**

### Career Entry Certificate – Industrial Maintenance

*Areas I-IV are required general education courses. Refer to the Drake State Catalog for specific course titles and credit hours.*

- Area I English/Communications
- Area II Humanities/Fine Arts
- Area III Natural Sciences/Math/Computer Science
- Area VI Core/Technical Concentration
  - (sample topics listed below)*

Industrial Pneumatics & Hydraulics  
Preventative Maintenance  
Principles of Industrial Pumps & Piping Systems

Precision Machining  
Industrial Wiring  
Industrial Motors  
Industrial Motor Controls  
AC & DC Fundamentals  
Industrial Mechanics Metal Welding & Cutting Techniques  
Programmable Controls  
Principles of Industrial Maintenance

Additional requirements include 1 credit hour for Orientation, 1 credit hour for Workplace Skills Preparation and a non-credit entry for Graduation

**Approximate Credit Hours Required: 50**

### Associate in Applied Technology Degree – Industrial Systems Technology

*Areas I-IV are required general education courses. Refer to the Drake State Catalog for specific course titles and credit hours.*

- Area I English/Communications
  - Area II Humanities/Fine Arts
  - Area III Natural Sciences/Math/Computer Science
  - Area IV History/Social/ Behavior Science
- Core/Technical Concentration
- 
- (sample topics listed below)*

Industrial Maintenance  
Fundamentals of Pneumatics & Hydraulics  
Mechanical Measurement & Technical Drawing  
Preventative Maintenance  
Industrial Pumps & Piping System  
Precision Machining  
Industrial Wiring  
Industrial Motors  
Industrial Motor Control  
AC & DC Fundamentals  
Industrial Mechanics Metal Welding & Cutting Techniques  
Industrial Robotics  
Robotic Maintenance and Troubleshooting  
Programmable Controllers (I & II)  
Introduction to CNC

Additional requirements include 1 credit hour for Orientation, 1 credit hour for Workplace Skills Preparation and a non-credit entry for Graduation

**Approximate Credit Hours Required: 74**