

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.

If you have any further questions regarding your program of choice or the registration process you may contact Drake State @ 256.539.8161 or visit us online @ drakestate.edu.

The Associate of Applied Technology - Industrial Electronics Technology potentially articulates 64 credit hours towards a Bachelors of Science in Electrical Engineering Technology at Alabama A&M. See a Drake State advisor for more credit transfer assistance.

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.

For specific questions about this program contact Karl Henry at 256.551.1709 or karl.henry@drakestate.edu.

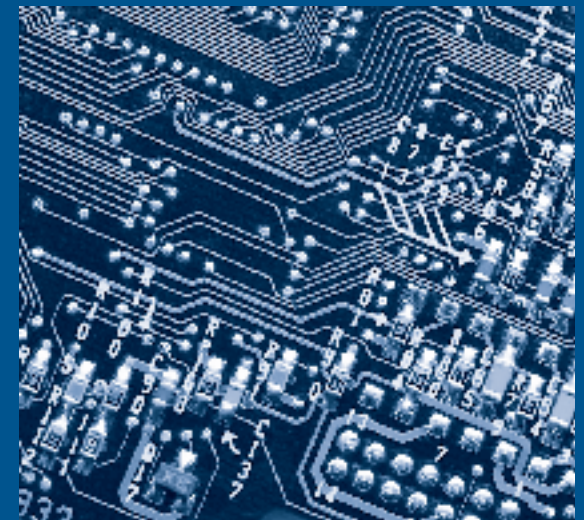


**Equal Employment/Opportunity Institution
Accredited by:**

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

INDUSTRIAL ELECTRONICS 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**

Program Description

The Industrial Electronics Technology program is designed to provide students with the opportunity to acquire knowledge, attitude, skills and potentially certification in the basic elements of Industrial Electronics. Students will begin by learning the basic laws of voltage and current, study various types of circuits and potentially use these theories to troubleshoot electronic equipment. Near the end of the program students will repair and build computers including the handling and replacing of circuit cards, drives, memory and the installation of hardware, which prepares them for the CompTIA certification.

Career Opportunities

Graduates of the Industrial Electronics Technology program can become employed as a telecommunications technician, electronic/engineering technician or computer maintenance technician.

Based on the course materials students are prepared for these specific jobs: IPCJ-standard, ICET, ETA, Customer Service; Cable and Harness, Inspection, Amateur Radio Licensure and A+ Certification.

Expected Earnings/Salary

Earnings of Electronic/electronics engineering technicians as reported by the 2008-2009 Occupational Outlook Handbook are as follows:

Median earnings are \$50,660 annually

The middle 50 percent earn between \$39,270 and \$60,470 annually.

The highest 10 percent earn more than \$73,200 annually

Median annual earnings in the industries employing the largest numbers of electrical and electronics engineering technicians are:

Wired telecommunications carriers - \$54,780

Engineering services - 48,330

Semiconductor and other electronic component manufacturing - 45,720

Navigational, measuring, electromedical, and control instruments manufacturing - 45,140

Employment services - 38,910

Skills Needed

Successful Industrial Electronic technicians have good eyesight and color vision, good mechanical ability, manual dexterity, above average math skills and a basic interest in diagnosing and repairing equipment. Because technicians are often part of a team, it is also important to have good communication skills and the creativity to identify and solve problems.

Types of Programs Offered

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

Career Skills Certificate Basic Electronics OR Advanced Microelectronics

Career Entry Certificate – Industrial Electronics

Associate in Applied Technology Degree

– Industrial Electronics Technology

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. Please refer to the Drake State Catalog for specific course titles and credit hours.

Area I English/Communications

Area III Natural Sciences/Math/Computer Science

Area VI Core/Technical Concentration

(sample topics listed below)

Basic Electronics Certificate

Concepts of Direct Current

Concepts of Alternating Current

Special Topics in IPC-J STD

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: 24

Career Entry Certificate – Industrial Electronics

Areas I-IV are required general education courses. Please 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/Behavioral Science

Area VI Core/Technical Concentration

(sample topics listed below)

Concepts in Direct Current

Concepts in Alternating Current

Concepts of Solid State Electronics

Concepts of Electronic Circuits

Concepts of Digital Electronics

Microprocessors

Special Topics in IPC-J STD

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 Electronics Technology

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

Area I English/Communications

Area II Humanities/Fine Arts

Area III History/Social/Behavior Science

Area IV Natural Sciences/Math/Computer Science

Area VI Core/Technical Concentration

(sample topics listed below)

Concepts in Direct Current

Concepts of Alternating Current

Concepts of Solid State Electronics

Concepts of Electronic Circuits

Concepts of Digital Electronics

Microprocessors

Microcomputers

PC Repair

Electronic Communications

Special Topics in IPC-J (STD & Senior)

Certification Prep Lab

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: 76