

# *Electronics/Electrical Engineering Technology* **Math/Science Concentration**

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*The Electronics/Electrical Engineering Technology: Math/Science Concentration has a core curriculum that emphasizes general engineering fundamentals with intense hands-on laboratory experience focusing on circuit design, applications, and integrated computer systems. The curriculum provides strong mathematics and science preparation needed for upper-division course work. The program is articulated with the University of Delaware's bachelor's degree in Electrical Engineering. Graduates of the associate degree program are also prepared as entry level electronic technicians.*

## **What You'll Learn...**

- Practical problem-solving and troubleshooting techniques
- Component identification and analysis techniques
- Circuit and systems identification and analysis
- Schematic and diagram analysis
- Test equipment applications

## **What You'll Earn...**

- A competitive salary and excellent opportunities for advancement
- A career focusing on either systems, bench, or field repair
- Employment as an electronics specialist, technical specialist, electrical technician and engineering technician
- The credentials to become an electrical & computer repair manager/supervisor
- The technical knowledge and ability to succeed in an expanding technical world

## **Why You'll Succeed...**

- Many of the higher paying jobs, now and in the future, will be in a technical career field requiring an education beyond high school
- Employees with degrees tend to be more eligible for promotion\*
- Associate degree holders generally earn more than high school graduates\*
- College credit may be awarded for relevant work experience
- Many credits from an Associate Degree may be applied toward a Bachelor Degree

*\*Statistics from U.S. Department of Commerce, Bureau of Census*

# Math/Science Concentration

You can enroll in the Math/Science Concentration on either a full-time or part-time basis. The length of time required to complete an Associate Degree depends on the number of courses you take each semester. Some students may need refresher courses at the basic or pre-tech level; others may receive transfer credit or credit for work experience. Delaware Tech operates on a semester system with new terms beginning in late August and mid-January, plus summer terms beginning at the end of May and in mid-June. You can start taking courses any semester or summer term; however, all technical courses may not be offered every term. A diploma program is also available for this technology.

## CORE COURSES

Courses		Credits
ECO 111	Macroeconomics .....	3
ECO 122	Microeconomics .....	3
ENG 121	Composition.....	3
or		
ENG 125	Honors Composition .....	3
ENG 122	Technical Writing & Communication .....	3
or		
ENG 130	Honors Technical Writing & Communication .....	3
Select two (2) courses from		
ENG 126	Pre-Industrial Literature .....	3
ENG 127	Post-Industrial Literature .....	3
ENG 128	Black American Literature .....	3
HIS 111	U.S. History: Pre-Civil War.....	3
HIS 112	U.S. History: Post-Civil Wa .....	3

## TECHNICAL SUPPORT/COMPUTER COURSES

Courses		Credits
CIS 120	Introduction to Programming .....	4
CIS 150	C/C++ Programming Language.....	4
or		
CEN 180 C	Language Intro .....	4

## TECHNICAL COURSES

Courses		Credits
CHM 150	Chemical Principles I.....	5

ELC 120	Introduction to Circuit Analysis.....	4
and		
ELC 121	Network Analysis.....	4
or		
ELC 118	Intro to Electricity.....	3
and		
ELC 119	DC and AC Theory .....	3
and		
ELC 121	Network Analysis .....	5
or		
ELC 122	Electronic Devices/Circuits I .....	3
and		
ELC 222	Network Theorems & Analysis.....	4
ELC 130	Digital Electronics I.....	4
ELC 131	Digital Electronics II.....	4
or		
ELC 233	Microprocessor Applications .....	4
ELC 232	Introduction to Microprocessors .....	4
ELC 220	Analog Electronics I .....	4
or		
ELC 221	Analog Electronics II.....	4
or		
ELC 123	Electronic Devices/Circuits II. ....	4
and		
ELC 223	Electronic Communications .....	4
MAT 281	Calculus I .....	4
MAT 282	Calculus II .....	4
MAT 283	Calculus III.....	4
PHY 281	Physics I with Calculus .....	4

## Getting Started

1. Obtain, complete, and submit an Application for Admission with a one-time, non-refundable application fee. Make check or money order payable to Delaware Technical & Community College. Applications may be requested by phone by calling (302)857-1020. or mail, via the Web, or from a high school counselor. Applications may be printed from the Web at [www.dtcc.edu/all/forms](http://www.dtcc.edu/all/forms)
2. Develop a financial plan to identify resources (financial aid/SEED/other scholarships) to help pay for college.
3. Take the College Placement Test (CPT) unless college-level math, reading, and English courses have been completed with a "C" grade or better. The CPT will determine appropriate placement and is scheduled by the Admissions Office.
4. Request that high school and/or college transcripts be sent to the Admissions Office.
5. Meet with a Delaware Tech counselor to discuss CPT results.
6. Meet with advisor to plan schedule.

## Standards of Excellence

❖ 97% of graduates are employed in their career choice