

# 2021-2022 TTC Catalog

## General Technology - Mechatronics

### Associate in Applied Science in General Technology

#### Mechatronics Career Path

#### 67 Credit Hours

The General Technology major allows students to select course work necessary to become multi-skilled technicians. In addition to completing the college's core curriculum, students also complete course work in at least two technical areas. The following is an example of a career path available. The secondary paths may be substituted for courses in other programs' primary path. Interested students should talk with their advisors.

Graduates of this career path are employed as automated controls technicians, electrical and instrumentation technicians, or robotics and automation technicians at manufacturing plants, chemical plants, food and beverage plants, water systems, and energy generation facilities. Job duties include installing, maintaining and repairing various types of electro-mechanical automation equipment.

Students can earn only one General Technology degree in a single career path.

#### General Education Core Requirements

MAT 170 Algebra, Geometry and Trigonometry I 3

REQ COM            Select from            3  
[Communication](#)

REQ GEN            Select from            3  
[General Education](#)

REQ HUM            Select from            3  
[Humanities](#)

REQ SSC            Select from            3  
[Behavioral/Social Sciences](#)

Total: 15

#### Primary Technical Specialty

AMT 105 Robotics and Automated Control I 3

AMT 205 Robotics and Automated Control II 3

EEM 221 DC AC Drives 3

EEM 251 Programmable Controllers 3

EEM 252 Programmable Controllers Applications 3

EET 113 Electrical Circuits I 4

EET 145 Digital Circuits 4

EIT 110 Principles of Instrumentation 3

EIT 244 Computers and PLCs in Instrumentation 3  
EGR 104 Engineering Technology Foundations 3

Total: 32

### **Secondary Technical Specialty**

AMT 209 Automation Networks-Ethernet 3  
EEM 151 Motor Controls I 4  
IMT 132 Hydraulics 2  
IMT 133 Pneumatics 2  
IMT 163 Problem Solving for Mechanical Applications 3

Total: 14

### **Additional Requirements**

EEM 107 Industrial Computer Techniques 2  
IET 223 Industrial Safety 3  
IMT 104 Schematics 2

Total: 6

### **Admission Requirements**

Admission into this program requires proof of high school graduation (or GED) and qualifying scores on SAT, ACT or the TTC placement test.