# **2019-2020 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 multiskilled 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**

REQ COM	Select from Communication	3
REQ GEN	Select from General Education	3
REQ HUM	Select from Humanities	3
REQ MAT	Select from  Mathematics/ Natural Sciences	3
REQ SSC	Select from Behavioral/Social Sciences	3

#### Total: 15

## **Primary Technical Specialty**

EEM 113 DC Circuits I 2
EEM 114 DC Circuits II 2
EEM 119 AC Circuits I 2
EEM 120 AC Circuits II 2
EEM 129 Solid State Devices I 2
EEM 130 Solid State Devices II 2

EEM 218 AC DC Machines with Electrical Codes I 2

EEM 219 AC DC Machines with Electrical Codes II 2

EEM 221 DC AC Drives 3

EEM 251 Programmable Controllers 3

EEM 252 Programmable Controllers Applications 3

EIT 110 Principles of Instrumentation 3

EIT 244 Computers and PLCs in Instrumentation 3

Total: 31

## **Secondary Technical Specialty**

EEM 151 Motor Controls I 4

EEM 167 Commercial-Industrial Wiring I 2

EEM 168 Commercial-Industrial Wiring II 2

IMT 132 Hydraulics 2

IMT 133 Pneumatics 2

IMT 163 Problem Solving for Mechanical Applications 3

Total: 15

## **Additional Requirements**

EEM 107 Industrial Computer Techniques 2

EEM 108 Basic Industrial Skills I 2

EEM 110 Basic Industrial Skills II 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.