



# BACHELOR OF TECHNOLOGY



**INSTITUTE OF  
TECHNOLOGY**

**Advance your career by earning a bachelor's degree in Instrumentation Engineering Technology through the Tulsa Community College and OSU Institute of Technology Bachelor of Technology Partnership Pathway.**

This pathway was created for individuals who wish to pursue rewarding, successful careers in the high-demand field of instrumentation engineering technology. Through the TCC/OSUIT partnership, students pursuing TCC's Associate in Applied Science in Electronics Technology may seamlessly transfer and apply up to sixty-seven (67) credit hours toward the OSUIT Bachelor of Technology in Instrumentation Engineering Technology program. The remaining coursework, listed below, will be completed through OSUIT.

#### **BT General Education Requirements: 15 hours**

ORIE 1011 College Strategies and  
\*ENGL 3323 Technical Writing III and

<sup>C</sup>Up to eleven hours of coursework from the following:

\*PHYS 1214 General Physics and/or

\*MATH 2144 Calculus and/or

\*MATH 2153 Calculus II and/or

PHIL 1213 Ethics and/or

Three hours of social science, foreign

language or fine arts coursework and/or

Three hours of humanities coursework

#### **BT Technical Requirements: 46 hours**

\*ETD 2411 Employment Exploration and

\*ETDE 2123 PLC Applications and

\*ETDE 2273 Electronic Control Devices and

\*ETDE 3112 Internship and

\*ETDE 3123 Instrumentation and

\*ETDE 3133 Process Measurement & Control and

\*ETDE 3213 Project Management &

Engineering Economics and

\*ETDE 3223 Industrial Networks and

\*ETDE 3313 Heat Transfer & Fluid Mechanics and

\*ETDE 3513 Programming for Instrumentation and

\*ETDE 4233 Liquid & Gas Flow Measurement and

\*ETDE 4313 Distributed Control Systems and

\*ETDE 4813 Capstone

\*Has a prerequisite | <sup>C</sup>Contingent on coursework completed through TCC

**TOTAL: 61 HOURS**

## **FIND OUT MORE**

Contact OSUIT Information Technologies Division

918.293.5440 or [infotech@okstate.edu](mailto:infotech@okstate.edu)

TCC Business, Information & Engineering Technology Division

918.595.7439 or [pat.green@tulsacc.edu](mailto:pat.green@tulsacc.edu)

# REQUIREMENTS

## Tulsa Community College

## OSU Institute of Technology

### GENERAL EDUCATION REQUIREMENTS: 35 HOURS

#### English Composition: 6 hours

- \*ENGL 1113 Composition I and
- \*ENGL 1213 Composition II

- \*ENGL 1113 Freshman Composition I and
- \*ENGL 1213 Freshman Composition II

#### Mathematics: 6 hours

- \*MATH 1513 College Algebra and
- \*MATH 1613 Plane Trigonometry

- \*MATH 1513 College Algebra and
- \*MATH 1613 Trigonometry

#### U.S. History: 3 hours

- HIST 1483 U.S. History 1492 to Civil War Era or
- HIST 1493 U.S. History Civil War Era to Present

- HIST 1483 U.S. History to 1865 or
- HIST 1493 U.S. History since 1865

#### U.S. Government: 3 hours

- POLS 1113 American Federal Government

- POLS 1113 U.S. Government

#### Science: 8 hours

- \*PHYS 1114 General Physics I or
- \*CHEM 1115 General Chemistry I

- \*PHYS 1114 General Physics I and
- \*CHEM 1314 General Chemistry I

#### Additional General Education Coursework: Up to 9 hours

- \*PHYS 1214 General Physics II and/or
- \*MATH 2114 Analytic Geometry and Calculus I and/or
- \*MATH 2124 Analytic Geometry and Calculus II and/or
- Three hours of social science, foreign language or fine arts coursework and/or
- PHIL 1143 Introduction to Ethics and/or
- Three hours of humanities coursework

- \*PHYS 1214 General Physics I and/or
- \*MATH 2144 Calculus I and/or
- \*MATH 2153 Calculus II and/or
- Three hours of social science, foreign language or fine arts coursework and/or
- PHIL 1213 Ethics and/or
- Three hours of humanities coursework

### TECHINICAL REQUIREMENTS: 29 HOURS

#### Technical Core: 24 hours

- \*ELET/ALTE 1223 Hydraulics & Pneumatics and
- \*ELET 1303 DC Circuit Analysis and
- \*ELET 1313 AC Circuit Analysis and
- \*ELET 1503 Programmable Control and
- \*ELET 2215 Digital Circuits and
- \*ELET 2244 Amplifiers I and
- \*ELET 2333 Amplifiers II and
- \*ELET 2533 Automation Control

- \*ETDE 2253 Hydraulics & Pneumatics and
- \*ETDE 1243 DC Electronics & Metrology and
- \*ETDE 1263 AC Electronic & Photonics and
- \*ETD 2113 Introduction to PLCs and
- \*ETDE 1373 Digital Systems & Microcontrollers and
- \*ETDE 1363 Electronic Devices & Standards and
- \*ETDE 2223 Electrical Power Distribution and
- \*ETD 1343 Electrical Motors & Controls

#### Additional Technical Coursework: 5 hours

- DRFT 1324 Engineering Drawing with CAD and
- \*S ELET 1212 Introduction to Electricity

- \*ETDG 1143 Introduction to Design/Drafting and
- ETD 1102 Basic Mechanics

\*Course has a prerequisite | §Approved substitution

**TOTAL: 67 HOURS**