

# Associate in Science (AS) Engineering Technology (Advanced Manufacturing Specialization)

This Program Map is Part of the Science, Technology, Engineering, and Mathematics Pathway

The Engineering Technology program is offered in an Open-Entry/Early-Exit format, which allows students to enroll in courses at any time during the academic year. Students should carefully review the <a href="mailto:program webpage">program webpage</a> for more information.

**Note:** This Program Map is intended to serve as a guide; students should always meet with their Student Success Advisor to develop a personalized Education Plan.

# **Program Map for Students Attending Full-Time**

Term	Course ID	Course Title	Credits
Term 1	ETD 1320C-1	Introduction to Computer-Aided Drafting 1	1 Credit
12 Hours	ETD 1320C-2	Introduction to Computer-Aided Drafting 2	1 Credit
	ETD 1320C-T	Introduction to Computer-Aided Drafting 3	1 Credit
	EET 1084C-1	Introduction to Electronics 1	1 Credit
	EET 1084C-2	Introduction to Electronics 2	1 Credit
	EET 1084C-T	Introduction to Electronics 3	1 Credit
	ENC 1101	College Composition I	3 Credits
	HUM 2020, or	Introduction to Humanities, or	3 Credits
	PHI 2010	Logic	
Term 2	ETI 1110C-1	Introduction to Quality 1	1 Credit
12 Hours	ETI 1110C-2	Introduction to Quality 2	1 Credit
	ETI 1110C-T	Introduction to Quality 3	1 Credit
	ETI 1701C-1	Industrial Safety 1	1 Credit
	ETI 1701C-2	Industrial Safety 2	1 Credit
	ETI 1701C-T	Industrial Safety 3	1 Credit
	MAC 1105	College Algebra	3 Credits
		(See Note 2 Below)	
	AMH 1020, or	History of the United States: 1877 to Present, or	3 Credits
	POS 2041	American National Government	
T	ETN 40400 4	(See Note 3 Below)	4.0 10
Term 3	ETM 1010C-1	Mechanical Measurements and Instrumentation 1	1 Credit
6 Hours	ETM 1010C-2	Mechanical Measurements and Instrumentation 2	1 Credit
	ETM 1010C-T	Mechanical Measurements and Instrumentation 3	1 Credit
	ETI 1420C-1	Manufacturing Processes and Materials 1	1 Credit
	ETI 1420C-2	Manufacturing Processes and Materials 2	1 Credit
	ETI 1420C-T	Manufacturing Processes and Materials 3	1 Credit

## **CONTINUED ON PAGE 2**



Term	Course ID	Course Title	Credits
Term 4	ETS 1511C-1	Motors and Controls 1	1 Credit
12-13 Hours	ETS 1511C-2	Motors and Controls 2	1 Credit
	ETS 1511C-T	Motors and Controls 3	1 Credit
	ETM 2315C-1	Hydraulics and Pneumatics 1	1 Credit
	ETM 2315C-2	Hydraulics and Pneumatics 2	1 Credit
	ETM 2315C-3	Hydraulics and Pneumatics 3	1 Credit
	ETM 2315C-T	Hydraulics and Pneumatics 4	1 Credit
	Natural Science	Natural Science General Education Course	3-4 Credits
		(See Note 4 Below)	
	HLP 1081	Wellness Concepts	2 Credits
Term 5	ETS 1542C-1	Introduction to Programmable Logic Controllers 1	1 Credit
12 Hours	ETS 1542C-2	Introduction to Programmable Logic Controllers 2	1 Credit
	ETS 1542C-T	Introduction to Programmable Logic Controllers 3	1 Credit
	ETI 1622C-1	Concepts of Lean Manufacturing and Six Sigma 1	1 Credit
	ETI 1622C-2	Concepts of Lean Manufacturing and Six Sigma 2	1 Credit
	ETI 1622C-T	Concepts of Lean Manufacturing and Six Sigma 3	1 Credit
	ETS 1535C-1	Automated Process Control 1	1 Credit
	ETS 1535C-2	Automated Process Control 2	1 Credit
	ETS 1535C-T	Automated Process Control 3	1 Credit
	ETS 1540C-1	Industrial Applications of PLCs and Robotics 1	1 Credit
	ETS 1540C-2	Industrial Applications of PLCs and Robotics 2	1 Credit
	ETS 1540C-T	Industrial Applications of PLCs and Robotics 3	1 Credit
Term 6	Electives	Approved Electives	5 Credits
5 Hours		(See Note 5 Below)	

# **Total Required Program Credit Hours: 60**

#### **A Few Notes**

- 1. Students must meet all graduation requirements. To learn more about graduation requirements, please refer to the College Catalog.
- 2. Students must earn an appropriate score on a placement examination or complete MAT 1033 in order to enroll in MAC 1105.
- 3. Pursuant to Rule 6A-10.02413 of the Florida Administrative Code, all degree-seeking students must demonstrate competency in civic literacy by both passing the Florida Civic Literacy Exam and by completion of either AMH 1020 (History of the United States: 1877 to the Present) or POS 2041 (American National Government). Students may also use AP or CLEP credit for one of the two courses options.
- 4. Students must take one of the approved Natural Science General Education Courses in this program: BSC 1005C, CHM 1020, CHM 1045C, ESC 1000, PHY 2020C, or PHY 2048C.
- 5. Students must earn 5 credits hours of electives from the following list: ETD 2364C-1, ETD 2364C-2, ETD 2364C-1, ETI 1002C-2, ETI 1002C-T, ETI 1181C-1, ETI 1181C-T, ETI 1414C-1, ETI 1414C-2, ETI 1414C-T, ETI 1949C-1, ETI 1949C-2, ETI 1949C-3, ETI 1949C-T, ETI 2411C-1, ETI 2411C-2, ETI 2411C-T, ETI 2412C-1, ETI 2412C-2, ETI 2412C-T, ETS 1539C-1, ETS 1539C-2, ETS 1539C-T, ETI 1931, CET 1600C, CET 1610C, CET 2615C, CGS 1061, CGS 1510, ENC 2210, MAC 2233, and MAN 2500.

Program: AS-25690 - 2022-23 Catalog Year



# Associate in Science (AS) Engineering Technology (Advanced Manufacturing Specialization)

This Program Map is Part of the Science, Technology, Engineering, and Mathematics Pathway

The Engineering Technology program is offered in an Open-Entry/Early-Exit format, which allows students to enroll in courses at any time during the academic year. Students should carefully review the program webpage for more information.

**Note:** This Program Map is intended to serve as a guide; students should always meet with their Student Success Advisor to develop a personalized Education Plan.

## **Program Map for Students Attending Part-Time**

Term	Course ID	Course Title	Credits
Term 1	ETD 1320C-1	Introduction to Computer-Aided Drafting 1	1 Credit
	ETD 1320C-2	Introduction to Computer-Aided Drafting 2	1 Credit
	ETD 1320C-T	Introduction to Computer-Aided Drafting 3	1 Credit
	ENC 1101	College Composition I	3 Credits
Term 2	EET 1084C-1	Introduction to Electronics 1	1 Credit
	EET 1084C-2	Introduction to Electronics 2	1 Credit
	EET 1084C-T	Introduction to Electronics 3	1 Credit
	MAC 1105	College Algebra	3 Credits
		(See Note 2 Below)	
Term 3	ETI 1110C-1	Introduction to Quality 1	1 Credit
	ETI 1110C-2	Introduction to Quality 2	1 Credit
	ETI 1110C-T	Introduction to Quality 3	1 Credit
	HUM 2020, or	Introduction to Humanities, or	1 Credit
	PHI 2010	Logic	
Term 4	ETI 1701C-1	Industrial Safety 1	1 Credit
	ETI 1701C-2	Industrial Safety 2	1 Credit
	ETI 1701C-T	Industrial Safety 3	1 Credit
	AMH 1020, or	History of the United States: 1877 to Present, or	3 Credits
	POS 2041	American National Government	
		(See Note 3 Below)	
Term 5	ETM 1010C-1	Mechanical Measurements and Instrumentation 1	1 Credit
	ETM 1010C-2	Mechanical Measurements and Instrumentation 2	1 Credit
	ETM 1010C-T	Mechanical Measurements and Instrumentation 3	1 Credit
	ETI 1420C-1	Manufacturing Processes and Materials 1	1 Credit
	ETI 1420C-2	Manufacturing Processes and Materials 2	1 Credit
	ETI 1420C-T	Manufacturing Processes and Materials 3	1 Credit
Term 6	ETS 1511C-1	Motors and Controls 1	1 Credit
	ETS 1511C-2	Motors and Controls 2	1 Credit
	ETS 1511C-T	Motors and Controls 3	1 Credit
	ETM 2315C-1	Hydraulics and Pneumatics 1	1 Credit
	ETM 2315C-2	Hydraulics and Pneumatics 2	1 Credit
	ETM 2315C-3	Hydraulics and Pneumatics 3	1 Credit
	ETM 2315C-T	Hydraulics and Pneumatics 4	1 Credit

#### **CONTINUED ON PAGE 4**



Term	Course ID	Course Title	Credits
Term 7	HLP 1081	Wellness Concepts	2-3 Credits
	ETS 1542C-1	Introduction to Programmable Logic Controllers 1	1 Credit
	ETS 1542C-2	Introduction to Programmable Logic Controllers 2	1 Credit
	ETS 1542C-T	Introduction to Programmable Logic Controllers 3	1 Credit
Term 8	ETI 1622C-1	Concepts of Lean Manufacturing and Six Sigma 1	1 Credit
	ETI 1622C-2	Concepts of Lean Manufacturing and Six Sigma 2	1 Credit
	ETI 1622C-T	Concepts of Lean Manufacturing and Six Sigma 3	1 Credit
	Natural Science	Natural Science General Education Course	3-4 Credits
		(See Note 4 Below)	
Term 9	ETS 1535C-1	Automated Process Control 1	1 Credit
	ETS 1535C-2	Automated Process Control 2	1 Credit
	ETS 1535C-T	Automated Process Control 3	1 Credit
	ETS 1540C-1	Industrial Applications of PLCs and Robotics 1	1 Credit
	ETS 1540C-2	Industrial Applications of PLCs and Robotics 2	1 Credit
	ETS 1540C-T	Industrial Applications of PLCs and Robotics 3	1 Credit
Term 10	Electives	Approved Electives	5 Credits
		(See Note 5 Below)	

# **Total Required Program Credit Hours: 60**

### **A Few Notes**

- 1. Students must meet all graduation requirements. To learn more about graduation requirements, please refer to the College Catalog.
- 2. Students must earn an appropriate score on a placement examination or complete MAT 1033 in order to enroll in MAC 1105.
- 3. Pursuant to Rule 6A-10.02413 of the Florida Administrative Code, all degree-seeking students must demonstrate competency in civic literacy by both passing the Florida Civic Literacy Exam and by completion of either AMH 1020 (History of the United States: 1877 to the Present) or POS 2041 (American National Government). Students may also use AP or CLEP credit for one of the two courses options.
- 4. Students must take one of the approved Natural Science General Education Courses in this program: BSC 1005C, CHM 1020, CHM 1045C, ESC 1000, PHY 2020C, or PHY 2048C.
- 5. Students must earn 5 credits hours of electives from the following list: ETD 2364C-1, ETD 2364C-2, ETD 2364C-1, ETI 1002C-2, ETI 1002C-T, ETI 1181C-1, ETI 1181C-T, ETI 1414C-1, ETI 1414C-2, ETI 1414C-T, ETI 1949C-1, ETI 1949C-2, ETI 1949C-3, ETI 1949C-T, ETI 2411C-1, ETI 2411C-2, ETI 2411C-T, ETI 2412C-1, ETI 2412C-2, ETI 2412C-T, ETS 1539C-1, ETS 1539C-2, ETS 1539C-T, ETI 1931, CET 1600C, CET 1610C, CET 2615C, CGS 1061, CGS 1510, ENC 2210, MAC 2233, and MAN 2500.

Program: AS-25690 - 2022-23 Catalog Year



### **Additional Information**



#### **Minimum Graduation Requirements**

To qualify for graduation at Polk State College, a student must:

- Complete all degree-seeking admission requirements, including the submission of all necessary transcripts and other required documents.
- 2. Complete the required credit hours in a prescribed program of study.
- 3. Complete any other applicable requirements (e.g., some occupational and technical programs require a grade of C or better in all program courses).
- 4. Have an overall cumulative GPA of at least 2.00. A minimum cumulative program GPA of 2.0 is required for graduation with a credit or vocational certificate, or an Applied Technology Diploma.
- 5. For Associate in Arts and Baccalaureate Degree programs ONLY, satisfy the foreign language requirement for graduation, which is proficiency at college-level II (or the equivalent).
- Complete at least 25 percent of the credit hours required for the degree or certificate through instruction offered at Polk State College.

To learn more about graduation requirements, including the foreign language proficiency requirement for AA, BAS, and BS degrees, refer to the College Catalog at <a href="http://catalog.polk.edu/index.php">http://catalog.polk.edu/index.php</a>.



#### **Career Coach**

Are you interested in learning more about the careers this program will prepare you for? If so, check out Career Coach. Career Coach provides information on job openings, wages, education requirements, required skills, and job postings. You can even complete a career assessment to find careers that match your interests. To learn more about the careers that this program will prepare you for, please visit Career Coach.



#### **Polk State Pathways**

Interested in exploring Program Maps for other programs and transfer intents at Polk State? Visit <a href="www.polk.edu/program-maps">www.polk.edu/program-maps</a> to view additional Pathways and Program Maps.

