



## Associate in Science (AS) Engineering Technology (Mechanical Design and Fabrication Specialization)

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

This Program Map is for students who plan to earn an AS degree in Engineering Technology with a Specialization in Mechanical Design and Fabrication at Polk State College. 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. This Program Map is intended to serve as a guide, and students should always meet with their Student Success Advisor to develop a personalized Educational Plan.

### Program Map for Students Attending Full-Time

Term	Course ID	Course Title	Credits
<b>Term 1</b> <b>12 Hours</b>	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
	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 PHI 2600	Introduction to Humanities, or Ethics	3 Credits
<b>Term 2</b> <b>12 Hours</b>	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
	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 (See Note 2 Below)	3 Credits
	PSY 2012, or SYG 2000	General Psychology, or Introduction to Sociology	3 Credits
<b>Term 3</b> <b>6 Hours</b>	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
<b>Term 4</b> <b>11-13 Hours</b>	ETD 2364C-1	3D Computer-Aided Drafting and Solid Modeling 1	1 Credit
	ETD 2364C-2	3D Computer-Aided Drafting and Solid Modeling 2	1 Credit
	ETD 2364C-T	3D Computer-Aided Drafting and Solid Modeling 3	1 Credit
	ETI 1414C-1	Introduction to CNC Machining 1	1 Credit
	ETI 1414C-2	Introduction to CNC Machining 2	1 Credit
	ETI 1414C-T	Introduction to CNC Machining 3	1 Credit
	Natural Sciences	Natural Sciences General Education Course (See Note 3 Below)	3-4 Credits
	Wellness	Wellness General Education Course (See Note 3 Below)	2-3 Credits



Term	Course ID	Course Title	Credits
<b>Term 5</b> <b>12 Hours</b>	ETI 2411C-1	CNC Machine Processes 1	1 Credit
	ETI 2411C-2	CNC Machine Processes 2	1 Credit
	ETI 2411C-T	CNC Machine Processes 3	1 Credit
	Electives	Approved Electives (See Note 4 Below)	9 Credits
<b>Term 6</b>	Electives	Approved Electives (See Note 4 Below)	3 Credits
	ETI 2412C-1	Advanced CNC Machine Processes 1	1 Credit
	ETI 2412C-2	Advanced CNC Machine Processes 2	1 Credit
	ETI 2412C-T	Advanced CNC Machine Processes 3	1 Credit

**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. Students who take a 3-credit-hour Natural Sciences Course must take a 3-credit-hour Wellness Course. Students who take a 4-credit-hour Natural Sciences Course should take a 2-credit-hour Wellness Course.
4. Students must earn 12 credits hours of electives from the following list: ETI 1002C-1, ETI 1002C-2, ETI 1002C-T, ETI 1622C-1, ETI 1622C-2, ETI 1622C-T, ETI 1949C-1, ETI 1949C-2, ETI 1949C-3, ETI 1949C-T, ETM 2315C-1, ETM 2315C-2, ETM 2315C-3, ETM 2315C-T, ETS 1511C-1, ETS 1511C-2, ETS 1511C-T, ETS 1535C-1, ETS 1535C-2, ETS 1535C-T, ETS 1539C-1, ETS 1539C-2, ETS 1539C-T, ETS 1542C-1, ETS 1542C-2, ETS 1542C-T, ETI 1931, CET1600C, CET 1610C, CET 2615C, CGS 1061, CGS 1510, ENC 2210, MAC 2233, and MAN 2500.

Program: AS-25670 - **2021-22 Catalog Year**



## Associate in Science (AS) Engineering Technology (Mechanical Design and Fabrication Specialization)

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This Program Map is for students who plan to earn an AS degree in Engineering Technology with a Specialization in Mechanical Design and Fabrication at Polk State College. 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. This Program Map is intended to serve as a guide, and students should always meet with their Student Success Advisor to develop a personalized Educational Plan.

### Program Map for Students Attending Part-Time

Term	Course ID	Course Title	Credits
<b>Term 1</b>	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
<b>Term 2</b>	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 (See Note 2 Below)	3 Credits
<b>Term 3</b>	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 PHI 2600	Introduction to Humanities, or Ethics	3 Credit
<b>Term 4</b>	ETI 1701C-1	Industrial Safety 1	1 Credit
	ETI 1701C-2	Industrial Safety 2	1 Credit
	ETI 1701C-T	Industrial Safety 3	1 Credit
	PSY 2012, or SYG 2000	General Psychology, or Introduction to Sociology	3 Credits
<b>Term 5</b>	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
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	ETI 1420C-2	Manufacturing Processes and Materials 2	1 Credit
	ETI 1420C-T	Manufacturing Processes and Materials 3	1 Credit
<b>Term 6</b>	ETD 2364C-1	3D Computer-Aided Drafting and Solid Modeling 1	1 Credit
	ETD 2364C-2	3D Computer-Aided Drafting and Solid Modeling 2	1 Credit
	ETD 2364C-T	3D Computer-Aided Drafting and Solid Modeling 3	1 Credit
	ETI 1414C-1	Introduction to CNC Machining 1	1 Credit
	ETI 1414C-2	Introduction to CNC Machining 2	1 Credit
	ETI 1414C-T	Introduction to CNC Machining 3	1 Credit
<b>Term 7</b>	Natural Sciences	Natural Sciences General Education Course (See Note 3 Below)	3-4 Credits
	ETI 2411C-1	CNC Machine Processes 1	1 Credit
	ETI 2411C-2	CNC Machine Processes 2	1 Credit
	ETI 2411C-T	CNC Machine Processes 3	1 Credit



Term	Course ID	Course Title	Credits
<b>Term 8</b>	ETI 2412C-1	Advanced CNC Machine Processes 1	1 Credit
	ETI 2412C-2	Advanced CNC Machine Processes 2	1 Credit
	ETI 2412C-T	Advanced CNC Machine Processes 3	1 Credit
	Wellness	Wellness General Education Course (See Note 3 Below)	2-3 Credits
<b>Term 9</b>	Electives	Approved Electives (See Note 4 Below)	6 Credits
<b>Term 10</b>	Electives	Approved Electives (See Note 4 Below)	6 Credits

**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. Students who take a 3-credit-hour Natural Sciences Course must take a 3-credit-hour Wellness Course. Students who take a 4-credit-hour Natural Sciences Course should take a 2-credit-hour Wellness Course.
4. Students must earn 12 credits hours of electives from the following list: ETI 1002C-1, ETI 1002C-2, ETI 1002C-T, ETI 1622C-1, ETI 1622C-2, ETI 1622C-T, ETI 1949C-1, ETI 1949C-2, ETI 1949C-3, ETI 1949C-T, ETM 2315C-1, ETM 2315C-2, ETM 2315C-3, ETM 2315C-T, ETS 1511C-1, ETS 1511C-2, ETS 1511C-T, ETS 1535C-1, ETS 1535C-2, ETS 1535C-T, ETS 1539C-1, ETS 1539C-2, ETS 1539C-T, ETS 1542C-1, ETS 1542C-2, ETS 1542C-T, ETI 1931, CET 1600C, CET 1610C, CET 2615C, CGS 1061, CGS 1510, ENC 2210, MAC 2233, and MAN 2500.

Program: AS-25670 - **2021-22 Catalog Year**



## Additional Information

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### **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](#).

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### **Polk State Pathways**

Interested in exploring Program Maps for other programs and transfer intents at Polk State? Visit [www.polk.edu/program-maps](http://www.polk.edu/program-maps) to view additional Pathways and Program Maps.

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