



**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. 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
Term 1	ETD 1320C	Introduction to Computer-Aided Drafting	3 Credits
	EET 1084C	Introduction to Electronics	3 Credits
	ENC 1101	College Composition I	3 Credits
	HUM 2020, or PHI 2010	Introduction to Humanities, or Introduction to Philosophy	3 Credits
Term 2	ETI 1110C	Introduction to Quality	3 Credits
	ETI 1701C	Industrial Safety	3 Credits
	Mathematics	Mathematics General Education Course (See Note 1)	3 Credits
	AMH 1020	History of the United States: 1877 to the Present (see Note 2)	3 Credits
Term 3	ETM 1010C	Mechanical Measurements and Instrumentation	3 Credits
	ETI 1420C	Manufacturing Processes and Materials	3 Credits
Term 4	ETD 2364C	3D Computer-Aided Drafting and Solid Modeling	3 Credits
	ETI 1414C	Introduction to CNC Machining	3 Credits
	Natural Sciences	Natural Sciences General Education (See Note 3)	3-4 Credits
	Wellness	Wellness General Education Course (See Note 3)	2-3 Credits
Term 5	ETI 2411C	CNC Machine Processes	3 Credits
	Electives	Approved Electives (See Note 4)	9 Credits
Term 6	ETI 2412C	Advanced CNC Machine Processes	3 Credits
	Electives	Approved Electives (See Note 4)	3 Credits

Total Required Program Hours: 60

A Few Notes:

1. Students may take MGF 1130 Mathematical Thinking, STA 2023 Introduction to Probability and Statistics, or MAC 1105 College Algebra. Students must earn an appropriate score on a placement examination or complete the appropriate MAT prerequisite(s) before taking these courses.
2. 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 AMH 1010 (History of the United States: 1607-1877), 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 three-course options.
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. Natural Sciences: BSC 1005C (Survey of Biological Science), CHM 1020 (Chemistry for Liberal Studies), CHM1045C (General Chemistry), ESC 1000 (Survey of Earth Science), PHY 2020C (Fundamentals of Physics), PHY 2048C (General Physics I with Calculus)



4. Students must earn 12 credits hours of electives from the following list: ETI 1002C, ETI 1622C ETI 1949, ETM 2315C, ETS 1511C, ETS 1535C, ETS 1539C, ETS 1540C, ETS 1542C, ETI 1931, CGS 1061C, CGS 1510C, ENC 2210, MAC 2233, and MAN 2500.
5. Students must meet all graduation requirements. To learn more about graduation requirements, [please refer to the College Catalog](#).

Program: AS-25670 – **2024-2025 Catalog Year (tentative)**





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Program Map for Students Attending Part-Time

Term	Course ID	Course Title	Credits
Term 1	ETD 1320C	Introduction to Computer-Aided Drafting	3 Credits
	ENC 1101	College Composition I	3 Credits
Term 2	EET 1084C	Introduction to Electronics	3 Credits
	Mathematics	Introduction to College Mathematics (See Note 1)	3 Credits
Term 3	ETI 1110C	Introduction to Quality	3 Credits
	HUM 2020, or PHI 2010	Introduction to Humanities, or Introduction to Philosophy	3 Credit
Term 4	ETI 1701C	Industrial Safety	3 Credits
	AMH 1020	History of the United States: 1877 to Present (See Note 2)	3 Credits
Term 5	ETM 1010C	Mechanical Measurements and Instrumentation	3 Credits
	ETI 1420C	Manufacturing Processes and Materials	3 Credits
Term 6	ETD 2364C	3D Computer-Aided Drafting and Solid Modeling	3 Credits
	ETI 1414C	Introduction to CNC Machining	3 Credits
Term 7	Natural Sciences	Natural Sciences General Education (See Note 3)	3-4 Credits
	ETI 2411C	CNC Machine Processes	3 Credits
Term 8	ETI 2412C	Advanced CNC Machine Processes	3 Credits
	Wellness	Wellness General Education Course (See Note 3)	2-3 Credits
Term 9	Electives	Approved Electives (See Note 4)	6 Credits
Term 10	Electives	Approved Electives (See Note 4)	6 Credits

Total Required Program Hours: 60

A Few Notes:

1. Students may take MGF 1130 Mathematical Thinking, STA 2023 Introduction to Probability and Statistics, or MAC 1105 College Algebra. Students must earn an appropriate score on a placement examination or complete the appropriate MAT prerequisite(s) before taking these courses.
2. 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 AMH 1010 (History of the United States: 1607-1877), 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 three-course options.
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. Natural Sciences: BSC 1005C (Survey of Biological Science), CHM 1020 (Chemistry for Liberal Studies), CHM1045C (General Chemistry), ESC 1000 (Survey of Earth Science), PHY 2020C (Fundamentals of Physics), PHY 2048C (General Physics I with Calculus)



4. Students must earn 12 credits hours of electives from the following list: ETI 1002C, ETI 1622C ETI 1949, ETM 2315C, ETS 1511C, ETS 1535C, ETS 1539C, ETS 1540C, ETS 1542C, ETI 1931, CGS 1061C, CGS 1510C, ENC 2210, MAC 2233, and MAN 2500.
5. Students must meet all graduation requirements. To learn more about graduation requirements, [please refer to the College Catalog](#).

Program: AS-25690 – **2024-2025 Catalog Year (tentative)**

