Engineering Technology

The B.S. in Engineering Technology prepares graduates for a variety of engineering associated positions with industry.

Program Requirements

In addition to the university's general requirements, students seeking the B.S. in Engineering Technology must meet the requirements listed below.

Students should consult with their academic advisor for courses which may satisfy both the General Education requirements and common prerequisites. A minimum grade of "C-" is required in major courses.

General Education

ADDENDUM - 06/12/2025

In addition to the General Education requirements, students must satisfy all additional State of Florida requirements, including the College-Level Communication and Computation, Civic Literacy, and Foreign Language requirements. With appropriate planning and coordination with an academic advisor, students may satisfy some of the general University requirements through the General Education curriculum. For a complete listing of general degree requirements, refer to the State University Requirements and Degree Requirements sections of this catalog.

General Education Curriculum:

Communication

ENC 1101	English Composition I (Core)	3
ENC 1102	English Composition II (Breadth)	3
Communication Elective Options:		
CRW 2001	Introduction to Creative Writing	
MMC 2000	Principles of Mass Communication	
SPC 2608	Public Speaking	

Humanities

Choose one course from the Humanities Core and one additional course from either the Humanities Core or the Humanities Breadth.		6
Humanities Core Options:		
ARH 1000	Art Appreciation	
HUM 2020	Introduction to Humanities	
HUM 2020H	Honors Introduction to Humanities	
LIT 2000	Introduction to Literature	
MUL 2010	Music Appreciation	
PHI 2010	Introduction to Philosophy	
THE 2000	Theatre Appreciation	
Humanities Breadth Options:		
AML 2010	American Literature I	
AML 2020	American Literature II	
AMS 2010	Civil Discourse and the American Political Order	
ARH 2050	Western Survey I: Prehistory to the Medieval Period	
ARH 2051	Western Survey II: Renaissance to Contemporary	
ART 1015C	Exploring Artistic Vision	
ENL 2010	History of English Literature I	
ENL 2020	History of English Literature II	
LIT 2030	Introduction to Poetry	
MUH 2004	The Music Experience - Concerts	
PHI 2103	Critical Thinking	
PHI 2603	Ethics in Contemporary Society	
REL 1300	World Religions	
THE 2300	Survey of Dramatic Literature	

Mathematics

Choose one course from the Mathematics Core and one additional course from either the Mathematics Core or the Mathematics Breadth.		6
Mathematics Core Options:		
MAC 1105	College Algebra	
MAC 1105C	College Algebra with Lab	
MAC 2311	Analytic Geometry and Calculus I	
MGF 1130	Mathematical Thinking	
STA 2023	Elements of Statistics	
Mathematics Breadth Options:		
MAC 1114	Trigonometry	3
MAC 1140	Precalculus Algebra	
MAC 1147	Precalculus with Trigonometry	
MAC 2233	Calculus with Business Applications	
MAC 2312	Analytic Geometry and Calculus II	
MGF 1131	Mathematics in Context	
STA 2360	Introduction to Data Science	

Natural Sciences

Choose one course from the Natural Sciences Core and one additional course from either the Natural Sciences Core or the Natural Sciences Breadth.		6
Natural Sciences Core Options:		
AST 1002	Descriptive Astronomy	
BSC 1005	General Biology for Non-Majors *	
BSC 1085	Anatomy and Physiology I *	
BSC 2010	Biology I	
CHM 1020	Concepts in Chemistry *	
CHM 2045	General Chemistry I *	
ESC 2000	Introduction to Earth Science *	
EVR 2001	Introduction to Environmental Science	
EVR 2001H	Honors Introduction to Environmental Science	
GLY 2010	Physical Geology	
PHY 1020	Conceptual Physics	
PHY 2048	Calculus-Based Physics I *, **	
PHY 2048C	Calculus-Based Physics I Studio ***	
PHY 2053	Algebra-Based Physics I *, **	
Natural Sciences Breadth Options:		
ANT 2511	Biological Anthropology *	
AST 2037	Life in the Universe	

BOT 2010	General Botany
BSC 1050	Fundamentals of Ecology
BSC 1086	Anatomy and Physiology II *
BSC 2011	Biology II
BSC 2311	Introduction to Oceanography and Marine Biology *
CGS 2020	Introduction to Machine Learning
CHM 2046	General Chemistry II *
MCB 1000	Fundamentals of Microbiology *
PHC 2082	Informatics and Your Health
PHY 2049	Calculus-Based Physics II *, **
PHY 2054	Algebra-Based Physics II *, **

* May be taken with or without lab.

** Algebra-Based Physics is usually recommended for non-science majors, while Calculus-Based Physics is recommended for science majors.

***Although students receive 5 semester hours credit for PHY 2048C, an additional 3 semester science course will be needed to meet General Education requirements.

Social Sciences

Choose one course from the Social Sciences Core and one additional course from either the Social Sciences Core or the Social Sciences Breadth.		6
Social Sciences Core Options:		
AMH 2010	United States to 1877	
AMH 2020	United States Since 1877	
ANT 2000	Introduction to Anthropology	
ECO 2013	Principles of Economics Macro	
POS 2041	American Politics	
PSY 2012	General Psychology	
Social Sciences Breadth Options:		
ANT 2100	Introduction to Archaeology	
CCJ 2002	Survey of Crime and Justice	
CIS 2530	Introduction to Cybersecurity	
COM 2023	Death and Communication	
CPO 2002	Comparative Politics	
DEP 2004	Human Development Across the Lifespan	
EUH 1000	Western Perspectives I	
EUH 1001	Western Perspectives II	
FIN 2104	Personal Finance	
GEA 2000	Nations and Regions of the World	
GEB 1011	Introduction to Business	
HIS 2050	Explore History	
HSC 2100	Personal, Family and Community Health	
INR 2002	International Politics	
PLA 2013	Survey of American Law	
PLA 2013H	Honors Survey of American Law	
SPM 2010	Sport in Global Society	
SYG 2000	Introduction to Sociology	

General Education Electives

Choose an additional course from two of the five areas of Communication Electives, Mathematics, Social Sciences, Humanities, and Natural Sciences.

Civic Literacy Requirement

The 2017 Florida Legislature amended Section 1007.25, Florida Statutes, to require students ***initially entering*** **a State University System (SUS) and/or Florida College System (FCS) institution in 2018-2019** and thereafter to demonstrate competency in civic literacy by passing an assessment or taking AMH 2020 United States Since 1877 or POS 2041 American Politics.

The 2021 Legislature further amended Florida Statutes, requiring students to complete both a civic literacy course and an exam. In 2024, the Board of Governors made an additional revision, recognizing two new courses meeting the Civic Literacy requirement, AMH 2010 United States to 1877 and AMS 2010 Civil Discourse and the American Political Order. As a result, there are four cohorts of students currently matriculating at Florida public institutions that are subject to varying requirements.

As demonstrated in the table below, the exact civic literacy requirements are based on the academic term in which a student first enrolled in a Florida public institution.

Students Included in Cohort	Civic Literacy Competency Requirement
Cohort 1: Students initially entering the SUS or FCS before fall 2018	None
Cohort 2: Students initially entering the SUS or FCS in Academic Year 2018 through Academic Year 2020	Complete a course **or** Assessment.
Cohort 3: Students initially entering the SUS or FCS in Academic Year 2021 through Academic Year 2023	Course **and** Assessment.
Cohort 4: Students initially entering the SUS or FCS in fall 2024 and thereafter	Course **and** Assessment.

Additionally, for Cohorts 3 and 4, approved accelerated mechanisms may meet the course and/or assessment requirement, and students who pass the Florida Civic Literacy Exam (FCLE) in high school are exempt from the postsecondary exam requirement.

There are multiple ways to satisfy this requirement. Students should work with their academic advisor to determine which option is best for their degree requirements/degree plan.

Additional information can be found on our Civic Literacy website, SUS regulation BOG 8.006, and Florida Statute s.1007.25(4,a-b).

Mathematics Pathway

Students are advised to complete the following courses to fulfill the mathematics pathway that aligns with the mathematics skills needed for success in their program and their career goals. Students should refer to their academic advisor for questions about the math pathway for their program. For information about this requirement, refer to the catalog page for Mathematics Pathways. These courses

may also fulfill requirements for General Education and Common Prerequisites.

Algebra through Calculus		
MAC 1105	College Algebra	3
or MAC 1105C	College Algebra with Lab	
or MAC 1140	Precalculus Algebra	
or MAC 1114	Trigonometry	
or MAC 1147	Precalculus with Trigonometry	
or MAC 2311	Analytic Geometry and Calculus I	
MAC 1140	Precalculus Algebra	3
or MAC 1114	Trigonometry	
or MAC 1147	Precalculus with Trigonometry	
or MAC 2311	Analytic Geometry and Calculus I	
or MAC 2312	Analytic Geometry and Calculus II	
Students will be placed on a starting point based on their mathematics placement.		

Common Prerequisites

State-mandated common prerequisites must be completed prior to graduation, but are not required for admission to the program. See the Common Prerequisite Manual for course substitutions from Florida colleges and universities.

CHM 2045	General Chemistry I	3
MAC 2311	Analytic Geometry and Calculus I	4

Major Courses

EML 3022	Computer Aided Design and Modeling +	3
EIN 4354	Engineering Economy +	3
EGS 4032	Professional Ethics +	3
EEL 4834	Programming for Engineers +1	3
EGN 4950	Capstone Design I +	1
EGN 4952L	Capstone Design II +	2
EGN 3365	Engineering Materials +	3
ENC 3455	Writing for Science, Technology, Engineering and Math Majors +	3
PHY 2053 & 2053L	Algebra-Based Physics I and Algebra-Based Physics I Lab *	4
PHY 2054 & 2054L	Algebra-Based Physics II and Algebra-Based Physics II Lab *	4
Upper Level Courses from EEL, EML, EGN, EGM, EGS		6
Any Upper-Level Courses from Hall Marcus College of Science Engineering or Lewis Bear Jr. College of Business		21
Total Hours		**56**

* PHY 2048/L and PHY 2049/L can be used in place of PHY 2053/L and PHY 2054/L.

1 COP 3014 may also be used to fulfill this requirement.

+ Counted toward the major GPA.

Upper Division Electives

Students must complete sufficient 3000/4000 level electives to meet UWF's requirement of 48 semester hours in the upper division or complete all departmental requirements at the 3000/4000 level, whichever is greater.		4