

ENGINEERING TECHNOLOGY

Degree: Bachelor of Science
 Specializations: Construction, Electrical, Instructional Support,
 Minors: Building Construction, Electrical Engineering Technology, Manufacturing Engineering Technology
 Certificate: Technology Systems Support
 Division: Engineering and Computer Technology
 Building 70
 (850) 474-2484
 techrsh@uwf.edu
 College: Professional Studies
 Semester Hours Required for Degree: 120

Faculty: K. Rasmussen (Chair), D. Dawson, R.L. Lee, C.H. Wentz (Emeritus)

The Engineering Technology program prepares graduates for a variety of engineering associated positions with industry.

The Construction Specialization examines construction of all types of buildings and prepares the student for a career in construction science.

The Electrical Specialization prepares students for positions as engineering technologists. Employment opportunities exist in instrumentation, communications, digital systems, power systems, manufacturing, and other related fields. The graduates may also be involved in research development, maintenance, production, or sales in the area of electrical engineering.

The Instructional Support Specialization prepares learners to assume the role of network, telecommunications, and instructional systems support in distance learning, training, or educational environments. The focus of this specialization is the implementation, maintenance, and adaptation of these technologies with an instructional perspective. The program is designed for delivery at a distance and exploits technology to offer learners the opportunity to pursue the degree even when regular attendance is problematic or relocation is necessary.

Contact the department for information concerning the certificate program.

PROGRAM REQUIREMENTS

In addition to general University 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 Studies requirements and common prerequisites. A minimum grade of "C-" is required in major courses.

Course descriptions are listed alphabetically by prefix in the back of this *Catalog*. Courses preceded by "*" are taught at Florida community/junior colleges.

CONSTRUCTION SPECIALIZATION

General Studies (36 sh)

For additional information see the General Studies section of this *Catalog*.

Common Prerequisites (24 sh)

State mandated common prerequisites must be completed prior to graduation, but are not required for admission to the program.

ACG	2021	Principles of Financial Accounting	3
ACG	2071	Principles of Managerial Accounting	3
+ MAC	1105	College Algebra	3
+ MAC	1114	Trigonometry	2
+ MAC	1140	Precalculus Algebra	3
+ MAC	2311	Analytic Geometry & Calculus I	4
+ PHY	2053	General Physics I	3
+ PHY	2054	General Physics II	3

+ Indicates common prerequisites which can be used to satisfy General Studies requirements.

Lower Division Electives (0-12 sh)

Sufficient 1000/2000 level electives to complete at least 60 semester hours in the lower division. Current UWF students may use elective courses at any level (1000-4999) to meet this elective requirement.

Major (44 sh)

BCN	2405	Construction Mechanics	3
BCN	3282C	Construction Surveying & Building Layout	3
BCN	3502	Plumbing & Drainage	3
BCN	3731	Construction Safety	3
BCN	4431	Structures I	4
BCN	4461C	Structures II	4
BCN	4510	Environmental Technology-Heat & Air	3
BCN	4701	Construction Administration	3
EET	3504C	Applications of Industrial Electricity and Electronics	3
EGS	3613	Principles of Engineering Economy	3
EST	4538	Instrumentation	3
ETD	4353C	Intermediate/Advanced Computer Assisted Drafting	3
ETI	3112	Applications of Quality Control	3
ETI	3445	Production Improvement	3

Major-Related (15 sh)

ACG	3311	Applied Managerial Accounting	3
CGS	2570	Personal Computer Applications	3
REE	4813	Principles of Real Estate Marketing	3
		Advisor-approved elective	3

Choose one:

FIN	3140	Personal Financial Planning	3
MAN	3025	Management Fundamentals	3
MAR	3023	Marketing Fundamentals	3

Upper Division Electives (1 sh)

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

ELECTRICAL SPECIALIZATION

General Studies (36 sh)

For additional information see the General Studies section of this *Catalog*.

Common Prerequisites (35 sh)

State mandated common prerequisites must be completed prior to graduation, but are not required for admission to the program. Courses in brackets indicate substitutes from Florida Public/Community Colleges and Universities.

• CET	2113C	Digital Fundamentals/Lab	4
		[EET 2112C]	
• EET	1015C	DC Circuits/Lab	4
• EET	1025C	AC Circuits/Lab	4
• EET	1141C	Electronic Devices & Circuits I/Lab	4
• EET	1142C	Electronic Devices & Circuits II/Lab	4
+ MAC	1105	College Algebra	3
+ MAC	1114	Trigonometry	2
+ MAC	2311	Analytic Geometry & Calculus I	4
+ PHY	2053	General Physics I	3
+ PHY	2054	General Physics II	3

- Courses available at Florida's Community Colleges
- + Indicates common prerequisites which can be used to satisfy General Studies requirements.

Lower Division Electives (0-1 sh)

Sufficient 1000/2000 level electives to complete at least 60 semester hours in the lower division. Current UWF students may use elective courses at any level (1000-4999) to meet this elective requirement.

Recommended elective:

CGS	2570	Personal Computer Applications	3
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Major (39 sh)

EET	3038C	Advanced Circuit Analysis	4
EET	3326C	Communication Systems	4
EET	3504C	Applications of Industrial Electricity and Electronics	3
EET	4356C	Advanced Communication	4
EET	4513	Electric Machinery	3
EET	4930	Seminar: Electrical Engineering Technology	3
EGS	3613	Principles of Engineering Economy	3
EST	4538	Instrumentation	3
ETD	4353C	Intermediate/Advanced Computer Assisted Drafting	3
ETI	3112	Applications of Quality Control	3
ETI	3445	Production Improvement	3
		3000/4000 level Engineering Technology elective	3

Major-Related (13 sh)

CDA	3100	Microprocessor Systems	3
MAC	2312	Analytic Geometry & Calculus II	4
STA	2023	Elements of Statistics	3

Choose one:

COP	2253	Programming Using Java	3
COP	2334	Programming Using C++	3
CGS	3464	Programming Using Visual Basic for Non-Majors	3

Upper Division Electives (8 sh)

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

INSTRUCTIONAL SUPPORT SPECIALIZATION

General Studies (36 sh)

For additional information see the General Studies section of this *Catalog*.

Common Prerequisites (18 sh)

State mandated common prerequisites must be completed prior to graduation, but are not required for admission to the program.

EVE	2040	Introduction to Educational Technology	3
+ MAC	1105	College Algebra	3
+ MAC	1114	Trigonometry	2
+ PHY	2053	General Physics I	3
+ PHY	2054	General Physics II	3
+ PHY	2054L	General Physics II Lab	1
+ STA	2023	Elements of Statistics	3

- + Indicates common prerequisites which can be used to satisfy General Studies requirements.

Lower Division Electives (6-19 sh)

Sufficient 1000/2000 level electives to complete at least 60 semester hours in the lower division. Current UWF students may use elective courses at any level (1000-4999) to meet this elective requirement.

Major (39 sh)

EET	3504C	Applications of Industrial Electricity and Electronics	3
EGS	3613	Principles of Engineering Economy	3
EVE	3402	Instructional Technology	3
		Course offered 1-3 sh per semester	
EVE	3406	Web Environments for Learning and Information	4
EVE	4454	Distance Education Technologies	3
EVE	4622	Technology Tools: Site-based Educational Networks	4
EVE	4627	Education and Training Technology Support Systems	4
EVE	4944	Internship/Practica in Technology	3
EST	4538	Instrumentation	3
ETD	4353C	Intermediate/Advanced Computer Assisted Drafting	3
ETI	3112	Applications of Quality Control	3
		3000/4000 level advisor-approved elective	3

Major-Related (15 sh)

COP	4710	Database Systems	3
ISM	3011	e-Business Systems Fundamentals	3
ISM	4300	Systems Planning, Design & Control	3
MAN	3025	Management Fundamentals	3

Choose one:

COP	2253	Programming Using Java	3
COP	2334	Programming Using C++	3
CGS	3464	Programming Using Visual Basic for Non-Majors	3

Upper Division Electives (6 sh)

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

MINORS

Building Construction (15 sh)

Construction Specialization majors may not earn this minor.

BCN	3731	Construction Safety	3
BCN	4701	Construction Administration	3
EET	3504C	Applications of Industrial Electricity and Electronics	3
ETD	4353C	Intermediate/Advanced Computer Assisted Drafting	3
EI	3112	Applications of Quality Control	3

Electrical Engineering Technology (16 sh)

Electrical Engineering Technology Specialization majors may not earn this minor.

EET	3038C	Advanced Circuit Analysis	4
EET	3504C	Applications of Industrial Electricity and Electronics	3
EET	4513	Electric Machinery	3
ETD	4353C	Intermediate/Advanced Computer Assisted Drafting	3
EI	3112	Applications of Quality Control	3

Manufacturing Engineering Technology (15 sh)

Manufacturing Specialization majors may not earn this minor.

EET	3504C	Applications of Industrial Electricity and Electronics	3
ETD	4353C	Intermediate/Advanced Computer Assisted Drafting	3
EI	3112	Applications of Quality Control	3
EI	3445	Production Improvement	3
EI	4411	Production Science	3