

# B.S. in Engineering Technology

## DEGREE REQUIREMENTS

### General Education

#### General Education

Embry-Riddle courses in the general education categories of Communication Theory and Skills, and Humanities and Social Sciences may be chosen from those listed below, assuming prerequisites are met. Courses from other institutions are acceptable if they fall into these broad categories and are at the level specified.

#### Communication Theory and Skills

ENGL 123	English Composition	3
English/Speech electives		6

#### Mathematics

MATH 241	Calculus and Analytical Geometry I	4
MATH 242	Calculus and Analytical Geometry II	4

#### Computer Science / Information

ENGR 115	Introduction to Computing for Engineers	3
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#### Physical and Life Sciences

CHEM 110	General Chemistry I	3
CHEM 110L	General Chemistry I Laboratory	1
PHYS 150	Physics I for Engineers	3
PHYS 160	Physics II for Engineers	3

#### Humanities

HUMN 330	Values and Ethics	3
Humanities lower level elective		3

#### Social Sciences

ECON 210	Microeconomics	3
ECON 211	Macroeconomics	3

#### General Electives

General Open Electives		9
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<b>Total Credits</b>		<b>51</b>
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### Core/Major

#### Business

STAT 222	Business Statistics	3
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<b>Total Credits</b>		<b>3</b>
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#### Leadership and Management

MGMT 201	Principles of Management	3
MGMT 203	Management for Aeronautical Science	3

<b>Total Credits</b>		<b>6</b>
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#### Technical Core

ENGR 101	Introduction to Engineering	3
ENGR 120	Graphical Communications	3
ESCI 201	Statics	3
CESC 220	Digital Circuit Design	3
CESC 222	Digital Circuit Design Laboratory	1
ESCI 204	Dynamics	3
ESCI 202	Solid Mechanics	3
ESCI 206	Fluid Mechanics	3
RSCH 202	Introduction to Research Methods	3
ETEC 310	Material Science for Engineering Technology	3
ETEC 315	Circuits for Engineering Technology	3

ETEC 316	Circuits Laboratory for Engineering Technology	1
ETEC 410	Thermodynamics for Engineering Technology	3
ETEC 415	Control Systems	3
ETEC 490	Engineering Technology Capstone I	3
ETEC 491	Engineering Technology Capstone II	3
<b>Total Credits</b>		<b>44</b>

### Electives/Concentration

<b>Concentrations</b>		<b>18</b>
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Following concentration areas are available to BSET students. Students may choose at least 3 courses each from two concentration areas.

<b>Total Degree Requirements</b>		<b>122</b>
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### Concentrations:

#### Aeronautical Science

##### Aeronautical Science Concentration

ASCI 309	Aerodynamics	3
AMNT 429	Advanced Technologies in Design and Production of Aircraft Structures and Systems	3
ETEC 409	Applied Aeronautics	3

#### Aviation Safety

##### Aviation Safety Concentration

BSAS 320	Human Factors in Aviation Safety	3
BSAS 330	Aircraft Accident Investigation	3
BSAS 409	Aviation Safety	3

#### Helicopter Operations and Safety

##### Helicopter Operations and Safety Concentration

ASCI 317	Rotorcraft	3
ASCI 378	Helicopter Flight Environments	3
ASCI 388	Helicopter Flight Planning	3

#### Uncrewed and Autonomous Systems

##### Uncrewed and Autonomous Systems Concentration

UNSY 315	Uncrewed Aircraft Systems and Operations	3
UNSY 318	Uncrewed Aircraft Systems Robotics	3
UNSY 410	Uncrewed Systems Sensing Technology	3

#### Logistics Management

##### Logistics Management Concentration

LGMT 331	Transportation Principles	3
LGMT 410	Management of Air Cargo	3
LGMT 411	Logistics Management for Aviation/Aerospace	3

#### Management Information Systems

##### Management Information Systems Concentration

MMIS 221	Introduction to Management Information Systems	3
MMIS 392	Database Management	3
MMIS 494	Aviation Information Systems	3

#### Occupational Safety & Health

##### Occupational Safety & Health Concentration

SFTY 311	Fundamentals of Occupational Safety and Health	3
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SFTY 321	Ergonomics	3
SFTY 355	Industrial Hygiene and Toxicology	3

### Project Management

#### Project Management Concentration

PMGT 391	Project Planning 1	3
PMGT 394	Project Planning 2	3
PMGT 400	Project Risk and Control	3

### Security and Intelligence

#### Security and Intelligence Concentration

SCTY 315	Studies in Intelligence I	3
SCTY 385	Intelligence Collection and Analysis	3
SCTY 488	National Security Issues and Terrorism	3