



**BSET Program**  
**Catalog Year: 2023-2024**

Prerequisites				
Courses	Classes	FA	SP	S
<b>Mathematics Requirement</b>				
MAC1105	College Algebra	✓	✓	✓
MAC1114	Trigonometry	✓	✓	✓
STA2023	Elementary Statistics	✓	✓	✓
<b>Technical Math Route</b>				
EGN2045	Engineering Technical Calculus I	✓	✓	
EGN 3046	Engineering Technical Calculus II		✓	✓
<b>*OR* Graduate Math Route</b>				
MAC1140	Pre-Calculus	✓	✓	✓
MAC2311C	Calculus I	✓	✓	✓
MAC2312C	Calculus II	✓	✓	✓
MAC2313C	Calculus III	✓	✓	✓
MAP2302	Differential Equations	✓	✓	✓
<b>Physics Requirement (select 1)</b>				
PHY2048C	Physics with Calculus I and Lab	✓	✓	
ETG3541	Applied Mechanics & Physics			✓
<b>Programming Requirement (select 1)</b>				
COP2220	Computer Programming C	✓	✓	
COP2800	Computer Programming Java	✓	✓	
COP2360	C# Programming	✓	✓	✓
EGN3214	Programming for Engineers	✓		✓
<b>Lower Level Technical Electives:</b> Student must complete <b>44</b> approved hours of lower-level technical coursework.				

Requirements (37 credit hours)				
Courses	Classes	FA	SP	SU
ETS 3543C	<b>Programming Logic Applications and Lab</b> PR: MAC1105	✓	✓	✓
GEB 3213	<b>Business Writing</b>	✓	✓	✓
EET 3085 & EET 3085L	<b>Electricity and Electronics &amp; Lab</b> PR: MAC1114 Co-R: EET3085L	✓	✓	✓
EGN 3613	<b>Engineering Economics Analysis</b> PR: EGN2045 or MAC2311C		✓	✓
EGN 3311	<b>Statics</b> PR: EGN2045 or MAC2311C and ETG3541 or PHY2048C	✓		
EGN 3321	<b>Dynamics</b> PR: EGN3311		✓	
ETS 4502C	<b>Metrology and Instrumentation</b> PR: EGN3311 or ETG3541 and EET3085/L	✓		
EGN 3046	<b>Engineering Technical Calculus II</b> PR: EGN2045 or MAC2311C		✓	✓
ETI 4448	<b>Project Management &amp; Senior Design I and Lab</b> PR: EGN3613	✓		
ETG 4950C	<b>Project Management &amp; Senior Design II and Lab</b> PR: ETI4448		✓	
<b>Energy Course (Select 1)</b>				
ETM 4220	<b>Energy Systems</b> PR: EGN2045 or MAC2311C		✓	
EGN 3343	<b>Thermodynamics (Offered every 2 years, Even)</b> PR: PHY2048C and EGN3046 or MAP2302C	✓		
ETM 4331	<b>Applied Fluid Mechanics</b> PR: EGN2045 or MAC2311C and ETG3541 or PHY2048C	✓		
<b>Materials Course (Select 1)</b>				
ETI 3421	<b>Materials &amp; Processes</b> PR: MAC1114	✓		
ETC 4241 & ETC 4241L	<b>Construction Materials &amp; Lab</b> PR: EGN2045 or MAC2311C and ETG3541 or EGN3311 Co-R: ETC4241L		✓	
ETG 3533 & ETG 3533L	<b>Engineering Strength of Materials &amp; Lab</b> PR: EGN3311 or ETG3541 Co-R: ETG3533L		✓	
<b>General Education Requirements:</b> Student must complete State required general education courses. This requirement is considered complete with an AA from an accredited Florida State School; two (2) semesters of a foreign language completed in a Florida State School or transferred from a high school; completion of Florida Civics Literacy course and Exam are required.				

Student must select two (2) courses (6 credit hours) from either categories below

Advanced Technical Certificate				
Construction and Design				
Courses	Classes	FA	SP	SU
ETG 3533 & ETG 3533L	<b>Engineering Strength of Materials &amp; Lab</b> PR: EGN3311 or ETG3541 Co-R: ETG3533L		✓	
ETC 4241 & ETC 4241L	<b>Construction Materials and Methods &amp; Lab</b> PR: EGN2045 or MAC2311C and ETG3541 or EGN3311 Co-R: ETC4241L		✓	
ETC 4414C	<b>Structural Steel Design and Lab (Offered every 2 years, Even)</b> PR: ETG3533	✓		
ETC 4415C	<b>Structural Concrete Design and Lab (Offered every 2 years, Odd)</b> PR: ETG3533		✓	
ETC 4206	<b>Construction Estimating</b> PR: ETC4241 and MAC1114		✓	

Logistics, Quality, or Industrial Fundamentals Electives				
Courses	Classes	FA	SP	SU
ETI 4205	<b>Applied Logistics</b> PR: MAC1105	✓		
ETI 3116	<b>Engineering Quality Assurance</b> PR: STA2023		✓	
ETI 4640	<b>Operations Management</b> PR: MAC1105		✓	
ETI 4704	<b>Occupational Safety</b> PR: GEB3213			✓
ETI 4186	<b>Applied Reliability</b> PR: EET3116	✓		

**Legend:**

Prerequisites	
BSET Program Requirement	
Construction and Design (Adv. Tech. Cert)	
Upper-Level Technical Electives - Logistics, Quality or Industrial	
✓	Course Available
	Not Offered