



BSFT Planner Year: Year: **Mathematics Course Requirements** CH Course Done Fall Spring Summer Fall Spring | Summer MAC1105 College Algebra MAC1114 Trigonometry 3 STA2023 Statistics 3 **Technical Math Route** Done Fall Summer Fall CH Course Spring Spring Summer Engineering Tech. Calculus I 4 EGN2045 Engineering Tech. Calculus II 3 EGN3046 *OR* Graduate Program Route CH Course Done Fall Spring Summer Fall Spring Summer Pre-Calculus MAC1140 3 Calculus I 4 MAC2311C Calculus II 4 MAC2312C Calculus III 4 MAC2313C Differential Equations 3 MAP2302 Physics Course Requirement (select 1) CH Course Done Fall Spring Summer Fall Spring Summer Physics with Calculus I PHY2048C Applied Mechanics and Physics ETG3541 3 CH Course Programming Course Req. (select 1) Done Fall Spring Summer Fall Spring Summer COP2360 C# Programming COP2220 Computer Programming C Computer Programming Java COP2800 Programming for Engineers EGN3214 Program Requirements (37 credit hours) Fall Fall CH Course Done Spring | Summer Spring | Summer **Business Writing** 3 GEB3213 Electricity and Electronics Lecture EET3085 3 Electricity and Electronics Lab 1 EET3085L Engineering Tech. Calculus II 3 EGN3046 Programmable Logic Applications and Lab 3 ETS3543C Engineering Economics Analysis 3 EGN3613 Statics l3 EGN3311 **Dynamics** 3 EGN3321 Metrology and Instrumentation and Lab 3 ETS4502C PM and Senior Design I ETI4448 l3 PM and Senior Design II ETG4950C l3 Materials Course Requirement (select 1) CH Course Done Fall Spring Summer Fall Spring | Summer Materials and Processes 3 ETI3421 Construction Materials Lecture ETC4241 Construction Materials Lab 1 ETC4241L Strength of Materials Lecture 2 ETG3533 Strength of Materials Lab 1 ETG3533L Spring Summer **Energy Course Requirement (select 1)** CH Course Done Fall Spring Summer Fall Thermodynamics EGN3343 Applied Fluid Mechanics ETM4331 13 ETM4220 **Energy Systems** Must select two (2) courses (6 credit hours) from one of the specializations below: Logistics, Quality, or Industrial Electives (select 2) CH Course Done Fall Fall Spring Summer Spring Summer Applied Logistics ETI4205 3 **Engineering Quality Assurance** ETI3116 Operations Management 3 ETI4640 Applied Reliability ETI4186 Occupational Safety ETI4704 Construction & Design (select 2) Done Spring Summer Spring | Summer CH | Course Structural Steel Design & Lab OFFERED EVERY 2 YRS ETC4414C Structural Steel Design & Lab OFFERED EVERY 2 YRS 3 ETC4415C (Odd years) Construction Estimating ETC4206 Construction Materials Lecture ETC4241 2 ETC4241L Construction Materials Lab Strength of Materials Lecture ETG3533 Strength of Materials Lab ETG3533L CH Course Number Requirements Summary Done General Education 36 Various Lower Level Technical Electives 44 44 Hours Upper Level Program Specific 48 48 Hours Total Hours 128 Hours



BSET Program Catalog Year: 2024-2025

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

Requirements (37 credit hours)				
Courses	Classes	FA	SP	SU
ETS 3543C	Programming Logic Applications and Lab	1	/	/
	PR: MAC1105			,
GEB 3213	Business Writing	✓	✓	✓
EET 3085 & EET 3085L	Electricity and Electronics & Lab			
	PR: MAC1114	✓	✓	✓
	Co-R: EET3085L			
EGN 3613	Engineering Economics Analysis		1	1
	PR: EGN2045 or MAC2311C			
EGN 3311	Statics	√	✓	
	PR: EGN2045 or (MAC2311C and ETG3541) or PHY2048C			
	Dynamics			
EGN 3321	PR: EGN3311	✓	✓	
ETS 4502C	Metrology and Instrumentation	· ✓		
E13 4302C	PR: EGN3311 or (ETG3541 and EET3085/L)			
EGN 3046	Engineering Technical Calculus II		1	1
EGN 3040	PR: EGN2045 or MAC2311C			
ETI 4448	Project Management & Senior Design I and Lab	1		
E11 4440	PR: EGN3613	'		
ETG 4950C	Project Management & Senior Design II and Lab		1	
L14 4950C	PR: ETI4448		,	
	Energy Course (Select 1)			
ETM 4220	Energy Systems		/	
L114 4220	PR: EGN2045 or MAC2311C			
EGN 3343	Thermodynamics			/
	PR: (PHY2048C and EGN3046) or MAP2302C			
	Applied Fluid Mechanics			
ETM 4331	PR: EGN2045 or (MAC2311C and ETG3541)	✓		
	or PHY2048C			
	Materials Course (Select 1)			
ETI 3421	Materials & Processes	1		
	PR: MAC1114			
ETC 4241 &	Construction Materials & Lab			
ETC 4241 &	PR: EGN2045 or (MAC2311C and ETG3541) or EGN3311		✓	
L.C 7271L	Co-R: ETC4241L			
ETG 3533 &	Engineering Strength of Materials & Lab			
ETG 3533 &	PR: EGN3311 or ETG3541		✓	
L10 3333L	Co-R: ETG3533L			
	General Education Requirements:			

General Education Requirements:

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 &	Engineering Strength of Materials & Lab		/	
ETG 3533L	PR: EGN3311 or ETG3541 Co-R: ETG3533L			
ETC 4241 & ETC 4241L	Construction Materials and Methods & Lab PR: EGN2045 or (MAC2311C and ETG3541) or EGN3311 Co-R: ETC4241L		1	
ETC 4414C	Structural Steel Design and Lab (Offered every 2 years, Even) PR: ETG3533	√		
ETC 4415C	Structural Concrete Design and Lab (Offered every 2 years, Odd) PR: ETG3533		1	
ETC 4206	PR: (ETC4241 and MAC1114)		✓	

Logistics, Quality, or Industrial Fundamentals Electives				
Courses	Classes	FA	SP	SU
ETI 4205	Applied Logistics	/		
E11 4205	PR: MAC1105	,		
ETI 3116	Engineering Quality Assurance		<	
	PR: STA2023			
ETI 4640	Operations Management		✓	
	PR: MAC1105			
ETI 4704	Occupational Safety			1
	PR: GEB3213			
ETI 4186	Applied Reliability	1		
	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