



**BSFT Planner** Year: Year: Fall **Mathematics Course Requirements** CH Course Done Spring Summer Fall Spring Summer MAC1105 College Algebra MAC1114 Trigonometry 3 STA2023 3 Statistics **Technical Math Route** Done Fall Fall CH Course Spring Summer Spring Summer Engineering Tech. Calculus I EGN2045 Engineering Tech. Calculus II EGN3046 \*OR\* Graduate Program Route СН Course Done Fall Spring Summer Fall **Spring** Summer Pre-Calculus MAC1140 Calculus I 4 MAC2311C Calculus II 14 MAC2312C Calculus III 14 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 CH Course Programming Course Req. (select 1) Done Fall Spring Summer Fall Spring Summer COP2360 C# Programming COP2220 Computer Programming C COP2800 Computer Programming Java Programming for Engineers EGN3214 Program Requirements (37 credit hours) Fall Fall CH Course Done Spring Summer Spring Summer GEB3213 Business Writing l3 EET3085 Electricity and Electronics Lecture 3 Electricity and Electronics Lab 1 EET3085L Engineering Tech. Calculus II 3 EGN3046 Programmable Logic Applications and Lab 3 ETS3543C Engineering Economics Analysis EGN3613 Statics EGN3311 **Dynamics** EGN3321 Metrology and Instrumentation and Lab 3 ETS4502C ETI4448 PM and Senior Design I PM and Senior Design II ETG4950C Materials Course Requirement (select 1) CH Course Done Fall Spring Summer Fall Summer Spring 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 **Energy Course Requirement (select 1)** CH Course Done Fall Spring Summer Fall Spring Summer Thermodynamics OFFERED EVERY 2 YRS (Even years) 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 Summer **Summer** Course Spring Spring Structural Steel Design & Lab OFFERED EVERY 2 YRS ETC4414C **Even years**) Structural Steel Design & Lab OFFERED EVERY 2 YRS ETC4415C (Odd years) Construction Estimating ETC4206 ETC4241 Construction Materials Lecture ETC4241L Construction Materials Lab 1 Strength of Materials Lecture ETG3533 Strength of Materials Lab ETG3533L CH Course Number Requirements Summary Done General Education 36 Various 44 Lower Level Technical Electives 44 Hours Upper Level Program Specific 48 48 Hours Total Hours 128 Hours



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

Prerequisites				
Courses	Classes	FA	SP	S
	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	✓	✓	✓
MAC2311C	Calculus I	✓	✓	✓
MAC2312C	Calculus II	~	✓	✓
MAC2313C	Calculus III	✓	✓	✓
MAP2302	Differential Equations	✓	✓	✓
	Physics Requirement (select 1)			
PHY2048C	Physics with Calculus I and Lab	✓	✓	
ETG3541	Applied Mechanics & Physics			✓
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	1	1
E15 3543C	PR: MAC1105	7 <b>*</b>	*	•
GEB 3213	Business Writing	1	<b>√</b>	<b>✓</b>
EET 3085 &	Electricity and Electronics & Lab	1	/	/
EET 3085L	PR: MAC1114 Co-R: EET3085L	7 *	*	\ \ \
EGN 3613	Engineering Economics Analysis		1	1
	PR: EGN2045 or MAC2311C			
EGN 3311	Statics	<b>√</b>		
EGN 3311	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	7		
EGN 3046	Engineering Technical Calculus II		/	/
EGN 3040	PR: EGN2045 or MAC2311C			
ETI 4448	Project Management & Senior Design I and Lab			
	PR: EGN3613			
ETG 4950C	Project Management & Senior Design II and Lab		1	
210 49300	PR: ETI4448			
	Energy Course (Select 1)			
ETM 4220	Energy Systems	4	1	
L111 4220	PR: EGN2045 or MAC2311C			
	Thermodynamics	١,		
EGN 3343	(Offered every 2 years, Even)	✓		
	PR: PHY2048C and EGN3046 or MAP2302C			
	Applied Fluid Mechanics	4 /		
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 4241L	PR: EGN2045 or MAC2311C and ETG3541 or EGN3311		*	
	Co-R: ETC4241L			
ETG 3533 &	Engineering Strength of Materials & Lab		,	
ETG 3533L	PR: EGN3311 or ETG3541		✓	
	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

Advanced Technical Certificate				
Construction and Design				
Courses	Classes	FA	SP	SU
ETG 3533 &	Engineering Strength of Materials & Lab		✓	
ETG 3533 &	PR: EGN3311 or ETG3541			
LIG JJJJL	Co-R: ETG3533L			
ETC 4241 &	Construction Materials and Methods & Lab			
ETC 4241 &	PR: EGN2045 or MAC2311C and ETG3541 or EGN3311		✓	
LIC 4241L	Co-R: ETC4241L			
	Structural Steel Design and Lab			
ETC 4414C	(Offered every 2 years, Even)	✓		
	PR: ETG3533			
	Structural Concrete Design and Lab			
ETC 4415C	(Offered every 2 years, Odd)		✓	
	PR: ETG3533			
ETC 4206	Construction Estimating		/	
L1C 4200	PR: ETC4241 and MAC1114			

Logistics, Quality, or Industrial Fundamentals Electives				
Courses	Classes	FA	SP	SU
ETI 4205	Applied Logistics	1		
E11 4205	PR: MAC1105			
ETI 3116	Engineering Quality Assurance		1	
E11 3110	PR: STA2023		ľ	
	Operations Management			
ETI 4640	PR: MAC1105		<b>✓</b>	
ETI 4704	Occupational Safety			/
E11 4/04	PR: GEB3213			Ľ
ETI 4186	Applied Reliability	✓		
	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			