

BSCpE Program - 2025-2026

1st Semester	2nd Semester	3rd Semester	4th Semester	5th Semester	6th Semester	7th Semester	8th Semester
MA125 ³ (4) Calculus I	MA126 (4) Calculus II <MA125 ^C >	MA227 (4) Calculus III <MA126 ^C >	MA238 (3) Diff. Equations (MA227 ^C)	EE331 (3) Physical Electronics <CH131 ^C , PH202 ^C > <MA238 ^C , EE220 ^C >	EE334 (3) Digital Electronics <EE223, EE331>	EE431 (3) Analog Electronics <EE227, EE334>	EE4XX (1) Tech Elective Lab
CH131 ³ (4) Chemistry I	PH201 (4) Physics I (cal based) <MA125 ^C , EH101 ^C > (MA126)	PH202 (4) Physics II (cal based) <PH201, MA126 ^C > <EH101 ^C >	EE223 (3) Network Analysis <EE220 ^C , PH202 ^C > (MA227 ^C , MA238 ^C)	EE321 (3) Signals & Systems <EE223, MA238 ^C >	EE328 (3) Feedbk Control Sys. <EE321>	EE401* (1) W Intro to ECE Design <CA110, EE321> (EE334, EE368)	EE404** (3) W ECE Design <EE328, EE334> <EE368, EE401>
EH101 ³ (3) Composition I	EH102 ³ (3) Composition II <EH101 ^C >	EE220 (3) Circuit Analysis <MA125 ^C , PH201 ^C >	General Ed (3) L/H/FA or H/SBS	EE227 (1) Circuits and Dev Lab <EH102 ^C , (EE223)>	EE322** (3) Prob. & Stat. Anal. <MA238 ^C , (EE321)>	EE/CSC4XX (3) Tech Elective	EE/CSC4XX (3) Tech Elective
EG101 ⁴ (2) Intro to Engineer. (MA113 or MA125 ^C)	CPE260 (3) Intro. to C++ (MA125 ^C)	EE263 (3) Digital Logic <CPE260 ^C >	EE268 (1) Digital Logic Lab <EE263 ^C or CSC228 ^C > <EH102 ^C >	EE368 (1) Microproc. Lab <EE268>, (EE264)	EE457** (3) Embedded Systems <EE264, EE368>	EE454* (3) Digital Comp. Architecture <EE264, EE268>	EE/CSC4XX (3) Tech Elective
General Ed (3) L/H/FA or H/SBS	CA110 (3) Public Speaking	MA267 (3) Discrete Math Structures	EE264 (3) Microproc. <EE263 ^C or CSC228 ^C > <EE220 ^C >	EG231 (3) Ethics & Eng Econ <MA126 ^C >	EE446** (1) Embedded Sys Lab (EE457)	EE/CSC4XX (3) Tech Elective	General Ed (3) L/H/FA or H/SBS
			CSC231 (4) Intro to Data Structures & Algo. <CIS120 or CPE260>	CSC311 (3) Networking and Commun. <CSC231>	CSC322 (3) Operating Systems <CSC231>	General Ed (3) L/H/FA or H/SBS	
				General Ed (3) L/H/FA or H/SBS			

Revised: 03/07/25

* EE Courses only taught in the fall semester

** EE Courses only taught in the spring semester

³ May require minimum ACT, placement test, or remedial prerequisites.

⁴ Students transferring 15 or more cr-hr may not be required to take EG101

^C Prerequisite requires C or better

< > indicates prerequisite courses; () indicates corequisite courses

Courses in shaded boxes indicate PCS course: C-grade or higher required

No 300 level courses can be taken without PCS

16 cr-hr

17 cr-hr

17 cr-hr

17 cr-hr

17 cr-hr

16 cr-hr

16 cr-hr

13 cr-hr

General Education Requirements			
All students are required to take EH 101 and EH 102, English Composition I and II, plus 18 hours of general education courses			
Literature, Humanities and Fine Arts: 9 hrs total		History, Social Sciences, and Behavioral Sciences: 9 hrs total	
L/H/FA		H/SBS	
<u>Literature - 3 hrs required</u>		<u>History -3 hrs required</u>	
EH 215, 216	British Literature	HY 101, 102	History of Civilization
EH 225, 226	American Literature	HY 135, 136	US History
EH 235, 236	World Literature	<u>Social and Behavioral Sciences - 3 hrs required</u> GS 101 Gender Studies IST 201 Seasons of Life AN 100, 101 Anthropology CA 100, 211 Communications ECO 215, 216 Economics GEO 114, 115 Geography PSC 130 US Government PSY 120, 250 Psychology SY 109, 112 Sociology IS 100 Global Issues	
<u>Fine Arts - 3 hrs required</u>			
ARH 100	Survey of Art		
ARH 103, 123	Art History		
ARS 101	Art Appreciation		
DRA 110	Intro to Drama		
MUL 101	Intro to Music		
<u>Humanities - 3 hrs required</u>			
AFR 101	African American Studies		
AIS 105	Encounter with the Human		
CA 110 *	Public Speaking *	* CpE Program requires CA 110	
LG 111, 112, 211, 212	French		
LG 131, 132, 231, 232	Spanish		
LG 171, 172,271, 272	Russian		
LG 151, 152, 251, 252	German		
LGS 101, 102 201, 202	Japanese		
LGS 106, 107, 206, 207	Arabic		
LGS 121, 122, 221, 222	Chinese		
LGS 141, 142 241, 242	Greek		
PHL 110, 121, 131, 231, 240	Philosophy		

BSCpE Elective Requirements					
BSCpE students must select either the Microelectronic, Hardware or the Software track for Technical elective courses					
Microelectronics Track		Hardware Track		Software Track	
2 senior-level MicroE courses		2 senior-level EE courses.		1 senior-level MicroE, EE, or CSC courses.	
2 senior-level MicroE, EE, or CSC courses		2 senior-level MicroE, EE, or CSC courses		CSC 331	Software Engineering Prin - W
Microelectronics Technical Electives		EE Technical Electives		CSC 332	Adv Data Structures and Algs
EE 430	Power Semiconductor Dev	EE 423	Modern Control Theory	CSC 333	Prog Language Theory
EE 432	Microelectronic Devices	EE 438	Virtual Instrumentation	CSC Technical Electives	
EE 434	VLSI Design System	EE 440	HDL Logic Synthesis	CSC 410	Compiler Design-Construction
EE 439	VLSI Technology-Fabrication	EE 441	Computer Networks	CSC 411	Comm - Network Analysis
EE 440	HDL Logic Synthesis	EE 444	Wireless Networks	CSC 412	Real-Time Software Systems
EE 455	Optoelectronics	EE 465	Digital Signal Processing	CSC 413	Computer Graphics
		EE 468	Programmable Logic Controllers	CSC 414	Modeling and Simulation
		EE 469	Signal Integrity	CSC 415	Numerical Analysis
		EE 470	Synth Active-Passive Networks	CSC 416	AI Theory and Programming
		EE 471	Wireless Communication	CSC 417	Computer Game Development
		EE 473	Advanced Communication Systems	CSC 418	Adv Game & Simulation Dev
				CSC 434	Form Lang - Automata Theory
				CSC 440	Secure Software Engineering
Senior Lab -May be selected from					
EE 437	Electronics Lab				
EE 447	Field-Programmable Gate Array (FPGA) Lab				
EE 449	Controls Lab				
EE 468	Programmable Logic Controllers	Can be used as senior lab instead of senior elective			

Student Responsibility: The University of South Alabama will endeavor to provide timely and accurate advising. However, students are ultimately responsible for selecting and registering for courses, meeting course pre-requisites and graduation requirements, and adhering to University policies and procedures.