BSCpE Program - 2025-2026									
1st Semester	2nd Semester	3rd Semester	4th Semester	5th Semester	6th Semester	7th Semester	8th Semester		
MA125³ (4) Calculus I	MA126 (4) Calculus II <ma125<sup>c&gt;</ma125<sup>	MA227 (4) Calculus III <ma126<sup>c&gt;</ma126<sup>	MA238 (3) Diff. Equations (MA227 <sup>c</sup> )	EE331 (3)  Physical Electronics <ch131<sup>c, PH202<sup>c</sup>&gt;  <ma238<sup>c, EE220<sup>c</sup>&gt;</ma238<sup></ch131<sup>	EE334 (3) Digital Electronics <ee223, ee331=""></ee223,>	EE431 (3) Analog Electronics <ee227, ee334=""></ee227,>	EE4XX (1) Tech Elective Lab		
CH131³ (4) Chemistry I	PH201 (4)  Physics I (cal based) <ma125<sup>C, EH101<sup>C</sup>&gt;  (MA126)</ma125<sup>	PH202 (4)  Physics II (cal based) <ph201, ma126<sup="">c&gt;  <eh101<sup>c&gt;</eh101<sup></ph201,>	<b>EE223 (3)</b> Network Analysis <ee220<sup>c, PH202<sup>c</sup>&gt;  (MA227<sup>c</sup>, MA238<sup>c</sup>)</ee220<sup>	EE321 (3) Signals & Systems <ee223, ma238<sup="">c&gt;</ee223,>	EE328 (3) Feedbk Control Sys. <ee321></ee321>	EE401* (1) W Intro to ECE Design <ca110, ee321=""> (EE334, EE368)</ca110,>	EE404** (3) W  ECE Design <ee328, ee334=""> <ee368, ee401=""></ee368,></ee328,>		
EH101³ (3) Composition I	EH102³ (3)  Composition II <eh101<sup>c&gt;</eh101<sup>	EE220 (3) Circuit Analysis <ma125<sup>c, PH201<sup>c</sup>&gt;</ma125<sup>	General Ed (3) L/H/FA or H/SBS	EE227 (1) Circuits and Dev Lab <eh102<sup>C&gt; (EE223)</eh102<sup>	EE322** (3)  Prob. & Stat. Anal. <ma238<sup>c&gt; (EE321)</ma238<sup>	EE/CSC4XX (3) Tech Elective	EE/CSC4XX (3) Tech Elective		
EG101 <sup>4</sup> (2) Intro to Engineer. (MA113 or MA125 <sup>C</sup> )	CPE260 (3) Intro. to C++ (MA125 <sup>c</sup> )	EE263 (3) Digital Logic <cpe260<sup>C&gt;</cpe260<sup>	EE268 (1)  Digital Logic Lab <ee263<sup>c or CSC228<sup>c</sup>&gt;  <eh102<sup>c&gt;</eh102<sup></ee263<sup>	EE368 (1) Microproc. Lab <ee268>, (EE264)</ee268>	EE457** (3) Embedded Systems <ee264, ee368=""></ee264,>	EE454* (3) Digital Comp. Architecture <ee264, ee268=""></ee264,>	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<sup>c or CSC228<sup>c</sup>&gt;  <ee220<sup>c&gt;</ee220<sup></ee263<sup>	EG231 (3) Ethics & Eng Econ <ma126<sup>c&gt;</ma126<sup>	EE446** (1) Embedded Sys Lab (EE457)	EE/CSC4XX (3) Tech Elective	General Ed (3) L/H/FA or H/SBS		
Revised: 03/07/25  * EE Courses only taught in the fall semester			CSC231 (4) Intro to Data Structures & Algo. <cis120 cpe260="" or=""></cis120>	CSC311 (3)  Networking and  Commun. <csc231></csc231>	CSC322 (3) Operating Systems <csc231></csc231>	General Ed (3) L/H/FA or H/SBS			
** 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				General Ed (3) L/H/FA or H/SBS					
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 a	nd Fine Arts: 9 hrs total	History, Social Sciences, and Behavioral Sciences: 9 hrs total			
L/H/	/FA	H/SBS			
Literature - 3 hrs required		History -3 hrs required			
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				
Fine Arts - 3 hrs required		Social and Behavioral Sciences - 3 hrs required			
ARH 100	Survey of Art	GS 101	Gender Studies		
ARH 103, 123	Art History	IST 201	Seasons of Life		
ARS 101	Art Appreciation	AN 100, 101	Anthropology		
DRA 110	Intro to Drama	CA 100, 211	Communications		
MUL 101	Intro to Music	ECO 215, 216	Economics		
		GEO 114, 115	Geography		
Humanities - 3 hrs required		PSC 130	US Government		
AFR 101	African American Studies	PSY 120, 250	Psychology		
AIS 105	Encounter with the Humani	SY 109, 112	Sociology		
CA 110 *	Public Speaking *	IS 100	Global Issues		
LG 111, 112, 211, 212	French				
LG 131, 132, 231, 232	Spanish				
LG 171, 172,271, 272	Russian	* CpE Program requires CA 110			
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

EE 468 Programmable Logic Controllers

BSCpE students must select either the Microlectronic, 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		Software Engineering Prin - W				
Microelectronics Technical Electives		EE Technical Electives		Adv Data Structures and Algs				
Power Semiconductor Dev	EE 423	Modern Control Theory	CSC 333	Prog Language Theory				
Microelectronic Devices	EE 438	Virtual Instrumentation	CSC Technical Electives					
VLSI Design System	EE 440	HDL Logic Synthesis	CSC 410	Compiler Design-Construction				
VLSI Technology-Fabrication	EE 441	Computer Networks	CSC 411	Comm - Network Analysis				
HDL Logic Synthesis	EE 444	Wireless Networks	CSC 412	Real-Time Software Systems				
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	Al 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								
Electronics Lab								
Field-Programmable Gate Array (FPGA) Lab								
Controls Lab								
	elevel MicroE courses elevel MicroE, EE, or CSC courses electronics Technical Electives Power Semiconductor Dev Microelectronic Devices VLSI Design System VLSI Technology-Fabrication HDL Logic Synthesis Optoelectronics  ab -May be selected from Electronics Lab Field-Programmable Gate Array (FPC	Pevel MicroE courses 2 senior- Pevel MicroE, EE, or CSC courses 2 senior- Peter MicroElectronics EE 423  Microelectronic Devices EE 438  VLSI Design System EE 440  VLSI Technology-Fabrication EE 441  HDL Logic Synthesis EE 444  Optoelectronics EE 465  EE 468  EE 469  EE 470  EE 471  EE 473  EB 473	Level MicroE courses Level MicroE, EE, or CSC course Level MicroE, EE, or CSC courses Level MicroE, EE, or CSC course Level MicroE, EE, or CSC courses Level MicroE, EE, or CSC course Level MicroE, EE, or CSC	Level MicroE courses 2 senior-level EE courses. 1 senior-level MicroE, EE, or CSC courses 2 senior-level MicroE, EE, or CSC courses CSC 331  Electronics Technical Electives EE Technical Electives CSC 332  Power Semiconductor Dev EE 423 Modern Control Theory CSC 333  Microelectronic Devices EE 438 Virtual Instrumentation CSC 410  VLSI Design System EE 440 HDL Logic Synthesis CSC 410  VLSI Technology-Fabrication EE 441 Computer Networks CSC 411  HDL Logic Synthesis EE 444 Wireless Networks CSC 412  Optoelectronics EE 465 Digital Signal Processing CSC 413  EE 468 Programmable Logic Controllers CSC 414  EE 469 Signal Integrity CSC 415  EE 470 Synth Active-Passive Networks CSC 416  EE 471 Wireless Communication CSC 417  EE 473 Advanced Communication Systems CSC 418  CSC 434  CSC 434  CSC 440  ab -May be selected from  Electronics Lab  Field-Programmable Gate Array (FPGA) Lab				

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.

Can be used as senior lab instead of senior elective