BSEE Program (PreMed Track) - 2022-2023

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>	**MA227 (4)** Calculus III <MA126>	**MA238 (3)** Diff. Equations (MA227)	**EE331 (3)** Physical Electronics <CH131> <PH202, MA238>	**EE334 (3)** Digital Electronics <EE331>	**EE431 (3)** Analog Electronics <EE334>	**EE437 (1)** Electronics Lab <EE334> (EE431)
CH131[3] (4) Chemistry I	**PH201 (4)** Physics I (cal based) <MA125, EH101> (MA126)	**PH202 (4)** Physics II (cal based) <PH201, MA126> <EH101>	**EE223 (3)** Network Analysis <EE220, PH202> (MA227, MA238)	**EE321 (3)** Signals & Systems <EE223, MA238>	**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>	**EE220 (3)** Circuit Analysis <MA125, PH201>	**MA237 (3)** Linear Algebra I <MA126>	**EE227 (1)** Circuits and Dev Lab (EE223, EH102)	**EE322 (3)** Prob. & Stat. Anal. <MA238> (EE321)	**EE465 (3)** Digital Signal Proc. <EE321, EE322>	**EE4XX (3)** Tech Elective
EG101[4] (2) Intro to Engineer. (MA113 or MA125)	**CPE260 (3)** Intro. to C++ (MA125)	**EE263 (3)** Digital Logic <CPE260>	**EE268 (1)** Digital Logic Lab <EE263 or CSC228>	**EE264 (3)** Microproc. <EE263 or CSC228>	**EE368 (1)** Microproc Sys Lab <EE268>, (EE264)	**EE372 (3)** Communications <EE321>, (EE322)	**EE4XX (3)** Tech Elective
CA110 (3) Public Speaking	**CH132 (4)** Chemistry II <CH131>	**CH201 (4)** Organic Chem I <CH132>	**CH202 (4)** Organic Chem II <CH201>	**BMD321* (3)** Biochem. I <CH201>	**BMD322** (3)** Biochem. II <CH201, BMD321>	**EE4XXL (1)** Tech Elective Lab	**General Ed (3)** **L/H/FA or** **H/SBS**
General Ed (3) **SS** **PSY120 recom**			**BLY121[3] (4)** Gen Biology I	**BLY122[3] (4)** Gen Biology II <BLY 121>	**General Ed (3)** **L/H/FA or** **H/SBS**	**BLY350[3] (3)** Human Physiology <See bulletin>	**General Ed (3)** **L/H/FA or** **H/SBS**
					General Ed (3) **SS** **SY109 recom**	**EG 231 (3)** Ethics & Eng Econ <MA126>	
19 cr-hr	**18 cr-hr**	**18 cr-hr**	**18 cr-hr**	**17 cr-hr**	**19 cr-hr**	**14 cr-hr**	**16 cr-hr**

Revised: Summer 2022

*** Courses only taught in the fall semester**

**** Courses only taught in the spring semester**

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

[4] Students transferring 15 or more cr-

< > 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

MCAT Exam is taken in the Summer after the Junior Year

Dashed border denotes EE pre-med-track elective

Double border denotes a course that is not required

General Education Requirements			
All students are required to take EH 101 and EH 102, English Composition I and II, plus 15 hours of general education courses.			
Literature, Humanities and Fine Arts: 9 hrs total		**History, Social Sciences, and Behavioral Sciences: 6 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, 121	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	*** EE Program requires CA 110**	
LG 151, 152, 251, 252	German	**** PSY120 and SY109 are recommended for the MCAT.**	
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		

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.

Electrical Enigneering Pre-med Track			
The EE Pre-med-track requires 26 hours from BLY121, BLY122, BMD321, BMD322, CH132, CH201, CH202 as pre-med track elective. In addition Physiology (eg BLY350) is recommended but not required. 2 technical electives and 1 technical elective lab must be selected satisfying the concentration requirement bellow.			
Concentration area	**Two courses required in one concentration area**		
Control Systems:	EE 422, EE 423, EE 424, EE 427, EE438, EE 468		
Communications and Networks:	EE 441, EE 444, EE 453, EE 456, EE 471, EE 473		
Digital Systems:	EE 438, EE 440*, EE 441, EE 443*, EE 454, EE 457, EE 468, EE 469		
Electromagnetics and Optics:	EE 450, EE 452, EE 453, EE 455, EE 456, EE 458, EE 488		
Electronics:	EE 430, EE 432, EE 438, EE 439, EE 455, EE 470, EE 482, EE 486		
Power Systems:	EE 430, EE 481, EE 482, EE 483, EE 484, EE 485, EE 486, EE 488, EE 489		
Courses			
EE 422	Adv Feedback Control Systems	EE 456	Fiber Optic Communication Sys
EE 423	Modern Control Theory	EE 457	Embedded System Design
EE 424	Nonlinear Control Systems	EE 458	Radar Systems
EE 427	Digital Control Systems	EE 465	Digital Signal Processing
EE 430	Power Semiconductor Dev	EE 468	Programmable Logic Controllers
EE 432	Microelectronic Devices	EE 469	Signal Integrity
EE 438	Virtual Instrumentation	EE 470	Synth Active-Passive Networks
EE 439	VSLI Technology-Fabrication	EE 471	Wireless Communication
EE 440*	HDL Logic Synthesis	EE 473	Advanced Communication Systems
EE 441	Computer Networks	EE 481	Electrical Machines
EE 443*	HDL Logic Simulation	EE 482	Switch Mode Power Conversion
EE 444	Wireless Networks	EE 483	Power Systems I
EE 450	Fundamentals of Fourier Optics	EE 484	Power Systems II
EE 452	Microwave Engineering	EE 485	Power Distrib and Utilization
EE 453	Antenna Theory and Design	EE 486	Power Electronics
EE 454	Digital Computer Architecture	EE 488	Illumination Engineering
EE 455	Optoelectronics	EE 489	Renewable Energy
*** Credit for both EE 440 & EE 443 not allowed**			
Senior Lab -May be selected from			
EE 446	Embedded System Design Lab		
EE 447	Programmable Logic Devices Lab		