

Chemical and Biomolecular Engineering BScE Program - 2025-2026

1st Semester	2nd Semester	3rd Semester	4th Semester	5th Semester	6th Semester	7th Semester	8th Semester
FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING
MA125 (4) Calculus I	MA126 (4) Calculus II <MA125>	MA227 (4) Calculus III <MA126>	MA238 (3) Diff. Equations (MA227)	*CHE311 (3) Separations I <CHE203>, (CHE331)	**CHE363 (3) Sim. Chem Proc. <CHE311>	*CHE421 (3) Separations II <CHE311, CHE322>	**CHE462 (3) Design II <CHE461>
CH131 (4) Chemistry I	CH132 (4) Chemistry II <CH131>	CH201 (4) Organic Chem. I <CH132>	CH202 (4) Organic Chem. II <CH201>	*CHE321 (3) Transport Phen. I <PH201, MA238, CHE203>	**CHE322 (3) Transport Phen. II <CHE321>	*CHE441 (2) Unit Ops Lab I <CHE322, CHE342, CHE351, CHE352>	**CHE442 (2) Unit Ops Lab II <CHE311, CHE421, CHE441>
EH101 (3) Composition I	EH102 (3) Composition II <EH101>	CHE203 (4) Mat. & Energy Bal. <CH132, MA126, EH101>	EG231 (3) EG Economics <MA126>	*CHE331 (3) Thermo I (CHE 351), <CH201, PH201, CHE203, MA238>	**CHE332 (3) Thermo II <CHE331>, (CHE 352)	*CHE461 (3) Design I <EG231, CHE311, CHE332, CHE342, CHE372>	**CHE Elect. II (3)
BLY121 (3) General Biology	PH201 (4) Physics I (cal based) <MA125, EH101> (MA126)	PH202 (4) Physics II (cal based) <PH201, MA126, EH101>	Tech Elective (3)	*CHE351 (1) Modeling Lab (CHE311, CHE331)	**CHE372 (3) Reactor Design <CHE331>, (CHE322, CHE332)	*CHE452 (3) Proc. Controls <CHE372>	General Ed (3) L/H/FA or H/SBS
EG101 (2) Freshman Seminar			General Ed (3) L/H/FA or H/SBS	Chem Elect. (3-4) CH265 Intro Anal. CH440 Biochem. I	**CHE352 (1) Measurement Lab <CHE351>, (CHE332, CHE372)	*CHE Elect. I (3)	General Ed (3) L/H/FA or H/SBS
				General Ed (3) L/H/FA or H/SBS	General Ed (3) L/H/FA or H/SBS	General Ed (3) L/H/FA or H/SBS	
16 cr-hr	15 cr-hr	16 cr-hr	16 cr-hr	16 or 17 cr-hr	16 cr-hr	17 cr-hr	14 cr-hr

< > indicates prerequisite courses; () indicates corequisite courses

Courses in shaded boxes indicate PCS course: C - Grade or higher required (Only two attempts allowed for CHE 203)

C-Grade or higher required in all prerequisite courses

BMD 321 can be taken in place of CH 440

* CHE Courses only taught in the fall semester

**CHE courses only taught in the spring semester

BSCHE Program - 2025-2026		BSCHE Elective Requirements	
All students are required to take EH 101 and EH 102, English Composition I and II, plus 18 hours of general		Students must take one 3-hour Technical Elective and at least six hours of Advanced Engineering Electives	
Literature, Humanities and Fine Arts:	History, Social Sciences, and Behavioral		
L/H/FA	H/SBS	Technical Electives	Advanced Engineering Electives
<u>Literature - 3 hrs required</u>	<u>History -3 hrs required</u>	Choose one course from this list	Choose at least 6 hours from this list
EH 215, 216 British Literature	HY 101, 102 History of Civilization	Biology BLY122 (only if CH440 or BMD321 is also taken)	CHE490 Special Topics in Chemical Eng. (3 hrs)
EH 225, 226 American Literature	HY 135, 136 US History	Chemistry Any course higher than CH202	CHE494 Directed Independent Study (3 hrs)
EH 235, 236 World Literature		Comp Info Sci CIS210	CHE499 Senior Honors Project (4 or 6 hrs)
		Mathematics MA 237, 332 or 354	EG450 Intro to Systems Engineering(must select project option w/ChBE related project)
		Statistics ST 315 or 320	CE370 w/CE374 Intro to Environmental Eng w/lab
		Physics Any standard* course higher than PH 202	CE470 w/CE471 Water-Wastewater Treatment Design
<u>Fine Arts - 3 hrs required</u>	<u>Social and Behavioral Sciences - 3 hrs required</u>		EG315 Mechanics of Materials
ARH 100 Survey of Art	GS 101 Gender Studies		ME326 Materials Science (pre-req of EG315)
ARH 103, 123 Art History	AIS 201 Seasons of Life		ME365 Design of Fluid Power Systems (pre-req of EG315)
ARS 101 Art Appreciation	AN 100, 101 Anthropology		ME411 Thermal System Design
DRA 110 Intro to Drama	CA 100, 211 Communications		ME452 Combustion (pre-req of ME312 and EG270)
MUL 101 Intro to Music	ECO 215, 216 Economics		ME453 IC Engines (pre-req of ME312 and EG270)
	GEO 114, 115 Geography		ME461 Turbomachinery (pre-req of ME312 and EG270)
<u>Humanities - 3 hrs required</u>	PSC 130 US Government		ME463 Intro. Biomedical Engineering
CA 110 Public Speaking*	PSY 120, 250, 121 Psychology		EE449 Controls Lab
	SY 109, 112 Sociology		EE489 Renewable Energy
	IS 100 Global Issues		EE331 Physical Electronics
			EE439 VSLI Technology-Fabrication (pre-req of EE331)
		Engineering Any standard* 200-level or higher course (excluding EG270, EG360, ME317)	

Student Responsibility: The University of South Alabama will endeavor to provide timely and accurate advisement. 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.

*Standard is a typical didactic course, not DIS, independent studies, or research