

# Sample Course Planning Guide

for

**Bachelor of Science in Engineering (BSE) entered 2017 or later**

**41 CU TOTAL**

COURSE SELECTION				
MATH (4 CU)	ENGINEERING (15 CU)	TECH ELECTIVES (4 CU)	SSH (7 CU)	
<input type="checkbox"/> MATH 104 <input type="checkbox"/> MATH 114 <input type="checkbox"/> MATH 240 <input type="checkbox"/> MATH 241	<input type="checkbox"/> ENGR 105 <input type="checkbox"/> CBE 160 <input type="checkbox"/> CBE 230 <input type="checkbox"/> CBE 231 <input type="checkbox"/> CBE 350 <input type="checkbox"/> CBE 351 <input type="checkbox"/> CBE 353 <input type="checkbox"/> CBE 371 <input type="checkbox"/> CBE 400 <input type="checkbox"/> CBE 410 <input type="checkbox"/> CBE 451 <input type="checkbox"/> CBE 459 <input type="checkbox"/> CBE 460 <input type="checkbox"/> CBE _____ <sup>c</sup> <input type="checkbox"/> CBE _____ <sup>c</sup>	<input type="checkbox"/> ENGINEERING <sup>d</sup> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> CBE 480 <sup>e</sup> or CHEM 223 or CHEM 245	<input type="checkbox"/> SS _____ <input type="checkbox"/> SS _____ <input type="checkbox"/> H _____ <input type="checkbox"/> H _____ <input type="checkbox"/> SS or H _____ <input type="checkbox"/> SS or H or TBS _____ <input type="checkbox"/> SS or H or TBS _____	
NATURAL SCIENCE (8-9 CU)				
<input type="checkbox"/> CHEM 101 <sup>a</sup> <input type="checkbox"/> CHEM 053 <input type="checkbox"/> CHEM 102 <input type="checkbox"/> CHEM 054 <input type="checkbox"/> PHYS 140 or PHYS 150 <sup>b</sup> <input type="checkbox"/> PHYS 141 or PHYS 151 <sup>b</sup> <input type="checkbox"/> CHEM 221 or MSE 221 <input type="checkbox"/> CHEM 241 <input type="checkbox"/> CHEM 242 or CHEM 251 or CHEM 243				
		NOTES:		
		<sup>a</sup> Please see * CHEM on reverse	<input type="checkbox"/> <b>Depth</b> (from SSH)	
		<sup>b</sup> 150/151 exempts student 1 TECH ELEC	<input type="checkbox"/> <b>Writing req't</b> (from SSH)	
		<sup>c</sup> CBE 300+	<b>FREE ELECTIVES (3 CU)</b>	
		<sup>d</sup> CBE 150 Recommended	<input type="checkbox"/> _____	
		<sup>e</sup> CBE 479 is pre-requisite	<input type="checkbox"/> _____	
			<input type="checkbox"/> _____	
SEMESTER PLANNING				
TERM	MATH & NAT SCI	ENGINEERING	COMP & TECH ELEC'S	SSH & FREE ELEC'S
Fall __	MATH 104 CHEM 101 & 053 PHYS 140		Tech elective (CBE 150 recommend)	Free Elective or SSH
Spring __	MATH 114 CHEM 102 & 054 PHYS 141	CBE 160		Writing requirement (SSH) <b>or</b> EAS 203 (Ethics requirement)
Summer __				
Fall __	MATH 240 CHEM 241	CBE 230		SSH elective Free elective
Spring __	MATH 241 CHEM 242 <b>or 251 or 243</b>	CBE 231	ENGR 105	SSH elective
Summer __				
Fall __	CHEM 221 <b>or</b> MSE 221	CBE 350 CBE 460 CBE elective		SSH elective
Spring __		CBE 351 CBE 353 CBE 371	CBE 480 <b>or</b> CHEM 223 <b>or</b> CHEM 245	SSH elective
Summer __				
Fall __		CBE 400 CBE 410 CBE 451	Tech elective	SSH elective
Spring __		CBE 459 CBE elective	Tech elective	SSH elective Free elective
Summer __				
CORE COURSE TITLES				
CBE 150 - Fund. of Biotechnology CBE 160 - Intro to Chemical Eng. CBE 230 - Mat. & Energy Balances CBE 231 - Thermod. of Fluids	CBE 350 - Fluid Mechanics CBE 351 - Heat & Mass Trans. CBE 353 - Adv. Chem. Eng. Sci CBE 371 - Separ. Processes	CBE 400 - Intro to Product Design CBE 410 - Chem. Eng. Lab CBE 451 - Chem. Reac. Design CBE 459 - Process Sys. Design Prjcs.	CBE 460 - Chem. Proc. Ctrl. CBE 479 - Biot. & Biochem. Eng CBE 480 - Lab in Biot. & Gen. E	