

**ENGINEERING (CHEMICAL)**

NAME	I.D.#	Expected Grad Date	B.S.E. Degree
<b>General Education Requirements</b>		<b>A. Chemical Concentration</b>	
<u>3</u>	THEO 101 Christian Formation	<u>5</u>	CHEM 311 Organic Chemistry I
<u>3</u>	BLIT 202 Christian Scriptures I	<u>5</u>	CHEM 312 Organic Chemistry II
<u>3</u>	BLIT 303 Christian Scriptures II	<u>3</u>	ENGR 102 Engineering Design II
<u>3</u>	THEO 404 Christian Faith	<u>3</u>	ENGR 107 Computational Engineering <b>OR</b>
<u>3</u>	ENGL 109 College Writing I		CSIS 150 Programming: Control Structures
<u>3</u>	COMM 105 Fundamentals of Communication	<u>3</u>	ENGR 211 Statics & Mechanics
<u>3</u>	FINA 101 Intro to Fine Arts	<u>3</u>	ENGR 215 Dynamics
<u>3</u>	HIST 200 Western Civilization	<u>3</u>	ENGR 220 Electrical Circuits & Systems
<u>3</u>	LIT 205 Studies in Literature	<u>4</u>	ENGR 323 Automatic Controls
<u>3</u>	Select from: ECON 110, PSCI 101, PSCI 223, PSYC 101, SOCY 120	<u>4</u>	ENGR 361 Material and Energy Balances
<u>0-8</u>	Elementary I, II Foreign Language or approved International Culture courses	<u>4</u>	ENGR 362 Chemical Engineering Thermodynamics
<u>3-4</u>	BIOL 201 General Biological Science <b>OR</b> approved biological Science lab course	<u>4</u>	ENGR 363 Transport Phenomena
<u>2-3</u>	PHED 190 Wellness or PHED 126 Nutrition	<u>3</u>	ENGR 461 Mass Transfer & Staging Operations
<u>1</u>	PHED 191 Applied Fitness	<u>3</u>	ENGR 462 Kinetics & Reactor Design
<b>Required Supporting Courses:</b>		<b>All required Engineering and supporting Math and Science courses must be completed with a grade of C or better to be eligible for graduation.</b>	
<u>4</u>	CHEM 103 General Chemistry I		
<u>4</u>	CHEM 104 General Chemistry II		
<u>4</u>	MATH 147 Calculus I		
<u>4</u>	MATH 148 Calculus II		
<u>4</u>	MATH 261 Calculus III		
<u>3</u>	MATH 357 Differential Equations		
<u>4</u>	PHYS 201 General Physics I		
<u>4</u>	PHYS 202 General Physics II		
<b>Major: 60 hours</b>			
<u>3</u>	ENGR 101 Engineering Design I		
<u>2</u>	ENGR 401 Senior Project Design I		
<u>2</u>	ENGR 402 Senior Project Design II		
<u>3</u>	ENGR 403 Engineering Economics		
<u>3</u>	ENGR 404 Tech. Comm./Exper. Design		

**PLUS completion of the following concentration:**