

Bachelor of Science in Chemical Engineering -- 131 Credits

JCHE-BSE (RG 7272)
Effective August 2023

Worlds of Knowledge (RQ 3788)

Aesthetic and Creative Expression				
Subject	Number	Course Title	CR	Satisfied/Term
			3	

Global History & Culture				
Subject	Number	Course Title	CR	Satisfied/Term
			3	

Societies & Civics				
Subject	Number	Course Title	CR	Satisfied/Term
			3	

Each student must take 1 course in each of the following Worlds of Knowledge.
Each student must take two additional "Follow-Up" courses from any of the following Worlds of Knowledge.
The minimum number of courses taken in the Worlds must be 5.
(No electives may be taken from the World of Science & Nature)

Follow-Up Courses				
Subject	Number	Course Title	CR	Satisfied/Term

Freshman Year Curriculum (RG 7272)

Freshman Year Curriculum - 1st Term (RQ 3415)				
Complete the following Courses			CR	Satisfied/Term
Chem 0150	General Chemistry 1 Engr		3	
EngCmp 0005	Composition 1		3	
Engr 0017	Intro Engr Analysis		3	
Engr 0081	Freshman Engr Sem 1		0	
Math 0221	Analytic Geom & Calc 1		4	
Phys 0150	Physics 1		4	
Requirement Satisfied			17	

Freshman Year Curriculum - 2nd Term (RQ 3416)				
Complete the following Courses			CR	Satisfied/Term
Chem 0151	General Chem 2 for Engr		3	
Engr 0018	Intro Engr Computing		3	
Engr 0082	Freshman Engr Sem 2		0	
Math 0231	Analytic Geom & Calc 2		4	
Phys 0152	Physics 2		4	
Requirement Satisfied			14	

Sophomore Year Curriculum (RG 7272)

Soph Year Curriculum - 3rd Term (RQ 3417)				
Complete the following Courses			CR	Satisfied/Term
CHE 0103	Chem Engr Foundations 1		3	
CHE 0104	Chem Engr Foundations Lab		1	
CHE 0220	Chem Engr Thermodyn 1		3	
CHE 1085	Dept Seminar		0	
Chem 0236	Organic Chemistry 1 Eng		3	
Math 0241	Analytic Geom & Calc 3		4	
Requirement Satisfied			14	

Soph Year Curriculum - 4th Term (RQ 3418)				
Complete the following Courses			CR	Satisfied/Term
CHE 0105	Chem Engr Foundations 2		3	
CHE 0214	Intro Chem Product Design		3	
CHE 0221	Chem Engr Thermodyn 2		3	
CHE 0222	Chem Engr Thermodyn Lab		1	
CHE 1085	Dept Seminar		0	
Chem 0237	Organic Chemistry 2 Eng		3	
Chem 0238	Organic Chem Lab Eng		1	
Math 1271	Differential Equations		3	
Requirement Satisfied			17	

Junior Year Curriculum (RG 7272)

Junior Year Curriculum - 5th Term (RQ 3419)				
Complete the following Courses			CR	Satisfied/Term
CHE 0302	Transport Phenomena 1		3	
CHE 0315	Product Design 2		3	
CHE 0402	Reactive Processes 1		3	
CHE 0404	Reactive Processes Lab		1	
CHE 1085	Dept Seminar		0	
Chem 1341	Physical Chemistry 1		3	
Engr 0020	Prob & Stats for Engr 1		4	
Requirement Satisfied			17	

Junior Year Curriculum - 6th Term (RQ 3420)				
Complete the following Courses			CR	Satisfied/Term
CHE 0303	Transport Phenomena 2		3	
CHE 0304	Transport Phenomena Lab		1	
CHE 0405	Reactive Processes 2		2	
CHE 1085	Dept Seminar		0	
Commrc 0052	Public Speaking		3	
Requirement Satisfied			9	

Senior Year Curriculum (RG 7272)

Senior Year Curriculum - 7th Term (RQ 3421)				
Complete the following Courses			CR	Satisfied/Term
CHE 0503	Syst Engr 1: Dyn & Modeling		5	
CHE 0504	Syst Engr 1: Lab		1	
CHE 1085	Dept Seminar		0	
CHE 1114	Systems Process Design 1		2	
Chem 1324	Fundamentals of Biochemistry		3	
Requirement Satisfied			11	

Senior Year Curriculum - 8th Term (RQ 3422)				
Complete the following Courses			CR	Satisfied/Term
CHE 0603	Chem Safety and Ethics		2	
CHE 1115	System Process Design 2		2	
CHE 1085	Dept Seminar		0	
Requirement Satisfied			4	

Electives (RQ 7272)

Engineering Electives (RQ 3779)				
Complete one of the following Courses			CR	Satisfied/Term
CE 1105	Materials of Construction		3	
CE 1503	Intro to Environmental Eng		3	
CE 1610	Eng & Sustainable Develop		3	
CHE 1096	Special Projects		3	
EE 0031	Linear Circuits & Systems 1		3	
EE 0445	Prog & Intro to Data Struct		3	
Engr 0022	Materials		3	
Engr 0132	Statics		3	
Engr 1103	Engineering Economics		3	
Engr 1115	Engineering Leadership		3	
ME 0024	Intro ME Design		3	
Requirement Satisfied			3	

Advance Chemical/Petroleum Elective (RQ 3780)				
Complete one of the following Courses			CR	Satisfied/Term
CHE 0520	Fuel and Energy Technology		3	
CHE 0510	Intro Comp Fluid Dynamics		3	
CHE 0515	Catalysis		3	
Requirement Satisfied			3	

Professional Electives (RQ 3781)				
Complete one of the following Courses			CR	Satisfied/Term
Commrc 0083	Intercultural Communications		3	
Engwrt 0053	Intro to Professional Writing		3	
Engwrt 1192	Technical Writing		3	
Math 1181	Linear Algebra		3	
Additional Engineering Elective			3	
Additional Advanced Science Elective			3	
Engineering Co-Op (with approval)			3	
Requirement Satisfied			3	

Advanced Science Elective / Lab (RQ 3782)				
Complete one of the following Courses			CR	Satisfied/Term
Any Chem or Physics Course			3	
Any Chem or Physics Lab			1	
Requirement Satisfied			4	

IMPORTANT INFORMATION:

This sheet is an unofficial representation of the major requirements and the information is subject to change. It is not an official record of academic progress and should not be treated as such. Official degree information can only be obtained through the Division Office or the Office of the Registrar.

Updated 10/10/2024