

Student Name \_\_\_\_\_  
 Advisor \_\_\_\_\_

total credits = 131/132

**University of Idaho**  
**Department of Chemical & Biological Engineering**  
**Fall 2021-Spring 2025**  
**Chemical Engineering Curriculum**

**Freshman**

Fall 2021		Cr	Grade	Sem
ChE 110	Intro to Chemical Engineering	1		
* Chem 111	Principles of Chemistry	3		
* Chem 111 Lab	Principles of Chemistry Lab	1		
** Engl 102	Coll. Writing & Rhetoric	3		
Elective	Humanities	3		
Math 170	Analyt Geom & Calculus I	4		
<b>TOTAL</b>		<b>15</b>		

Spring 2022		Cr	Grade	Sem
** ChE 123	Computations in ChE	2		
* Chem 112	Principles of Chemistry II	3		
* Chem 112 Lab	Principles of Chem II Lab	2		
** Math 175	Analyt. Geom & Calculus II	4		
Phys 211	Engr Physics I	3		
Phys 211 Lab	Engr Physics I Lab	1		
<b>TOTAL</b>		<b>15</b>		

**Sophomore**

Fall 2022		Cr	Grade	Sem
** ChE 220	Prog. for Chem Engrs	3		
Chem 277	Organic Chemistry	3		
Chem 278	Organic Chemistry Lab	1		
* Engr 210	Engineering Statics	3		
* Math 275	Analyt. Geom & Calc III	3		
Phys 212	Engr Physics II	3		
<b>TOTAL</b>		<b>16</b>		

Spring 2023		Cr	Grade	Sem
* ChE 223	Mat'l & Energy Balances	3		
Chem 372	Organic Chemistry II	3		
Chem 374	Organic Chemistry II Lab	1		
* Engr 320	Thermo & Heat Transfer	3		
* Engr 335	Fluid Mechanics	3		
* Math 310	Ord Diff Equations	3		
<b>TOTAL</b>		<b>16</b>		

**Junior**

Fall 2023		Cr	Grade	Sem
ChE 326	ChE Thermodynamics	3		
ChE 340	Trans & Rate Processes I	4		
Chem 305	Physical Chemistry	3		
Chem 307	Physical Chemistry Lab	1		
Elective	Econ 201 or 202	3		
Engr 240	Intro to Electrical Circuits	3		
<b>TOTAL</b>		<b>18</b>		

Spring 2024		Cr	Grade	Sem
ChE 210	Integrated ChE Fundamentl.	1		
ChE 330	Separation Processes	3		
ChE 341	Tran & Rate Processes II	4		
ChE 423	Reactor Kinetics & Design	3		
Elective	Math-UPDV	3		
Elective	Oral Communication	2		
Elective	International	3		
<b>TOTAL</b>		<b>19</b>		

**Senior**

Fall 2024		Cr	Grade	Sem
ChE 433	Chem Engr Lab I	1		
ChE 444	Process Analysis & Control	3		
ChE 453	Process Analysis & Des. I	3		
ChE 491	Seminar	1		
Elective	ChE/MSE 390+	3		
Elective	UPDV Tech Elective	3		
Elective	American Diversity	3		
<b>TOTAL</b>		<b>17</b>		

Spring 2025		Cr	Grade	Sem
ChE 434	Chem Engr Lab II	1		
ChE 454	Process Analysis & Des II	3		
Elective	Social Science	3		
Elective	Humanities	3		
Elective	UPDV CHE Elective	3		
Elective	UPDV Tech Elective	3		
<b>TOTAL</b>		<b>16</b>		

**\*Grades of C or better are required (Junior Certification Courses)**

Course	Cr	Grade	Sem	Grade	Sem	Course	Cr	Grade	Sem	Grade	Sem
Chem 111 + 111L	3 + 1					Engr 320	3				
Chem 112 + 112L	3 + 2					Engr 335	3				
Engr 210	3					ChE 223	3				
Math 275	3					Math 310	3				

General Catalog: Students majoring in chemical engineering must earn a grade of C or better in each of the following courses before enrolling in upper-division CHE courses: Chem 111, 111L, 112 and 112L; ChE 223; Engr 210, 320, and 335; Math 275 and 310.

\*\*Passing ChE 123, Engl 102, computer programming, Math 175 #, and Phys 211-212 are also REQUIRED for upper-division registration!

# Math 170 requires a grade of C or better to go on to Math 175.

Specified credits: 92; Humanity-Social Sciences credits: 12; American Diversity: 3 credits, International: 3 credits; Communication Elective (from core): 2 credits; Other unspecified (ChE - 3; Math - 3; Technical - 6): 15 credits.

Humanities and Social Science electives (including Econ elective) must satisfy the university's general education core.

Technical electives and the ChE/MSE elective may NOT include 398, 498 or 598 Internship.