

**Transfer Plan: NIC to UI**  
**B.S. DEGREE PROGRAM IN CHEMICAL ENGINEERING – Catalog Year 2022/23**  
*This plan assumes a student completes the Associate of Science degree at NIC before transferring to UI.*

	Course Title/Requirement at NIC	COMMENTS	Credits
<b>YEAR 1 FALL @ NIC</b>			
CHEM 111/111 Lab	Principles of Chemistry I/111 Lab		5
ENGL 101	Writing and Rhetoric I		3
GEM 7		Required course in Engr AS Program of Study at NIC	3
MATH 170	Calculus I		4
ENGR 123	Introduction to Engineering	Substitute for ChE 123?	3
			<b>18</b>
<b>YEAR 1 SPRING @ NIC</b>			
ENGL 102	Writing and Rhetoric II		3
GEM 7F or 7I	First Year Experience or Inst. Designated		3
ENGR 210	Engineering Statics		3
MATH 175	Calculus II		4
CHEM 112/112 Lab	Principles of Chemistry II/112 Lab		5
			<b>18</b>
<b>YEAR 2 FALL @ NIC</b>			
COMM 101	Oral Communication		3
ECON 201 or 202	Economics course		3
MATH 275	Calculus III		4
PHYS 211/211 Lab	Engineering Physics I/Lab		5
			<b>15</b>
<b>YEAR 2 SPRING @ NIC</b>			
Phil 103	Intro to Ethics		3
CHEM 277	Organic Chemistry I		3
CHEM 278	Organic Chemistry I Lab		1
MATH 370	Intro to Ordinary Differential Equations		3
PHYS 212/212 Lab	Engineering Physics II/Lab		5
ENGR 223	Engineering Analysis		3
			<b>18</b>
	Course Title/Requirement at UI	Prerequisites	Credits
<b>YEAR 3 FALL @ UI</b>			
ChE 220	Programming for Chemical Engineers		3
CHEM 372	Organic Chemistry II		3
CHEM 375	Organic Chemistry II Lab		1
ENGR 335	Engineering Fluid Mechanics	MATH 275 and ENGR 210	3
			<b>10</b>
<b>YEAR 3 SPRING @ UI</b>			
ChE 223	Material & Energy Balances		3
ENGR 320	Eng. Thermodynamics & Heat Transfer	ENGR 210, MATH 275	3
Elective	Math-UPDV		<b>3</b>
Elective	Technical Elective		3
			<b>12</b>
<b>YEAR 4 FALL @ UI</b>			
CHE 326	ChE Thermodynamics		3
CHE 340	Trans & Rate Processes		3
CHEM 305	Physical Chemistry		3
CHEM 307	Physical Chemistry Lab		1
			<b>10</b>
<b>YEAR 4 SPRING @ UI</b>			
CHE 330	Separation Processes		3
CHE 341	Trans & Rate Processes II		3
CHE 423	Reactor Kinetics & Design		3
CHE/BE Elective	390 or higher course		3
			<b>12</b>
<b>YEAR 5 FALL @ UI</b>			
CHE 433	Chem Engr Lab I		1
ChE 444	Process Analysis & Control		3
CHE 453	Process Analysis & Design I		3

ChE 491	Seminar	Senior standing	1
			<b>8</b>
<b>YEAR 5 SPRING @ UI</b>			
CHE 434	Chem Engr Lab II		1
CHE 454	Process Analysis & Design II		3
Elective	UPDV CHE Elective		3
Elective	UPDV Tech Elective		3
			<b>10</b>