

## NCSU Chemical Engineering

(Unofficial Community Colleges to NCSU Curriculum)

Degree Earned: NCSU Bachelor of Science Degree in Chemical Engineering

Transfer GPA = 3.5

Effective: 2015-2016

Grey Highlighted Courses – Take at NCSU

### FRESHMAN YEAR

Com College	Fall Semester	Credit	Com College	Spring Semester	Credit
CHM 151	CH 101 Chemistry -- A Molecular Science	3	CHM 152	CH 201 Chemistry – Quantitative Science	3
CHM 151	CH 102 General Chemistry Lab	1	CHM 152	CH 202 Quantitative Chemistry Lab	1
EGR 150	E 101 Intro to Engr & Problem Solving	1	MAT 272	MA 241 Calculus II	4
NCSU	E 115 Intro to Computing Environment	1	PHY 251	PY 205/PY 206 Physics For Engr & Science	4
ENG 111 & ENG 112	ENG 101 Academic Writing & Research	4	ECO 251	EC 205 Economics (or EC 201 or AARE 201)	3
MAT 271	MA 141 Calculus I	4	PED 110	Health and Exercise Studies Course	1
PED 110	HESF 10* Health and Exercise Studies Fitness Course	1			
<b>15</b>			<b>16</b>		

### SOPHOMORE YEAR

Com College	Fall Semester	Credit	Com College	Spring Semester	Credit
CHM 251	CH 221 Organic Chemistry I	3	CHM 252	CH 223 Organic Chemistry II	3
CHM 251	CH 222 Organic Chemistry I Lab	1	CHM 252	CH 224 Organic Chemistry II Lab	1
NCSU	CHE 205 Chemical Process Principles	4	NCSU	CHE 225 Chemical Proc Systems	3
MAT 273	MA 242 Calculus III	4	MAT 285	MA 341 Applied Differential Equations	3
	GEP Requirement	3	PHY 252	PY 208/PY 209 Physics Engr & Science II	4
				GEP Requirement	3
<b>15</b>			<b>17</b>		

### JUNIOR YEAR

Com College	Fall Semester	Credit	Com College	Spring Semester	Credit
NCSU	CH 315/316 Quantitative Analysis & Lab	4	NCSU	CH *** Chemistry Elective	4
NCSU	CHE 311 Transport Processes	3	NCSU	CHE 312 Transport Processes II	
NCSU	CHE 315 Chemical Process Thermodynamics	3	NCSU	CHE 316 Thermodynamics of Chemical & Phase Eq	3
NCSU	ECE 331 Principles of Electrical Engr I or MSE 201 Structure & Properties Engr Materials	3	NCSU	CHE 330 Chemical Engr Lab I	4
	GEP Requirement	3	BIO 111, EGR 220, DFT 170	Free Elective	3
NCSU	CHE 395 Professional Development Seminar	1			
<b>17</b>			<b>17</b>		

### SENIOR YEAR

Com College	Fall Semester	Credit	Com College	Spring Semester	Credit
NCSU	CHE 331 Chemical Engr Lab II or	2	NCSU	CHE 435 Process System Analysis & Control	3
NCSU	CHE 446 Design & Analysis Chemical Reactors	3	NCSU	CHE 451 CHE Design II	3
NCSU	CHE 450 CHE Design I	3	NCSU	Technical Elective	3
NCSU	Technical Elective	3	HUM 110	GEP Requirement	3
	GEP Requirement	3		GEP Requirement	3
<b>14</b>			<b>15</b>		

**NCSU - Minimum Credit Hours Required for Graduation in Chemical Engineering**

**125**