

North Carolina State University

Chemical Engineering Curriculum (Effective 07-01-2021)

1 + 3 Program with UNC Asheville

FALL SEMESTER

SPRING SEMESTER

Freshman Year (UNC Asheville)

MATH 191	Calculus I	4	MATH 192	Calculus II	4
LANG 120	Academic Writing & Crit Inquiry	4	PHYS 221	Physics I	4
CHEM 132	General Chemistry	3	CHEM 233	Fndns Inorganic Chemistry	3
CHEM 111	General Chemistry Lab	1	CHEM 145	Quantitative Chem Lab	1
E 101	Intro to Engr & Prob Solv	1	ECON 104	Microecon. Princip. for Engineer.	<u>3</u>
JEM 123	Intro to CAD for Mechat. Eng.	1			15
FYS 178	First Year Seminar	<u>3</u>			
		17			

Sophomore Year (NC State)

MA 242	Calculus III	4	MA 341	Appl Differential Equations I	3
CHE 205	Chemical Process Principles	4	CH 223	Organic Chemistry II	3
CH 221	Organic Chemistry I	3	CH 224	Organic Chemistry II Lab	1
CH 222	Organic Chemistry I Lab	1	CHE 225	Intro Chemical Engr Analy	3
HES ***	Health & Exercise Studies	1	PY 208	Physics for Engrs & Sci II	3
E 115	Intro to Computing Environ	1	PY 209	Physics for Engrs & Sci II Lab	1
*** ***	GEP Course	<u>3</u>	E 102	(or GEP substitute)	2
		17	HES ***	Health & Exercise Studies	<u>1</u>
					17

Junior Year (NC State)

CH 315	Quantitative Analysis	3	CH ***	Chemistry Elective	4
CH 316	Quantitative Analysis Lab	1	CHE 312	Transport Processes II	3
CHE 311	Transport Processes I	3	CHE 316	Thermo of Chem/Phase Equil	3
CHE 315	Chem Proc Thermodynamics	3	CHE 330	Chemical Engr Lab I	4
ECE 331	Prin of Electrical Engr (a)	3	*** ***	Free Elective	<u>3</u>
*** ***	GEP Course	3			17
CHE 395	Prof Development Seminar	<u>1</u>			
		17			

Senior Year (NC State)

CHE 331	Chemical Engr Lab II	2	CHE 435	Proc Sys Analysis & Control	3
CHE 446	Design & Analy Chem React	3	CHE 451	CHE Design II	3
CHE 450	CHE Design I	3	*** ***	Technical Elective	3
*** ***	Technical Elective	3	*** ***	GEP Course	3
*** ***	GEP Course	<u>3</u>	*** ***	GEP Course	<u>3</u>
		14			15

(a) or MSE 201 (3)