

North Carolina State University

Biomedical & Health Sciences

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	BIO 183	Intro Bio: Cell/Mol	4
PY 208	Physics for Engrs & Sci II	3	BME 205	Intro to Biomedical Mechanics	4
PY 209	Physics for Engrs & Sci II Lab	1	BME 207	BME Electronics	4
BME 201	Comp Meth in BME	3	CH 221	Organic Chem I	3
BME 209	Intro to Mat Sci of Biomaterials	4	CH 222	Organic Chem I Lab	1
BME 298	BME Design and Manuf I	2	E 102	(or GEP substitute)	<u>2</u>
E 115	Intro to Computing Environ	<u>1</u>			18
		18			

Junior Year (NC State)

BME 301	Human Phys: Electrical Analysis	4	BME 302	Human Phys: Mechanical Analys.	4
MA 341	Applied Differ. Eq. I (a)	3	BME 3*5	BME Gateway 2	3
BME 3*5	BME Gateway 1	3	BME 3*5	BME Gateway 3	3
***	Engineering Elective	3	BME 398	BME Design and Manuf II	2
PHI 325	Biomedical Ethics	3	HES ***	Phys Ed/Healthy Living	<u>1</u>
HESF ***	Fitness and Wellness Course	<u>1</u>			13
		17			

Senior Year (NC State)

BME 451	BME Senior Design I	3	BME 452	BME Senior Design II	3
BME ***	BME Specialty Elective 1	3	BME ***	BME Specialty Elective 3	3
BME ***	BME Specialty Elective 2	3	BME ***	BME Specialty Elective 4	3
***	GEP Course	3	***	GEP Course	3
***	GEP Course	<u>3</u>	***	GEP Course	<u>3</u>
		15			15

(a) or MAE 331 (3)