

# North Carolina State University

## Mechanical Engineering Curriculum (Effective 2015-07-01)

### 2 + 2 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	ECON 102	Prin of Microeconomics (GEP)	3
E 101	Intro to Engr & Prob Solv	1	PHYS 221	Physics I	4
CHEM 111	General Chemistry Lab	1	XXX	GEP Course	<u>3</u>
CHEM 132	General Chemistry	3			14
XXX	GEP Course	<u>3</u>			
		16			

#### Sophomore Year (UNC Asheville)

MATH 291	Calculus III	4	MATH 394	Differential Equations	3
PHYS 222	Physics II	4	MAE 208	<i>Engineering Dynamics</i>	3
MSE 201	Struc & Prop of Engr Matls	3	MAE 214	<i>Solid Mechanics</i>	3
MAE 206	<i>Engineering Statics</i>	3	STAT 225	Intro to Calc-based Statistics	4+
DFT 170*	Engineering Graphics	<u>3</u>	XXX	GEP Course	<u>3</u>
		17			16

#### Junior Year (NC State)

CSC 113	Intro Computing - MATLAB	3	MAE 302	Engr Thermodynamics II	3
MAE 205	Mechanical Engr Lab I	1	MAE 306	Mechanical Engr Lab II	1
MAE 200	Intro to ME Design	1	MAE 315	Dynamics of Machines	3
MAE 201	Engr Thermodynamics I	3	MAE 316	Strength of Mech Components	3
MAE 308	Fluid Mechanics	3	ISE 311	Engr Economic Analysis	3
E 115	Intro to Computing Environ	1	ECE 331	Prin of Electrical Engr	3
HES XXX	Health Exercise Studies	1	HESF XXX	Health Exercise Studies	<u>1</u>
XXX	GEP Course	<u>3</u>			17
		16			

#### Senior Year (NC State)

MAE 405	Controls Lab	1	MAE 416	Mechanical Engr Design	4
MAE 4XX	ME Design Elective	3	XXE	Technical Elective	3
MAE 435	Prin of Automatic Control	3	XXE	Technical Elective	3
XXE	Technical Elective	3	XXX	GEP Course	3
ENG 331	Commun for Engr and Tech	3	XXX	GEP Course (IP: Ethics Elective)	<u>3</u>
MAE 310	Heat Transfer Fundamentals	<u>3</u>			16
		16			

Total hours shown: 128

*Italics* indicates the course is received from NC State by distance education technology.

+ This course has a one-credit excess over NC State requirements.

\* Available at AB Tech