

## NCSU Mechanical Engineering

(Unofficial Community Colleges to NCSU Curriculum)

Degree Earned: NCSU Bachelor of Science in Mechanical Engineering

Transfer GPA = 3.8+

Effective: 2018

Grey Highlighted Courses – Take Courses at NCSU

### FRESHMAN YEAR

Fall Semester		Credit	Spring Semester		Credit
CHM 151	CH 101 Chemistry -- A Molecular Science	3	CSC 134	CIS 113 MATLAB	3
CHM 151	CH 102 General Chemistry Lab	1	MAT 272	MA 241 Calculus II	4
EGR 150	E 101 Intro to Engr & Problem Solving	1	PHY 251	PY 205/PY 206 Physics for Engr & Science I	4
NCSU	E 115 Intro to Computing Environment	1	E 102	Engineering in the 21 <sup>st</sup> Century	2
ENG 111 & ENG 112	ENG 101 Academic Writing & Research	4	PED 110	Fitness and Wellness Course	1
MAT 271	MA 141 Calculus I	4	DFT 170	GC 120 Foundations of Graphics	3
ECO 251	EC 205 Economics (EC 201, ARE 201) (GEP Social Sciences)	3			
PED 110	HES Health and Exercise Studies	1			
		18			17

### SOPHOMORE YEAR

Fall Semester		Credit	Spring Semester		Credit
NCSU	MAE 200 Intro to ME Design	1	MAT 285	MA 341 Applied Differential Equations	3
MAT 273	MA 242 Calculus III	4	EGR 225	MAE 208 Engr Dynamics	3
EGR 220	MAE 206 Engr Statics	3	NCSU	MAE 201 Thermodynamcis	3
PHY 252	PY 208/209 Physics for Engr & Science II	4	NCSU	MAE 305 ME Lab 1	1
	GEP Requirement	3		GEP Requirement	3
NCSU	ST 3700 Prob & Stat for Engineers	3	NCSU	MAE 214 Solid Mechanics	3
		18			16

### JUNIOR YEAR

Fall Semester		Credit	Spring Semester		Credit
NCSU	ENG 331 Comm Engr & Tech	3	NCSU	ECE 331 Principles of Electrical Engr I	3
NCSU	MAE 302 Engr Thermodynamics II	3	NCSU	MAE 200 Mech Prop of Engr. Materials	3
NCSU	MAE 306 ME Lab II	1	NCSU	Tech Elective	3
NCSU	MAE 308 Fluid Mechanics	3	NCSU	MAE 310 Heat Transfer Fundamentals	3
NCSU	MAE 315 Dynamics of Machines	3	NCSU	MAE 316 Strength of Mech Comp	3
	GEP Requirement	3			
		16			15

### SENIOR YEAR

Fall Semester		Credit	Spring Semester		Credit
NCSU	MAE 405 Controls Lab	1		GEP Requirement	3
NCSU	MAE 4** Mech Engr Design Elective	3	NCSU	MAE 416 ME Senior Design	4
NCSU	MAE 435 Principles of Auto Control	3	NCSU	MAE 4** Technical Elective	3
NCSU	ISE 311 Engr Econ Analysis	3	PHI 240	Ethics (GEP Requirement)	3
NCSU	Tech Elective	3			
		13			13

**NCSU - Minimum Credit Hours Required for Graduation in Mechanical Engineering:**

**126**