

## NCSU Aerospace Engineering

(Unofficial Community Colleges to NCSU Curriculum)

Degree Earned: NCSU Bachelor of Science in Aerospace Engineering

Transfer GPA = 3.8+

Effective: 2017

Grey Highlighted Courses – Take at NCSU

FRESHMAN YEAR					
Fall Semester		Credit	Spring Semester		Credit
CHM 151	CH 101 Chemistry -- A Molecular Science <sup>1</sup>	3	CSC 134	CSC 113 Intro Comp MATLAB (or CSC 112)	3
CHM 151	CH 102 General Chemistry Lab <sup>1</sup>	1	MAT 272	MA 241 Calculus II <sup>1</sup>	4
EGR 150	E 101 Intro to Engr & Problem Solving <sup>1</sup>	1	PHY 251	PY 205 Physics for Engr & Science <sup>1</sup> PY 206 Physics for Engr & Science <sup>1</sup> Lab	3 1
NCSU	E 115 Intro to Computing Environment	1	DFT 170	GC 120 Foundations of Graphics	3
ENG 111 & ENG 112	ENG 101 Academic Writing & Research	4	PED 110	HES *** Health and Exercise Studies Course*	1
MAT 271	MA 141 Calculus I <sup>1</sup>	4	E 102	Engineering in the 21 <sup>st</sup> Century	2
ECO 251	EC 205 Economics (or EC 201 or ARE 201) (GEP Social Science)	3			
PED 110	HES 1** Health and Exercise Studies Fitness Course*	1			
<b>18</b>			<b>17</b>		
SOPHOMORE YEAR					
Fall Semester		Credit	Spring Semester		Credit
MAT 273	MA 242 Calculus III	4	MAT 285	MA 341 Applied Differential Equations	3
EGR 220	MAE 206 Engr Statics <sup>2,3</sup>	3	EGR 225	MAE 208 Engr Dynamics <sup>2,3</sup>	3
NCSU	MAE 250 Intro to Aero Engr	1	NCSU	MAE 252 (355) Aerodynamics I	3
NCSU	MAE 251 (261) Aero Vehicle Perf	3	NCSU	MAE 253 (357) Expt. Aerodynamics I	1
PHY 252	PY 208 Physics for Engr & Science II	3	NCSU	MAE 214 Solid Mechanics <sup>2,3</sup>	3
	PY 209 Physics for Engr & Science II Lab	1			
				GEP Requirement*	3
<b>15</b>			<b>16</b>		
JUNIOR YEAR					
Fall Semester		Credit	Spring Semester		Credit
COM 231	English elective	3	NCSU	MAE 351 (356) Aerodynamics II	3
NCSU	MAE 201 Engr Thermodynamics <sup>2,3</sup>	3	NCSU	MAE 352 (358) Aerodynamics II Lab	1
NCSU	MAE 361 (461) Vibrations (or MAE 315)	3	NCSU	Tech Elective - Flight/Space	3
NCSU	MAE 371 Aerospace Structures I	3	NCSU	Tech Elective - Structures	3
NCSU	MAE 372 (473) Aerospace Structures I Lab	1	NCSU	Math Elective	3
PHI 240	Ethics	3		GEP Requirement*	3
<b>16</b>			<b>16</b>		
SENIOR YEAR					
Fall Semester		Credit	Spring Semester		Credit
NCSU	MAE 435 Automatic Controls	3	NCSU	MAE 481 Aerospace Vehicle Design II	3
NCSU	MAE 405 Controls Lab	1	NCSU	Tech Elective - Flight/Space	3
NCSU	MAE 451 Expt Aero III	1	NCSU	Tech Elective	3
NCSU	MAE 480 Aero Vehicle Design I	3		GEP Requirement*	3
NCSU	Tech Elect - Propulsion	3		GEP Requirement*	3
NCSU	MAE *** Tech Elect <sup>4</sup>	3			
<b>14</b>			<b>15</b>		

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

**127**