

NCSU Materials Science and Engineering

(Unofficial Community Colleges to NCSU Curriculum)

Degree Earned: NCSU Bachelor of Science in Materials Science and Engineering

Transfer GPA = 3.5

Effective: 2018

Grey Highlighted Courses – Take at NCSU

FRESHMAN YEAR

| <u>Fall Semester</u> | | <u>Credit</u> | <u>Spring Semester</u> | | <u>Credit</u> |
|----------------------|---|---------------|------------------------|---|---------------|
| CHM 151 | CH 101 Chemistry -- A Molecular Science | 3 | CHM 152 | CH 201 Chemistry -- A Quantitative Science | 3 |
| CHM 151 | CH 102 General Chemistry Lab | 1 | CHM 152 | CH 202 Quantitative Chemistry Lab | 1 |
| EGR 150 | E 101 Intro to Engr & Problem Solving | 1 | MAT 272 | MA 241 Calculus II | 4 |
| NCSU | E 115 Intro to Computing Environment | 1 | PHY 251 | PY 205/PY 206 Physics for Engr & Science | 4 |
| ENG 111 & ENG 112 | ENG 101 Academic Writing & Research | 4 | PED 110 | Health and Exercise Studies Course | 1 |
| MAT 271 | MA 141 Calculus I | 4 | NCSU | E 102 Engineering in the 21 st Century | 2 |
| ECO 251 | EC 205 Economics (EC 201 or ARE 201) | 3 | | | |
| 17 | | | 15 | | |

SOPHOMORE YEAR

| <u>Fall Semester</u> | | <u>Credit</u> | <u>Spring Semester</u> | | <u>Credit</u> |
|----------------------|--|---------------|------------------------|--|---------------|
| NCSU | MSE 201 Structure & Prop of Engr Materials | 3 | NCSU | MSE 255 Exp Mech Struct Analysis of Matrls | 2 |
| NCSU | ST 370 Prob. & Statistics for Engineers | 3 | NCSU | MSE 260 Math Methods for Matrls Engrs | 3 |
| MAT 273 | MA 242 Calculus III | 4 | NCSU | MSE 270 MSE Seminar | 1 |
| PHY 252 | PY 208/ PY 209 Physics for Engr & Science II | 4 | CHM 251 | CH 220 Intro to Organic Chemistry | 4 |
| PED 110 | Health and Exercise Studies Course | 1 | MAT 285 | MA 341 Applied Differential Equations | 3 |
| | | | | GEP Requirement | 3 |
| 15 | | | 16 | | |

JUNIOR YEAR

| <u>Fall Semester</u> | | <u>Credit</u> | <u>Spring Semester</u> | | <u>Credit</u> |
|----------------------|---------------------------------------|---------------|------------------------|---|---------------|
| NCSU | MSE 300 Struc of Matrls at nanoscale | 3 | NCSU | MSE 355 Elect, Mag & Opt Prop of Matrls | 3 |
| NCSU | MSE 301 Intro to Thermo of Matrls | 3 | NCSU | MSE 360 Kinetic Process in Materials | 3 |
| NCSU | MSE 320 Intro to Defects in Solids | 3 | NCSU | MSE 370 Microstructure of Inorganic Materials | 3 |
| NCSU | MSE 335 Exp Meth Anals of Matrls Prop | 2 | NCSU | MSE 380 Microstructure of Organic Matrls | 3 |
| MAT 280 | Technical Elective | 3 | EGR 220 | Engineering Elective | 3 |
| | GEP Requirement | 3 | | | |
| 17 | | | 15 | | |

SENIOR YEAR

| <u>Fall Semester</u> | | <u>Credit</u> | <u>Spring Semester</u> | | <u>Credit</u> |
|----------------------|-------------------------------------|---------------|------------------------|---|---------------|
| NCSU | MSE 420 Mech Prop of Matrls | 3 | NCSU | MSE 470 Matrl Sci & Engr Design Project | 3 |
| NCSU | MSE 423 Intro to Matrls Engr Design | 1 | NCSU | MSE 480 Materials Forensics & Degradation | 3 |
| NCSU | ENG 331 Technical Writing | 3 | NCSU | Technical Elective | 3 |
| NCSU | MSE Processing Elective | 3 | | GEP Requirement | 3 |
| NCSU | Technical Elective | 3 | | GEP Requirement | 3 |
| | GEP Requirement | 3 | | | |
| 16 | | | 15 | | |

NCSU - Minimum Credit Hours Required for Graduation in Materials Science and Engineering 126

NCSU Materials Science and Engineering

(Unofficial Community Colleges to NCSU Curriculum)