

BIOENGINEERING Department
Biomaterials – Major Code 405 COURSE COMPLETION PLAN
2015-2016 (128 total credits)

| STUDENT NAME: Last _____ First _____ Middle Initial _____ | | | | | |
|--|-----------|----------------------|------------------------------------|---------------|----------------------|
| STUDENT ID NUMBER: _____ | | USER ID _____ | | ADVISOR _____ | |
| CLEMSON ENTRANCE DATE: _____ | | HONORS _____ | | DEPT'L? _____ | |
| **TERM: YY&& where YY = Year and && = Semester Code: 08-Fall; 05-First Summer; 06-Second Summer; 01-Spring | | | | | |
| FRESHMAN YEAR | | | | | |
| Fall Semester | Cr | Term to be completed | Spring Semester | Cr | Term to be completed |
| CH 1010 Chem I | 4 | | CH 1020 Chem II | 4 | |
| ENGL 1030 Accel. Comp. | 3 | | PHYS 1220 Phys with Calc. I | 3 | |
| ENGR 1050 Eng.Dis.&SkillsI 1 | | | ENGR 1070 Progr &Prob SolvgI | 1 | |
| ENGR 1060 Eng.Dis.&SkillsII 1 | | | ENGR 1080 Progr &Prob SolvgII | 1 | |
| | | | ENGR 1090 Progr &Prob SolvgAppls 1 | | |
| MATH 1060 Calc. I | 4 | | MATH 1080 Calc. II | 4 | |
| Arts& Humanities/ SS ¹ | 3 | | Arts&Humanities/ SS ¹ | 3 | |
| | | | Biology requirement ² | 1 | |
| Total | 16 | | Total | 18 | |
| SOPHOMORE YEAR | | | | | |
| Fall Semester | Cr | Term to be completed | Spring Semester | Cr | Term to be completed |
| BIOE 2010 Intro. to BME | 3 | | C E 2010 Statics | 3 | |
| MSE 2100 Intro. Matl. Sci. | 3 | | ENGR 2080 EgrGraph/Mach Des2 | | |
| CH 2010 Surv Org Chem. ³ | 3 | | ECE 2070 Basic Elec Engr | 2 | |
| CH 2020 Surv OrgChemLab 1 | | | ECE 2080 EE lab | 1 | |
| MATH 2060 Calc. III | 4 | | MATH 2080 Diff. Eq. | 4 | |
| PHYS 2210 Physics II | 3 | | BIOE 3020 Biomats | 3 | |
| | | | BIOE 2000 Bioe Prof Dev't | 0 | |
| Total | 17 | | Total | 15 | |
| JUNIOR YEAR | | | | | |
| Fall Semester | Cr | Term to be completed | Spring Semester | Cr | Term to be completed |
| BIOL 3150 Funct. H. Anat. | 4 | | BCHM 3050 Essentl. Ele. Bioch. | 3 | |
| MSE 3260 Thermo of Matls. | 3 | | BIOE 3210 Biofluid Mechs | 3 | |
| MSE 3270 Transp. Phenom. | 3 | | MATH 3020 Statistics | 3 | |
| MSE 3190 Matls. Process. | 3 | | BIOE Tech. Req. ⁴ | 3 | |
| BIOE 3200 Biomechanics | 3 | | BIOE 3700 Bioinstr. & Imag. | 3 | |
| | | | BIOE 3000 Bioe Ethics&Entrep. | 0 | |
| Total | 16 | | Total | 15 | |
| SENIOR YEAR | | | | | |
| Fall Semester | Cr | Term to be completed | Spring Semester | Cr | Term to be completed |
| MSE 4150 Intro. Polym. Sci | 3 | | BIOE 4030 Appld Bioe Design | 3 | |
| BIOL 4610 Cell Biology | 3 | | BIOE 4480 Tissue Engr. | 3 | |
| BIOE 4010 Bioe Des Theor | 3 | | Arts& Humanities/ SS ¹ | 3 | |
| | | | BIOE 4000 Leadership&Comm | 1 | |
| Arts&Humanities/ SS ¹ | 3 | | BIOE Tech. Req. ⁴ | 3 | |
| BIOE Tech. Req. ⁴ | 3 | | BIOE Tech. Req. ⁴ | 3 | |
| Total | 15 | | Total | 16 | |

1. See General Education Requirements for Arts and Humanities, Social Sciences, Cross-Cultural Awareness, and Science & Technology in Society. 2. Bio E 1010 or Biol 1030 or 1100 or other biology course as approved 3. Students planning to enter Medical School should take CH 2230/2270 instead of CH 2010/2020 and take CH 2240/2280 additional.. Also take phys 1240 & 2230 labs 4. Select from department approved list maintained in Bioengineering Dept.