

**The University of South Dakota-Community College for Sioux Falls (CCSF)**  
**Major Credit Hour count: 96 [130 degree]**  
**Major: Biomedical Engineering, B.S.**

**[2021-2022 Academic Catalog]**

**First Year - 1st Semester**

| SGR/Major Requirement            | Cr Hrs   |           |
|----------------------------------|----------|-----------|
| ISCI 151/L: Integrated Science I | SGR 6    | 4         |
| MATH 123: Calculus I             | SGR 5+BS | 5         |
| ENGL 101: Composition I          | SGR 1    | 3         |
| Fine Arts                        | SGR 4    | 3         |
| BME 101/L: Intro to BME/Lab      | Major    | 2         |
| <b>Semester Credit Hours:</b>    |          | <b>17</b> |

**Second Year - 1st Semester**

| SGR/Major Requirement                     | Cr Hrs |           |
|---|--------|-----------|
| ISCI 225/225L: Integrated Science III/Lab | BS + M | 4         |
| MATH 225: Calculus III                    | Major  | 4         |
| CHEM 326/L: Organic Chemistry             | Major  | 5         |
| BME 304: BME Fluid Mechanics              | Major  | 3         |
| <b>Semester Credit Hours:</b>             |        | <b>16</b> |

**Third Year - 1st Semester**

| SGR/Major Requirement                             | Cr Hrs    |           |
|---|-----------|-----------|
| BME 303: Introduction to Biomechanics             | Major     | 3         |
| MATH 481: Probability and Statistics (Math Minor) | Major     | 3         |
| BME 300: Quantitative Systems Phys I              | Major     | 3         |
| BME/MET 232: Properties of Materials              | Major     | 3         |
| BME/IENG 301: Engineering Economics               | Major     | 2         |
| Department Approved Elective: ENGL 210            | BS+ Major | 3         |
| <b>Semester Credit Hours:</b>                     |           | <b>17</b> |

**Fourth Year - 1st Semester**

| SGR/Major Requirement                                      | Cr Hrs    |           |
|--|-----------|-----------|
| BME 464: BME Senior Design I                               | Major     | 3         |
| BME 401: Introduction to Biomaterials                      | Major     | 3         |
| Engineering Elective                                       | Major     | 3         |
| Department Approved Social Science or Humanities Electives | BS+ Major | 3         |
| Humanities   | SGR 4     | 3         |
| <b>Semester Credit Hours:</b>                              |           | <b>15</b> |

**First Year - 2nd Semester**

| SGR/Major Requirement             | Cr Hrs |           |
|-----------------------------------|--------|-----------|
| ISCI 153/L: Integrated Science II | SGR 6  | 4         |
| MATH 125/L: Calculus II           | Major  | 5         |
| CSC 170/L: Programming            | Major  | 3         |
| PHYS 211/L: University Physics I  | Major  | 4         |
| <b>Semester Credit Hours:</b>     |        | <b>16</b> |

**Second Year - 2nd Semester**

| SGR/Major Requirement                     | Cr Hrs   |           |
|---|----------|-----------|
| ISCI/BME 335/L: Biomedical Technologies/I | Major    | 4         |
| MATH 321: Differential Equations          | Major    | 3         |
| CHEM 328/L: OChem II or CHEM 330:         | BS+Major | 5         |
| BME/EM 214: Statics                       | Major    | 3         |
| CMST 101: Fundamentals of Speech          | SGR 2    | 3         |
| <b>Semester Credit Hours:</b>             |          | <b>18</b> |

**Third Year - 2nd Semester**

| SGR/Major Requirement                 | Cr Hrs |           |
|---------------------------------------|--------|-----------|
| BME 306: BME Thermodynamics           | Major  | 3         |
| BME 305: BME Transport Phenomena      | Major  | 3         |
| BME 302: Quantitative Systems Phys II | Major  | 3         |
| BME 463/L: BME Lab                    | Major  | 1         |
| Social Science                        | SGR 3  | 3         |
| ENGL 201: Composition II              | SGR 1  | 3         |
| <b>Semester Credit Hours:</b>         |        | <b>16</b> |

**Fourth Year - 2nd Semester**

| SGR/Major Requirement                                      | Cr Hrs   |           |
|--|----------|-----------|
| BME 465: BME Senior Design II                              | Major    | 3         |
| BME Electives  | Major    | 6         |
| Department Approved Social Science or Humanities Electives | BS+Major | 3         |
| Social Science   | SGR 3    | 3         |
| <b>Semester Credit Hours:</b>                              |          | <b>15</b> |

**Total Major Requirements 130**

**Notes:** New Joint program with SDSM&T 2019-2020