



**SAMPLE CAREER DEGREE MAP**  
**Engineering Science BS: Computer Engineering**  
**2024-Present | Total Credits Required: 133**

| Year One - First Semester Academic Program → |            |           |
|--|------------|-----------|
| Course Number & Title                        | Min. Grade | Cr.       |
| ENG 111 ENGLISH COMPOSITION                  |            | 3         |
| MTH 231 ANALYTIC GEOMETRY & CALC. I          | C          | 3         |
| MTH 229 CALCULUS COMPUTER LAB                |            | 1         |
| PHY 120 GENERAL PHYSICS I                    |            | 3         |
| PHY 121 GENERAL PHYSICS I LAB                |            | 1         |
| ENGR 100 INTRO TO ENGINEERING                |            | 2         |
| ENGR 136 COMPUTER-AIDED ENGINEERING          |            | 2         |
| ENS 110 ENGINEERING GRAPHICS                 |            | 2         |
| <b>Total Credits:</b>                        |            | <b>17</b> |

| ← Year One - First Semester Career Readiness                       |      |
|--|------|
| Recommended Career Milestones                                      | Done |
| Log in to your Handshake Account available through Career Services |      |
| Create a Draft Resume or Start Building a Basic Resume             |      |
| Join a Student Club  |      |

| Year One - Second Semester Academic Program → |            |           |
|---|------------|-----------|
| Course Number & Title                         | Min. Grade | Cr.       |
| ENG 151 INTRO TO COLLEGE WRITING              |            | 3         |
| MTH 232 CALCULUS II                           | C          | 3         |
| PHY 160 GENERAL PHYSICS I                     |            | 3         |
| PHY 161 GENERAL PHYSICS I LAB                 |            | 1         |
| ENGR 220 INTRO TO COMPUTER ENG.               |            | 4         |
| CSC 270 INTRO TO SCIENTIFIC COMP.             | C          | 4         |
| <b>Total Credits:</b>                         |            | <b>18</b> |

| ← Year One - Second Semester Career Readiness                                 |      |
|---|------|
| Recommended Career Milestones   | Done |
| Create a LinkedIn Account to start connecting with classmates and professors  |      |
| Explore Career Options for Engineering Science Majors through O*Net           |      |
| Attend Career Center for Professional Development Events and Internship Fairs |      |
| Create a Draft Cover Letter   |      |

| Year Two - First Semester Academic Program → |            |           |
|--|------------|-----------|
| Course Number & Title                        | Min. Grade | Cr.       |
| MTH 233 CALCULUS III                         |            | 3         |
| ENGR 221 DIGITAL ELECTRONICS LAB             |            | 2         |
| ENS 250 ENGINEERING MECHANICS                |            | 3         |
| ENGR 241 ELECTRICAL & ELECTRONIC CIRCUITS    |            | 4         |
| US EXPERIENCE IN ITS DIVERSITY               |            | 3         |
| ECO 101 INTRO TO ECONOMICS                   |            | 3         |
| <b>Total Credits:</b>                        |            | <b>18</b> |

| ← Year Two - First Semester Career Readiness  |      |
|---|------|
| Recommended Career Milestones   | Done |
| Develop a Network of Contacts Through LinkedIn  |      |
| Update Your Resume to include certifications  |      |
| Find a Mentor through the CSI Alumni Mentorship Program You Can Check in With Periodically or Shadow in the Field |      |
| Start Your Internship Search  |      |
| Look for Summer Research Opportunities  |      |

| Year Two - Second Semester Academic Program →                            |            |           |
|--|------------|-----------|
| Course Number & Title  | Min. Grade | Cr.       |
| POL 103 INTRO TO POLITICAL SCIENCE OR ANY WORLD CULTURES & GLOBAL ISSUES |            | 3         |
| ENGR 310 THERMODYNAMICS  |            | 4         |
| ENGR 249 BASIC MEASUREMENTS LAB  |            | 2         |
| MTH 330 APPLIED MATH. ANALYSIS I   |            | 4         |
| CHM 141 GENERAL CHEMISTRY I  |            | 3         |
| CHM 121 GENERAL CHEMISTRY I LAB  |            | 1         |
| <b>Total Credits:</b>  |            | <b>17</b> |

| ← Year Two - Second Semester Career Readiness   |      |
|---|------|
| Recommended Career Milestones   | Done |
| Join a Student Professional Organization  |      |
| Use LinkedIn to Start Marketing Yourself and Building Professional Relationships                      |      |
| Attend Basic Interview Workshops  |      |
| Identify Skills That You Need to Build Outside of the Classroom - Develop Proficiency in CAD Software |      |



**SAMPLE CAREER DEGREE MAP**  
**Engineering Science BS: Computer Engineering**  
**2024-Present | Total Credits Required: 133**

| Year Three - First Semester <i>Academic Program</i> → |            |           |
|---|------------|-----------|
| Course Number & Title                                 | Min. Grade | Cr.       |
| ENS 331 DIGITAL SIGNAL PROCESSING                     |            | 4         |
| ENS 336 COMPUTER-AIDED ENGINEERING                    |            | 4         |
| ENS 362 MICROCONTROLLERS                              |            | 4         |
| MTH 311 PROB. THEORY & INTRO MTH STATS                |            | 4         |
| <b>Total Credits:</b>                                 |            | <b>16</b> |

| ← Year Three - First Semester <i>Career Readiness</i>                             |      |
|---|------|
| Recommended Career Milestones   | Done |
| Refine Your Resume to Include Project Achievements and New Skills Gained          |      |
| Continue to Apply for Internships with Engineering Firms or Governmental Agencies |      |
| Research Graduate School or Other Post-Graduate Opportunities                     |      |
| Practice Advanced Interview Techniques  |      |

| Year Three - Second Semester <i>Academic Program</i> → |            |           |
|--|------------|-----------|
| Course Number & Title                                  | Min. Grade | Cr.       |
| POL 251 OR ECO 285                                     |            | 4         |
| CSC 326 DATA STRUCTURES                                |            | 4         |
| ENS 439 SYSTEMS LAB                                    |            | 2         |
| ENS 371 SYSTEMS ANALYSIS                               |            | 3         |
| PHY 240 WAVES AND MODERN PHYSICS                       |            | 3         |
| <b>Total Credits:</b>                                  |            | <b>16</b> |

| ← Year Three - Second Semester <i>Career Readiness</i>   |      |
|--|------|
| Recommended Career Milestones  | Done |
| Take Leadership Roles in Clubs and Organizations   |      |
| Attend Career Center for Professional Development Events and Internship Fairs  |      |
| Explore Career Options and Tasks with Virtual Work Experiences such as Forage Gain Practical Experience and Industry-Specific Skills |      |
| Create an Elevator Pitch   |      |

| Year Four - First Semester <i>Academic Program</i> → |            |           |
|--|------------|-----------|
| Course Number & Title                                | Min. Grade | Cr.       |
| CREATIVE EXPRESSION                                  |            | 3         |
| ENS 491 ADV. ENGINEERING DESIGN I                    |            | 2         |
| CSC 305 OPERATING SYS. PROGRAM. LAB                  |            | 1         |
| CSC 332 OPERATING SYSTEMS I                          |            | 3         |
| TECH ELECTIVE STEM 300-400 LEVEL                     |            | 4         |
| CES ADVANCED ELECTIVE                                |            | 4         |
| <b>Total Credits:</b>                                |            | <b>17</b> |

| ← Year Four - First Semester <i>Career Readiness</i>   |      |
|--|------|
| Recommended Career Milestones  | Done |
| Meet with a Career Advisor for Job Search Preparation  |      |
| Use LinkedIn to Let Contacts Know You Are Looking for Employment   |      |
| If Appropriate, Complete the Process of Applying to Graduate School  |      |
| Secure letters of recommendation from professors or supervisors  |      |
| Take online courses through Coursera, LinkedIn Learning, or edX to learn new skills and stay updated with industry trends. |      |

| Year Four - Second Semester <i>Academic Program</i> → |            |           |
|---|------------|-----------|
| Course Number & Title                                 | Min. Grade | Cr.       |
| ENS 485 PROPERTIES OF MATERIALS                       |            | 4         |
| ENS 492 ADV. ENGINEERING DESIGN II                    |            | 2         |
| CES ADVANCED ELECTIVE                                 |            | 4         |
| ELECTIVE  |            | 4         |
| <b>Total Credits:</b>                                 |            | <b>14</b> |

| ← Year Four - Second Semester <i>Career Readiness</i> |      |
|---|------|
| Recommended Career Milestones                         | Done |
| Actively Apply for Jobs!                              |      |
| Attend Networking Events and Career Fairs             |      |
| Participate in Senior Showcase Events                 |      |