

COMPUTER SCIENCE, ASSOCIATE IN ENGINEERING SCIENCE



College(s): DA, HW, TR, WR

Program Code: 0100

Sample Transfer Pathway

All plans can be modified to fit the needs of part-time students by adding more semesters.

Recommended electives may vary by transfer institution. Choose your courses with your College Advisor.

Institution-specific transfer guides and agreements can be found on CCC's transfer site (<https://www.ccc.edu/services/Pages/Transfer-Guides.aspx>).

| Semester 1 | | Hours |
|--|--|--------------|
| ENGLISH 101 | Composition ¹ | 3 |
| MATH 207 | Calculus & Analytic Geometry I ¹ | 5 |
| CHEM 201 | General Chemistry I ¹ | 5 |
| Social and Behavioral Sciences course ^{1,2} | | 3 |
| Hours | | 16 |
| Semester 2 | | Hours |
| ENGLISH 102 | Composition | 3 |
| MATH 208 | Calculus & Analytic Geometry II | 5 |
| PHYSICS 235 | Engineering Physics I: Mechanics & Wave Motion | 5 |
| CHEM 203 or BIOLOGY 115 | General Chemistry II ³ or Human Biology | 4-5 |
| Hours | | 17-18 |
| Semester 3 | | Hours |
| MATH 209 | Calculus & Analytic Geometry III | 5 |
| PHYSICS 236 | Engineering Physics II: Electricity & Magnetism | 5 |
| ENGR 190 or CIS 142 | Computer Programming for Engineers or C++ Object Oriented Programming I | 3 |

| Pathway Elective (p. 1) ³ | | 3 |
|---|---|--------------|
| Hours | | 16 |
| Semester 4 | | Hours |
| MATH 210 | Differential Equations | 3 |
| Fine Arts or Humanities course ¹ | | 3 |
| CIS 242 or CIS 244 | C++ Object Oriented Programming II ³ or Java Object Oriented Programming II | 3 |
| MATH 146 | Discrete Mathematics ³ | 4 |
| Pathway Elective (p. 1) ³ | | 3 |
| Hours | | 16 |
| Total Hours | | 65-66 |

¹ General Education course

² One course must satisfy the Human Diversity (HD) requirement

³ Pathway Elective (p. 1)

Pathway Electives

| Code | Title | Hours |
|-------------|-------------------------------------|-------|
| BIOLOGY 115 | Human Biology | 4 |
| CHEM 203 | General Chemistry II | 5 |
| CIS 144 | Java Object Oriented Programming I | 3 |
| CIS 242 | C++ Object Oriented Programming II | 3 |
| CIS 244 | Java Object Oriented Programming II | 3 |
| ENGR 111 | Engineering Success Seminar | 3 |
| ENGR 215 | Electrical Circuit Analysis | 5 |
| MATH 146 | Discrete Mathematics | 4 |
| MATH 212 | Linear Algebra | 3 |
| PHYSICS 215 | Statics | 3 |