

SYSTEMS ENGINEERING AND DESIGN, ASSOCIATE IN ENGINEERING SCIENCE



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

Program Code: 0100

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 ¹	3
MATH 208	Calculus & Analytic Geometry II	5
PHYSICS 235	Engineering Physics I: Mechanics & Wave Motion	5
CHEM 203	General Chemistry II ³	5
Hours		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
PHYSICS 215	Statics ³	3
Hours		16

Semester 4

MATH 210	Differential Equations	3
Fine Arts or Humanities course ^{1,2}		3
PHYSICS 216	Dynamics ³	3
PHYSICS 217	Mechanics Of Materials ³	3
Pathway Elective (p. 1) ³		3
Hours		15
Total Hours		65

¹ General Education course

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

³ Pathway Elective (p. 1)

Pathway Electives

Code	Title	Hours
CHEM 203	General Chemistry II	5
ENGR 111	Engineering Success Seminar	3
PHYSICS 215	Statics	3
PHYSICS 216	Dynamics	3
PHYSICS 217	Mechanics Of Materials	3
PHYSICS 237	Engineering Physics III: Heat light and Modern Physics	5