



Associate in Science

COT Pathway Program: Engineering Science Option (EB16) 2015-2016 Catalog

Transfer Program: The pre-engineering pathway is based upon a mathematics and science core that provides the nucleus for engineering education. In addition to the 64-hour core of courses listed below, the student must maintain a "B" or better average with no grade less than a "C" for continuation in the engineering program at the University of Connecticut.

Outcomes:

- Understand the basic principles of the physical sciences.
- Perform a scientific experiment and interpret results.
- Demonstrate an understanding of the major concepts of differential and integral calculus.
- Have the ability to write and document a computer program.
- Complete the general education courses in satisfaction of the associate degree requirements.

Note: All courses may not be offered at HCC.

Note: For students interested in Chemical Engineering, Computer Science and Engineering, or Electrical Engineering, additional technical coursework is needed prior to the junior year in the Uconn curriculum. This coursework may be completed at one of the regional UCONN campuses while progressing through the Pathway Program or may be obtained through the use of the electives prescribed in the core listed above.

Suggested Sequence of Courses:

Prerequisite or parallel courses may be required. Please check individual course descriptions for details.

¹ Art	Elective	3
¹ Economics	Elective	3
¹ History	Elective	3
¹ Philosophy	Elective	3
⁴ Programming	CSC Directed Elective	3
MAT* E254	Calculus I	4
MAT* E256	Calculus II	4
MAT* E268	Calculus III: Multivariable	4
MAT* E285	Differential Equations	3
³ Major Specific	Elective	3
³ Major Specific	Elective	3
² PHY* E221	Calculus-Based Physics I	4
² PHY* E222	Calculus-Based Physics II	4
CHE* E121	General Chemistry I	4
CHE* E122	General Chemistry II	4
ENG* E101	Composition	3
ENG* E102	Literature & Composition	3
EGR* E211	Engineering Statics	3
EGR* E212	Engineering Dynamics	3

Total Credits:

64

¹ For students pursuing a Mechanical Engineering degree at Fairfield University the following courses must be taken as electives: ART* E101, ECN* E102, HIS* E101, PHL* E151.

² This course is offered in the SUMMER SESSION ONLY at HCC. It may also be taken at another Community College.

³ These Major Specific courses:

EGR* 214, EGR* 221, EET 252 (Electrical/Computer or Aerospace Engineering students)

CHE*211, EGR* 214, CHE*212 (Chemical Engineering students)

EGR* 214, MFG*102, any single CAD course (Mechanical or Civil Engineering or Engineering students) any BME* course (Biomedical Engineering students).

Note: A minimum of 15 credits must be taken in 200-level courses

Note: For degree completion the student must complete the Computer Literacy Requirement.