

ENGINEERING SCIENCE, AS

Program code: ENSC-AS-COT

Location: Gateway, Housatonic, Manchester, Middlesex, Naugatuck Valley, Northwestern, Norwalk, Quinebaug Valley, Three Rivers, Tunxis

Degree Requirements

Code	Title	Credits
General Education Core Courses		
ENG 1010	Composition	3
MATH 2600	Calculus I	4
PHIL 1101	Ethics	3
CHEM 1210	General Chemistry I	4
Elective HISX - Historical Knowledge Course		3
ENG 1020 or ENG 1080	Composition II and Literature Composition II: Technical Writing	3
CCS 1001	College and Career Success	3
Program Courses		
Elective BHEL - Behavioral Science Elective (ANTH, PSY, SOC-ANTH recommended for transfer)		3
Elective SSCI - Social Science Elective (Economics Recommended)		3
PHYS 2201	Calculus-Based Physics I	4
PHYS 2202	Calculus-Based Physics II	4
MATH 2610	Calculus II	4
MATH 2620	Calculus III: Multivariable	4
MATH 2622	Differential Equations	4
EGR 1110	Introduction to Engineering	3
EGR 2215	Thermodynamics I	4
EGR 2211	Engineering Statics	3
Choose one of the following introductory programming courses:		3
CSC 1201	Introduction to Programming	
CSC 1203	Python Fundamentals	
CSC 1211	Java I	
CSC 2212	Java II	
CSC 2214	C++ Programming	
EGR 1115	Programming for Engineers	
EGR 2230	C++ for Engineering	
EGR 2201	MATLAB for Engineers	
EGR 2250	Computation Methods for Engineering	
Specialization Electives¹		
Choose six to eight credits of the following:		6-8
Any EGR#course		
Any CAD course		
BIO 1210	General Biology I	
BIO 1220	General Biology II	
CHEM 1220	General Chemistry II	
CHEM 1210	General Chemistry I	
EETA 2052	Digital Electronics	
MATH 2621	Linear Algebra	

MFG 1010	Parametric Design	
Total Credits		68-70

¹ For transferability in a specialty, the sequences below are recommended.

Code	Title	Credits
BioMedical / BioMechanics		
BIO 1210 & CHEM 1220	General Biology I and General Chemistry II	8
Mechanical / Robotics/ #Aerospace / Manufacturing / AE&M		
EGR 2212 & EGR 2221	Engineering Dynamics and Introduction to Electrical Circuit Analysis	7
Electrical		
EGR 2221 & EETA 2052	Introduction to Electrical Circuit Analysis and Digital Electronics	8
Civil		
CAD 1330 & BIO 1220	2D CAD (AutoCAD) and General Biology II	7
Chemical		
CHEM 1220 & CHEM 2310	General Chemistry II and Organic Chemistry I	8
Environmental		
BIO 1220 & CHEM 1220	General Biology II and General Chemistry II	8