

Engineering

HOLYOKE COMMUNITY COLLEGE Engineering Science Option	WESTERN NEW ENGLAND UNIVERSITY College of Engineering
GRADUATION REQUIREMENTS	EQUIVALENT COURSES
General Education Courses	General Education Courses
ENG 101 College Composition I	ENGL 132 English Composition I
ENG 102 College Composition II	ENGL 133 English Composition II
Social Science Elective (<i>PSY 101 or SO 101 recommended</i>)	Social Systems Requirement
Social Science Elective (<i>POL 110 recommended</i>)	Citizenship, Identity and Community Requirement
PHS 111 Physics for Engineers & Science Maj. I	PHYS 133 Mechanics
PHS 112 Physics for Engineers & Science Maj. II	PHYS 134 Electricity and Magnetism
Program Requirements	Program Requirements
EGR 118 Intro to Engineering w/ Java (or) EGR 117 Intro to Engineering w/Computer Apps	ENGR 105 Computer Prog. for Engineers ENGR 103 Intro to Engineering (***) See Below)
EGR 109 Intro to Electronic Digital Circuits/Verilog (or) EGR 110 Introduction to Robotics 1	**CPE 271 Digital Design (recommended for Computer/Electrical Majors only) ***see below
MTH 113 Calculus I	MATH 133 Calculus I
MTH 114 Calculus II	MATH 134 Calculus II
Program Electives: Recommended Courses	Program Electives: Recommended Courses
Select 7 courses (approx 20 credit hours) Please reference the HCC catalogue*	** see below
General Electives:	General Electives:
General Elective	* see below

The below courses are highly recommended and without these courses a student will require additional time to satisfy the bachelors' requirements.

****Mechanical** (Recommended) MTH 213 Calculus 3, EGR 221 Mechanics, EGR 222 Mechanics II, EGR 223 Systems Analysis I, MTH 214 Differential Equations, CHM 121 Inorganic Chemistry I, EGR 117 and EGR 118. Additional course EGR 250 Thermodynamics.

****Electrical or Computer** (Recommended) MTH 213 Calculus 3, EGR 221 Mechanics, EGR 223 Systems Analysis I, EGR 224 Systems Analysis II, MTH 214 Differential Equations, CHM 121 Inorganic Chemistry I, EGR 109 Intro to Electronic Digital Circuits with Verilog, EGR 117 and EGR 118 Additional course MTH 142 Statistics.

****Industrial** (Recommended) MTH 213 Calculus 3, EGR 221 Mechanics, EGR 223 Systems Analysis I, MTH 214 Diff. Equations, CHM 121 Inorganic Chem I, MTH 142 Statistics, EGR 117 and EGR 118 Additional Course: ACC 111 Principles of Accounting I.

****Civil** (Recommended) MTH 213 Calculus 3, EGR 221 Mechanics, EGR 222 Mechanics 2, MTH 214 Differential Equations, CHM 121 Inorganic Chemistry I, CHM 124 Inorganic Chemistry II, EGR 117 and EGR 118. Additional Course: EGR 250 Thermodynamics.

****Biomedical** (recommended) MTH 213 Calculus 3, MTH 214 Differential Equations, CHM 121 Inorganic Chemistry, CHM 124 Inorganic Chemistry II, EGR 223 Systems Analysis I, BIO 107 General Biology I, EGR 117 and EGR 118.

*** To receive credit for Western New England's ENGR 102 First Year Engineering Seminar and ENGR 110 Data Acquisition/Processing students must complete EGR 110 or SEM 110 at Holyoke Community College. **It is highly recommended students take both EGR 117 and EGR 118 for transferability into Western New England's Engineering programs. Without these courses a student will require more time to complete their degree at Western New England.**