

# Engineering

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

This is not an articulation agreement. This chart should serve as a reference for Holyoke Community College students who eventually plan to transfer to Western New England University. We hope that this will aid you in working towards your academic goals and maximize the transfer credit applied towards a degree at Western New England University. Please reference our University Catalogue for additional information. A maximum of 70 semester hours may be transferred from two-year institutions.

All engineering candidates are encouraged to complete one four-credit circuits course (EGR 223) prior to enrolling at Western New England University. Candidates for Electrical and Computer Engineering are encouraged to complete an additional four-credit circuits course (EGR 224) and a four-credit digital design course (EGR 109) prior to enrolling at Western New England University. Without these three courses a student majoring in Electrical Engineering or Computer Engineering will most likely require additional time to satisfy the bachelor's degree requirements at Western New England University. This is due to prerequisite requirements and sequential course offerings.

\* The following Holyoke Community College courses will count towards satisfying Western New England University's general University requirements: any history course (one), PHI 101 Intro to Philosophy or PHI 120 Ethics (one), PSY 110 Intro to Psychology or SOC 110 Intro to Sociology or any economics course (one). **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 or 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 or 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 or EGR 11.8 Additional courses ACC 111 Principles of Acct I; BIO 107 General Biology I, or ENV 120 Principles of Environmental Science, or CHM 124 Inorganic Chemistry II or MTH 205 Linear Algebra, or MTH 230 Discrete Math.

**\*\*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 or EGR 118. Additional Course: EGR 250 Thermodynamics.

**\*\*\*** 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.