

# Engineering

| MANCHESTER COMMUNITY COLLEGE<br>Engineering Science | WESTERN NEW ENGLAND UNIVERSITY<br>Engineering |
|---|---|
| GRADUATION REQUIREMENTS                             | EQUIVALENT COURSES                            |
| <b>Semester 1</b>                                   |   |
| ENG 101 Composition                                 | ENGL 132 English Composition I                |
| EGR 111 Introduction to Engineering                 | ENGR 103 Introduction to Engineering          |
| MAT 254 Calculus I                                  | MATH 133 Calculus I                           |
| CHE 121 General Chemistry I                         | CHEM 105 General Chemistry I                  |
| HIS 101 Western Civilization I                      | Historical Perspective                        |
| <b>Semester 2</b>                                   |   |
| ENG 110 Introduction to Literature                  | ENGL 133 English Composition II               |
| MAT 256 Calculus II                                 | MATH 134 Calculus II                          |
| Arts Requirement                                    | General Elective (EE, IE, ME & CPE)           |
| PHY 221 Calculus-Based Physics I                    | PHYS 133 Mechanics                            |
| EGR 230 C++ for Engineering                         | ENGR 105 Computer Programming for Engineers   |
| <b>Semester 3</b>                                   |   |
| PHY 222 Calculus-Based Physics II                   | PHYS 134 Electricity and Magnetism            |
| Engineering Elective                                | ** see below                                  |
| EGR 211 Engineering Statics                         | ME 202 Statics                                |
| PHL 111 Ethics                                      | PH 208 Ethics (Ethical Perspective)           |
| MAT 268 Calculus III: Multivariable                 | MATH 235 Calculus III                         |
| <b>Semester 4</b>                                   |   |
| Social Science Requirement                          | *see below                                    |
| Engineering Elective                                | **see below                                   |
| Engineering Elective                                | **see below                                   |
| MAT 286 Differential Equations                      | MATH 236 Differential Equations               |

This is not an articulation agreement. This chart should serve as a reference for Manchester 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.

\* The following Manchester Community College courses will count towards satisfying Western New England University's general education requirements: PSY 111 General Psychology I or SOC 101 Principles of Sociology or any economics course (one).

**\*\*Biomedical:** EGR 221 Electric Circuits Analysis, BIO 121 General Biology, CHE 122 General Chemistry 2

**\*\*Civil:** EGR 212 Engineering Dynamics, CHE 122 General Chemistry 2, CAD 110 Intro. to CAD

**\*\*Computer:** ENGR 221 Electric Circuits Analysis, EET 252 Digital Electronics, MAT 274 Linear Algebra

**\*\*Electrical:** ENGR 221 Electric Circuits Analysis, EET 252 Digital Electronics, MAT 274 Linear Algebra

**\*\*Industrial Engineering:** ENGR 221 Electric Circuits Analysis, MAT 165 Statistics, MAT 274 Linear Algebra

**\*\*Mechanical:** EGR 221 Electric Circuits Analysis, EGR 214 Engr. Thermodynamics, EGR 212 Engr. Dynamics

Candidates for **Electrical Engineering** or **Computer Engineering** are encouraged to complete two four-credit circuits courses during their first two years of study and to complete a four-credit digital design course prior to enrolling. Without these three courses a student will require additional time to satisfy the bachelor's degree requirements.

Candidates for **Mechanical** or **Industrial Engineering** are encouraged to complete one four-credit circuits course prior to enrolling.