ASSOCIATE OF SCIENCE IN 
ENGINEERING (ASE)

NMC offers an intensive Associate of Science in Engineering transfer degree that is intended to prepare students for transfer to a four-year engineering program. The NMC engineering curriculum parallels engineering programs offered during the first two years at other colleges and universities. Traditionally, these first two years emphasize the tools and theories that provide background for all engineering fields. Students are required to meet with an advisor for completion of this degree.

Course Title Credits
Core General Education Requirements 48
Communications
ENG 111 English Composition 4
ENG 112 English Composition 4
Humanities
Any Group 1 class from: art, history, humanities, literature, music, philosophy or second year foreign language 3
Mathematics
MTH 141 Calculus I 5
MTH 142 Calculus II 5
MTH 241 Calculus III 5
MTH 251 Differential Equations 4
Science
CHM 150 General Chemistry I 5
CHM 150L General Chemistry I Lab
CHM 150R General Chemistry I, Recitaton
PHY 221 Problems & Princ.of Physics I 5
PHY 221L Prob./Prin. of Physics I Lab
PHY 221R Prob.& Princ. of Physics I Rec
PHY 222 Prob. & Princ. of Physics II 5
PHY 222L Prob./ Prin. of Physics II Lab
PHY 222R Prob. & Princ. of Physics II R
Social Science
One Group 1 class from: anthropology, economics, geography, political science, psychology or sociology 3
Directed Electives 25
Directed Electives will be determined by the type of engineering program the student is pursuing and the university to which they are transferring. See Program Advisor for course information.
BIO 227 Human Anatomy & Physiology I 4
BIO 227L Human Anatomy & Phys I Lab
BIO 228 Human Anatomy & Physiology II 4
BIO 228L Human Anatomy & Phys II Lab
CHM 151 General Chemistry II 5
CHM 151L General Chemistry II Lab
CHM 151R General Chemistry II Recitaton
CHM 250 Organic Chemistry I 5
CHM 250L Organic Chemistry I Lab
CHM 251 Organic Chemistry II 5
CHM 251L Organic Chemistry II Lab
CIT 110 Programming Logic and Design 3

EGR 101 Introduction To Engineering 1
EGR 113 Engineering Graphics I 3
EGR 131 Elementary Surveying 5
EGR 131L Elementary Surveying Lab
EGR 201 Statics 3
EGR 202 Mechanics of Materials 3
EGR 203 Dynamics 4
EGR 211 Electrical Circuits I 3
EGR 220 Engineering Practice I 2
EGR 221 Material Science 3
EGR 232 Introductory Thermodynamics 3
ENV 111 Physical Geology 4
ENV 111L Physical Geology Lab

Other Requirements
• Complete the ASE degree with a 2.0 or higher cumulative grade point average.
• Complete a minimum 15 of the 60 credits through NMC classes.

NOTES
• Courses with numbers below 100 level do not count toward graduation, but the grades do count toward your cumulative GPA. They may be prerequisites for other courses needed to complete degree or certificate requirements and may add to the total number of credits taken. Review course prerequisites carefully.
• For elective courses to count toward graduation, a course must be completed with a grade of 1.0 or higher.