

DEGREE PROGRAM FOUNDATION COURSES

UNIVERSITY OF NORTH DAKOTA SCHOOL OF ENGINEERING AND MINES

Any student desiring to apply for admission to one of the School of Engineering and Mines' Professional Degree Programs must complete or be in the process of completing the Foundation Course work as indicated below and earn at least a C grade in each of these courses.

All programs **require** the following courses:

Course name	Course Number	Course name	Course Number
English Composition	- Engl 110 - Engl 120 or Engl 125	Calculus	- Math 165 - Math 166 - Math 265
University Physics I&II (Calculus-based)	- Phys 251 - Phys 252		

In addition to the above courses, each department requires the following course work:

**CHEMICAL ENGINEERING**

**Required Courses:**

Fund. Of Chemistry Concepts .....	Chem 221/221L
Fund. Of Chemistry Analysis .....	Chem222 &222L
Stoichiometry .....	ChE 201

Select **three** courses from the following:

Intro. to ChE.....	ChE 102
Unit Operations .....	ChE 206
ChE Lab I .....	ChE 232
Organic Chemistry I/Lab.....	Chem 341/341L
Statics .....	Engr 201
Principles of Economics .....	Econ 201
Elem. Differential Equations .....	Math 266

**CIVIL ENGINEERING**

**Required courses:**

General Chemistry I/Lab .....	Chem 121/121L
General Chemistry II/Lab.....	Chem122 & 122L
OR General Biology I/Lab .....	Biol 150 & 150L

Select **four** courses from the following:

Graphical Communications .....	Engr 101
Computer Appl. in Engr.....	Engr 200
Statics.....	Engr 201
Dynamics.....	Engr 202
Mechanics of Materials .....	Engr 203

**GEOLOGICAL ENGINEERING**

**Required courses:**

Geology for Engineers.....	GeoE 203
General Chemistry I .....	Chem 121/121L

Select **four** courses from the following:

Graphical Communications .....	Engr 101
Computer Appl. in Engr.....	Engr 200
Statics.....	Engr 201
Dynamics.....	Engr 202
Mechanics of Materials.....	Engr 203
Circuit Analysis.....	EE 206

**ELECTRICAL ENGINEERING**

**Required Courses:**

Circuit Analysis .....	EE 206
and a Programming Course	
General Chemistry I.....	Chem 121/121L

Select **four** courses from the following:

Elem. Differential Equations .....	Math 266
Digital Logic .....	EE 201
Computer Aided Meas.....	EE 304
or a programming course	
Linear Electric Circuits .....	EE 313
Graphical Communications .....	Engr 101
Statics .....	Engr 201
Dynamics.....	Engr 202
Mechanics of Materials .....	Engr 203
Materials Science .....	ME 301
Fluid Mechanics .....	ME 306
Thermodynamics .....	ME 341

**MECHANICAL ENGINEERING**

**Required Course:**

General Chemistry I.....	Chem 121/121L
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Select **five** courses from the following:

Intro to ME.....	ME 101
Computer Appl. in Engr.....	Engr 200
Statics.....	Engr 201
Dynamics.....	Engr 202
Mechanics of Materials.....	Engr 203
Circuit Analysis.....	EE 206
Thermodynamics.....	ME 341