

ENGINEERING FOUNDATIONS 2+2 (FOR UNL)

⁵ Electrical Engineering

⁶ Except courses numbered 188 or 388.

Offered by Department of Physics and (<http://catalog.unk.edu/undergraduate/departments-programs/physics-astronomy>)Astronomy (<http://catalog.unk.edu/undergraduate/departments-programs/physics-astronomy>)

UNK's Engineering Foundations (2+2) program is broadly designed to meet the College of Engineering requirements at UNL. Because requirements for specific engineering programs at UNL and other universities may vary, students should always consult with their advisors before registration.

| Code | Title | Credit Hours |
|---|--|--------------|
| First Year | | |
| CHEM 160 & 160L | General Chemistry and General Chemistry Laboratory | 4 |
| CHEM 161 & 161L | General Chemistry and General Chemistry Laboratory ¹ | 4 |
| PHYS 275 & 275L | General Physics I (Calculus) and General Physics I (Calculus) Laboratory | 5 |
| ENGR 101 | Introduction to Engineering | 3 |
| ENG 102 | Academic Writing and Research ² | 3 |
| MATH 102 | College Algebra ³ | 3 |
| MATH 103 | Plane Trigonometry ³ | 3 |
| MATH 115 | Calculus I with Analytic Geometry ³ | 5 |
| MATH 202 | Calculus II with Analytic Geometry | 5 |
| Second Year | | |
| ENGR 130 | Computer Aided Drafting for Mechanical Engineering | 3 |
| PHYS 276 & 276L | General Physics II (Calculus) and General Physics II (Calculus) Laboratory | 5 |
| CSIT 112 | Programming in C | 3 |
| ENGR 223 | Engineering Statics ⁴ | 3 |
| ENGR 373 | Engineering Dynamics ⁴ | 3 |
| ENGR 325 | Mechanics of Materials ⁴ | 3 |
| ENGR 215 | Engineering Circuits I ⁵ | 4 |
| ENGR 216 | Engineering Circuits II ⁵ | 4 |
| MATH 260 | Calculus III | 5 |
| MATH 305 | Differential Equations | 3 |
| Electives (Social Sciences and Humanities) ⁶ | | 3 |
| Total Credit Hours | | 74 |

Pre-Engineering students can transfer up to 18 credit hours of social sciences and humanities. Students should check with advisors for more detailed information on approved Electives.

¹ Only required for some fields of engineering.

² ENG 101 and ENG 102 can be replaced by technical writing at UNL.

³ Students with sufficient preparation may enter the mathematics program at a higher level reducing total credit hours needed to complete the pre-professional program.

⁴ Civil, Mechanical, and Agricultural Engineering