

Mechanical Engineering and Physics

Department Information

- **Department Location:**
Dolve Hall 111
- **Department Phone:**
701-231-8671
- **Department Web Site:**
www.ndsu.edu/me/
- **Credential Offered:**
B.S.M.E.
- **Plan Of Study Sample:**
bulletin.ndsu.edu/programs-study/undergraduate/mechanical-engineering-physics/

Major Requirements

Major: Mechanical Engineering & Physics

Degree Type: B.S.M.E.

Minimum Degree Credits to Graduate: 129

Code	Title	Credits
CHEM 121	General Chemistry I	3
CHEM 122	General Chemistry II	3
New ECE Course		4
ENGL 321	Writing in the Technical Professions	3
ENGR 402	Engineering Ethics and Social Responsibility	1
IME 330	Manufacturing Processes	3
MATH 129	Basic Linear Algebra	3
MATH 165	Calculus I	4
MATH 166	Calculus II	4
MATH 265	Calculus III	4
MATH 266	Introduction to Differential Equations	3
ME Freshmen Experience		2
ME 212	Fundamentals of Visual Communication for Engineers	3
ME 213	Modeling of Engineering Systems	3
ME 221	Engineering Mechanics I	3
ME 222	Engineering Mechanics II	3
ME 223	Mechanics of Materials	3
ME 331	Materials Science and Engineering	4
ME 352	Fluid Dynamics	3
ME 351	Thermodynamics I	3
ME 361	Introduction to Mechanical Engineering Profession	1
ME 412	Engineering Measurements	3
ME 421	Theory of Vibrations	3
ME 442	Machine Design I	3
ME 443	Machine Design II	3
ME 454	Heat and Mass Transfer	3
ME 457	Thermal Systems Laboratory	3
ME 461	Design Project I	3
ME 462	Design Project II	3
PHYS 171	Introductory Projects in Physics	1
PHYS 252	University Physics II	4
PHYS 252L	University Physics II Laboratory	1

PHYS 350	Modern Physics *	3
PHYS 355	Classical Mechanics *	3
PHYS 361	Electromagnetic Theory *	3
PHYS 411	Optics for Scientists & Engineers	3
PHYS 411L	Optics for Scientists and Engineers Lab	1
PHYS 485	Quantum Mechanics I	3
PHYS Elective		3
Total Credits		112

* Mechanical engineering technical electives

Degree Notes:

- No grade less than 'C' is accepted to fulfill any of the degree requirements.
- Admission to the dual major requires a minimum 2.70 GPA
- A 2.50 cumulative GPA is required for graduation.