

University of Indianapolis – Shaheen College of Arts & Sciences / R.B. Annis School of Engineering
2023-2024 Curriculum Guide for Mechanical Engineering (MENG)
 Bachelor of Science

Mechanical Engineering (MENG) is an engineering discipline that focuses on the application of engineering principles to the design and development of mechanical systems.

Freshman Year

- **CHEM 150** General Chemistry I (3)
- **CHEM 151** General Chemistry Laboratory I (1)
- **CSCI 155** Introduction to Programming (3)
- **MATH 190** Calculus and Analytic Geometry I (4)
- **MATH 191** Calculus and Analytic Geometry II (4)
- **PHYS 153** General Physics I, Calculus Based (4)
- **ENGR 185** Orientation to Engineering (1)
- **ENGR 196** Introduction to Engineering (Design Lab I) (3)
- **ENGR 198** Engineering Design Lab II (1)
- **MENG 120** Engineering Graphics (1)

Sophomore Year

- **MATH 270** Calculus and Analytic Geometry III (4)
- **MATH 280** Linear Algebra (3)
- **MATH 330** Differential Equations (3)
- **PHYS 163** General Physics II, Calculus Based (4)
- **PHYS 230** Laboratory Instrumentation I (3)
- **ENGR 210** Engineering Economics (3)
- **PHYS 360** Dynamics (3)
- **ENGR 296** Engineering Design Lab III (1)
- **ENGR 298** Engineering Design Lab IV (1)
- **MENG 210** Statics (3)
- **MENG 220** Thermodynamics I (3)

Junior Year

- **MENG 300** Mechanics of Solids (3)
- **MENG 310** Thermodynamics II (3)
- **MENG 320** Materials Processing (3)
- **MENG 330** Design of Machine Components (3)
- **MENG 350** Heat Transfer (3)
- **MENG 360** Fluid Mechanics (3)
- **ENGR 396** Engineering Design Lab V (1)
- **ENGR 398** Engineering Design Lab VI (1)

Senior Year

- **MENG 340** Mechanical Modeling and Simulation (3)
- **MENG 410** Machine Dynamics and Mechanisms (3)
- **MENG 420** Control Systems (3)
- **MENG 430** Manufacturing Processes and Systems (2)
- **MENG 440** Mechatronics (3)
- **ENGR 496** Engineering Design Lab VII (1)
- **ENGR 498** Engineering Design Lab VIII (2) (capstone)

NOTES:

- A grade of C- (1.7 on a 4.0 scale) or higher is required in all courses in the Bachelor of Science Degree in Mechanical Engineering at the University of Indianapolis. A minimum of 120 hours is required to earn a Bachelor of Science Degree from the University of Indianapolis. A typical MENG major can satisfy degree requirements with 138 credits.
- An average grade of C or higher is required in all required Engineering, Mathematics, Science and Computer Science courses for the Mechanical Engineering Program.
- A student may complete more than one major as long as each major has at least 24 discrete hours. Please see the Academic Catalog for additional details.

REMEMBER: If you have any questions about the -Mechanical Engineering major requirements, contact a faculty advisor from the R. B. Annis School of Engineering (Kenneth Reid, 788-3657; Annis Hall, Room 105) or the Center for Advising & Student Achievement (788-2057, Schwitzer Student Center, Room 206). Courses and requirements sometimes change so keep in contact with your advisor.