

Engineering

AETM Department



Description of major: The BSE program includes a required core of engineering courses as well as coursework in science and mathematics. In addition, the program requires completion of one of three concentrations that enable students to tailor the program to meet careers goals.

- Civil Engineering includes aspects of structural analysis of concrete design, wastewater and drinking water system design, hydrology, and transportation engineering.
- Industrial Engineering focuses on reliability, maintainability, operations, and production planning.
- Mechanical Engineering focuses on machinery dynamics, engineering design and management, heat transfer, and finite elemental analysis.

Current engineering application and design considerations are explored with emphasis on experiential learning opportunities engaging students in research, testing, design, and analysis. Students also develop essential knowledge, skills, and abilities assuring a comprehensive understanding of engineering principles and disciplines

Math Requirement:

Calculus I, II, III
Differential Equations
Advanced Statistics

Science Requirement:

Physics
Chemistry

Hands on/ Lab Based: Yes

- Test materials, Conduct experiments with fluids, design and build projects

Theoretical/ Analytical: Yes

- Calculate static loads, Apply Strength of Materials, Utilize Quality Systems, Analyze Thermodynamic Systems

Distance and/or Online: No

Accreditation: Higher Learning Commission

Popular Jobs Associated: Engineers, Technical Managers, Supervisors at engineering firms, government offices, manufacturing facilities

Department of Major Contact Information:

AETM Department
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Indiana State University
812-237-2987

