B.S.E. in Engineering
Department of Applied Engineering and Technology Management
Indiana State University

Program Educational Objectives

Graduates two to three years into their careers should have the foundation to:

1. Apply disciplinary reasoning, critical thinking, and hands-on skills to identify, analyze, and solve problems. (Engineering)

2. Communicate effectively in both oral and written form to articulate technical knowledge, ideas, and proposals. (Communication)

3. Consider professional, ethical, and social responsibility of engineering practices. (Global Responsibility)

4. Perform effectively, think independently, and work collaboratively in a team environment in membership or leadership role. (Management and/or Teamwork)

5. Actively participate in professional development, including continuous self-improvement and lifelong learning. (Lifelong Learning)

Student Outcomes

Students at the time of graduation are prepared to demonstrate:

1.1 An ability to identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics.

1.2 An ability to apply both analysis and synthesis in the engineering design process, resulting in designs that meet desired needs.

1.3 An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

2.1 An ability to communicate effectively with a range of audiences.

3.1 An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

4.1 An ability to function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.

5.1 An ability to recognize the ongoing need for additional knowledge and locate, evaluate, integrate, and apply this knowledge appropriately.

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