

Standing Requirements

Outcomes Library

BS in Mechanical Engineering Technology

Program Educational Objective 1: Solve technical problems

Apply the latest technology and engineering tools to solve technical problems in the practice of mechanical engineering technology and related interdisciplinary fields.

Outcome	Mapping
SLO a: Appropriate mastery of techs, skills, and tools an appropriate mastery of the knowledge, techniques, skills, and modern tools of the MET discipline	No Mapping
SLO b: Apply current knowledge, adapt to emerging applications an ability to apply current knowledge and adapt to emerging applications of mathematics, science, engineering, and technology.	No Mapping
SLO c: Conduct, analyze and interpret experiments an ability to conduct, analyze and interpret experiments, and apply experimental results to improve processes.	No Mapping
SLO d: Apply creativity in the design of systems an ability to apply creativity in the design of systems, components, or processes appropriate to the MET program educational objective.	No Mapping
SLO f: Identify, analyze and solve technical problems an ability to identify, analyze and solve technical (close-ended analysis and open-ended design) problems.	Foundational Studies: 2. Critically evaluate the ideas of others.
PO 1: Develop, simulate, and analyze mechanical systems Develop, simulate, and analyze mechanical components/systems using computer-aided design and analysis tools.	No Mapping
PO 2: Select engineering materials Select engineering materials for specific applications.	No Mapping
PO 3: Identify and inspect tolerances Identify and inspect tolerances in mechanical parts and assemblies.	No Mapping
PO 4: Manage design work/processes. Manage design work/processes.	No Mapping
PO 5: Implement design and produce parts. Implement design and produce parts.	No Mapping
PO 6: Estimate cost and manage engineering projects. Estimate cost and manage engineering projects.	No Mapping
PO 7: Analyze/plan system's control and integration. Recognize the need and analyze/plan the requirement for system's control and integration.	No Mapping
PO 8: Provide an integrated educational experience Provide an integrated educational experience that develops the ability of students to apply pertinent knowledge to solving problems in MET specialty.	No Mapping

Program Educational Objective 2: Remain technically current with continuous learning

Remain technically current and adapt to rapidly changing technologies through self improvement with continuous learning or post-graduate education.

Outcome

Mapping

SLO h: Engage in lifelong learning.

No Mapping

a recognition of the need for, and an ability to engage in lifelong learning.

SLO k: Quality, timeliness, and continuous improvement

No Mapping

a commitment to quality, timeliness, and continuous improvement.

Program Educational Objective 3: Demonstrate independent thinking, self-management, and functioning effectively in team-oriented activities

Demonstrate independent thinking, self-management, and functioning effectively in team-oriented and open-ended activities in an industrial environment.

Outcome

Mapping

SLO e: An ability to function effectively on teams

No Mapping

an ability to function effectively on teams.

Program Educational Objective 4: Communicate effectively in oral, written, and graphical forms.

Outcome

Mapping

SLO g: Communicate through engineering drawings, reports
an ability to communicate effectively through engineering drawings,
written reports, or oral presentations.

Foundational Studies: 10. Express themselves effectively,
professionally, and persuasively both orally and in writing.

Program Educational Objective 5: Perform ethically and professionally in business, industry, and society.

Outcome

Mapping

SLO i: understand professional, ethical, social responsibility
an ability to understand professional, ethical and social
responsibilities.

No Mapping

Program Educational Objective 6: Develop leadership skills and responsibility in their chosen career field.

Outcome

Mapping

SLO e: An ability to function effectively on teams.

No Mapping

an ability to function effectively on teams.

Program Educational Objective 7: Understand global issues and the impact of technology and engineering solutions

Understand global issues and the impact of technology and engineering solutions on the society and environment.

Outcome

Mapping

SLO j: A respect for diversity

No Mapping

a respect for diversity and a knowledge of contemporary
professional, societal and global issues.

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