Master of Engineering in Project Management - Minor in Ethics in Engineering and Technology

HBI University
Course Duration: 2 years
Credit Hours: 69 (including 15 credit hours for minor)

Program Description

The Master of Engineering in Project Management at HBI University is designed for professionals seeking advanced expertise in engineering project execution, risk analysis, and technological innovation management. The program integrates technical project management, systems engineering, and resource optimization to prepare graduates for leadership roles in engineering, construction, and technology-driven industries.

The Minor in Ethics in Engineering and Technology provides a specialized focus on ethical decision-making, corporate social responsibility, and sustainable engineering practices. Students will explore faith-based and professional ethical principles in the context of technological advancements, artificial intelligence, and environmental sustainability.

This 69-credit hour program includes 30 credit hours of foundational engineering and project management courses, 24 credit hours of core engineering leadership courses, 15 credit hours in Ethics in Engineering and Technology, elective coursework, a supervised practicum, and a research-based master's thesis.

Admissions Requirements

- Bachelor's degree in business, management, or a related field
- Minimum GPA of 3.0
- Two letters of recommendation from faculty or business professionals
- Statement of purpose outlining career goals in business, project management, and faith-based leadership
- Resume or Curriculum Vitae (CV)
- Interview with faculty committee (if required)

Practicum Requirement

Students must complete a 300-hour supervised practicum in engineering project execution, infrastructure planning, or technology ethics research. Practicum placements include construction firms, technology companies, and sustainability-focused engineering projects.

Master's Thesis

Students are required to complete a research-based master's thesis exploring technological ethics, engineering project execution, or risk management in large-scale infrastructure. The thesis should include an applied research component analyzing real-world engineering challenges.

Program Outcomes

Graduates of this program will be able to:

- Lead complex engineering projects with efficiency and precision.
- Apply ethical frameworks to technology and engineering decision-making.
- Utilize advanced risk analysis and project planning methodologies.
- Manage multi-disciplinary teams in engineering and technology-driven industries.
- Ensure sustainability and corporate social responsibility in engineering initiatives.

Career Outcomes & Potential Salary

- Engineering Project Manager – $90,000 - $150,000
- Technology Ethics Consultant – $80,000 - $140,000
- Sustainability & Environmental Engineering Manager – $85,000 - $145,000
- Infrastructure & Construction Project Director – $95,000 - $160,000
- Chief Technology Officer (CTO) with Ethics Specialization – $120,000 - $200,000

Advocacy and Professional Development

Students are encouraged to join engineering and technology organizations such as:

- Project Management Institute (PMI)
- Institute of Electrical and Electronics Engineers (IEEE)
- National Society of Professional Engineers (NSPE)
- Sustainable Engineering & Ethics Association

Participation in technology ethics symposiums, engineering innovation conferences, and professional project management workshops is highly recommended.

Course Breakdown (Total: 69 Credit Hours)

A. Foundational Engineering and Project Management Courses (30 Credit Hours)

Course Code	Course Name	Credit Hours
ENGR-701	Fundamentals of Engineering Project Management	3
ENGR-702	Risk Assessment in Engineering Projects	3
ENGR-703	Financial Analysis for Engineering & Technology	3
ENGR-704	Advanced Engineering Leadership	3
ENGR-705	Innovation & Technology Management	3
ENGR-706	Systems Engineering & Process Optimization	3
ENGR-707	Sustainable Engineering & Green Technology	3
ENGR-708	Data Analytics & Decision Making in Engineering	3
ENGR-709	Infrastructure Planning & Development	3
ENGR-710	Research Methods in Engineering Management	3

B. Core Engineering Leadership Courses (24 Credit Hours)

Course Code	Course Name	Credit Hours
PMGT-721	Agile & Lean Project Execution for Engineers	3
PMGT-722	Quality Control & Process Improvement	3
PMGT-723	Managing Large-Scale Engineering Projects	3
PMGT-724	Cybersecurity & Ethics in Engineering	3
PMGT-725	Engineering Contracts & Regulatory Compliance	3

PMGT-726	Artificial Intelligence & Ethics	3
PMGT-727	Engineering Crisis Management	3
PMGT-728	Supervised Engineering Leadership Practicum	3

C. Ethics in Engineering and Technology Minor (15 Credit Hours)

Course Code	Course Name	Credit Hours
EET-901	The Ethics of AI & Automation	3
EET-902	Sustainability & Engineering Responsibility	3
EET-903	Corporate Social Responsibility in Technology	3
EET-904	Risk Ethics in Infrastructure & Safety	3
EET-905	Faith & Ethics in Engineering Leadership	3

D. Electives (9 Credit Hours)

Course Code	Course Name	Credit Hours
ELEC-891	Renewable Energy & Green Engineering	3
ELEC-892	Blockchain & Secure Engineering Systems	3
ELEC-893	Cross-Cultural Leadership in Global Engineering	3