

MASTER OF SCIENCE IN ENGINEERING MANAGEMENT

The Master of Science in Engineering Management program is a coursework-based graduate degree program oriented toward students who wish to gain introductory knowledge in the management of engineering projects. Project management is a critical requirement for successful industrial, construction, and other engineering projects.

Students with a variety of academic backgrounds are eligible to apply for the program, including those with undergraduate degrees in engineering disciplines (e.g., architectural, civil, mechanical, or environmental engineering) and non-engineering disciplines (e.g., architecture, construction management, or others).

Curriculum

Degree Requirements

Code	Title	Credit Hours
Core Courses		(12)
EMGT 470	Project Management	3
EMGT 523	Statistical Analysis of Engineering Data	3
EMGT 574	Economic Decision Analysis in Engineering	3
EMGT 575	Systems Analysis in Engineering	3
Major Elective Courses		(12)
Select a minimum of 12 credit hours from the following courses:		12
BUS 510	Strategic Management	3
BUS 532	Artificial Intelligence in Business	3
BUS 550	Business and Financial Quantitative Techniques	3
CAE 473	Construction Contract Administration	3
CAE 568	Transportation Asset Management	3
CAE 569	Construction Methods, Cost Estimating, and Project Budgeting	3
CAE 570	Legal Issues in Civil Engineering	3
CHE 506	Entrepreneurship and Intellectual Property Management	3
CHE 543	Energy, Environment, and Economics	3
EMGT 406	Entrepreneurship and Intellectual Property Management	3
INTM 511	Industrial Leadership	3
INTM 515	Advanced Project Management	3
INTM 534	Digital Transformation	3
INTM 537	Smart Factory Automation	3
INTM 548	Agile Methodologies for New Product/Process Development	3
MBA 523	Negotiations and Strategic Decision Making	3
MMAE 560	Statistical Quality and Process Control	3
or CHE 560	Statistical Quality and Process Control	
MMAE 589	Applications in Reliability Engineering I	3
MMAE 590	Applications in Reliability Engineering II	3
PM 501	Project Management Essentials	3
PM 502	Project Scope, Quality and Risk Management	3
PM 503	Project Schedule and Cost Management	3
PM 505	Project Finance and Procurement	3
PM 506	Agile Strategies and Practices	3
PM 507	Project Management Capstone	3
PM 508	High Impact Power Skills	3
General Elective Courses		(6)
Select 6 credit hours of additional major or general electives ¹		6
Total Credit Hours		30

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¹ General electives include any 400- or 500-level course in BME, BUS, CAE, CHE, CS, ECE, EMGT, ENVE, INTM, MATH, MMAE, STAT or other disciplines with advisor approval. Up to 12 credit hours of 400-level courses can be applied to the program.