

MASTER OF SCIENCE IN ENGINEERING MANAGEMENT

Curriculum Structure

The Program (Total 36 Cr Hrs)

Curriculum Component	Number of Courses	Total Number Cr Hrs
Major Core	6	18
Focus Area	3	9
Track Based	1	3
Thesis	2	6
Total:	12	36

Core Requirements (18 Cr Hrs)

Core Requirements	
Course ID	Course Title
EMP 603	Business Fundamentals for Engineering Managers
EMP 604	Process Improvement Techniques
EMP 605	Project Management
EMP 606	Production and Operations Management
EMP 607	Enterprise Information Analysis and Business Applications
EMP 608	Decision Techniques and Data Analysis

Logistics & Supply Chain Focus Area (9 Cr Hrs)

Logistics & Supply Chain Focus Area	
Course ID	Course Title
EMP 611	Physical Distribution Management
EMP 612	Procurement Management
EMP 613	Suppliers Management
EMP 614	Supply Chain Management
EMP 615	Materials & Logistics Management

Operations Focus Area Package (9 Cr Hrs)

Operations Focus Area Package	
Course ID	Course Title
EMP 621	Facility Planning and Layout
EMP 622	Service Operations Management
EMP 623	Six Sigma & Strategic Quality Management
EMP 624	Systems Analysis and Design
EMP 625	Manufacturing & Enterprise Resource Planning
EMP 626	Innovation and Technology Management

Construction Focus Area Package (9 Cr Hrs)

Construction Focus Area Package	
Course ID	Course Title
EMP 631	Construction Engineering Management
EMP 632	Estimating & Financial Analysis for Construction
EMP 633	Construction Equipment Management
EMP 634	Construction Contracts & Legal Concepts in Construction
EMP 635	Concrete Formwork Design
EMP 636	Project Planning, Scheduling, and Control
EMP 637	Engineering and Construction Materials and Methods

Project Option Requirement (3 Cr Hrs)

Master Thesis	
Course ID	Course Title
EMP 691	Master Project

Thesis Option Requirement (6 Cr Hrs)

Master Thesis	
Course ID	Course Title
EMP 695	Master Thesis I
EMP 696	Master Thesis II

STUDY PLAN

Master of Science in Engineering Management Thesis Option

FIRST SEMESTER (9 Cr Hrs)			
Term	Course#	Course Title	Cr Hrs
Fall	EMP 603	Business Fundamentals for Engineering Managers	3
	EMP 604	Process Improvement Techniques	3
	EMP 607	Enterprise Information Analysis and Business Applications	3
Total			9
SECOND SEMESTER (9 Cr Hrs)			
Term	Course#	Course Title	Cr Hrs
Spring	EMP 605	Project Management	3
	EMP 606	Production and Operations Management	3
	EMP 608	Decision Techniques and Data Analysis	3
Total			9
THIRD SEMESTER (9 Cr Hrs)			
Term	Course#	Course Title	Cr Hrs
Fall		Track Based Course	3
		Track Based Course	3
	EMP 695	Master Thesis I	3
Total			9
FOURTH SEMESTER (9 Cr Hrs)			
Term	Course#	Course Title	Cr Hrs
Spring		Track Based Course	3
		Track Based Course (Free)	3
	EMP 696	Master Thesis II	3
Total			9

STUDY PLAN

Master of Science in Engineering Management Project Option

FIRST SEMESTER (9 Cr Hrs)			
Term	Course#	Course Title	Cr Hrs
Fall	EMP 603	Business Fundamentals for Engineering Managers	3
	EMP 604	Process Improvement Techniques	3
	EMP 607	Enterprise Information Analysis and Business Applications	3
Total			9
SECOND SEMESTER (9 Cr Hrs)			
Term	Course#	Course Title	Cr Hrs
Spring	EMP 605	Project Management	3
	EMP 606	Production and Operations Management	3
	EMP 608	Decision Techniques and Data Analysis	3
Total			9
THIRD SEMESTER (9 Cr Hrs)			
Term	Course#	Course Title	Cr Hrs
Fall		Track Based Course	3
		Track Based Course	3
		Track Based Course (Free)	3
Total			9
FOURTH SEMESTER (9 Cr Hrs)			
Term	Course#	Course Title	Cr Hrs
Spring		Track Based Course	3
		Track Based Course (Free)	3
	EMP 691	Master Project	3
Total			9