



Certificate Requirement

Managing a manufacturing enterprise has never been more challenging or exciting than today. With the focus of corporate leaders increasingly shifting towards innovation and entrepreneurship and high-value, high-margin products in new and evolving industries, students must be well-prepared to succeed in today's highly competitive world of manufacturing. The Manufacturing & Technology Management (MTM) option focus allows students to prepare for these challenges. The Center granted 51 Certificates in 2011 and 43 in 2012.

To meet option requirements, coursework must include at least one course from 4 of the Groups A-F. At least one from each of Groups G and H. 3 additional courses (totaling 9 courses) can come from the entire list. Students should also submit a formal application for the Certificate at the end of their first year to be considered. Contact gscmi@purdue.edu for details.

Course Number	Course Title	Area Description	Group
IE 57700	Human Factors in Engineering	Human Resources in Manufacturing	A
OBHR 64000	Industrial Relations I	Human Resources in Manufacturing	A
OBHR 64100	Industrial Relations II	Human Resources in Manufacturing	A
OBHR 66900	Negotiations in Organizations	Human Resources in Manufacturing	A
OBHR 69000	Organizational Change Management	Human Resources in Manufacturing	A
OBHR 69000	Training	Human Resources in Manufacturing	A
TECH 58100F	Technology & Conflict Management	Human Resources in Manufacturing	A
ME 55700	Design for Manufacturability & Assembly	Product Design & Development	B
ME 59700I	Product and Process Design	Product Design & Development	B
MGMT 52200	New Product Development	Product Design & Development	B
MGMT 56200	Project Management	Product Design & Development	B
IE 58000	Systems Simulation	Systems Integration & Information Management	C
MGMT 57100	Data Mining	Systems Integration & Information Management	C
MGMT 58200	Management of Organizational Data	Systems Integration & Information Management	C
MGMT 68300	Management Information Systems	Systems Integration & Information Management	C
MGMT 68400	Information Security for Managers	Systems Integration & Information Management	C
MGMT 68500	Enterprise Integration	Systems Integration & Information Management	C
MGMT 68600	Knowledge Management	Systems Integration & Information Management	C
MGMT 69000	Mobile & Ubiquitous Commerce	Systems Integration & Information Management	C
MGMT 57200	Six Sigma & Quality Management	Total Quality Management	D
IE 54500	Engineering Economic Analysis	Manufacturing Economics	D
MGMT 65700	Manufacturing Strategy	Manufacturing Strategy	E
MGMT 65500	Competitive Strategy	Manufacturing Strategy	E
MGMT 61100	Advanced Corporate Finance	Finance for Manufacturing	F
MGMT 61200	Financial MGMT III	Finance for Manufacturing	F
IE 56600	Production Management Control	Production Planning & Control	G
MGMT 56000	Manufacturing Planning and Control	Production Planning & Control	G
MGMT 56100	Logistics	Production Planning & Control	G
MGMT 66000	Intro to Operations Management	Production Planning & Control	G



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Course Number	Course Title	Area Description	Group
MGMT 66900	Operations: Practice and Models	Production Planning & Control	G
MGMT 56400	Management of Service Operations	Operations	H
MGMT 56500	Strategic Sourcing and Procurement	Operations	H
MGMT 56600	Global Supply Chain Management	Operations	H
MGMT 59000	Healthcare Operations	Operations	H
MGMT 69000	Sustainable and Socially Responsible Operations	Operations	H
MGMT 66100	Management Operations Systems	Operations	H
MGMT 66400	Supply Chain Management	Operations	H
MGMT 50300	Advanced Accounting	Accounting	
MGMT 60200	Valuation and Financial Statement Analysis	Accounting	
MGMT 69000	International Law	Business Law	
MGMT 69000	Employment Law	Business Law	
ECON 65200	Advanced Labor Economics	Economics	
MGMT 51100	Fixed Income Securities	Finance	
MGMT 61400	Investments	Finance	
MGMT 61500	International Financial Management	Finance	
MGMT 64100	Options and Futures	Finance	
MGMT 64300	Financial Risk Management	Finance	
MGMT 64400	Venture Capital and Investment Banking	Finance	
MGMT 64500	Mergers, Acquisitions & Corporate Control	Finance	
MGMT 59000	SMIF	Finance	
SA 59000	International Internship India	Study Abroad	
IE 54600	Economic Decisions in Engineering	Industrial Engineering	
IE 54800	Knowledge-Based Systems	Industrial Engineering	
IE 57500	Computer Aided Manufacturing	Industrial Engineering	
IE 57900	Advanced Production Control	Industrial Engineering	
IE 58300	Design and Evaluation of Material Handling Systems	Industrial Engineering	
IE 63200	Scheduling Models	Industrial Engineering	
MGMT 62300	Business Marketing	Marketing	
MGMT 62500	Marketing Research	Marketing	
MGMT 64900	Marketing in a Global Economy	Marketing	
IE 58000	Systems Simulation	MIS	
MGMT 59000	Digital Business and Information Strategies	MIS	
OBHR 56000	Mentoring & Socialization	OBHR	
OBHR 69000	Management of Human Capital Globally	OBHR	
OBHR 66200	Leadership	OBHR	
MGMT 57000	Spreadsheet Modeling	Quantitative Methods	
MGMT 65200	Management of New and Small Firms	Strategy	
MGMT 59000	Developing a Global Business Strategy	Strategy	
MET 54600 /MET 59000	Integrated Operating Systems	Operations	