

Engineering Management (MR): Advanced Manufacturing Concentration

Degree Requirements

Core Requirements

Code	Title	Hours
Required Courses		15
ISE/OR 501	Introduction to Operations Research	
Select one of the following courses:		3
ST 513	Statistics for Management and Social Sciences I	
ST 515	Experimental Statistics for Engineers I	
ST 516	Experimental Statistics For Engineers II	
ST 517	Applied Statistical Methods I	
ST 518	Applied Statistical Methods II	
Select one of the following courses:		3
EM/EGR 501	Engineering Leadership and Strategic Change	
COM 530	Interpersonal Communication in Science and Technology Organizations	
COM 527	Seminar in Organizational Conflict Management	
COM 556	Seminar In Organizational Communication	
Select one of the following courses:		3
EM 530	Project Management	
CE 561	Construction Project Management	
EGR 590	Special Topics in Engineering (Engineering Project Management)	
BUS 554	Project Management	
Select one of the following courses:		3
ISE 510	Applied Engineering Economy	
EGR 505	Managerial Finance for Engineers	
CE 567	Risk and Financial Management in Construction	

Concentration Requirements

Code	Title	Hours
Required Courses		15
Select four of the following courses:		12
ISE 725	Foundations of Smart Manufacturing	
ISE 555	Digital Manufacturing	
ISE 515	Manufacturing Process Engineering	
ISE 714	Product Manufacturing Engineering for the Medical Device Industry	
ISE 716	Automated Systems Engineering	
ISE 718	Micro/Nano-Scale Fabrication and Manufacturing	
MAE 517	Advanced Precision Manufacturing for Products, Systems and Processes	
MAE 531	Engineering Design Optimization	

MAE 545	Metrology For Precision Manufacturing	
MSE 500	Modern Concepts in Materials Science	
MSE 539	Advanced Materials	
MSE 540	Processing of Metallic Materials	
MSE 556	Composite Materials	
MSE 580	Materials Forensics and Degradation	
MSE 705	Mechanical Behavior Of Engineering Materials	
MSE/MBA 576	Technology Entrepreneurship and Commercialization I	
MSE/MBA 577	Technology Entrepreneurship and Commercialization II	
ISE 748	Quality Engineering	
Take one of the following courses:		3
MAE 526	Fundamentals of Product Design	
EM 675	Engineering Management Masters Project	
Total Hours		30

Faculty

Director

Brandon M. McConnell, *Interim Director*

Full Professors

Sebastian Heese , *Owens Distinguished Professor of Supply Chain Management*

Jonathan Bohlmann , *Professor of Marketing and Innovation*

John Baugh, *Professor*

Joseph DeCarolis, *Professor*

Jingyan Dong, *Professor*

Shu-Cherng Fang, *Walter Clark Chair Professor and University Alumni Distinguished Graduate Professor*

Yahya Fathi, *Professor*

Rob Handfield, *Bank of America University Distinguished Professor of Operations and Supply Chain Management*

Ola Harrysson, *Edward P. Fitts Distinguished Professor*

Jessica Jameson, *Professor*

Edward Jaselskis, *E.I. Clancy Distinguished Professor*

Russell King, *Foscue Distinguished Professor*

Yuan-Shin Lee, *Professor*

Maria Mayorga, *Professor*

Rohan Shirwaiker, *James T. Ryan Professor*

Julie Swann, *A. Doug Allison Distinguished Professor and Department Head*

Daowen Zhang, *Professor*

Associate Professors

Karen Chen, *Associate Professor*

Adolfo R. Escobedo, *Associate Professor*

Xiaolei Fang, *Associate Professor*

Leila Hajibabai, *Associate Professor*

Tim Horn, *Associate Professor*

Michael Kay, *Associate Professor*

Tim Kraft, *Associate Professor of Operations and Supply Chain Management*

Osman Ozaltin, *Associate Professor of Personalized Medicine*

Daniel Saloni, *Associate Professor*

Jeffrey Stonebraker, *Associate Professor of Operations and Supply Chain Management*

Hong Wan, *Associate Professor*

Don Warsing, *Associate Professor of Operations and Supply Chain Management*

Xu Xu, *Associate Professor*

Assistant Professors

S Mohammad Hosseinian, *Assistant Professor*

Jordan Kern, *Assistant Professor*

Ben Rachunok, *Assistant Professor*

Sara Shashaani, *Assistant Professor*

Renran Tian, *Assistant Professor*

Associate Research Professor

Christopher D. Rock, *Associate Research Professor*

Teaching Professor

Corey Kiassat, *Teaching Professor*

Associate Teaching Professor

Meagan Kittle Autry, *Associate Teaching Professor*

S. Sebnem Ahiska King, *Teaching Associate Professor*

Fred Livingston, *Associate Teaching Professor*

Kanton Reynolds, *Associate Teaching Professor*

Teaching Assistant Professors

Donnie Hale, *Teaching Assistant Professor in Business Analytics*

Nur Ozaltin, *Teaching Assistant Professor*

Professor of the Practice

Steven DelGrosso, *Professor of the Practice*

Doug Morton, *Professor of the Practice*

James Rispoli, *Professor of the Practice*

Emeritus Faculty

Javad Taheri, *Associate Research Professor Emeritus*

Associate and Adjunct Faculty

Edwin Addison, *Adjunct Professor*

Lecturers

Ken Gregory, *Lecturer*

Dan Harris, *Lecturer*

Dan Kempton, *Adjunct Lecturer*

Robert Nunez, *Lecturer*