

Engineering Management (MR): Analytics Concentration

Degree Requirements

Core Requirements

Code	Title	Hours	Counts towards
Required Courses		15	

ISE/OR 501	Introduction to Operations Research		
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Select one of the following courses: 3

ST 513	Statistics for Management and Social Sciences I		
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ST 515	Experimental Statistics for Engineers I		
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ST 516	Experimental Statistics For Engineers II		
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ST 517	Applied Statistical Methods I		
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ST 518	Applied Statistical Methods II		
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Select one of the following courses: 3

EM/EGR 501	Engineering Leadership and Strategic Change		
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COM 530	Interpersonal Communication in Science and Technology Organizations		
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COM 527	Seminar in Organizational Conflict Management		
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COM 556	Seminar In Organizational Communication		
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Select one of the following courses: 3

EM 530	Project Management		
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CE 561	Construction Project Management		
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EGR 590	Special Topics in Engineering (Engineering Project Management)		
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BUS 554	Project Management		
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Select one of the following courses: 3

ISE 510	Applied Engineering Economy		
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EGR 505	Managerial Finance for Engineers		
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CE 567	Risk and Financial Management in Construction		
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Concentration Requirements

Code	Title	Hours	Counts towards
Required Courses		15	

Select four courses below: 12

ISE 519	Database Applications in Industrial and Systems Engineering		
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ISE 535	Python Programming for Industrial & Systems Engineers		
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ISE 537	Statistical Models for Systems Analytics in Industrial Engineering		
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OR/CE 537	Computer Methods and Applications		
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MBA 545	Decision Making under Uncertainty		
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MBA 544	Operations Analysis		
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ST 562	Data Mining with SAS Enterprise Miner		
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ST 563	Introduction to Statistical Learning		
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ST 555	Statistical Programming I		
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ST 558	Data Science for Statisticians		
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DSC 405	Data Wrangling and Web Scraping		
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DSC 406	Exploratory Data Analysis for Big Data		
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DSC 410	Data Internship Preparation for Social Impact	
DSC 412	Exploring Machine Learning	
DSC 495	Special Topics in Data Science	
DSC 595	Graduate Special Topics in Data Science	
Students may count up to 3 credit hours from DSC prefix courses (data science), 400+ level or higher, toward this concentration.		
Select one of the following courses:		3
EM 675	Engineering Management Masters Project	
ISE 677	Industrial Engineering Projects	
MBA 559	Business Analytics Practicum	
Total Hours		30

Faculty

Director

Brandon M. McConnell, *Interim Director*

Full Professors

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

John Baugh, *Professor*

Joseph DeCarolis, *Professor*

Jingyan Dong, *Professor*

Yahya Fathi, *Professor*

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*

Daowen Zhang, *Professor*

Associate Professors

Karen Chen, *Associate Professor*

Adolfo R. Escobedo, *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*

Assistant Professors

Xiaolei Fang, *Assistant Professor*

Leila Hajibabai, *Assistant Professor*

Associate Research Professor

Christopher D. Rock, *Associate Research 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 Professor

Nur Ozaltin, *Teaching Assistant Professor*

Professor of the Practice

Doug Morton, *Professor of the Practice*

James Rispoli, *Professor of the Practice*

Michael Spano, *Professor of Practice*

Emeritus Faculty

Javad Taheri, *Associate Research Professor Emeritus*

Associate and Adjunct Faculty

Edwin Addison, *Adjunct Professor*

Lecturers

Steven DelGrosso, *Lecturer*

Dan Harris, *Lecturer*

Dan Kempton, *Adjunct Lecturer*

Robert Nunez, *Lecturer*