

# Engineering Management (MR): Analytics Concentration

## Degree Requirements

### Core Requirements

Code	Title	Hours
<b>Required Courses</b>		<b>15</b>
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
<b>Required Courses</b>		<b>15</b>
Select four courses below:		12
ISE 519	Database Applications in Industrial and Systems Engineering	
ISE 535	Python Programming for Industrial & Systems Engineers	
ISE 537	Statistical Models for Systems Analytics in Industrial Engineering	
OR/CE 537	Computer Methods and Applications	
MBA 545	Decision Making under Uncertainty	
MBA 544	Operations Analysis	
ST 562	Data Mining with SAS Enterprise Miner	
ST 563	Introduction to Statistical Learning	
ST 555	Statistical Programming I	
ST 558	Data Science for Statisticians	

DSC 405	Data Wrangling and Web Scraping	
DSC 406	Exploratory Data Analysis for Big Data	
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	
<b>Total Hours</b>		<b>30</b>

## 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*

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## 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*

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## Assistant Professors

S Mohammad Hosseinian, *Assistant Professor*

Jordan Kern, *Assistant Professor*

Ben Rachunok, *Assistant Professor*

Sara Shashaani, *Assistant Professor*

Renran Tian, *Assistant Professor*

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## Associate Research Professor

Christopher D. Rock, *Associate Research Professor*

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## Teaching Professor

Corey Kiassat, *Teaching Professor*

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## 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*

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## Teaching Assistant Professors

Donnie Hale, *Teaching Assistant Professor in Business Analytics*

Nur Ozaltin, *Teaching Assistant Professor*

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## Professor of the Practice

Steven DelGrosso, *Professor of the Practice*

Doug Morton, *Professor of the Practice*

James Rispoli, *Professor of the Practice*

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## Emeritus Faculty

Javad Taheri, *Associate Research Professor Emeritus*

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## Associate and Adjunct Faculty

Edwin Addison, *Adjunct Professor*

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## Lecturers

Ken Gregory, *Lecturer*

Dan Harris, *Lecturer*

Dan Kempton, *Adjunct Lecturer*

Robert Nunez, *Lecturer*