

# Engineering Management (MR): Health and Human Systems 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         |
| 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> |
| ISE 521                               | Healthcare Systems Performance Improvement II |           |
| Select four of the following courses: |   | 12        |
| ISE 520                               | Healthcare Systems Performance Improvement I  |           |
| ISE/OR 525                            | Medical Decision Making                       |           |
| ISE 533                               | Service Systems Engineering                   |           |
| ISE 547                               | Applications of Data Science in Healthcare    |           |
| ISE 562                               | Simulation Modeling                           |           |
| ISE 560                               | Stochastic Models in Industrial Engineering   |           |
| TE 533                                | Lean Six Sigma Quality                        |           |
| ISE 511                               | Supply Chain Economics and Decision Making    |           |
| ISE 541                               | Occupational Safety Engineering               |           |

ISE 544 Occupational Biomechanics

**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*

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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*