# Operations Research (MS)

## Degree Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Required Courses</strong></td>
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<tr>
<td></td>
<td><strong>Requirement A Courses</strong></td>
<td>19</td>
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<tr>
<td>OR 601</td>
<td>Seminar in Operations Research</td>
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<tr>
<td>OR 695</td>
<td>Master's Thesis Research</td>
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<td><strong>Requirement B Courses</strong></td>
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<tr>
<td>OR 505</td>
<td>Linear Programming</td>
<td></td>
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<tr>
<td>OR 506</td>
<td>Algorithmic Methods in Nonlinear Programming</td>
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<tr>
<td>OR 709</td>
<td>Dynamic Programming</td>
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<td><strong>Requirement C Courses</strong></td>
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<tr>
<td>OR 501</td>
<td>Introduction to Operations Research</td>
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<tr>
<td>OR 504</td>
<td>Introduction to Mathematical Programming</td>
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<tr>
<td>or OR 505</td>
<td>Linear Programming</td>
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<tr>
<td>CSC 505</td>
<td>Design and Analysis Of Algorithms</td>
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<td>OR 506</td>
<td>Algorithmic Methods in Nonlinear Programming</td>
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<tr>
<td>ST 516</td>
<td>Experimental Statistics For Engineers II</td>
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<tr>
<td>OR 531</td>
<td>Dynamic Systems and Multivariable Control I</td>
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<tr>
<td>OR 537</td>
<td>Computer Methods and Applications</td>
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<tr>
<td>MA/ST 546</td>
<td>Probability and Stochastic Processes I</td>
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<td>OR 560</td>
<td>Stochastic Models in Industrial Engineering</td>
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<tr>
<td>OR 562</td>
<td>Simulation Modeling</td>
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<td>OR 706</td>
<td>Nonlinear Programming</td>
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<td>OR 708</td>
<td>Integer Programming</td>
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<tr>
<td>OR 709</td>
<td>Dynamic Programming 1</td>
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<tr>
<td>MA/ST 747</td>
<td>Probability and Stochastic Processes II</td>
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<td>OR 760</td>
<td>Applied Stochastic Models in Industrial Engineering</td>
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<tr>
<td>OR 761</td>
<td>Queues and Stochastic Service Systems</td>
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<tr>
<td>OR 762</td>
<td>Computer Simulation Techniques</td>
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<td>OR 772</td>
<td>Stochastic Simulation Design and Analysis</td>
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<td></td>
<td><strong>Elective Courses</strong></td>
<td>12</td>
</tr>
</tbody>
</table>
|            | *Elective Courses* that will be applied to reach 30 credit hours will be determined in conjunction with the academic committee. 

### Professors

- Kristin Barletta
- John W. Baugh
- Rada Yuryevna Chirkova
- Joseph F. DeCarolis
- Umut Dur
- Shu-Cherng Fang
- Yahya Fathi
- Subhashis Ghoshal
Robert B. Handfield
Christopher Graham Healey
Hans Sebastian Heese
Ilse Ipsen
Kazufumi Ito
Jeffrey A. Joines
Carl Timothy Kelley
Russell E. King
Zhilin Li
George F. List
Ning Lu
Louis A. Martin-Vega
Maria A. Mayorga, Director & Goodnight Distinguished Chair in Operations Research
Negash G. Medhin
Rainer Mueller
Tao Pang
Harry G. Perros
William M. Rand
Ranji S. Ranjithan
Michael A. Rappa
Joseph P. Roise
George N. Rouskas
Munindar P. Singh
Ralph C. Smith
Matthias F.M. Stallmann
Julie LeAnne Swann
Hien T. Tran
Yannis Viniotis
Mladen Alan Vouk
Wenye Wang
Fen Wu
Zhaobang Zeng
Dmitry V. Zenkov

Associate Professors
Jacob J. Adams
Adolfo Raphael Escobedo
Zhishan Guo
Ali Hajibabaie
Arnav Jhala
Michael G. Kay
Eda Kemahlioglu-Ziya
Min J. King
Timothy C. Kraft
Yunan Liu
Osman Ozaltin
Andrew Papanicolaou
David Papp
Anderson de Queiroz
Thomas W. Reiland
Charles E. Smith
Hong Wan
Donald P. Warsing

Assistant Professors
Leila Hajibabaie Dizaji
Xiaolei Fang
Daniela S. Jones
Jordan Kern
S. Sebnem Ahiska King
Shawn Mankad
Benjamin Rachunok
Sara Shashaani
Wentao Tang
Zhuoting Yu
Mengmeng Zhu

Research Assistant Professor
Brandon McConnell
Emeritus Faculty

Peter Bloomfield
Julie S. Ivy
Carl Timothy Kelley
Harry G. Perros