Operations Research
(PhD)

Degree Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td><strong>Required Courses</strong></td>
<td>17</td>
<td></td>
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<tr>
<td><strong>Requirement A Course</strong></td>
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<tr>
<td>OR 801</td>
<td>Seminar in Operations Research</td>
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<tr>
<td><strong>Requirement B Course</strong></td>
<td>Select one of the following:</td>
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<tr>
<td>OR 505</td>
<td>Linear Programming</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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<tr>
<td><strong>Requirement C Courses</strong></td>
<td>Select four of the following:</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 ¹</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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<tr>
<td>OR 506</td>
<td>Algorithmic Methods in Nonlinear Programming ¹</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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<tr>
<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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<tr>
<td>OR 706</td>
<td>Nonlinear Programming</td>
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<tr>
<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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<tr>
<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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<tr>
<td>OR 772</td>
<td>Stochastic Simulation Design and Analysis</td>
<td></td>
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<tr>
<td><strong>Elective Courses</strong></td>
<td>6-55</td>
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</table>

*“Elective Courses” are determined in conjunction with the academic committee to meet the 72 total credit hours*

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1. OR 505, OR 506, and OR 709 cannot be double counted toward "Requirement C" courses if already used toward "Requirement B" courses.

2. "Elective Courses" cannot be double counted if already used to fulfill requirements "A-C" courses

**Full Professors**

John W. Baugh

Rada Yuryevna Chirkova

Do Young Eun

Shu-Cherng Fang

Yahya Fathi

Subhashis Ghoshal

Robert B. Handfield

Robert E. Hartwig

Christopher Graham Healey

Hans Sebastian Heese

Ilse Ipsen

Kazufumi Ito

Julie S. Ivy

Jeffrey A. Joines

Carl Timothy Kelley

Russell E. King

Zhilin Li

George F. List

Min Liu

Ning Lu

Louis A. Martin-Vega

Maria A. Mayorga

Negash G. Medhin

Arne Nilsson

Tao Pang

Harry G. Perros

Ranji S. Ranjithan

Michael A. Rappa

Joseph P. Roise

George N. Rouskas

Nagiza F. Samatova

Carla D. Savage

Munindar P. Singh

Ralph C. Smith

Matthias F.M. Stallmann

Julie LeAnne Swann

Hien T. Tran

Yannis Viniotis

Miaden Alan Vouk
Wenye Wang
Fen Wu
Zhaobang Zeng
Dmitry V. Zenkov

Associate Professors
Jacob James Adams
Kristin Anne Barletta
Joseph F. DeCarolis
Min Jeong Kang
Michael G. Kay
Eda Kemahlioglu-Ziya
Yunan Liu
Osman Yalin Ozaltin
William Michael Rand
Thomas W. Reiland
Charles Eugene Smith
Hong Wan
Donald P. Warsing

Assistant Professors
Leila Hajibabai Dizaji
Xiaolei Fang
Jordan Kern
Timothy Charles Kraft
David Papp
Sara Shashaani
Mengmeng Zhu

Practice/Research/Teaching Professors
Billy L. Edge
Daniela Sofia Jones
David Lee Lubkeman
Brandon Mark McConnell
Javad Taheri

Emeritus Faculty
Peter Bloomfield
Stephen L. Campbell
Thom Hodgson

Adjunct Faculty
Brian Denton
Mihail Devetsikiotis
Patricia L. Hersh
Simon M. Hsiang
Anderson Rodrigo de Queiroz
Ting Yu