# Operations Research (PhD)

## Degree Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
<th>Counts towards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Required Courses</strong></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td></td>
<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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<td></td>
<td><strong>Requirement B Course</strong></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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<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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<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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<td>OR 531</td>
<td>Dynamic Systems and Multivariable Control</td>
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<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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</tbody>
</table>

**Elective Courses** 6-55

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

**Total Hours** 23-72

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

## Professors

Kristin Barletta
John W. Baugh
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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  
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Rainer Mueller  
Tao Pang  
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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  

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

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Adolfo Raphael Escobedo  
Zhishan Guo  

Emeritus Faculty  
Peter Bloomfield  
Julie S. Ivy
Carl Timothy Kelley

Harry G. Perros