## Operations Research (PhD)

### Degree Requirements

<table>
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<tr>
<th>Code</th>
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<th>Hours</th>
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<td><strong>Required Courses</strong></td>
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#### Requirement A Course
- OR 801 Seminar in Operations Research

#### Requirement B Course
Select one of the following:
- OR 505 Linear Programming
- OR 506 Algorithmic Methods in Nonlinear Programming
- OR 709 Dynamic Programming

#### Requirement C Courses
Select four of the following:
- OR 501 Introduction to Operations Research
- OR 504 Introduction to Mathematical Programming
  - or OR 505 Linear Programming
- CSC 505 Design and Analysis Of Algorithms
- OR 506 Algorithmic Methods in Nonlinear Programming
  - 1
- ST 516 Experimental Statistics For Engineers II
- OR 531 Dynamic Systems and Multivariable Control I
- OR 537 Computer Methods and Applications
- MA/ST 546 Probability and Stochastic Processes I
- OR 560 Stochastic Models in Industrial Engineering
- OR 562 Simulation Modeling
- OR 706 Nonlinear Programming
- OR 708 Integer Programming
- OR 709 Dynamic Programming
- MA/ST 747 Probability and Stochastic Processes II
- OR 760 Applied Stochastic Models in Industrial Engineering
- OR 761 Queues and Stochastic Service Systems
- OR 762 Computer Simulation Techniques
- OR 772 Stochastic Simulation Design and Analysis

#### 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

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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.

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