# **Operations Research**

Operations Research (OR) is a graduate program of an interdisciplinary nature, governed by an administrative board and the program committee, and administered through the office of the program director.

# **Master's Degree Requirements**

The Master of Operations Research degree is a terminal graduate degree for students who seek careers as OR practitioners in either the private or public sector. The M.S. degree is designed to prepare students for careers in research and development.

### **Doctoral Degree Requirements**

The Ph.D. degree is intended for students to be research scientists in industry or teachers and researchers in academia. This degree requires a minimum of 72 hours of graduate credit beyond the bachelor's degree, including coursework in major and minor areas of concentration together with credit for doctoral research and dissertation preparation. A departmental written qualifying examination is required. For students who have completed a Master's degree from another institution prior to joining the Ph.D. program, a minimum of 54 hours of additional graduate credit are required.

# **Student Financial Support**

Both teaching and research assistantships are available to qualified applicants. Award priority is given to Ph.D. then M.S. applicants. Outstanding students who are U.S. citizens and who shall be enrolled in the NC State Graduate School for the first time are eligible for the Engineering Dean's Graduate Fellowship Program.

#### More Information

Operations Research Program Website (http://www.or.ncsu.edu/)

# **Admission Requirements**

Applications are accepted from undergraduate majors in all technical disciplines. Applicants should have had at least four math courses beyond calculus (e.g., courses in differential equations, linear algebra, probability and statistics, and mathematical analysis). Knowledge of a computer programming language is recommended, but not required. GRE is optional (though highly encouraged) for students applying with a degree from a US institution in a related major and is required otherwise.

# **Applicant Information**

### **Operations Research (MS and PhD)**

• Delivery Method: On-Campus

• Entrance Exam: GRE - exceptions apply, see above

• Interview Required: None

#### Operations Research (MR)

• Delivery Method: On-Campus, Online, Hybrid

• Entrance Exam: GRE - exceptions apply, see above

• Interview Required: None

# **Application Deadlines**

• Fall: March 1 (Aid); June 25 (Adm. Only)

Spring: November 25
Summer 1: March 25
Summer 2: May 10

#### **Degrees**

- Operations Research (MR) (http://catalog.ncsu.edu/graduate/ interdisciplinary/operations-research/operations-research-mr/)
- Operations Research (MS) (http://catalog.ncsu.edu/graduate/ interdisciplinary/operations-research/operations-research-ms/)
- Operations Research (PhD) (http://catalog.ncsu.edu/graduate/ interdisciplinary/operations-research/operations-research-phd/)
- Operations Research (Minor) (http://catalog.ncsu.edu/graduate/ interdisciplinary/operations-research/operations-research-minor/)

#### **Professors**

Kristin A. Barletta

John W. Baugh

Rada Yuryevna Chirkova

Huaiyu Dai

Joseph DeCarolis

**Umut Dur** 

Shu-Cherng Fang

Yahya Fathi

Subhashis Ghoshal

Robert B. Handfield

Christopher Graham Healey

Hans Sebastian Heese

Ilse Ipsen

Jeffrey A. Joines

Russell E. King

Zhilin Li

George F. List

Edgar Lobaton

Ning Lu

Louis A. Martin-Vega

Maria A. Mayorga, *Director & Goodnight Distinguished Chair in Operations Research* 

Negash G. Medhin

Rainer Mueller

Tao Pang

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 Hajbabaie

Arnav Jhala

Michael G. Kay

Eda Kemahliglu-Ziya

Min J. King

Timothy C. Kraft

Osman Ozaltin

Andrew Papanicolaou

David Papp

Anderson de Queiroz

Thomas W. Reiland

Charles E. Smith

Hong Wan

Donald P. Warsing

### **Assistant Professors**

Chao Chen

Leila Hajibabai Dizaji

Xiaolei Fang

Seyedmohammadhossein Hosseinian

Hangjie Ji

Daniela S. Jones

Jordan Kern

S. Sebnem Ahiska King

Shawn Mankad

Md Abdul Quddus

Benjamin Rachunok

Sara Shashaani

Wentao Tang

Renran Tian

Zhuoting Yu

Mengmeng Zhu

#### **Research Assistant Professor**

Brandon M. McConnell

# **Adjunct Associate Professor**

Yunan Liu

### **Emeritus Faculty**

Peter Bloomfield

Julie S. Ivy

Carl Timothy Kelley

Harry G. Perros