

Naveen Jindal School of Management

Doctor of Philosophy Programs

Degree Requirements

At the Naveen Jindal School of Management (JSOM), each doctoral candidate is required to complete a minimum of 75 semester credit hours of applicable graduate work in specific program areas beyond the baccalaureate degree and prerequisites. Throughout their programs, PhD students are encouraged to participate in ongoing research activities and to develop their own lines of research. Research activities include research seminars, directed reading courses and research assistantships. Research supervision is available in the areas of Accounting, Finance and Managerial Economics, Information Systems, International Management Studies, Marketing, and Operations Management.

Doctor of Philosophy in International Management Studies

75 semester credit hours minimum beyond the baccalaureate degree

Faculty

FACG> jsom-international-management-studies-phd

Professors: Gregory G. Dess, Seung-Hyun Lee, Zhiang (John) Lin, Mike W. Peng, Cuili Qian, Riki Takeuchi, Wing Kwong (Eric) Tsang, Jun Xia

Associate Professors: Lívia Markóczy, H. Dennis Park

Assistant Professors: Khai Chiong, Kirti Sinha, Junfeng Wu

Associate Professors Emeriti: J. Richard Harrison, Jane Salk

Clinical Professors: Britt Berrett, Shawn Carraher, Larry Chasteen, Marilyn Kaplan, Diane S. McNulty, Jeff Weekley, Habte Woldu, Laurie L. Ziegler

Professor of Practice: Rajiv Shah

Overview

This program is for individuals seeking the most advanced academic degree with an emphasis on International Management Studies (IMS). Housed in the Organizations, Strategy, and International Management (OSIM) Area, this program is designed to prepare graduates to assume business school faculty positions in universities.

Students may enter the IMS doctoral program after previous graduate training or directly from undergraduate programs. Desirable educational backgrounds include graduate training in any area of business administration, and graduate or undergraduate degrees in areas such as business administration, economics, sociology, psychology, political science, mathematics, and engineering, although students from other areas are also considered.

All students must take PhD courses that are offered in each of the first two years in the program. Students must satisfy a first-year research paper requirement which will be due at the end of the first year (also known as the preliminary exam). Students also must pass the qualifying (comprehensive in nature) examination, which is administered at the end of the second year of study when all the relevant course requirements have been satisfied. The qualifying examination is intended to assess the student's mastery of the basic theories and methodologies central to the program and to evaluate the student's potential to do original research in an area of specialization. In addition, students must write research papers at the end of their second year. The first and second year papers should be based on two different research projects. All tenure-track and tenured faculty will be involved in evaluating these papers. Students will not be allowed to continue in the program should they fail to pass these evaluations.

After passing the qualifying exam and the second-year paper, each student writes a dissertation proposal, which is defended before a faculty committee appointed in consultation with the dissertation chair. This committee also serves as the supervising committee for the dissertation after the proposal is approved.

Course Requirements

Core Courses: 36 semester credit hours

[BPS 7300](#) Advanced Strategic Management Seminar I

[BPS 7301](#) Advanced Strategic Management Seminar II

[BPS 7303](#) Doctoral Teaching and Writing Seminar

[ENTP 7300](#) Foundations of Entrepreneurship

[ENTP 7301](#) Technology, Innovation and Entrepreneurship

[IMS 7301](#) International Business

[OB 7300](#) Organization Theory

[OB 7302](#) Organization Behavior

[OB 7310](#) Group and Intergroup Processes

[OB 7312](#) Social Network Theory

[OB 7313](#) Organizational Decision Making

[MAS 8V00](#) Special Topics in Management Science [Teaching Practicum]

Research Methods: 15 semester credit hours

[BPS 7302](#) Research Methodology

[ECON 6306](#) Applied Econometrics

[EPPS 6313](#) Introduction to Quantitative Methods

[EPPS 6316](#) Applied Regression

[OB 7306](#) Macro-Organizational Empirical Investigation

Dissertation: minimum of 12 semester credit hours

The PhD degree is conferred when the dissertation is successfully defended.

The remaining requirements beyond the core and research method courses are made up of dissertation hours, specialty courses, research and independent study hours as approved by a faculty committee appointed to guide and evaluate each student's doctoral dissertation.

Doctor of Philosophy in Management Science

75 semester credit hours minimum beyond the baccalaureate degree

Faculty

FACG> jsom-management-science-phd

Professors: Ashiq Ali, Alain Bensoussan, Gary Bolton, Metin Çakanyildirim, Huseyin Cavusoglu, Jianqing Chen, William M. Cready, Milind Dawande, Gregory G. Dess, Umit G. Gurun, Dorothée Honhon, Kyle Hyndman, Varghese S. Jacob, Sanjay Jain, Ganesh Janakiraman, Elena Katok, Dmitri Kuksov, Nanda Kumar, Seung-Hyun Lee, Stanley Liebowitz, Zhiang (John) Lin, Sumit K. Majumdar,

Stanimir Markov, Amit Mehra, Syam Menon, Vijay S. Mookerjee, B. P. S. Murthi, Vikram Nanda, Özalp Özer, Mike W. Peng, Hasan Pirkul, Cuili Qian, Suresh Radhakrishnan, Srinivasan Raghunathan, Ram C. Rao, Brian Ratchford, Michael J. Rebello, Gil Sadka, Sumit Sarkar, Suresh P. Sethi, Kathryn E. Stecke, Wing Kwong (Eric) Tsang, Jun Xia, Ying Xie, Harold Zhang, Zhiqiang (Eric) Zheng

Associate Professors: Mehmet Ayvaci, Nina Baranchuk, Zhonglan Dai, Rebecca Files, Michael Hasler, Bin Hu, Surya N. Janakiraman, Robert L. Kieschnick Jr., Atanu Lahiri, Jun Li, Ningzhong Li, Maria Loumiotis, Livia Markóczy, Ramachandran (Ram) Natarajan, Naim Bugra Ozel, H. Dennis Park, Anyan Qi, Young U. Ryu, Serdar Simsek, Harpreet Singh, Upender Subramanian, Shaojie Tang, Shouqiang Wang, Kelsey D. Wei, Han (Victor) Xia, Yexiao Xu, Alejandro Zentner, Jieying Zhang, Yuan Zhang, Zhe (James) Zhang, Feng Zhao, Yibin Zhou

Assistant Professors: Khai Chiong, Rafael Copat, Soraya Fatehi, Andrew Frazelle, Ying Huang, Joonhwi Joo, Sora Jun, Jason Kautz, Tongil Kim, Sheen Levine, Meng Li, Christopher Mace, Samir Mamadehussene, Jean-Marie Meier, Zixuan Meng, Radha Mookerjee, Jedson Pinto, Ignacio Rios Uribe, Alejandro Rivera Mesias, Alessio Saretto, Simon Siegenthaler, Shujing Sun, Xiaoxiao Tang, Shervin Tehrani, Ashwin Venkataraman, Christian Von-Drathen, Guihua Wang, Hongchang Wang, Pingle Wang, Junfeng Wu, Steven Xiao

Associate Professor Emeriti: J. Richard Harrison, Jane Salk, David J. Springate

Clinical Professors: Abhijit Biswas, William Hefley, Peter Lewin, Divakar Rajamani

Overview

The PhD Program in Management Science at the Naveen Jindal School of Management (JSOM) is characterized by a high ratio of research faculty to students, which fosters close working relationships. Core and elective courses provide the students with a thorough understanding of management principles. Coursework incorporates a broad business outlook into the study of theory and practice. A sequence of PhD seminars exposes students to traditional and emerging research issues. Students have the opportunity to be involved in ongoing research projects under the mentorship of experienced faculty. We emphasize involving students in research early in their graduate careers. The close interaction with faculty members enables students to learn to identify and develop research ideas and create their own research agenda. Students also develop their teaching competence under faculty mentorship by teaching organized classes.

The course of study for the PhD in Management Science consists of three phases. First is attaining a background in business concepts. Second is satisfying the requirements for doctoral proficiency. Third is the dissertation. Each area of study - Accounting, Finance, Information Systems, Marketing, and Operations Management - determines the specific requirements for the three phases. Details can be obtained from the Director of the PhD programs in the Jindal School of Management.

Incoming students complete a two-week math refresher before classes begin in August in preparation for fall classes. Students admitted into the program typically devote two years to the

doctoral proficiency coursework and research projects. PhD students take a written preliminary exam at the end of their first year in the program over a set of core methodology courses. They then take a qualifying (comprehensive in nature) exam that they must pass before admission for candidacy for the doctorate degree. After passing the qualifying exam, each student develops his or her dissertation research area, which is usually completed over the next two years.

Doctoral proficiency encompasses courses in research methods, electives or a specialization, doctoral seminars, and a written and oral qualifying examination.

Course Requirements

Required core courses: 18 semester credit hours

[BPS 7303](#) Doctoral Teaching and Writing Seminar

[MAS 8V00](#) Special Topics in Management Science [Teaching Practicum]

[MECO 6345](#) Advanced Managerial Economics

[MECO 6350](#) Game Theory

[MECO 7312](#) Advanced Statistics and Probability (or a similar course such as [STAT 5352](#))

[OPRE 7353](#) Optimization

Secondary Required Core Courses: minimum of 9 semester credit hours

[MECO 6320](#) Econometrics (or [ECON 6309](#) Econometrics I)

[MECO 6360](#) Topics in Industrial Organization

[MECO 7311](#) Advanced Game Theory

[MECO 7313](#) Applied Econometrics

[MECO 7320](#) Advanced Econometrics (or [ECON 7309](#) Econometrics II)

[OPRE 7310](#) Probability and Stochastic Processes

[OPRE 7311](#) Stochastic Models in Operations Research

[OPRE 7320](#) Optimal Control Theory and Applications

[OPRE 7330](#) Deterministic Models in Operations Research

[OPRE 7343](#) Modern Machine Learning Methods

Remaining requirements beyond the core consist of research courses, electives, independent study and seminars as approved by the program committee appointed to guide and evaluate each student. After completion of the coursework to achieve doctoral proficiency and passing the preliminary exam, the student will take a written qualifying (comprehensive in nature) exam which must be passed before formal admission to candidacy for the doctorate. The student must also orally defend the dissertation proposal before starting the dissertation. Written examination in the area of specialization may also be required.

The focal point of the PhD program is the dissertation. The dissertation is written under the direction of the candidate's committee. Twelve to 24 semester credit hours may be granted for the dissertation toward the minimum 75 semester credit hour requirement for the degree. At a time mutually agreeable with the candidate and the members of the committee, the student will orally defend his or her dissertation to the satisfaction of the committee. A student must pass in order to have the PhD degree conferred.

Accounting Concentration

This program is for individuals seeking training in the most advanced issues, both theoretical and applied, in the field of accounting. It is designed to prepare them primarily for teaching positions in research-oriented universities. Some students may be placed in senior positions in industry, government, or consulting organizations. The program requires hands-on training in accounting research, supported by work in the disciplines of economics, mathematics, psychology and statistics, culminating in a doctoral dissertation.

Finance Concentration

This program is for individuals seeking the most advanced academic degree with an emphasis in finance. It is designed to prepare them for (1) teaching positions in research-oriented universities, (2) senior staff positions in industry or government, or (3) senior positions in consulting organizations. However, the emphasis is on (1). The program consists of coursework in financial management, investments, and money and capital markets, together with work in the supporting areas of economics, mathematics and statistics; it culminates in a doctoral dissertation.

Information Systems Concentration

This program is designed for individuals who seek training in advanced theoretical and applied issues in the field of information systems. The training prepares students for conducting leading-edge research in topics ranging from the design of optimized systems to the effective use of such systems in organizations. Students undergo rigorous training in research methodologies as well as in the design of information systems. The research conducted is often interdisciplinary in nature, and is characterized by strong analytical modeling of new and emerging issues in information technology creation and management. The program prepares students mainly for academic positions in research universities. Some students may be placed in research positions in industry,

government, or consulting organizations.

Marketing Concentration

The purpose of the PhD Program in Management Science with a marketing concentration is to train researchers capable of dealing with the most advanced issues, both theoretical and applied, in the field of marketing. Universities as well as major companies with marketing orientation aggressively recruit PhDs with strong theoretical and research training in marketing. Graduates will have rigorous training in disciplinary areas and research methodology. They will have knowledge of the various research streams in marketing, will have developed a research specialization and a clear perspective on management issues.

Operations Management Concentration

Operations Management emphasizes the development of models, methods, applications and algorithms as they apply to problems in manufacturing and services. All students will be exposed to deterministic and stochastic modeling and will have the option of applying and/or developing these and new methods to solve problems in their selected topics. The goal of the doctoral program in Operations Management is to educate future practitioners and researchers in the concepts and analytical techniques needed to understand and advance scientific solutions to the problems currently faced by operations managers.

Research

The faculty of the school makes intellectual contributions in two areas: fundamental scholarship that advances theory and practice, and applied scholarship that focuses on practical issues. The fundamental work includes traditional basic research as well as applied research that defines new areas of practice and provides general frameworks that address a wide range of application problems. The applied scholarship provides "how-to" frameworks for skilled practitioners, uses demonstration cases to show how theories can be applied, and defines new areas of application for existing tools and techniques.

Updated: 2022-02-12 16:00:48 v3.f40580