Naveen Jindal School of Management

Master of Science in Financial Engineering and Risk Management

36 semester credit hours minimum

Faculty


Clinical Professor: John Barden

Associate Professors: Zhonglan Dai, Rebecca Files, Surya N. Janakiraman, Ningzhong Li, Ramachandran (Ram) Natarajan, Naim Bugra Ozel, Gil Sadka, Jieying Zhang, Yuan Zhang, Yibin Zhou

Clinical Associate Professor: Lale Guler

Assistant Professors: Nathan Goldman, Ying Huang, Meng Li, Maria Loumioti, Nir Yehuda

Clinical Assistant Professor: John Gamino

Senior Lecturers: Tiffany A. Bortz, Richard Bowen, Mary Beth Goodrich, Jennifer G. Johnson, Chris Linsteadt, Joseph Mauriello, Anindita Roy Bardhan, Steven Solcher, Amy L. Troutman, Kathy Zolton

Degree Requirements

The Master of Science in Financial Engineering and Risk Management (MS FERM) at the Naveen Jindal School of Management is a STEM (Science, Technology, Engineering and Mathematics) cohort degree program that requires a minimum of 36 semester credit hours. Students learn the quantitative skills required to analyze financial information, engineer financial products, identify risks, and manage risks. The program is designed for students with or without previous educational background in finance, but with a proclivity toward more quantitative approaches to managerial issues. Special tuition, fees and admissions requirements apply and the program is supported entirely by participant tuition/fees.

The program provides the student with education and knowlegde to pursue a career in financial data analytics as well as to pass the Financial Risk Manager (FRM) exam, the Enterprise Risk Management Certified Professional (ERMCP) exam, or the RIMS-CRMP exam.

To apply for this degree program, an undergraduate degree is required (all majors are considered). Students must maintain a 3.0 grade-point average (GPA) in both core courses and in aggregate courses to qualify for the MS degree.
Prerequisites

Students pursuing the Master of Science in Financial Engineering and Risk Management degree program are required to have completed course work in calculus, linear algebra, probability and statistics, and programming with a grade of "B" or better. Applicants who have not satisfied these requirements will need to satisfy these requirements prior to beginning their program of course work. The program director will work with such candidates on different ways to satisfy these requirements. Degree credit is not earned for program prerequisites, however, the grade achieved in prerequisites will count toward the student's grade-point average (GPA).

Course Requirements

Core Courses: 36 semester credit hours

Students take courses from the following set of courses with approval of the program director.

- **FERM 6301** Financial Accounting Information and Analysis
- **FERM 6303** Financial Assets and Market
- **FERM 6305** Introduction to Mathematics in Finance
- **FERM 6306** Advanced Mathematics in Finance
- **FERM 6310** Financial Information and Analytics
- **FERM 6311** Financial Technology
- **FERM 6320** Statistical Methods for Financial Analytics
- **FERM 6321** Advanced Statistical Methods for Financial Analytics
- **FERM 6330** Insurance and Risk Management
- **FERM 6331** Risk Evaluation and Management
- **FERM 6332** Financial Risk Management
- **FERM 6333** Enterprise Risk Management
- **FERM 6V98** Finance Internship
- **FERM 6V99** Special Topics in Finance