**Naveen Jindal School of Management**

**Master of Science in Financial Engineering and Risk Management**

*36 semester credit hours minimum*

**Faculty**

**Professors:** Ashiq Ali, William M. Cready, Umit G. Gurun, Suresh Radhakrishnan, sxm079200  
**Clinical Professors:** John Barden, John Gamino  
**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  
**Assistant Professors:** Meng Li, Maria Loumioti  
**Senior Lecturers:** Tiffany A. Bortz, Richard Bowen, Mary Beth Goodrich, Jennifer G. Johnson, Chris Linsteadt, Joseph Mauriello, Steven Solcher, 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. This Fintech program provides students with the practical and theoretical knowledge needed to pursue careers involving financial data analytics, financial technology, or risk management. 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. Students completing this program will have the knowledge necessary to take the Certified Corporate Financial Planning & Analysis Professional exam, the RMA Credit Risk Certification, the Financial Risk Manager (FRM) exam, the Enterprise Risk Management Certified Professional (ERMCP) exam, or similar finance related certifications. While the full-time program is a cohort program, a part-time program for working professionals is also offered. Both programs only begin each fall. Special tuition, fees and admissions requirements apply and the program is supported entirely by participant tuition/fees. 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 all graduate courses taken in the degree program, excluding program prerequisites 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/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
Program director develops a program of study for students each term based on courses listed below.

FERM 6301  Financial Accounting Information and Analysis
FERM 6302  Financial Forecasting, Planning 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 6334  Financial Applications of Machine Learning
FERM 6V98  Financial Engineering and Risk Management Internship
FERM 6V99  Special Topics in Financial Engineering and Risk Management