Naveen Jindal School of Management

Master of Science in Business Analytics

36 semester credit hours minimum

Faculty


Professor Emeritus: Dale Osborne


Associate Professors: Nina Baranchuk, Norris Bruce, Huseyin Cavusoglu, Jianqing Chen, Zhonglan Dai, Rebecca Files, Xianjun Geng, J. Richard Harrison, Dorothée Honhon, Kyle Hyndman, Surya N. Janakiraman, Robert L. Kieschnick Jr., Lívia Markóczy, Syam Menon, Toyah Miller, Alp Muharremoglu, Ramachandran (Ram) Natarajan, Valery Polkovnichenko, Orlando C. Richard, Young U. Ryu, Gil Sadka, Jane Salk, Harpreet Singh, David J. Springate, Upender Subramanian, Kelsey D. Wei, Jun Xia, Ying Xie, Yexiao Xu, Alejandro Zentner, Yuan Zhang, Feng Zhao, Yibin Zhou

Clinical Associate Professors: Sonia Leach, Carolyn Reichert, Avanti P. Sethi, Kelly Slaughter, James Szot, Mark Thouin, John McClain Watson

Assistant Professors: Mehmet Ayvaci, Emily Choi, Bernhard Ganglmair, Atanu Lahiri, Sheen Levine, Bin Li, Jun Li, Meng Li, Ningzhong Li, Xiaolin Li, Naim Bugra Ozel, Arzu Ozoguz, Anyan Qi, Alejandro Rivera Mesias, Alessio Saretto, Serdar Simsek, Gonca P. Soysal, Shaojie Tang, Christian Von-Drathen, Malcolm Wardlaw, Han (Victor) Xia, Steven Xiao, Shengqi Ye, Nir Yehuda, Jieying Zhang, Zhe (James) Zhang, Xiaofei Zhao

Clinical Assistant Professors: Shawn Alborz, Athena Alimirzaei, Moran Blueshtein, Judd Bradbury,
John Gamino, Ayfer Gurun, Maria Hasenhuttl, Julie Haworth, Jeffery (Jeff) Hicks, Kristen Lawson, Vance Lewis, Liping Ma, Ravi Narayan, Dawn Owens, Parneet Pahwa, Anastasia V. Shcherbakova, Jeanne Sluder, Nassim Sohaee

**Visiting Assistant Professor:** Lale Guler

**Visiting Clinical Professor:** Kyle Edgington

**Senior Lecturers:** Arthur M. Agulnek, Semiramis Amirpour, Frank Anderson, Anindita Bardhan, Daniel Bochsler, Tiffany A. Bortz, Richard Bowen, Monica E. Brussolo, George DeCourcy, Eugene (Gene) Deluke, Alexander Edsel, Amal El-Ashmawi, Carol Flannery, Mary Beth Goodrich, Thomas (Tom) Henderson, Jennifer G. Johnson, Jackie Kimzey, Chris Linsteadt, Michele Lockhart, Joseph Mauriello, Victoria D. McCrady, Edward Meda, Prithi Narasimhan, Madison Pedigo, Matt Polze, James Richards, Debra Richardson, Margaret Smallwood, Steven Solcher, David Spivey, Luell (Lou) Thompson, Amy L. Troutman, Jeremy Vickers, Robert Wright, Kathy Zolton, Hubert Zydorek

### Degree Requirements

The Master of Science in Business Analytics (MS BUAN) is a STEM (Science, Technology, Engineering and Mathematics) degree program (18-24 months) at the Naveen Jindal School of Management that provides students with a broad foundation in the business intelligence and analytics area. The program includes core courses and the analytics electives organized into different tracks such as decisions and operations analytics, financial analytics, healthcare analytics, IT for analytics, and marketing analytics.

Students must maintain a 3.0 grade point average (GPA) in both core courses and in aggregate courses to qualify for the MS degree.

### Course Requirements

**Core Courses:** 24 semester credit hours from the following

- **BUAN 6312** Applied Econometrics and Time Series Analysis
  or **ECON 6306** Applied Econometrics

- **BUAN 6320** Database Foundations
  or **MIS 6326** Data Management

- **BUAN 6324** Business Intelligence Software and Techniques

- **BUAN 6337** Marketing Predictive Analytics Using SAS

- **BUAN 6390** Analytics Practicum

- **BUAN 6398** Prescriptive Analytics

- **OPRE 6301** Quantitative Introduction to Risk and Uncertainty in Business

Choose one course from the following track-specific courses:

- **FIN 6301** Financial Management
- **HMGT 6320** The American Healthcare System
- **MIS 6308** Systems Analysis and Project Management
- **MKT 6301** Marketing Management
- **OPRE 6302** Operations Management

Analytics Electives: 12 semester credit hours

Students may choose four courses from one or more tracks in the following areas to obtain in-depth analytics knowledge.

**Decisions and Operations Analytics Track**

- **OPRE 6332** Spreadsheet Modeling and Analytics
- **OPRE 6335** Risk and Decision Analysis
- **OPRE 6377** Demand and Revenue Management
- **OPRE 6378** Supply Chain Strategy

**Financial Analytics Track**

- **FIN 6306** Quantitative Methods in Finance
- **FIN 6352** Financial Modeling
- **FIN 6360** Options and Futures Markets
- **FIN 6382** Numerical and Statistical Methods in Finance

**Healthcare Analytics Track**

- **HMGT 6323** Healthcare Informatics
- **HMGT 6325** Healthcare Operations Management
- **HMGT 6327** Electronic Health Records Applications
- **HMGT 6334** Healthcare Analytics

**IT For Analytics Track**

- **BUAN 6335** Organizing for Business Analytics: A Systems Approach
- **BUAN 6345** High Performance Analytics
BUAN 6346 Big Data Analytics
MIS 6309 Business Data Warehousing
MIS 6334 Advanced Business Intelligence with SAS
MIS 6344 Web Analytics
MIS 6373 Social Media and Business
MIS 6380 Data Visualization

Marketing Analytics Track

MKT 6309 Marketing Research
MKT 6323 Database Marketing
MKT 6338 Enterprise Systems and CRM or MKT 6340 Marketing Projects Lab*
MKT 6362 Marketing Models

Other analytics related courses can be approved on a case-by-case basis.

* Program Director approval required.