The Naveen Jindal School of Management, Executive Education combines the best of the school's nationally recognized faculty with a select group of executives to provide an innovative, relevant portfolio of programs. Designed to advance knowledge and skills that improve organizational performance, these programs include both MBA and Master of Science degree programs, as well as certificate programs. Courses are taught on campus, on site or online.

Executive MBA and Master's Degrees

- **Executive MBA (EMBA) Degree Program**
- **Global Leadership Executive MBA (GLEMBA) Degree Program**
- **Graduate Certificates and Degree Programs with an emphasis in Project Management**
- **Graduate Certificates and Degree Programs with an emphasis in Product Lifecycle and Supply Chain Management**
- **Master of Science in Healthcare Management for Physicians**
- **Healthcare Management Executive MBA for Physicians**
- **Executive Education Degree Program in Organizational Behavior and Coaching**
- **Graduate Certificate in Executive and Professional Coaching**
- **Executive Master of Science Degree and Certificate Programs in Systems Engineering and Management (MS-SEM)**
- **Dual MS-SEM/MBA Degree**

Special admission and fee requirements apply to the following programs and courses.

**Executive MBA (EMBA) Program**

*53 semester credit hours minimum*

**Faculty**


**Clinical Professors:** John Barden, Abhijit Biswas, Pamela Foster Brady, Larry Chasteen, Tevfik Dalgic,
Overview

The Executive MBA (EMBA) program prepares experienced professionals for upper management, executive levels, and the C-suite. Based in part on personal executive coaching, the program provides a transformative educational experience that enhances your success and takes your career to a higher level. The 21-month program is 4 class days per month, minimizing disruptions for those with busy schedules. The Executive MBA curriculum enhances individuals' basic business fundamentals and sharpens their decision making skills through strategic frameworks for enterprise transformation. The program includes the America's trip and an international study tour. The ten-day international trip exposes students to corporate and governmental decision makers and provides behind the scenes with one-on-one conversations with corporate leaders.

The EMBA program is supported entirely by participant fees and special admissions requirements apply.

Executive MBA degree programs in the Naveen Jindal School of Management require a core of 30 semester credit hours, along with a set of specially designed elective courses equivalent to 23 semester credit hours, for a total of 53 semester credit hours. The MBA core is comprised of the following courses:

**Executive MBA Core Curriculum: 30 semester credit hours**

- ACCT 6201 Introduction to Financial Accounting
- ACCT 6202 Introduction to Managerial Accounting
- BPS 6310 Strategic Management
- FIN 6301 Financial Management
- IMS 6204 Global Business
- MIS 6302 Information Technology Strategy and Management
- MECO 6303 Business Economics
**MKT 6301** Marketing Management

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

**OPRE 6302** Operations Management

**OB 6301** Organizational Behavior

**Required Courses: 23 semester credit hours**

The following courses, comprising a total of 23 semester credit hours, are currently required in the Executive MBA Program curriculum.

**BPS 6254** Enterprise Transformation

**FIN 6252** Creating Value through Mergers, Acquisitions and Private Equity

**IMS 6252** International Business Management

**BPS 6151** Executive Study Trip - Americas

**IMS 6351** Executive International Study Trip - EMBA

**ACCT 6287** Board Membership, Risk Management and Compliance

**OB 6152** Executive Coaching

**BPS 6256** C-Suite Leadership

**OB 6339** Negotiations and Contracts

**ENTP 6394** Managing Innovation

**BPS 6255** Field Project

**Global Leadership Executive MBA (GLEMBA)**

**Program**

53 semester credit hours minimum

**Faculty**


**Clinical Professors:** John Barden, Pamela Foster Brady, Larry Chasteen, Tevfik Dalgic, Marilyn Kaplan, Peter Lewin, Divakar Rajamani, Daniel Rajaratnam, Habte Woldu, Laurie L. Ziegler

**Associate Professors:** Surya N. Janakiraman, Seung-Hyun Lee, Ramachandran (Ram) Natarajan,
Overview

The Global Leadership Executive MBA (GLEMBA) program is designed for the manager wanting to expand their international business acumen. The first two semesters are about US business fundamentals. The third semester begins with an international retreat as students take a deep dive into four geographic markets. The fourth semester is about entering and operating in new geographic markets and the fifth semester is about leading and executing in those markets. This 21 month program includes: online learning, three campus retreats, one international retreat and a ten-day international study tour. A set degree plan expands the MBA core curriculum with an international curriculum.

The Global Leadership Executive MBA Program curriculum is detailed below and requires a core of 29 semester credit hours, along with a set of specially designed elective courses equivalent to 24 semester credit hours, for a total of 53 semester credit hours.

GLEMBA program is supported entirely by participant fees and special admissions requirements apply. The MBA core is comprised of the following courses:

Executive MBA Core Curriculum: 29 semester credit hours

- **ACCT 6201** Introduction to Financial Accounting
- **ACCT 6202** Introduction to Managerial Accounting
- **BPS 6310** Strategic Management
- **FIN 6301** Financial Management
- **IMS 6204** Global Business
- **MIS 6204** Information Technology for Management
- **MECO 6303** Business Economics
- **MKT 6301** Marketing Management
- **OB 6301** Organizational Behavior
- **OPRE 6301** Quantitative Introduction to Risk and Uncertainty in Business
Required Courses: 24 semester credit hours

The degree plan will be comprised of total 24 semester credit hours from the list below

- **ENTP 6352** International Business Plan
- **FIN 6366** International Financial Management
- **IMS 6151** Global Business Ethics
- **IMS 6212** Global Communication and Negotiations
- **IMS 6213** Global Politics in Business
- **IMS 6214** Global Mergers and Acquisitions
- **IMS 6253** Cross-Cultural Management
- **IMS 6345** Global Leadership
- **IMS 6351** Executive International Study Trip - EMBA
- **IMS 6354** Global Marketing
- **OB 6152** Executive Coaching
- **OPRE 6250** Global Supply Chain Management

Graduate Certificates and Degree Programs with an emphasis in Project Management

The Executive Education Project Management Program is one of the emphasis areas designed to begin with a set of specialization area courses followed by additional business management core courses and leading to either a Master of Science or a Master of Business Administration degree with the chosen emphasis. Upon completion of the project management core courses, students earn a graduate certificate in project management and are prepared to take the Project Management Institute's Project Management Professional (PMP) certification exam. Following completion of the project management core, students may then continue to complete the requirements for the Master of Science or the Master of Business Administration degree.

Project management faculty members have industrial project management, operations management, management consulting, and teaching experience. The program curriculum is delivered both on campus and online. The on-campus program accommodates work and travel schedules by meeting 8 hours per day on one consecutive Thursday, Friday, and Saturday per month. The online program is designed as weekly modules equivalent to one half-day on campus and includes live interaction.

The project management emphasis certificate and degree programs are supported entirely by
participant fees and special admissions requirements apply. Both degree and non-degree seeking students with undergraduate degrees can study towards the Graduate Certificate in Project Management. Potential students are required to complete an application, provide written professional references from 3 people, attend an interview with the program director, and request all universities attended send an official transcript.

Graduate Certificate in Project Management
21 semester credit hours minimum

Faculty
Professor: David L. Ford Jr.
Clinical Professors: Larry Chasteen, Divakar Rajamani, Laurie L. Ziegler
Associate Professor: Orlando C. Richard
Clinical Associate Professor: Carolyn Reichert
Senior Lectures: Maria Hasenhuttl, Jeffery (Jeff) Hicks, James Szot

Overview
The graduate certificate in Project Management is awarded after completion of the project management core courses described below totaling 21 semester credit hours. These courses emphasize a systems approach to project management and follow the lifecycle of a project, integrating relevant topics from multiple knowledge areas rather than presenting topical courses in isolation. This type of learning environment more closely tracks an actual work experience and facilitates learning and application.

Courses Required for Graduate Certificate in Project Management
- MAS 6101 Legal Considerations in Project Management
- OB 6301 Organizational Behavior
- OPRE 6271 Project Overview, Strategic and Process Management
- OPRE 6372 Project Initiation
- OPRE 6373 Project Planning
- OPRE 6374 Project Planning and Execution
- OPRE 6375 Project Execution and Closeout
- OPRE 6376 Advanced Project Management and Simulation

Master of Science in Management and Administrative
Sciences with an emphasis in Project Management

39 semester credit hours minimum

Faculty


Professor Emeritus: Dale Osborne


Clinical Associate Professors: Sonia Leach, Carolyn Reichert, Mark Thouin, John McClain Watson

Assistant Professors: Mehmet Ayvaci, Emily Choi, Rebecca Files, Bernhard Ganglmair, Dorothée Honhon, Elisabeth Honka, Kyle Hyndman, Atanu Lahiri, Sheen Levine, Bin Li, Jun Li, Meng Li, Ningzhong Li, Arzu Ozoguz, Anyan Qi, Alessio Saretto, Harpreet Singh, Gonca P. Soysal, Upender Subramanian, Shaojie Tang, Christian Von-Drathen, Yu Wang, Malcolm Wardlaw, Han (Victor) Xia, Shengqi Ye, Nir Yehuda, Yuanping Ying, Jieying Zhang, Xiaofei Zhao

Clinical Assistant Professors: Hans-Joachim Adler, Shawn Alborz, Athena Alimirzaei, Moran Bluestein, John Gamino, Ayfer Gurun, Vance Lewis, Liping Ma, Ravi Narayan, Dawn Owens, Anastasia V. Shcherbakova

Senior Lecturers: Arthur M. Agulnek, Semiramis Amirpour, Frank Anderson, Anindita Bardhan, Daniel Bochsler, Tiffany A. Bortz, Richard Bowen, Judd Bradbury, Monica E. Brussolo, George DeCourcy, Eugene (Gene) Deluke, Alexander Edsel, Amal El-Ashmawi, Carol Flannery, Mary Beth Goodrich, Maria Hasenhuttl, Jeffery (Jeff) Hicks, Jennifer G. Johnson, Lynn Carl Jones, Jackie Kimzey,
Overview

A Master of Science degree is awarded after the completion of an additional 18 semester credit hours beyond the Project Management Core requirements.

MS MAS in Project Management supplemental curriculum:

- **ACCT 6201** Introduction to Financial Accounting
- **ACCT 6202** Introduction to Managerial Accounting
- **IMS 6370** Seminar in International Operations Management
- **IMS 6371** Seminar in International Strategic Management
- **MECO 6303** Business Economics
- **MIS 6204** Information Technology for Management
- **OPRE 6301** Quantitative Introduction to Risk and Uncertainty in Business

Executive MBA degree with an emphasis in Project Management

*53 semester credit hours minimum*

Faculty


**Professor Emeritus**: Dale Osborne

Overview

The Executive MBA is earned by waiving the Master of Science degree and completing an additional 14 semester credit hours, for a total of 53 semester credit hours. Students must complete the executive core courses listed below to earn the degree.

Additional courses to fulfill requirements for the Executive MBA:

- **BPS 6310** Strategic Management
- **FIN 6301** Financial Management
- **IMS 6204** Global Business
- **MKT 6301** Marketing Management
- **OPRE 6302** Operations Management

Graduate Certificates and Degree Programs with
an emphasis in Product Lifecycle and Supply Chain Management

The graduate certificate and degree programs in Product Lifecycle and Supply Chain Management focus on educating executives and industry sponsored employees by combining theory and practice. It emphasizes the need to understand "the big picture," the importance of renewed focus on product lifecycle from design to disposal, and supply chain from end to end. Students are trained to be effective problem solvers, and to continuously improve product performance and supply chain efficiency.

The program will employ lectures, case studies, site visits, and the use of quantitative and qualitative methods to meet the learning objectives of the program. Students are required to integrate classroom learning with work projects. The program leverages the world-class faculty in the operations management and industry leaders/practitioners to deliver the program. Following completion of the product lifecycle and supply chain management core, students may then continue to complete the requirements for the Master of Science in Supply Chain Management or the Master of Business Administration degree.

The product lifecycle and supply chain emphasis certificate and degree programs are supported entirely by participant fees and special admissions requirements apply. Both degree and non-degree seeking students with undergraduate degrees can study towards the Graduate Certificate in Project Management. Potential students are required to complete an application, provide written professional references from 3 people, attend an interview with the program director, and request all universities attended send an official transcript.

Graduate Certificate in Product Lifecycle and Supply Chain Management

15 semester credit hours minimum

Faculty

Professors: Metin Çakanyildirim, Elena Katok
Clinical Professors: Divakar Rajamani, Kannan Ramanathan
Associate Professor: Alp Muharremoglu
Clinical Associate Professor: Sonia Leach

Overview

The graduate certificate in Product Lifecycle and Supply Chain Management is awarded after completion of the product lifecycle and supply chain management core courses described below,
totaling 15 semester credit hours.

Courses Required for Graduate Certificate in Product Lifecycle and Supply Chain Management: 15 semester credit hours

- **OPRE 6364** Quality Control (Lean 6 Sigma)
- **OPRE 6366** Global Supply Chain Management
- **OPRE 6370** Global Logistics and Transportation
- **OPRE 6371** Purchasing, Sourcing and Contract Management
- **OPRE 6379** Product Lifecycle Management

**Master of Science in Supply Chain Management**

*36 semester credit hours minimum*

**Faculty**

**Professors:** Alain Bensoussan, Metin Çakanyildirim, Milind Dawande, Theodore E. Day, Ganesh Janakiraman, Elena Katok, Shun-Chen Niu, Özalp Özer, Suresh P. Sethi, Kathryn E. Stecke, John J. Wiorkowski

**Clinical Professors:** Divakar Rajamani, Kannan Ramanathan

**Associate Professors:** Surya N. Janakiraman, Alp Muhtarremoglu, Gil Sadka, Kelsey D. Wei

**Clinical Associate Professor:** Sonia Leach

**Assistant Professors:** Dorothée Honhon, Arzu Ozoguz, Anyan Qi, Malcolm Wardlaw, Shengqi Ye, Jieying Zhang

**Clinical Assistant Professors:** Shawn Alborz, Athena Alimirzaei

**Senior Lecturers:** Monica E. Brussolo, Eugene (Gene) Deluke, Carol Flannery, Avanti P. Sethi

**Overview**

A Master of Science in Supply Chain Management degree is awarded after the completion of an additional 22 semester credit hours beyond the product lifecycle and supply chain management core requirements. The MS in Supply Chain Management requires the following coursework:

**MS in Supply Chain Management supplemental curriculum: 22 semester credit hours**

- **ACCT 6201** Introduction to Financial Accounting
Executive MBA degree with an emphasis in Product Lifecycle and Supply Chain Management

53 semester credit hours minimum

Faculty

Professors: Alain Bensoussan, Metin Çakanyildirim, Milind Dawande, Theodore E. Day, Ganesh Janakiraman, Elena Katok, Shun-Chen Niu, Özalp Özer, Suresh P. Sethi, Kathryn E. Stecke, John J. Wiorkowski

Clinical Professors: Divakar Rajamani, Kannan Ramanathan

Associate Professors: Surya N. Janakiraman, Alp Muharremoglu, Gil Sadka, Kelsey D. Wei

Clinical Associate Professor: Sonia Leach

Assistant Professors: Dorothée Honhon, Arzu Ozoguz, Anyan Qi, Malcolm Wardlaw, Shengqi Ye, Jieying Zhang

Clinical Assistant Professors: Shawn Alborz, Athena Alimirzaei

Senior Lecturers: Monica E. Brussolo, Eugene (Gene) Deluke, Carol Flannery, Avanti P. Sethi

Overview

The Executive MBA is earned by waiving the Master of Science degree and completing an additional 16 semester credit hours, for a total of 53 semester credit hours. Students must include the executive core courses listed below to earn the degree.

Additional courses to fulfill requirements for the Executive MBA: 16 semester credit hours

BPS 6310 Strategic Management
IMS 6204 Global Business
Master of Science in Healthcare Management for Physicians

36 semester credit hours minimum

Faculty


Associate Professors: Norris Bruce, Zhonglan Dai, J. Richard Harrison, Surya N. Janakiraman, Nanda Kumar, Seung-Hyun Lee, Lívia Markóczy, Toyah Miller, Valery Polkovnichenko, Orlando C. Richard, Gil Sadka, Jane Salk, Kelsey D. Wei, Jun Xia, Yexiao Xu

Clinical Associate Professors: Sonia Leach, Carolyn Reichert, John McClain Watson

Assistant Professors: Emily Choi, Sheen Levine, Ningzhong Li, Virginie Lopez-Kidwell, Arzu Ozoguz, Gonca P. Soysal, Malcolm Wardlaw, Jieying Zhang

Clinical Assistant Professor: Vance Lewis

Senior Lecturers: Daniel Bochsler, Monica E. Brussolo, Carol Flannery, Maria Hasenhuttl, Thomas (Tom) Henderson, Jeffery (Jeff) Hicks, Jackie Kimzey, Kristen Lawson, Michele Lockhart, Victoria D. McCrady, Diane S. McNulty, Madison Pedigo, Avanti P. Sethi, Jeanne Sluder, Margaret Smallwood, Robert Wright, Hubert Zydorek

Overview

The Master of Science in Healthcare Management is a specialized business degree available to licensed MDs and DOs. The 36 semester credit hour healthcare management curriculum consists of nine 4-day residential classes OR any eight classes plus a self-directed field study. A different class is offered every two months and classes may be started at any time and taken in any order. Classes are eligible for up to 36 semester credit hours each of Category 1 CME credit toward the AMA Physician’s Recognition Award. Successful completion of any five classes is recognized by the award...
of a Graduate Certificate in Healthcare Management.

The curriculum is centered on real-life healthcare problems and cases. Classes are jointly taught by senior business and medical school faculty with outstanding academic credentials and real-world healthcare experience. Physicians and faculty work collaboratively in small teams to examine facts, evaluate alternatives, and develop workable solutions.

The Healthcare Management curriculum consists of the following courses:

- **HMGT 6401** Negotiation and Conflict Management in Healthcare
- **HMGT 6402** Financial Management of Healthcare Organizations
- **HMGT 6403** Medical Cost and Performance Management
- **HMGT 6404** Quality and Performance Improvement in Healthcare
- **HMGT 6405** Healthcare Information Management and Technology
- **HMGT 6406** Strategic Management of Healthcare Organizations
- **HMGT 6407** Healthcare Policy and Regulation
- **HMGT 6408** Competencies of Effective Physician Leaders
- **HMGT 6410** Leading Complex Organizations
- **HMGT 6V10** Special Topics in Healthcare Management
- **HMGT 6V15** Self-Directed Field Study

**Healthcare Management Executive MBA for Physicians**

53 semester credit hours minimum

**Faculty**

**Professors:** Daniel A. Cohen, Theodore E. Day, Gregory G. Dess, David L. Ford Jr., Ernan E. Haruvy, Dmitri Kuksov, Zhiang (John) Lin, B. P. S. Murthi, Mike W. Peng, Michael J. Rebello, Wing Kwong (Eric) Tsang, John J. Wiorkowski

**Clinical Professors:** Britt Berrett, Abhijit Biswas, Larry Chasteen, Tevfik Dalgic, Michael Deegan, Forney Fleming III, Charles Hazzard, Marilyn Kaplan, Joseph Picken, Daniel Rajaratnam, David Ritchey, Rajiv Shah, Habte Woldu, Laurie L. Ziegler

**Associate Professors:** Norris Bruce, Zhonglan Dai, J. Richard Harrison, Surya N. Janakiraman, Nanda Kumar, Seung-Hyun Lee, Lívia Markóczy, Toyah Miller, Valery Polkovnichenko, Orlando C. Richard, Gil Sadka, Jane Salk, Kelsey D. Wei, Jun Xia, Yexiao Xu

Clinical Associate Professors: Sonia Leach, Carolyn Reichert, John McClain Watson

Assistant Professors: Emily Choi, Sheen Levine, Ningzhong Li, Virginie Lopez-Kidwell, Arzu Ozoguz, Gonca P. Soysal, Malcolm Wardlaw, Jieying Zhang

Clinical Assistant Professor: Vance Lewis

Senior Lecturers: Daniel Bochsler, Monica E. Brussolo, Carol Flannery, Maria Hasenhuttl, Thomas (Tom) Henderson, Jeffery (Jeff) Hicks, Jackie Kimzey, Kristen Lawson, Michele Lockhart, Victoria D. McCrady, Diane S. McNulty, Madison Pedigo, Avanti P. Sethi, Jeanne Sluder, Margaret Smallwood, Robert Wright, Hubert Zydorek

Overview

The Healthcare Management Executive MBA is a general business degree preferred by physicians who wish to transition into an executive management role. It requires the completion of the Master of Science in Healthcare Management curriculum plus an additional 17 semester credit hours consisting of six non-healthcare related general business classes. These classes provide an integrated overview of functional areas of management as well as analytical tools for effective decision making. The general business classes may be taken online for maximum flexibility and convenience. The online classes require no on-campus visits.

Required Business Courses: 17 semester credit hours

- FIN 6301 Financial Management
- IMS 6204 Global Business
- MECO 6303 Business Economics
- MKT 6301 Marketing Management
- OPRE 6301 Quantitative Introduction to Risk and Uncertainty in Business
- OPRE 6302 Operations Management

The Healthcare Management Executive MS and MBA degrees are supported entirely by participant fees and special admissions requirements apply. Further information may be obtained from the program website: amme.utdallas.edu.

Executive Education Program in Organizational Behavior and Coaching

As is the case with both Project Management and Healthcare Management for Physicians, students in the executive program in Organizational Behavior and Coaching can complete multiple levels of recognition in the program, including:

1. A Graduate Certificate in Executive and Professional Coaching after 15 semester credit hours.
2. A Master of Science degree in Management and Administrative Sciences after the completion of
an additional 21 semester credit hours beyond certificate requirements.

This concentration focuses on organizational behavior and coaching theory, methodology, and techniques. Students learn how to become instruments of individual and organizational change, lead and manage organizational transitions, work effectively when there is resistance to change, and develop skills as an internal and external practitioner. Students deepen their knowledge of individual and organizational behavior through the integration of theory and practice. They leave the program with a set of tools for personal, group, organization, and community transformation, qualified to apply for professional accreditation by the International Coach Federation.

Classes are conducted utilizing the very best in interactive distance learning methodologies, making the program convenient, efficient, and geographically independent for busy professionals. Students are taught by outstanding master coaches with real-world coaching experience within business settings and by Jindal School of Management faculty.

**Graduate Certificate in Executive and Professional Coaching**

*15 semester credit hours minimum*

**Faculty**

Clinical Professor: Robert Hicks

Associate Professor: Orlando C. Richard

**Overview**

The graduate level certificate requires the successful completion of the following six courses specific to Executive and Professional Coaching, including three Coaching Practice/Practicum courses, OB 6248, OB 6249, and OB 6253.

**Executive and Professional Coaching courses**

- **OB 6248** Coaching Practice Lab I
- **OB 6249** Coaching Practice Lab II
- **OB 6350** Introduction to Executive and Professional Coaching
- **OB 6351** Coaching in the Business or Organizational Setting
- **OB 6352** Advanced Coaching Models and Methods
- **OB 6253** Coaching Practicum

**Master of Science in Management and Administrative**
Sciences with a Concentration in Organizational Behavior and Coaching

36 semester credit hours minimum

Faculty


Clinical Professors: John Barden, Robert Hicks, Peter Lewin, Laurie L. Ziegler

Associate Professors: J. Richard Harrison, Surya N. Janakiraman, Ramachandran (Ram) Natarajan, Orlando C. Richard, Alejandro Zentner

Clinical Associate Professor: Sonia Leach

Assistant Professors: Bernhard Ganglmair, Jieying Zhang

Clinical Assistant Professors: Hans-Joachim Adler, Moran Bluestein, Ayfer Gurun

Senior Lecturers: Anindita Bardhan, Monica E. Brussolo, Carol Flannery, Maria Hasenhuttl, Jeffery (Jeff) Hicks, Avanti P. Sethi, Steven Solcher

Overview

After completion of the certificate requirements, students can go on to complete a Master of Science in Management and Administrative Sciences by completing another 21 semester credit hours of graduate level courses, including the courses in the MS MAS core curriculum.

MS MAS Core Curriculum

The MS MAS core is comprised of the following courses:

- ACCT 6201 Introduction to Financial Accounting
- MECO 6303 Business Economics
- MIS 6204 Information Technology for Management
- OB 6301 Organizational Behavior
- OPRE 6301 Quantitative Introduction to Risk and Uncertainty in Business

Organizational Behavior and Coaching students take the executive MS MAS core set, and then draw the remainder of their courses from the following list specific to the Organizational Behavior component of the curriculum.

Organizational Behavior Electives

- OB 6331 Power and Politics in Organizations
- OB 6332 Negotiation and Dispute Resolution
- OB 6255 Capstone in Organizational Behavior and Coaching

Executive Master of Science Degree and Certificate Programs in Systems Engineering and Management (MS-SEM)

36 semester credit hours minimum

Faculty

Professors: Mathukumalli Vidyasagar, Steve Yurkovich

UT Dallas Affiliated Faculty: Farokh B. Bastani, Alain Bensoussan, Robert D. Gregg, Duncan L. MacFarlane, Suresh P. Sethi, Rajiv Shah, Mark W. Spong, Lakshman Tamil, W. Eric Wong

Overview

The certificates and degree programs are jointly offered by the Naveen Jindal School of Management and the Erik Jonsson School of Engineering and Computer Science.

Admissions Requirements

A student lacking undergraduate prerequisites for graduate courses must complete prerequisites or receive approval from the graduate advisor and the course instructor. Specific admission requirements for the MS-SEM follow.

A student entering the MS-SEM program should meet the following guidelines:

- A minimum of a BS in engineering, mathematics, physics, chemistry, economics or finance (specifically, programs that provide adequate fundamental skills in mathematics).
- A minimum of three years of work experience.
- Submission of three letters of recommendation from individuals who are able to judge the candidate's probability of success in pursuing a program of study leading to the MS-SEM degree.
- Submission of an essay outlining the candidate's background, education, and professional goals.
Degree Requirements

The MS-SEM program is designed to be flexible to accommodate different student backgrounds, allowing students to learn in areas in which they are deficient, while still guaranteeing core competency in systems engineering and systems management. This program has both a thesis and a non-thesis option. All part-time MS-SEM students will be assigned initially to the non-thesis option. Those wishing to elect the thesis option may do so by obtaining the approval of a faculty thesis supervisor.

The MS-SEM degree requires a total of 36 semester credit hours consisting of 12 courses in the non-thesis option or 10 courses plus six semester credit hours of thesis credit for the thesis option. All students must have an academic advisor and an approved degree plan. Courses taken without advisor approval will not count toward the 36 semester credit hour requirement. Successful completion of the approved course of studies leads to the MS-SEM degree. Please also note that the University's general degree requirements are discussed in the graduate catalog.

Non-Thesis Option

Completion of a minimum of 36 semester credit hours of graduate-level lecture courses including the required core courses. With advisor approval, these may include some 5000 level courses. Students must earn a grade of B- or better in each of four core courses (see below).

Thesis Option

An alternative to the 36 semester credit hour requirement for the MS-SEM degree is the completion of a minimum of 30 semester credit hours of graduate-level lecture courses, with a grade of B- or better in each of the required core courses, six semester credit hours of a combination of master's research (SYSM 6V70) and thesis (SYSM 6V90), submitted to the graduate school, and a formal public defense of the thesis.

Students enrolled in the thesis option should meet with individual faculty members to discuss research opportunities and to choose a research advisor during the first or second semester that the student is enrolled. After the second semester of study, course selection should be made in consultation with the research advisor. Part-time students are encouraged to enroll in only one course during their first semester and in no more than two courses during any semester they are also working full-time.

Research and thesis semester credit hours cannot be counted in an MS-SEM degree plan unless a thesis is written and successfully defended. A supervising committee, which must be chosen in consultation with the student's thesis advisor prior to enrolling for thesis credit, administers the defense. With advisor approval, the lecture courses may include some 5000 level courses. Full-time UT Dallas students who receive financial assistance are required to enroll in nine semester credit hours each semester.
Required Courses

Students are required to take four courses (a total of 12 semester credit hours) from a set of eight courses in the list below. Two of the courses must be from the Engineering Core section and two from the Management Core section. The four required courses contribute a total of 12 semester credit hours toward the MS-SEM degree.

Prescribed Elective Courses

These consist of an additional four courses (a total of 12 semester credit hours) from the set of eight core courses listed and/or the set of courses listed below. Two of these courses must be chosen from the two Engineering sections (core and elective), and two from the two Management sections. Because a program objective is to maintain a high degree of flexibility, students are encouraged to work with a SEM program advisor to discuss possible (limited) exceptions and substitutions for the prescribed courses.

SEM Core Curriculum

Engineering 1 (Core)

SYSM 6301 Systems Engineering, Architecture and Design
SYSM 6302 Dynamics of Complex Networks and Systems
SYSM 6303 Quantitative Introduction to Risk and Uncertainty in Business
SYSM 6305 Optimization Theory and Practice

Management 1 (Core)

SYSM 6311 Systems Project Management in Engineering and Operations
SYSM 6312 Systems Financial Management
SYSM 6318 Marketing Management
SYSM 6333 Systems Organizational Behavior

Engineering 2 (Prescribed Elective)

SYSM 6304 Risk and Decision Analysis
SYSM 6306 Engineering Systems: Modeling and Simulation
SYSM 6307 Linear Systems
SYSM 6308 Software Maintenance, Evolution, and Re-Engineering
SYSM 6309 Advanced Requirements Engineering
SYSM 6310 Software Testing, Validation and Verification
SYSM 6321 Financial Engineering I
SYSM 7321 Financial Engineering II

Management 2 (Prescribed Elective)
SYSM 6313 Systems Negotiation and Dispute Resolution
SYSM 6315 The Entrepreneurial Experience
SYSM 6316 Managing Innovation within the Corporation
SYSM 6317 The Management of High Tech Products
SYSM 6319 Business Economics
SYSM 6320 Strategic Leadership
SYSM 6332 Technology and New Product Development
SYSM 6334 Systems Operations Management

Free Elective Courses

For the free elective, students will be able to take, with prior approval from the program director, any four additional and distinct courses of the remaining 12 core courses that have not already been taken as required courses or prescribed elective courses. Students will also be able to take additional free elective courses that are already being offered in management or in engineering that will allow "concentration" or "specialization" in specific industry sectors, including the following:

- Aerospace, Defense and Space
- Cybersecurity and Information Assurance
- Energy and Infrastructure Systems
- Enterprise and Data Management Systems
- Entrepreneurship and Innovation Management
- Global Supply Chain and Operations Management
- Healthcare and Biomedical Systems
- Optimization Theory and Operations Research
- Telecom, IT and Multimedia Networks
- Transportation Systems

Students must take a minimum of five core and prescribed elective courses before taking any free elective courses.
Certificates

The program offers two certificates: a Certificate in Systems Engineering and a Certificate in Systems Management. Each certificate requires 12 semester credit hours and is offered in an Executive Education, four-semester credit hour module format. See Course Descriptions for information on course content.

Certificate in Systems Engineering

Students are required to complete two from the set of engineering courses listed below, and any two additional from the remainder of the 20 SYSM-prefix listed below in either group, engineering or management.

Systems Engineering Courses

- SYSM 6301 Systems Engineering, Architecture and Design
- SYSM 6302 Dynamics of Complex Networks and Systems
- SYSM 6303 Quantitative Introduction to Risk and Uncertainty in Business
- SYSM 6304 Risk and Decision Analysis
- SYSM 6305 Optimization Theory and Practice
- SYSM 6306 Engineering Systems: Modeling and Simulation
- SYSM 6307 Linear Systems
- SYSM 6308 Software Maintenance, Evolution, and Re-Engineering
- SYSM 6309 Advanced Requirements Engineering
- SYSM 6310 Software Testing, Validation and Verification
- SYSM 6321 Financial Engineering I
- SYSM 7321 Financial Engineering II

Certificate in Systems Management

Students are required to complete two from the set of management courses listed below, and any two additional from the remainder of the 20 SYSM-prefix listed in group, engineering or management.

Systems Management Courses

- SYSM 6311 Systems Project Management in Engineering and Operations
- SYSM 6312 Systems Financial Management
SYSM 6313 Systems Negotiation and Dispute Resolution
SYSM 6315 The Entrepreneurial Experience
SYSM 6316 Managing Innovation Within the Corporation
SYSM 6317 The Management of High Tech Products
SYSM 6318 Marketing Management
SYSM 6319 Business Economics
SYSM 6320 Strategic Leadership
SYSM 6332 Technology and New Product Development
SYSM 6333 Systems Organizational Behavior
SYSM 6334 Systems Operations Management

Engineering Courses
SYSM 6301 Systems Engineering, Architecture and Design
SYSM 6302 Dynamics of Complex Networks and Systems
SYSM 6303 Quantitative Introduction to Risk and Uncertainty in Business
SYSM 6304 Risk and Decision Analysis
SYSM 6305 Optimization Theory and Practice
SYSM 6306 Engineering Systems: Modeling and Simulation
SYSM 6307 Linear Systems
SYSM 6308 Software Maintenance, Evolution, and Re-Engineering
SYSM 6309 Advanced Requirements Engineering
SYSM 6310 Software Testing, Validation and Verification
SYSM 6321 Financial Engineering I
SYSM 7321 Financial Engineering II
SYSM 6V70 Research In Systems Engineering and Management
SYSM 6V80 Special Topics in Systems Engineering and Management
SYSM 6V90 Thesis

Management Courses
SYSM 6311 Systems Project Management in Engineering and Operations
SYSM 6312 Systems Financial Management
**Dual MS-SEM/MBA Degree**

*63-65 semester credit hours minimum*

**JSOM Faculty**


**Professor Emeritus:** Dale Osborne

**Clinical Professors:** John Barden, Britt Berrett, Abhijit Biswas, Pamela Foster Brady, Larry Chasteen, David Cordell, Tevfik Dalgic, Michael Deegan, Howard Dover, Greg Durham, Forney Fleming III, Randall S. Guttery, Charles Hazzard, Robert Hicks, Marilyn Kaplan, Peter Lewin, John F. McCracken, Dennis McCuistion, Radha Mookerjee, Joseph Picken, Divakar Rajamani, Daniel Rajaratnam, Kannan Ramanathan, David Ritchey, Arthur Selender, Rajiv Shah, Kelly Slaughter, Kenneth Smith, Habte Woldu, Fang Wu, Laurie L. Ziegler

**Associate Professors:** Nina Baranchuk, Norris Bruce, Huseyin Cavusoglu, Jianqing Chen, Zhonglan Dai, Xianjun Geng, Umit G. Gurun, J. Richard Harrison, Surya N. Janakiraman, Robert L. Kieschnick Jr., Nanda Kumar, Seung-Hyun Lee, Lívia Markóczy, Syam Menon, Toyah Miller, Alp Muharremoglu, Ramachandran (Ram) Natarajan, Valery Polkovnichenko, Ashutosh Prasad, Orlando C. Richard, Young U. Ryu, Gil Sadka, Jane Salk, David J. Springate, Kelsey D. Wei, Jun Xia, Ying Xie, Yexiao Xu, Alejandro Zentner, Yuan Zhang, Feng Zhao, Zhiqiang (Eric) Zheng, Yibin Zhou
Clinical Associate Professors: Sonia Leach, Carolyn Reichert, Mark Thouin, John McClain Watson

Assistant Professors: Mehmet Ayvaci, Emily Choi, Rebecca Files, Bernhard Ganglmair, Dorothée Honhon, Elisabeth Honka, Kyle Hyndman, Atanu Lahiri, Sheen Levine, Bin Li, Jun Li, Meng Li, Ningzhong Li, Arzu Ozoguz, Anyan Qi, Alessio Saretto, Harpreet Singh, Gonca P. Soysal, Upender Subramanian, Shaojie Tang, Christian Von-Dragen, Yu Wang, Malcolm Wardlaw, Han (Victor) Xia, Shengqi Ye, Nir Yehuda, Yuanping Ying, Jieying Zhang, Xiaofei Zhao

Clinical Assistant Professors: Hans-Joachim Adler, Shawn Alborz, Athena Alimirzaei, Moran Bluestein, John Gamino, Ayfer Gurun, Vance Lewis, Liping Ma, Ravi Narayan, Dawn Owens, Anastasia V. Shcherbakova

Senior Lecturers: Arthur M. Agulnek, Semiramis Amirpour, Frank Anderson, Anindita Bardhan, Daniel Bochsler, Tiffany A. Bortz, Richard Bowen, Judd Bradbury, Monica E. Brussolo, George DeCourcy, Eugene (Gene) Deluke, Alexander Edsel, Amal El-Ashmawi, Carol Flannery, Mary Beth Goodrich, Maria Hasenhuttl, Jeffery (Jeff) Hicks, Jennifer G. Johnson, Lynn Carl Jones, Jackie Kimzey, Kristen Lawson, Chris Linsteadt, Michele Lockhart, Victoria D. McCrady, Diane S. McNulty, Madison Pedigo, Jared Pickens, Matt Polze, James Richards, Mark Salamasick, Avanti P. Sethi, Jeanne Sluder, Steven Solcher, David Spivey, James Szot, Luell (Lou) Thompson, Amy L. Troutman, Robert Wright, Kathy Zolton

ENCS Faculty

Professors: Mathukumalli Vidyasagar, Steve Yurkovich

Assistant Professor: Robert D. Gregg

UT Dallas Affiliated Faculty: Farokh B. Bastani, Alain Bensoussan, Robert D. Gregg, Duncan L. MacFarlane, Suresh P. Sethi, Rajiv Shah, Mark W. Spong, Lakshman Tamil, W. Eric Wong

Overview

The Naveen Jindal School of Management and the Erik Jonsson School of Engineering and Computer Science offer a joint Executive MS-SEM and MBA degree program. This is a 63-65 semester credit hours degree program (excluding pre-requisites) that provides students with opportunities to learn from excellent faculty and places them at the forefront in the fields of systems engineering management and business leadership. This dual degree program also provides students with deep knowledge in SEM and a broad knowledge of management with an enhanced worldwide perspective of business leadership for increasing productivity, efficiency and profitability.

Dual-Degree Admission Requirements

Students pursuing the dual MS-SEM and MBA degree program must meet the admission requirements for both programs and submit all required documents for admission to both programs. Students joining the Executive MS-SEM degree program, must first complete their 36 semester credit hours of the master program. Students have up to six years to accumulate remaining required core hours for the MBA Degree (details with respect to program-specific
requirements can be obtained from the advisors for the two programs).

1. This course replaces MIS 6204, which is a two semester credit hour course. The Executive MBA MIS 6302 is a three semester credit hour course.