Naveen Jindal School of Management

Information Technology and Systems (BS)

Bachelor of Science in Information Technology and Systems

**Degree Requirements** (120 semester credit hours)

*View an Example of Degree Requirements by Semester*

**Faculty**


**Associate Professors:** Mehmet Ayvaci, Nina Baranchuk, Norris Bruce, Zhonglan Dai, Rebecca Files, Dorothée Honhon, Bin Hu, Kyle Hyndman, Surya N. Janakiraman, Robert L. Kieschnick Jr., Atanu Lahiri, Jun Li, Ningzhong Li, Livia Markóczy, Amit Mehra, Toyah Miller, Ramachandran (Ram) Natarajan, Naim Bugra Ozel, H. Dennis Park, Cuili Qian, Young U. Ryu, Gil Sadka, Harpreet Singh, David J. Springate, Upender Subramanian, Shaojie Tang, Kelsey D. Wei, Han (Víctor) Xia, Yexiao Xu, Alejandro Zentner, Jieying Zhang, Yuan Zhang, Feng Zhao, Yibin Zhou

**Assistant Professors:** Khai Chiong, Emily Choi, Andrew Frazelle, Ying Huang, Joonhwi Joo, Sora Jun, Sheen Levine, Meng Li, Maria Loumioti, Jean-Marie Meier, Radha Mookerjee, Anyan Qi, Alejandro Rivera Mesias, Alessio Saretto, Simon Siegenthaler, Serdar Simsek, Xiaoxiao Tang, Shervin Tehrani, Ashwin Venkataraman, Christian Von-Drathen, Guihua Wang, Shouqiang Wang, Junfeng Wu, Steven Xiao, Yingjie Zhang, Zhe (James) Zhang, Xiaofei Zhao

**Professor Emeritus:** John J. Wiorkowski

**Assistant Professors Emeriti:** J. Richard Harrison, Jane Salk

**Clinical Professors:** John Barden, Britt Berrett, Abhijit Biswas, Pamela Foster Brady, Shawn Carraher, Larry Chasteen, Paul Convery, David Cordell, Howard Dover, John Gamino, Randall S. Guttery, William Hefley, Robert Hicks, Marilyn Kaplan, Sonia Leach, Peter Lewin, Jeffrey Manzi, John F. McCracken, Diane S. McNulty, Divakar Rajamani, Daniel Rajaratnam, Kannan Ramanathan, David Ritchey, Mark Thouin, McClain Watson, Jeff Weekley, Habte Woldu, Fang Wu, Laurie L. Ziegler

**Clinical Associate Professors:** Shawn Alborz, Dawn Owens, Carolyn Reichert, Avanti P. Sethi, Ramesh
Subramoniam, James Szot, Aysegul Toptal, David Widdifield

**Clinical Assistant Professors:** Athena Alimirzaei, Christina (Krysta) Betanzos, Moran Blueshtein, Judd Bradbury, Sourav Chatterjee, Jerome Gafford, Ayfer Gurun, Jeffery (Jeff) Hicks, Revansiddha Khanapure, Kristen Lawson, Kathryn Lookadoo, Liping Ma, Sarah Moore, Ravi Narayan, Parneet Pahwa, Jason Parker, Drew Peabody, Nassim Sohaee

**Professors of Instruction:** Mary Beth Goodrich, Charles Hazzard, Chris Linsteadt, Luell (Lou) Thompson

**Associate Professors of Instruction:** Vivek Arora, Monica E. Brussolo, Amal El-Ashmawi, Maria Hasenhuttl, Jennifer G. Johnson, Hubert Zydorek

**Assistant Professor of Instruction:** Rasoul Ramezani

**Professors of Practice:** Gregory Ballew, Tiffany A. Bortz, Ranavir Bose, Alexander Edsel, Rajiv Shah

**Associate Professors of Practice:** Richard Bowen, Jackie Kimzey, David Parks, Margaret Smallwood, Steven Solcher, Kathy Zolton

**Senior Lecturers:** Khatereh Ahadi, Semiramis Amirpour, Tiffany A. Bortz, Richard Bowen, Monica E. Brussolo, Juliann Chapman, George DeCourcy, Alexander Edsel, Amal El-Ashmawi, Negin Enayaty Ahangar, Mary Beth Goodrich, Thomas (Tom) Henderson, Abu Naser Islam, Scott Janke, Jennifer G. Johnson, Jackie Kimzey, Chris Linsteadt, Joseph Mauriello, Victoria D. McCrady, Edward Meda, Robert (Stephen) Molina, Prithi Narasimhan, Mohammad Naseri Taheri, Madison Pedigo, Matt Polze, Gaurav Shekhar, Margaret Smallwood, Steven Solcher, Timothy Stephens, Luell (Lou) Thompson, Guido Tirone, Robert Wright, Kathy Zolton, Hubert Zydorek

I. Core Curriculum Requirements: 42 semester credit hours

**Communication:** 6 semester credit hours

Select any 6 semester credit hours from Communication Core courses (see advisor)

**Mathematics:** 3 semester credit hours

- **MATH 1325** Applied Calculus 1, 4, 5, 6

  Or select any 3 semester credit hours from Mathematics Core courses (see advisor)

**Life and Physical Sciences:** 6 semester credit hours

Select any 6 semester credit hours from Life and Physical Sciences Core courses (see advisor and degree requirements)

**Language, Philosophy and Culture:** 3 semester credit hours

Select any 3 semester credit hours from Language, Philosophy and Culture Core courses (see advisor)

**Creative Arts:** 3 semester credit hours

Select any 3 semester credit hours from Creative Arts Core courses (see advisor)
American History: 6 semester credit hours

Select any 6 semester credit hours from American History Core courses (see advisor)

Government/Political Science: 6 semester credit hours

GOVT 2305 American National Government
GOVT 2306 State and Local Government

Or select any 6 semester credit hours from Government/Political Science Core courses (see advisor)

Social and Behavioral Sciences: 3 semester credit hours

Choose one of the following:

BA 1310 Making Choices in Free Market Systems
BA 1320 Business in a Global World
ECON 2301 Principles of Macroeconomics
ECON 2302 Principles of Microeconomics

Or select any 3 semester credit hours from Social and Behavioral Sciences Core courses (see advisor)

Component Area Option: 6 semester credit hours

Choose two of the following:

MATH 1326 Applied Calculus II
BA 1310 Making Choices in Free Market Systems
BA 1320 Business in a Global World
ECON 2301 Principles of Macroeconomics
ECON 2302 Principles of Microeconomics

Or select any 6 semester credit hours from Component Area Option Core courses (see advisor)

II. Major Requirements: 75-78 semester credit hours

Major Preparatory Courses: 21-24 semester credit hours beyond Core Curriculum

ACCT 2301 Introductory Financial Accounting
ACCT 2302 Introductory Management Accounting
BLAW 2301 Business and Public Law
MATH 1325 Applied Calculus I
MATH 1326 Applied Calculus II
or **OPRE 3340** Advanced Business Quantitative Methods

**OPRE 3333** Quantitative Business Analysis

or **MATH 2333** Matrices, Vectors, and Their Application

**STAT 3360** Probability and Statistics for Management and Economics

or **OPRE 3360** Managerial Methods in Decision Making Under Uncertainty

**ITSS 3311** Introduction to Programming

**ITSS 3312** Object-Oriented Programming

or **ITSS 4381** Object Oriented Programming with Python

Choose two of the following:

**BA 1310** Making Choices in Free Market Systems

**BA 1320** Business in a Global World

**ECON 2301** Principles of Macroeconomics

**ECON 2302** Principles of Microeconomics

**Major Core Courses: 24 semester credit hours**

**BCOM 1300** Introduction to Professionalism and Communication in Business

or **BCOM 3300** Professionalism and Communication in Business

**BCOM 4300** Managing Communications in Business

**IMS 3310** International Business

**FIN 3320** Business Finance

**ITSS 3300** Information Technology for Business

**OPRE 3310** Operations Management

**OBHR 3310** Organizational Behavior

or **OBHR 3330** Introduction to Human Resource Management

**MKT 3300** Principles of Marketing

**Major Related Courses: 18 semester credit hours**

**ITSS 4300** Database Fundamentals

**ITSS 4330** Systems Analysis and Design

**ITSS 4360** Network and Information Security

**ITSS 4351** Foundations of Business Intelligence

**ITSS 4370** Information Technology Infrastructure
**ITSS 4395** Capstone Senior Project - Information Systems

or **BPS 4395** Capstone Senior Project - Business

or **ENTP 4395** Capstone Senior Project - Entrepreneurship

**Guided Electives: 12 semester credit hours**

A practicum experience of at least 160 working hours is required; the student has the option of zero to 3 semester credit hours, depending on the particular internship, and preference for additional electives.

**ITSS 4V90** ITSS Internship

**ITSS 4090** Information Technology and Systems Internship

**BA 4090** Management Internship

A community engagement experience is required; the student has the option of zero or 3 semester credit hours, depending on the particular experience, and preference for additional electives.

**IMS 4335** Social Sector Entrepreneurship and Community Engagement

or **ENTP 4340** Social Sector Entrepreneurship and Community Engagement

or **MKT 4360** Social Marketing

or **BA 4095** Social Sector Engagement and Community Outreach Practicum

Choose from the following to fulfill remaining Guided Elective semester credit hours:

Students may choose one of the following tracks:

**A. Business Intelligence and Analytics Track**

**ITSS 4353** Business Analytics

**ITSS 4352** Introduction to Web Analytics

**ITSS 4354** Advanced Big Data Analytics

**ITSS 4355** Data Visualization

**B. Enterprise Systems Track**

**ITSS 4340** Enterprise Resource Planning

**ITSS 4353** Business Analytics

**ITSS 4343** Integrated SCM Information Systems

**ACCT 4342** or **ITSS 4342** Analysis and Design of Accounting Systems

or **ACCT 3322** Integrated Accounting Information Systems

**C. IT Sales Engineering Track**

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ITSS 4340  Enterprise Resource Planning
MKT 3330  Introduction to Professional Selling
MKT 4331  Digital Prospecting

Any ITSS upper-division course, excluding ITSS 4301 Database Systems, that is not part of the BS INTS major preparatory, major core, or major related courses.

D. IT Product Development Track\textsuperscript{12}

ENTP 3301  Innovation and Entrepreneurship
ENTP 3320  Start-up Launch I

Any 2 ITSS upper-division courses, excluding ITSS 4301 Database Systems, that are not part of the BS INTS major preparatory, major core, or major related courses.

E. General Track\textsuperscript{12}

Any ITSS upper-division courses, excluding ITSS 4301 Database Systems, that are not part of the BS INTS major preparatory, major core, or major related courses may be used to satisfy the 12 semester credit hours of guided elective credit.

All prerequisites must be met.

III. Elective Requirements: 0-3 semester credit hours

Free Electives: 0-3 semester credit hours

Both lower- and upper-division courses may count as electives but students must complete at least 51 semester credit hours of upper-division courses to qualify for graduation.

1. Incoming freshmen must enroll and complete requirements of UNIV 1010 and the corresponding school-related freshman seminar course. Students, including transfer students, who complete their core curriculum at UT Dallas must take UNIV 2020.

2. Curriculum Requirements can be fulfilled by other approved courses from institutions of higher education. The courses listed are recommended as the most efficient way to satisfy both Core Curriculum and Major Requirements at UT Dallas.

3. Indicates a prerequisite class to be completed before enrolling for upper-division classes.

4. A required Major course that also fulfills a Core Curriculum requirement. Semester credit hours are counted in Core Curriculum.

5. Students may elect to substitute MATH 2413 or MATH 2417 for MATH 1325. Students may elect to substitute MATH 2414 or MATH 2419 for MATH 1326.

6. In order to make timely degree progress, students should complete MATH 1325 or its equivalent by the end of their first semester at UT Dallas. Students who will not meet this requirement should...
contact their academic advisor to discuss their degree timeline.

7. Certain courses listed are prerequisites for major core, major concentration, or major related courses. Choose accordingly.

8. Students may substitute MATH 2418 or CS 2305.

9. Students who have completed CS 1336 with a C or better may replace ITSS 3311 with an additional ITSS upper-division course (excluding ITSS 4301).

10. Students who have completed CS 1337 with a C or better may replace (ITSS 3312 or ITSS 4381) with an additional ITSS upper-division course (excluding ITSS 4301).

11. JSOM first-time-in-college freshmen are required to take BCOM 1300 in their first semester. Transfer students and students new to JSOM are required to take BCOM 3300 in their first semester.

12. At least two of the additional courses must have an ITSS prefix.

13. ACCT 4301 or ITSS 4301 may not be used to satisfy BS INTS degree requirements.