UT Dallas 2019 Undergraduate Catalog

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


**Professor Emeritus:** Dale Osborne

**Clinical Professors:** John Barden, Britt Berrett, Abhijit Biswas, Ranavir Bose, Pamela Foster Brady, Shawn Carrhaer, Larry Chasteen, Paul Convery, David Cordell, Kutsal Dogan, Howard Dover, Forney Fleming Ill, John Gamino, Randall S. Guttery, Charles Hazzard, William Hefley, Robert Hicks, Gerald (Jerry) Hoag, Marilyn Kaplan, Ching-Chung Kuo, Sonia Leach, Peter Lewin, Jeffrey Manzi, John F. McCracken, Dennis McCuistion, Diane S. McNulty, Divakar Rajamani, Daniel Rajaratnam, David Ritchey, Rajiv Shah, Mark Thouin, Keith Thurgood, Jeff Weekley, Habte Woldu, Fang Wu, Laurie L. Ziegler

**Associate Professors:** Nina Baranchuk, Norris Bruce, Jianqing Chen, Zhonglan Dai, Rebecca Files, Xianjun Geng, J. Richard Harrison, Dorothee Honhon, 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, Valery Polkovnichenko, Cuili Qian, Orlando C. Richard, Young U. Ryu, Gil Sadka, Jane Salk, Harpreet Singh, David J. Springate, Upender Subramanian, Kelsey D. Wei, Han (Victor) Xia, Jun Xia, Ying Xie, Yexiao Xu, Alejandro Zentner, Jiyeing Zhang, Yuan Zhang, Feng Zhao, Yibin Zhou

**Clinical Associate Professors:** Steven Guengerich, Lale Guler, David Parks, Carolyn Reichert, Avanti P. Sethi, Kelly Slaughter, Jeanne Sluder, James Szot, McClain Watson

**Assistant Professors:** Mehmet Ayvaci, Qi (George) Chen, Khai Chiong, Emily Choi, Bernhard Ganglmair, Nathan Goldman, Ying Huang, Sora Jun, Sheen Levine, Meng Li, Xiaolin Li, Maria Loumioti, Jean-Marie Meier, Radha Mookerjee, Anyan Qi, Alejandro Rivera Mesias, Alessio Saretto, Simon Siegenthaler, Serdar Simsek, Shaojie Tang, Christian Von-Drathen, Shouqiang Wang, Malcolm Wardlaw, Junfeng Wu, Steven Xiao, Shengqi Ye, Nir Yehuda, Zhe (James) Zhang, Xiaofei Zhao

**Clinical Assistant Professors:** Shawn Alborz, Athena Alimirzaei, Christina (Krysta) Betanzos, Moran Blueshtein, Judd Bradbury, Jerome Gafford, Ayfer Gurun, Maria Hasenhuttl, Julie Haworth, Jeffery (Jeff) Hicks, Revansiddha Khanapure, Kristen Lawson,
I. Core Curriculum Requirements: 42 semester credit hours

Communication: 6 semester credit hours

COMM 1315 Public Speaking

or COMM 1311 Survey of Oral and Technology-based Communication

RHET 1302 Rhetoric

Mathematics: 3 semester credit hours

MATH 1325 Applied Calculus

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

Social and Behavioral Sciences: 3 semester credit hours

Choose one of the following:

BA 1310 Making Choices in Free Market Systems\(^3,4\) (Awaiting Core Approval from THECB)

BA 1320 Business in a Global World\(^3,4\)

ECON 2301 Principles of Macroeconomics\(^3,4\)

ECON 2302 Principles of Microeconomics\(^3,4\)

**Component Area Option: 6 semester credit hours**

MATH 1326 Applied Calculus I\(^3,4,5\)

And one of the following:\(^6\)

BA 1310 Making Choices in Free Market Systems\(^3,4\) (Awaiting Core Approval from THECB)

BA 1320 Business in a Global World\(^3,4\)

ECON 2301 Principles of Macroeconomics\(^3,4\)

ECON 2302 Principles of Microeconomics\(^3,4\)

II. Major Requirements: 77 semester credit hours

**Major Preparatory Courses: 21 semester credit hours beyond Core Curriculum\(^6\)**

ACCT 2301 Introductory Financial Accounting\(^3\)

ACCT 2302 Introductory Management Accounting\(^3\)

BLAW 2301 Business and Public Law\(^3\)

BA 1310 Making Choices in Free Market Systems\(^3,4\) (Awaiting Core Approval from THECB)

or ECON 2302 Principles of Microeconomics\(^3,4\)

BA 1320 Business in a Global World\(^3,4\)

or ECON 2301 Principles of Macroeconomics\(^3,4\)

MATH 1325 Applied Calculus I\(^3,4,5\)

MATH 1326 Applied Calculus I\(^3,4,5\)

OPRE 3333 Quantitative Business Analysis\(^3\)

or MATH 2333 Matrices, Vectors, and Their Application\(^3,7\)

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
Major Core Courses: 26 semester credit hours

**BA 1100** Business Basics and **ITSS 3100** Professional Development

or **ITSS 3200** Introduction to Business and Professional Development

**BCOM 3310** Business Communication

**BCOM 4350** Advanced Business Communication

**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

**IMS 3310** International Business

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 4390** Information Systems Capstone

Guided Electives: 12 semester credit hours

A practicum experience 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

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

C. General Track
   
   Any ITSS upper level course, excluding ITSS 4301 Database Systems, that is not part of the BS INTS major preparatory or major related courses may be used to satisfy the 12 hours of guided elective credit.

All prerequisites must be met.

III. Elective Requirements: 1 semester credit hours

Free Electives: 1 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 and MATH 2414 or MATH 2417 and MATH 2419.
6. Certain courses listed are prerequisites for major core (e.g., BA 1320 or ECON 2301 for IMS 3310), major concentration, or major related courses. Choose accordingly.
7. Students may substitute MATH 2418 or CS 2305.
8. JSOM freshmen are required to take BA 1100 and ITSS 3100. Transfer students and students new to JSOM are required to take ITSS 3200.
9. ACCT 4301 or ITSS 4301 may not be used to satisfy BS INTS degree requirements.