

DEPARTMENT OF DATA SCIENCES AND OPERATIONS
(Formerly Information and Operations Management)
AREAS OF INTEREST

The DSO (formerly IOM) department offers classes that cover three main topics: digital innovation (formerly information systems), statistics, and operations management. Students can take classes in Digital Transformation to learn about fundamental and innovative trends in the digital workplace, the global digital firm, and the digital marketplace to identify digitally enabled services for customers and employees and to design the agile enterprise of the future. The classes in statistics teach students how to use statistical analyses to turn market data into critical forecasts and competitive analyses. Finally, the operations management classes' help students prepare to manage projects with international teams, develop innovative products, and manage the delivery of goods and services anywhere in the world. Career opportunities in these areas include: consulting, business analyst, data scientist, product development, supply chain management, and global manufacturing. Course work in this department can be especially helpful to students interested in running their own companies in the future or in helping today's companies become tomorrow's agile enterprises.

Department of Data Sciences and Operations, Marshall School of Business, Bridge Hall 308,
<http://www.marshall.usc.edu/dso>

PROJECT AND PROGRAM MANAGEMENT: This area of study prepares students who plan to work as a project/program manager. This focus provides the necessary tools and strategies to begin a career in all industries including aerospace, construction, and information technology.

Essential Courses

- DSO-455: Project Management
- DSO-431: Foundation of Digital Business Innovation
- DSO-435: Enterprise Data Architecture

Related Courses

- DSO-401: Business Info. Systems - Spreadsheet Applications
- DSO-427: Designing Spreadsheet-Based Business Models
- DSO-433: Business Process Design
- DSO-443: The Business of Digital Entertainment
- DSO-483: Operations Consulting

CONSULTING: This area of study prepares students for a career as a consultant, a business analyst, or an associate. This focus is highly relevant for students considering a profession in management consulting companies that focus on technology consulting, process improvements or operations and supply chain management as well as for internal consulting groups of large companies.

Essential Courses:

- DSO-431: Foundation of Digital Business Innovation
- DSO-433: Business Process Design
- DSO-483: Operations Consulting

Related Courses:

- DSO-427: Designing Spreadsheet-Based Business Models
- DSO-428: Essentials and Digital Frontiers of Big Data
- DSO-455: Project Management
- DSO-482: Supply Chain Management
- DSO-499: Essentials of Business Data Analysis Using R
- DSO-401: Bus Info. Systems – Spreadsheet Applications

SUPPLY CHAIN MANAGEMENT: For students who plan to work as a procurement/manufacturing/demand/sales planner in large manufacturing and logistics companies

Essential Courses:

- DSO-482: Supply Chain Management
- DSO-424: Business Forecasting
- DSO-427: Designing Spreadsheet-Based Business Models

Related Courses:

- DSO-401: Business Info Systems – Spreadsheet Applications
- DSO-455: Project Management
- DSO-431: Foundation of Digital Business Innovation
- DSO-483: Operations Consulting
- DSO-462: Managing a Small Business on the Internet

DIGITAL INNOVATION: Students who plan to have a career with digital media will find the courses in this area of study beneficial. Digital innovation classes prepare students to work in business fields that focus on information systems, business development, and/or digital technologies in all industries.

Essential Courses:

- DSO-431: Foundation of Digital Business Innovation
- DSO-433: Business Process Design
- DSO-428: Essentials and Digital Frontiers of Big Data

- DSO-401: Business Info Systems – Spreadsheet Applications
- DSO-435: Enterprise Data Architecture
- DSO-455: Project Management
- DSO-462: Managing a Small Business on the Internet
- DSO-499: Essentials of Business Data Analysis Using R
- DSO-443: Business of Interactive Digital Media

Related Courses:

BUSINESS ANALYTICS: Students who plan to obtain a position as a data scientist will find courses in this area of study beneficial. These classes prepare you to have the essential analytic and business skills to analyze large data sets from the web.

Essential Courses:

- DSO-428: Essential and Digital Frontiers of Big Data
- DSO-424: Business Forecasting
- DSO-431: Foundations of Digital Business Innovation

Related Courses:

- DSO-499: Deep Learning and Business Applications
- DSO-499: Modern Data Science Techniques for Data Driven Consulting
- DSO-435: Enterprise Data Architecture
- DSO-455: Project Management
- DSO-462: Managing a Small Business on the Internet
- DSO-499: Essentials of Business Data Analysis Using R
- DSO-443: Business of Interactive Digital Media
- DSO 427: Designing Spreadsheet-Based Business Models