DECISION SCIENCES (DS)

# Course numbers with the # symbol included (e.g. #400) have not been taught in the last 3 years.

**DS 444 - Meaning of Entrepreneurship**  
**Credits:** 4  
This course explores the idea and ideals of entrepreneurship, the creating of value through individual initiative, creativity and innovation. The idea of entrepreneurship is of significant relevance in the highly dynamic and competitive 21st century global economy. It is an idea that is important for students to understand and to critically consider and apply. Encourages the development of multiple views of entrepreneurship, and uses a broad, not just business, approach to the study as it engages students in the subject matter. Open to all majors. (Also offered as MGT 444.) Writing intensive.  
**Attributes:** Environment, Tech Society (Disc); Inquiry (Discovery); Writing Intensive Course  
**Equivalent(s):** MGT 444  
**Grade Mode:** Letter Grading

**DS 520 - Topics in Decision Sciences**  
**Credits:** 4  
Special topics, vary by semester.  
**Repeat Rule:** May be repeated for a maximum of 8 credits.  
**Grade Mode:** Letter Grading

**DS 620 - Topics in Decision Sciences**  
**Credits:** 1-4  
Special topics, vary by semester.  
**Repeat Rule:** May be repeated for a maximum of 12 credits.  
**Grade Mode:** Letter Grading

**DS 660 - The Mel Rines Student Angel Investment Fund**  
**Credits:** 2  
The Mel Rines Student Angel Investment Fund is a cross-disciplinary, undergraduate, student-managed private equity fund. The fund allows students to learn angel and venture capital investment strategies through the first-hand experience of investing in start-up companies. Students evaluate entrepreneur pitches, conduct due diligence projects on potential investments, and work with angel partners. An officer corps is responsible for structuring and coordinating the class. Students in good standing may retake the course. Prereq: permission.  
**Repeat Rule:** May be repeated for a maximum of 12 credits.  
**Grade Mode:** Letter Grading

**DS 662 - Programming for Business**  
**Credits:** 4  
Introduces students to programming concepts. Covers fundamentals including functions, variable types, conditional, and data structures. Students apply these concepts to a variety of business analytics problems including data collection, wrangling, reshaping, summarizing, and visualization. Prereq: ADMN 410.  
**Equivalent(s):** DS 562  
**Grade Mode:** Letter Grading

**DS 671 - Data Visualization and Prescriptive Analytics**  
**Credits:** 4  
The course focuses on Descriptive and Prescriptive Analytics. Students gain modeling and data analysis and visualization skills necessary to address a wide variety of business problems. In Descriptive Analytics, students learn principles of data visualization, data cleanup and wrangling, advanced data analysis and visualization tools, and dashboard design. In Prescriptive Analytics, students learn advanced spreadsheet modeling/programming, formulating and solving a variety of optimization problems, and performing sensitivity analysis. Prereq: ADMN 410, ADMN 420.  
**Equivalent(s):** DS 766  
**Grade Mode:** Letter Grading

**DS 673 - Database Management**  
**Credits:** 4  
Provides students with the skills necessary to understand the database environment of the firm. Topics include data models, normalization, SQL, data warehouses, and nosQL databases. Students learn to design and implement moderately complex relational databases in multi-user, client/server environments. Prereq: ADMN 410.  
**Equivalent(s):** DS 773  
**Grade Mode:** Letter Grading

**DS 720 - Topics in Decision Sciences II**  
**Credits:** 4  
Introduces students to commonly used predictive analytics techniques and necessary programming with focus on regression analysis and model building. The course coverage is supported with real data applications and illustrations. The topics include linear and non-linear regression model building/selection, residual analysis, search algorithms, generalized linear models/classification, and clustering algorithms.  
**Repeat Rule:** May be repeated for a maximum of 8 credits.  
**Grade Mode:** Letter Grading

**DS 741 - Private Equity/Venture Capital**  
**Credits:** 4  
This course will notably increase knowledge and understanding of the private equity financing market, develop analytical skills in evaluating private equity financing details, learn from the experience of market practitioners, and enhance oral and written presentation skills. Prereq: ADMN 570 and senior standing.  
**Grade Mode:** Letter Grading

**DS 742 - Internship in Entrepreneurial and Management Practice**  
**Credits:** 4  
Involves working for leading companies and dynamic entrepreneurs, as well as classroom instruction. The priority experiential, real-world, and real-time learning in the high-growth environment of entrepreneurial ventures. Focus on several topic areas, including venture capital. Prereq: senior standing; permission.  
**Equivalent(s):** MGT 742  
**Grade Mode:** Letter Grading

**DS 768 - Forecasting Analytics**  
**Credits:** 4  
The course focuses on Predictive Analytics. Businesses and organizations need to be able to forecast effectively in order to make decisions. Students learn the background necessary to develop forecasts for real-world business situations. An applied, hands-on approach is used in the course. Students learn and use SAS to analyze data and fit models. Topics include regression analysis in forecasting, model building, residual checking, analysis of seasonal and cyclical trends, and time series models. Prereq: ADMN 420.  
**Grade Mode:** Letter Grading
DS 774 - E-Business
Credits: 4
Covers the concepts, tools, and strategies for understanding the challenges and exploiting the opportunities associated with e-commerce/e-business. Students gain a comprehensive understanding of online payment systems, cyber security, e-commerce marketing and advertising, web development, and web and social media analytics. Prereq: ADMN 410 and junior standing. DS 562 or CS 405 is strongly recommended.
Grade Mode: Letter Grading

DS 775 - Corporate Project Experience
Credits: 4
Provides real-life experience in organizations. Work in groups on information systems and/or business analytics projects identified by sponsoring organizations. Integrate concepts and skills learned in prior business, analytics, and information systems courses. Learn project management concepts, work with project management tools, and use presentation techniques. Prereq: DS 673 and 2 ISBA Electives.
Attributes: Writing Intensive Course
Grade Mode: Letter Grading