# BUDT Decision and Information Technologies

Fall 2025

**BUDT700** Business Communication

(Perm req) Credits: 1 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H Smith School of Business. Credit only granted for: BUDT758A or BUDT700. Formerly: BUDT758A.

Consists of written and oral base-line assessments. Students will meet with Program administrators to receive feedback on these assessments and create an individualized development plan. Workshops and core course assignments, Smith-related activities and CMP assignments.

0506	Cary Gillett  Meets August 25, 2025 - October 10, 2025	Seats (Total: 0, Open: 0, Waitlist: 0)
	W 7:00pm - 8:50pm Class time/details on ELMs	Location: TBA ONLINE
0507	Cary Gillett  Meets August 25, 2025 - October 10, 2025	Seats (Total: 0, Open: 0, Waitlist: 0)
	Th 7:00pm - 8:50pm Class time/details on ELMs	Location: TBA ONLINE

#### BUDT702 Database Management Systems

(Perm req) Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H Smith School of Business.

Introduction to the conceptual, logical and physical design of relational database systems and their use in business environments. Topics include information modeling and optimization via normalization; Structured Query Language (SQL); Data Warehousing.

0501	Woei-jyh Lee	Seats (Total: 0, Open: 0, Waitlist: 0)
	Meets August 25, 2025 - October 10, 2025	
	MW 10:00am - 11:50am	Location: TBA

0502 Woei-jyh Lee Seats (Total: 0, Open: 0, Waitlist: 0)

Meets August 25, 2025 - October 10,

2025

MW 2:00pm - 3:50pm Location: TBA

#### BUDT703 Database Management Systems

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H Smith School of Business. Credit only granted for: BUDT758Y OR BUDT703. Formerly: BUDT758Y.

Introduction to the conceptual, logical and physical design of relational database systems and their use in business environments. Topics include information modeling and optimization via normalization; Structured Query Language (SQL); Data Warehousing.

0506 Woei-jyh Lee Seats (Total: 0, Open: 0, Waitlist: 0)

Meets August 25, 2025 - December 12,

2025

TuTh 9:30am - 10:45am Location: TBA

#### BUDT704 Data Processing and Analysis in Python

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H Smith School of Business. Credit only granted for: BUDT758X OR BUDT704. Formerly: BUDT758X.

An introduction to the Python programming language for the purpose of processing, analyzing, and visualizing data. In addition, students will be introduced to developing basic regression, optimization, and simulation models in Python, using highly popular packages. Course emphasis is on mastering basic Python functionality and developing intermediate to advanced skills in working with data, through instruction and active learning.

0501	Manmohan Aseri	Seats (Total: 0, Open: 0, Waitlist: 0)
	Meets August 25, 2025 - December 12, 2025	
	TuTh 5:00pm - 6:15pm	Location: TBA
0502	Manmohan Aseri	Seats (Total: 0, Open: 0, Waitlist: 0)
	Meets August 25, 2025 - December 12, 2025	
	TuTh 6:30pm - 7:45pm	Location: TBA

0506 Peng Huang Seats (Total: 0, Open: 0, Waitlist: 0)

Meets August 25, 2025 - December 12,

2025

MW 2:00pm - 3:15pm Location: TBA

#### BUDT705 Data Visualization for Business

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H Smith.

An introduction to data visualization techniques. Data-driven decisions are increasingly embedded in business organizations, so professionals must be able to explore and communicate data with understandable and powerful visualizations.

0501	Jessica Clark	Seats (Total: 30, Open: 0, Waitlist: 2)
	Meets August 25, 2025 - October 10, 2025	
	TuTh 12:00pm - 1:50pm	Location: TBA
0502	Jessica Clark	Seats (Total: 30, Open: 0, Waitlist: 1)
	Meets August 25, 2025 - October 10, 2025	
	TuTh 2:00pm - 3:50pm	Location: TBA

#### **BUDT721** Digital Transformation in Business

(Perm req) C

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H Smith School of Business. Credit only granted for: BUDT758E or BUDT721. Formerly: BUDT758E.

Introduces students to the strategic role of digital transformation within businesses, and provides an overview for how major information technologies may be used to inform and transform the firm's strategic, operational, and tactical decisions. Topics discussed in the course include the strategic use of digital technologies to generate sustainable competitive value; the contributions of new forms of technology infrastructure; the evaluation of new technology investments and the resulting ROI; acquiring, managing and governing technological capabilities within the firm; understanding the role of enterprise systems and social technologies within the firm; and the management of disruptive technologies within and outside the firm.

0501 II-Horn Hann Seats (Total: 0, Open: 0, Waitlist: 0)

Meets October 20, 2025 - December 12,

2025

TuTh 12:00pm - 1:50pm Location: TBA

0504 II-Horn Hann Seats (Total: 0, Open: 0, Waitlist: 0)

Meets October 20, 2025 - December 12,

2025

TuTh 2:00pm - 3:50pm Location: TBA

#### **BUDT722** Managing Digital Business Markets

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H Smith. Credit only granted for: BUDT758G or BUDT722. Formerly: BUDT758G.

The objective is to understand the strategic and tactical issues involved in managing digital businesses and markets. Also, some of the characteristics of digital businesses and markets that make them unique and understand how companies can best manage them will be examined.

0501	Siva Viswanathan	Seats (Total: 0, Open: 0, Waitlist: 0)
	Meets August 25, 2025 - October 10, 2025	
	TuTh 2:00pm - 3:50pm	Location: TBA
0504	Siva Viswanathan	Seats (Total: 0, Open: 0, Waitlist: 0)
	Meets August 25, 2025 - October 10, 2025	
	TuTh 12:00pm - 1:50pm	Location: TBA

#### **BUDT724** Project Management in Dynamic Environments

(Perm req)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H Smith.

Addresses project management skills that are required by successful managers in increasingly competitive and faster-moving environments. Examines fundamental concepts of successful project management, and the technical and managerial issues, methods, and techniques.

0501	Paul Shapiro	Seats (Total: 0, Open: 0, Waitlist: 0)
	Meets October 20, 2025 - December 12, 2025	
	TuTh 2:00pm - 3:50pm	Location: TBA
0504	Paul Shapiro	Seats (Total: 0, Open: 0, Waitlist: 0)
	Meets October 20, 2025 - December 12, 2025	
	TuTh 12:00pm - 1:50pm	Location: TBA

#### **BUDT730** Data Models and Decisions

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H Smith. Credit only granted for: BUSI758B, BUDT758Q or BUDT730. Formerly: BUDT758Q.

Analytical modeling of business decisions; uncertainty, risk and expected utility; regression modeling to infer relationships among variables.

0506 Sujin Kim Seats (Total: 0, Open: 0, Waitlist: 0)

Meets August 25, 2025 - December 12,

2025

TuTh 12:30pm - 1:45pm Location: TBA

#### BUDT731 Data, Models, and Decisions Using R

(Perm reg)

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H Smith School of Business.

Analytical modeling of business decisions; uncertainty, risk and expected utility; regression modeling to infer relationships among variables.

0501	Eaman Jahani	Seats (Total: 0, Open: 0, Waitlist: 0)
	Meets August 25, 2025 - October 10, 2025	
	MW 4:00pm - 5:50pm	Location: TBA
0502	Eaman Jahani	Seats (Total: 0, Open: 0, Waitlist: 0)
	Meets August 25, 2025 - October 10, 2025	
	MW 12:00pm - 1:50pm	Location: TBA

#### **BUDT732** Decision Analytics

(Perm req)

Credits: 3 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H Smith. Credit only granted for: BMGT732, BUDT758P or BUDT732. Formerly: BMGT732 and BUDT758P.

Analytical modeling for managerial decisions using a spreadsheet environment. Includes linear and nonlinear optimization models, decision making under uncertainty and simulation models.

0506 Alexander Estes Seats (Total: 0, Open: 0, Waitlist: 0)

Meets August 25, 2025 - December 12,

2025

MW 11:00am - 12:15pm Location: TBA

#### **BUDT733** Data Mining and Predictive Analytics

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H Smith School of Business.

With vast quantities of data being generated, including new types of data such as web traffic, social network data, and reviews and comments on websites, "big data" and "analytics" are important topics. Data, when used correctly, can create a competitive edge for firms. Advances in computing hardware and algorithms have improved the quality of predictions and effectiveness of predictive business applications. Expertise in working with data, and deep knowledge of data mining/machine learning methods, is a sought-after skill. This course introduces key tools and techniques of data mining: classification, prediction, cluster analysis, and text mining. The methods covered are linear and logistic regression, k-nearest neighbors, naive Bayes, classification and regression trees, ensemble methods, neural networks, k-Means and hierarchical clustering, and association rules. The course will focus on business applications, with examples from Marketing, Finance, Healthcare, and Operations.

0504 Jessica Clark Seats (Total: 0, Open: 0, Waitlist: 0)

Meets August 25, 2025 - October 10,

2025

MW 2:00pm - 3:50pm Location: TBA

#### **BUDT748** Industry Practicum

Credits: 3 Grading Method: Regular

This capstone course will provide students an opportunity to work on a real-world project where they will work with a company to use technology to solve a business problem.

0501	Minoo Modaresnezhad	Seats (Total: 30, Open: 3, Waitlist: 0)
	Meets August 25, 2025 - December 12, 2025	
	MW 9:30am - 10:45am	TYD 1118
0502	Minoo Modaresnezhad	Seats (Total: 30, Open: 6, Waitlist: 0)
	Meets August 25, 2025 - December 12, 2025	
	MW 8:00am - 9:15am	Location: TBA

0503	Paul Shapiro	Seats (Total: 30, Open: 6, Waitlist: 0)
	Meets August 25, 2025 - December 12, 2025	
	MW 6:30pm - 7:45pm	Location: TBA
0504	Paul Shapiro	Seats (Total: 0, Open: 0, Waitlist: 0)
	Meets August 25, 2025 - December 12, 2025	
	MW 5:00pm - 6:15pm	Location: TBA

#### BUDT756 Causal Inference & A/B Testing

Credits: 2 Grading Method: Regular

Restriction: Must be in Business and Management (Master's) program; or permission of BMGT-Robert H Smith School of Business.

Organizations and policymakers in government constantly grapple with such causal questions. For example, firms want to know how does a price change affect the sales of a product, or how to design websites and platforms that increase consumer engagement and lead generation; political parties want to know what on social media sites can boost their political influence, and governments want to know whether allowing parents to pay for private schools using publicly funded vouchers make the education system more effective. In particular, platforms such as Netflix, Airbnb, eBay, Groupon, Booking.com, Uber, Amazon, etc. make extensive and continuous use of A/B tests and have a dedicated team of data scientists and IT-personnel to implement, monitor and analyze such tests. Banks and Insurance companies constitute another important sector where the use of A/B testing is ubiquitous.

0501 Jui Ramaprasad Seats (Total: 35, Open: 0, Waitlist: 18)

Meets August 25, 2025 - October 10,

2025

MW 12:00pm - 1:50pm Location: TBA

### BUDT758I Special Topics in Decision, Operations and Information Technologies; Applied Finance Information Systems

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501 Harish Neelakandan Seats (Total: 30, Open: 0, **Waitlist: 1**)

Meets August 25, 2025 - October 10,

2025

MW 6:00pm - 7:50pm Location: TBA

BUDT758L Special Topics in Decision, Operations and Information Technologies; Price Optimization & Revenue Management

(Perm req)

Credits: 3

Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

For MS in Business Analytic students only.

0506	Yi Xu	Seats (Total: 0, Open: 0, Waitlist: 0)
	Meets August 25, 2025 - December 12, 2025	
	TuTh 3:30pm - 4:45pm	Location: TBA
0507	Yi Xu	Seats (Total: 0, Open: 0, Waitlist: 0)
	Meets August 25, 2025 - December 12, 2025	
	TuTh 5:00pm - 6:15pm	Location: TBA

#### **BUDT7580**

#### Special Topics in Decision, Operations and Information Technologies; Designing Al Systems

Credits: 2 Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0501	Tejwansh Anand	Seats (Total: 30, Open: 0, Waitlist: 0)	
	Meets August 25, 2025 - October 10, 2025		
	TuTh 4:00pm - 5:50pm	Location: TBA	

#### **BUDT758W**

## Special Topics in Decision, Operations and Information Technologies; Capstone Project in Business Analytics

(Perm req)

Credits: 3

Grading Method: Regular

Selected advanced topics in the various fields of graduate study in decision, operations and information technologies.

0506	Suresh Acharya	Seats (Total: 0, Open: 0, Waitlist: 0)
	Meets August 25, 2025 - Dece 2025	ember 12,
	M 7:00pm - 9:40pm	Location: TBA
	For MS in Business Analytics s	tudents only.
0507	Suresh Acharya	Seats (Total: 0, Open: 0, Waitlist: 0)
	Meets August 25, 2025 - Decc 2025	ember 12,
	Contact instructor or departmen	nt for details.

BUDT759 Independent Study in Decision and Information Technologies

(Perm req) Grading Method: Regular, Sat-

Fail

Independent study for masters students in decision and information technologies.

Contact department for information to register for this course.