BTU | BUSINESS & TECHNOLOGY UNIVERSITY

DIGITAL TRANSFORMATION

Digital Transformation

Course Description

This course provides an introduction to digital transformation, with a focus on digital strategy, business model innovation, data-driven decision making, and agile development methodologies. Through a combination of lectures, case studies, and hands-on exercises, students will learn how to design and implement successful digital transformation initiatives that drive growth and innovation.

Course Goals:

- Understand the key concepts and principles of digital transformation
- Develop the skills to design and implement digital strategies and business models
- Learn how to use data to drive decision making and innovation
- Gain insights into agile development methodologies and best practices

Course Outline:

Week 1: Introduction to Digital Transformation

- Overview of digital transformation
- The impact of digital technology on business models and strategy
- Key trends and challenges in digital transformation

Week 2: Digital Strategy

- Developing a digital strategy
- Identifying digital opportunities and threats
- Aligning digital strategy with business objectives

Week 3: Business Model Innovation

- Understanding business model innovation
- Identifying new revenue streams and value propositions
- Implementing business model innovation in a digital context

Week 4: Data-Driven Decision Making

- The role of data in digital transformation
- Data analytics and visualization
- Using data to drive decision making and innovation

Week 5: Agile Development Methodologies

- Introduction to agile development
- Agile principles and best practices
- Implementing agile in a digital transformation context

Assessment and Evaluation:

Participation and Attendance: 10%
Homework Assignments: 30%
Midterm Exam: 20%
Final Exam: 40%

Required Readings:

1. Digital Transformation: Survive and Thrive in an Era of Mass Extinction by Thomas M. Siebel
2. The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail by Clayton M. Christensen
3. Agile Estimating and Planning by Mike Cohn
4. Leading Digital: Turning Technology into Business Transformation by George Westerman, Didier Bonnet, and Andrew McAfee
5. The Business of Platforms: Strategy in the Age of Digital Competition, Innovation, and Power by David B. Yoffie and Michael A. Cusumano
6. Design Thinking for Strategic Innovation: What They Can't Teach You at Business or Design School by Idris Mootee
7. Agile Project Management with Scrum by Ken Schwaber

Course Assignments:

1. Develop a digital strategy for a specific business or industry
2. Create a business model canvas for a hypothetical digital product or service
3. Conduct a case study analysis of a successful data-driven decision making initiative
4. Implement an agile development methodology in a digital transformation project

Classroom Policies:

- Attendance and participation are expected in every class.
- Late homework assignments will not be accepted without prior approval from the instructor. If you have an emergency or an unexpected situation that prevents you from completing an assignment on time, please contact the instructor as soon as possible.
- Academic dishonesty, including plagiarism and cheating, will not be tolerated and will result in a failing grade for the course. It is the responsibility of each student to ensure that their work is original and properly cited.
- Students are expected to treat each other and the instructor with respect and professionalism. Inappropriate behavior, including harassment and discrimination, will not be tolerated and may result in disciplinary action.
- Accommodations for students with disabilities are available through the Disability Services Office.

Course Resources:

- Online resources, including articles, videos, and tutorials, will be assigned throughout the course.
- Guest speakers from industry and academia will be invited to share their insights and experiences in digital transformation.
- The course website will include links to digital transformation tools and resources, such as software and case studies.