Business Technology Management Administration (BTMA) 444

Business Intelligence and Analytics (Revision 2)

Status:	Replaced with new revision, see the **course listing** for the current revision
Delivery mode:	**Individualized study online**. Delivered via Brightspace.
Credits:	3
Area of study:	Applied Studies (Business and Administrative Studies)
Prerequisites:	**BTMA 320** and **CMIS 351**.
Precluded:	None

Challenge:	BTMA 444 has a challenge for credit option.
Faculty:	**Faculty of Business**

Overview

Contemporary businesses operate in an increasingly data-driven world. Successful businesses around the world are investing heavily in technologies and systems to become more informed about the key elements that affect their business operations, support and serve their customers, and sustain their competitive positioning with their markets. Decision makers often need to make use of first-hand, in-depth, and contextual capacity to collect business data from highly distributed systems around the globe; to employ analytics techniques to discover business relationships; to communicate and collaborate effortlessly with clients, partners, and analysts; and to evolve a highly successful business practice. Business intelligence, analytics, and data science are overlapping fields that encompass the technologies, systems, architectures, and tools that support managerial decision making in this data-driven climate.

BTMA 444 approaches business intelligence and analytics from a managerial viewpoint. Students are expected to orient their study toward making strategic business decisions using analytics data derived from business tools. The assignments are designed to offer students choice and flexibility to explore their interests within the field of analytics and to demonstrate their ability to apply course concepts to real-world contexts.

Outline

- Lesson 1: Data-Driven Decision Making
- Lesson 2: Data Processing, Modeling, Reporting, and Visualization
- Lesson 3: Data Warehousing and Performance Management
- Lesson 4: Data Mining
- Lesson 5: Text, Web, and Social Media Analytics
- Lesson 6: Optimization and Simulation
- Lesson 7: Big Data Concepts and Tools
- Lesson 8: Future Trends, Ethics, and Managerial Considerations in Analytics

Evaluation

To **receive credit** for BTMA 444, you must submit four written assignments, receive at least 50 percent on the Final Examination, and achieve an overall course grade of at least **D (50 percent)**.

Activity	Weight	Complete by
Assignment 1: Final Project Proposal	5%	as soon as possible
Assignment 2	15%	after Lesson 4

Activity	Weight	Complete by
Assignment 3	15%	after Lesson 8
Assignment 4: Final Project	30%	after receiving approval for Assignment 1
Forum Participation	5%	ongoing
Final Examination	30%	after Lesson 8
Total	**100%**	

The **final examination** for this course must be requested in advance and written under the supervision of an AU-approved exam invigilator. Invigilators include either ProctorU or an approved in-person invigilation centre that can accommodate online exams. Students are responsible for payment of any invigilation fees. Information on exam request deadlines, invigilators, and other exam-related questions, can be found at the **Exams and grades** section of the Calendar.

Materials

Digital course materials

Links to the following course materials will be made available in the course:

Sharda, R., Delen, D., & Turban., E. (2018). *Business intelligence, analytics, and data science: A managerial perspective* (4th ed.). Boston: Pearson Education

Other Resources

All other learning resources will be available online.

Challenge for credit

Overview

The challenge for credit process allows you to demonstrate that you have acquired a command of the general subject matter, knowledge, intellectual and/or other skills that would normally be found in a university-level course.

Full information about **challenge for credit** can be found in the Undergraduate Calendar.

Evaluation

To **receive credit** for the BTMA 444 challenge registration, you must complete one written assignment, write a challenge examination, and achieve a composite course grade of at least **D (50 percent)** .

Activity	Weight
Written Assignment	60%

Activity	Weight
Online Exam (3 hours)	40%
Total	**100%**

Challenge for credit course registration form

Important links

- Academic advising
- Program planning
- Request assistance
- Support services at AU

Athabasca University reserves the right to amend course outlines occasionally and without notice. Courses offered by other delivery modes may vary from their individualized study counterparts.

Opened in Revision 2, October 28, 2022

Updated November 6, 2026

View **previous revision**