

FB6778A: AI-DRIVEN ANALYTICS AND BUSINESS INTELLIGENCE

Effective Term

Semester A 2026/27

Part I Course Overview

Course Title

AI-Driven Analytics and Business Intelligence

Subject Code

FB - College of Business (FB)

Course Number

6778A

Academic Unit

College of Business (CB)

College/School

College of Business (CB)

Course Duration

One Semester

Credit Units

2

Level

P5, P6 - Postgraduate Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

FB6778B

Part II Course Details

Abstract

Students will learn how to use AI to conduct descriptive, predictive, diagnostic, or prescriptive analytics for a selected topic and how AI solves the pain points of a selected industry.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Explain the concepts of AI	40	x	x	x
2	Analyse the application and impact of AI in various industries	30	x	x	x
3	Design and analyse the impact of AI in various markets	30	x	x	x

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Learning and Teaching Activities (LTAs)

LTAs		Brief Description	CILO No.	Hours/week (if applicable)
1	Lecture	Students will identify the concepts, frameworks, and technologies of AI.	1, 2, 3	
2	Case Studies	Students will engage in case studies to analyse how AI be used in different industries and evaluate its impact on businesses.	1, 2, 3	
3	In-class activities	Students will demonstrate the self-reflection sharing of concepts, techniques, and methods of AI among students within or after formal classes.	1, 2, 3	

Assessment Tasks / Activities (ATs)

ATs		CILO No.	Weighting (%)	Remarks ("-" for nil entry)	Allow Use of GenAI?
1	Individual Assignment	1, 2, 3	50	-	No
2	Group Assignment	1, 2, 3	50	-	No

Continuous Assessment (%)

100

Assessment Rubrics (AR)

Assessment Task

Individual Assignment (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

Ability to demonstrate understanding of the course topics through assignment.

Excellent

(A+, A, A-) Strong evidence of original thinking; good organization, capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.

Good

(B+, B, B-) Evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.

Fair

(C+, C, C-) Student who is profiting from the university experience; understanding of the subject; ability to develop solutions to simple problems in the material.

Marginal

(D) Little evidence of familiarity with the subject matter; weakness in critical and analytic skills; limited, or irrelevant use of literature.

Failure

(F) No evidence of familiarity with the subject matter; weakness in critical and analytic skills; limited, or irrelevant use of literature

Assessment Task

Group Assignment (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

Synthesize concepts and tools learned from this course

Excellent

(A+, A, A-) Demonstrate strong ability to synthesize concepts and tools learned in the group assignments

Good

(B+, B, B-) Demonstrate good ability to synthesize concepts and tools learned in the group assignments

Fair

(C+, C, C-) Demonstrate acceptable ability to synthesize concepts and tools learned in the group assignments

Marginal

(D) Demonstrate poor ability to synthesize concepts and tools learned in the group assignments

Failure

(F) Demonstrate unacceptable ability to synthesize concepts and tools learned in the group assignments

Assessment Task

Individual Assignment (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

Ability to demonstrate understanding of the course topics through assignment.

Excellent

(A+, A, A-) Strong evidence of original thinking; good organization, capacity to analyse and synthesize; superior grasp of subject matter; evidence of extensive knowledge base.

Good

(B+, B) Evidence of grasp of subject, some evidence of critical capacity and analytic ability; reasonable understanding of issues; evidence of familiarity with literature.

Marginal

(B-, C+, C) Student who is profiting from the university experience; understanding of the subject; ability to develop solutions to simple problems in the material.

Failure

(F) Little evidence of familiarity with the subject matter; weakness in critical and analytic skills; limited, or irrelevant use of literature.

Assessment Task

Group Assignment (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

Synthesize concepts and tools learned from this course

Excellent

(A+, A, A-) Demonstrate strong ability to synthesize concepts and tools learned in the group assignments

Good

(B+, B) Demonstrate good ability to synthesize concepts and tools learned in the group assignments

Marginal

(B-, C+, C) Demonstrate acceptable ability to synthesize concepts and tools learned in the group assignments

Failure

(F) Demonstrate poor ability to synthesize concepts and tools learned in the group assignments

Part III Other Information

Keyword Syllabus

1. Artificial Intelligence (AI)
2. Generative AI
3. Machine Learning
4. AI-Powered Descriptive and Predictive Analytics
5. AI-Powered Prescriptive and Diagnostics Analytics
6. Unstructured Data and Big Data
7. Power BI
8. Visualization
9. Microsoft Azure

Reading List

Compulsory Readings

Title	
1	Nil

Additional Readings

Title	
1	Albada, Michael. Building Applications with AI Agents: Designing and Implementing Multiagent Systems. Sebastopol: O’ Reilly Media, Incorporated, 2024.
2	Stirrup, Jen; Weinandy, Thomas J. Artificial Intelligence with Microsoft Power BI: Simpler AI for the Enterprise. Sebastopol: O’ Reilly Media, Incorporated, 2024.
3	Zwingmann, Tobias. AI-Powered Business Intelligence: Improving Forecasts and Decision Making with Machine Learning. Sebastopol: O’ Reilly Media, Incorporated, 2022.