

IS6201P: BLOCKCHAIN TECHNOLOGY AND ARTIFICIAL INTELLIGENCE

Effective Term

Semester A 2026/27

Part I Course Overview

Course Title

Blockchain Technology and Artificial Intelligence

Subject Code

IS - Information Systems

Course Number

6201P

Academic Unit

Information Systems (IS)

College/School

College of Business (CB)

Course Duration

Non-standard Duration

Other Course Duration

Intensive mode: 3 days

Credit Units

1.5

Level

P5, P6 - Postgraduate Degree

Medium of Instruction

Other Languages

Other Languages for Medium of Instruction

Putonghua supplemented by English

Medium of Assessment

Chinese

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details**Abstract**

The course will cover blockchain technologies, distributed ledger technology, cryptocurrencies (e.g., Bitcoin), and their applications, implementation and security concerns. Students will learn how these systems work; analyse the security and regulation issues relating to blockchain technologies; and understand the impact of blockchain technologies on financial services and other industries. Students will also learn how to use artificial intelligence (AI) software to conduct analytics for selected topics and how to use AI to solve pain points of selected industries.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Explain the concepts of cryptocurrency, blockchain, distributed ledger technologies and AI	20		x	x
2	Analyse the application and impact of blockchain technology and AI in the financial industry and other industries	30	x	x	x
3	Identify the security issues relating to blockchain and AI	25	x	x	
4	Explain and analyse the impact of blockchain and AI technology in other markets	25		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 learn about the concepts, frameworks, and technologies of blockchain and AI through lectures.	1, 3	

2	Cases studies	Students will conduct case studies to analyse how blockchain and AI can be used in different industries and evaluate their impact on businesses.	1, 2, 3, 4	
3	Online discussion	Students will participate in online discussion for self-reflection and sharing of concepts, techniques, and methods of knowledge management.	1, 2, 3, 4	

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks	Allow Use of GenAI?
1	Participation Students should participate in class activities, such as small group discussions and presentations, self-reflection, raise and answer questions, and the likes. Class participation is used to assess students' understanding of the topics and their abilities to apply the knowledge and concepts taught in class.	1, 2, 3, 4	40	-	Yes
2	Individual Assignment(s) Students will answer questions and solve problems in the area of blockchain technologies and applications.	1, 2, 3, 4	60	-	Yes

Continuous Assessment (%)

100

Assessment Rubrics (AR)**Assessment Task**

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

Criterion

Ability to show initiative and interactions in raising sensible questions and giving insightful discussion of issues relating to the course topics in class.

Excellent

(A+, A, A-) Demonstrate excellent ability to show initiative and interactions in raising sensible questions and giving insightful discussion of issues relating to the course topics in class.

Good

(B+, B, B-) Demonstrate good ability to show initiative and interactions in raising sensible questions and giving insightful discussion of issues relating to the course topics in class.

Fair

(C+, C, C-) Demonstrate moderate ability to show initiative and interactions in raising sensible questions and giving insightful discussion of issues relating to the course topics in class.

Marginal

(D) Demonstrate marginal ability to show initiative and interactions in raising sensible questions and giving insightful discussion of issues relating to the course topics in class.

Failure

(F) Demonstrate little to no ability to show initiative and interactions in raising sensible questions and giving insightful discussion of issues relating to the course topics in class.

Assessment Task

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

Criterion

Understanding of the course topics through assignment(s).

Excellent

(A+, A, A-) Demonstrate excellent understanding of the course topics through assignment(s).

Good

(B+, B, B-) Demonstrate good understanding of the course topics through assignment(s).

Fair

(C+, C, C-) Demonstrate moderate understanding of the course topics through assignment(s).

Marginal

(D) Demonstrate marginal understanding of the course topics through assignment(s).

Failure

(F) Demonstrate little to no understanding of the course topics through assignment(s).

Assessment Task

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

Criterion

Ability to show initiative and interactions in raising sensible questions and giving insightful discussion of issues relating to the course topics in class.

Excellent

(A+, A, A-) Demonstrate excellent ability to show initiative and interactions in raising sensible questions and giving insightful discussion of issues relating to the course topics in class.

Good

(B+, B) Demonstrate good ability to show initiative and interactions in raising sensible questions and giving insightful discussion of issues relating to the course topics in class.

Marginal

(B-, C+, C) Demonstrate marginal ability to show initiative and interactions in raising sensible questions and giving insightful discussion of issues relating to the course topics in class.

Failure

(F) Demonstrate little to no ability to show initiative and interactions in raising sensible questions and giving insightful discussion of issues relating to the course topics in class.

Assessment Task

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

Criterion

Understanding of the course topics through assignment(s).

Excellent

(A+, A, A-) Demonstrate excellent understanding of the course topics through assignment(s).

Good

(B+, B) Demonstrate good understanding of the course topics through assignment(s).

Marginal

(B-, C+, C) Demonstrate marginal understanding of the course topics through assignment(s).

Failure

(F) Demonstrate little to no understanding of the course topics through assignment(s).

Part III Other Information**Keyword Syllabus**

Blockchain, Digital Currency, and Artificial Intelligence.

Reading List**Compulsory Readings**

Title	
1	Nil

Additional Readings

Title	
1	Don Tapscott, Alex Tapscott. Blockchain Revolution: How the Technology Behind Bitcoin is Changing Money, Business, and the World. Portfolio / Penguin (May 10, 2016)
2	William Mougayar. The Business Blockchain: Promise, Practice, and Application of the Next Internet Technology. Wiley; 1st edition (May 9, 2016)

3	Arvind Narayanan, Joseph Bonneau, Edward Felten, Andrew Miller, and Steven Goldfeder. Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction. Princeton University Press (July 19, 2016)
4	Andreas M. Antonopoulos. Mastering Bitcoin: Unlocking Digital Cryptocurrencies. O'Reilly Media; 1st edition (December 20, 2014)
5	Kumble, G.P., Practical Artificial Intelligence and Blockchain: A Guide to Converging Blockchain and AI to Build Smart Applications for New Economies. Packt Publishing, 2020
6	Zwingmann, Tobias. AI-Powered Business Intelligence. Sebastopol: O' Reilly Media, Incorporated, 2022.
7	Online Resources: Readings will be augmented by pertinent journal/newspaper/magazine articles.