

AC6761P: ARTIFICIAL INTELLIGENCE ACCOUNTING

Effective Term

Semester A 2026/27

Part I Course Overview

Course Title

Artificial Intelligence Accounting

Subject Code

AC - Accountancy

Course Number

6761P

Academic Unit

Accountancy (AC)

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**

This course is designed for students taking accountancy and finance studies who are interested to learn how to manage data, conduct business analytics, apply AI model to automate accounting and assurance processes and develop predictive model to increase profitability or return. It is oriented to enhance their technical skillset.

The aim of this course is to provide a broad understanding on how to manage data, the process of preparing data for analysis, basics of analytics, using AI to automate financial analysis process and generate accounting reports. This course will equip students with the ability to apply customized solutions to make informed business decisions, integrate statistical libraries for data analysis, develop AI models to automate accounting and assurance process. This course will provide students with case analysis to enhance the proper direction and process in applying AI in the accounting and related functions.

This course aims to:

1. Provide students with knowledge of AI and its role in accounting and business; 2. Equip students with ability to automate financial analyses using contemporary AI technologies;
3. Develop students' ability to model business processes and develop accounting information database;
4. Manage data to sufficiently derive, analyze, communicate analytics outcome and eventually apply AI models in accounting and related functions;
5. Enhance students' knowledge on China and global businesses in face of the rapid development of AI.

Objectives of the course:

At the completion of this course, students should be able to:

1. Appreciate the contemporary developmental process of AI models and mechanism with reference to the accounting and related practices;
2. Automate financial analyses using contemporary AI technologies;
3. Identify possible utilization of AI techniques and models in existing and forecasted accounting, finance and related functions;
4. Visualize the current progress and outcome in the professional and business sector in the application of AI models and identify the causes and moderating factors thereof;
5. Develop communication and presentation skills in demonstrating AI accounting to potential users in the accounting and business sector;
6. Apply AI and accounting knowledge in China and the global market.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Describe and explain the automation of financial analyses using contemporary AI technologies.		x	x	x
2	Identify AI techniques and models in accounting and finance.		x	x	x
3	Explain the application progress of AI techniques and models in accounting and finance functions.		x	x	
4	Explain clearly to potential users of AI accounting with enhanced communication and presentation skills.		x	x	
5	Apply AI and accounting knowledge in China and the global market.		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	Lectures	Students will learn the development of AI knowledge, analytical and communication skills and modelling capabilities through the analysis and application of AI in accounting.	1, 2, 3, 4, 5	
2	Case Analyses#	Students will conduct case analyses and design solutions to problems related to AI in accounting and business.	1, 2, 3, 4, 5	

Additional Information for LTAs

DEC TLA element

Assessment Tasks / Activities (ATs)

ATs		CILO No.	Weighting (%)	Remarks ("- " for nil entry)	Allow Use of GenAI?
1	In-class Discussion and Activities#: Students need to identify the issues and problems in various studied cases and actively participate in class activities and discussion.	1, 2, 3, 4, 5	60	# DEC AT element	Yes

Continuous Assessment (%)

60

Examination (%)

40

Examination Duration (Hours)

3

Additional Information for ATs

Final Examination: Students are required to answer all the essay and case questions set in the examination paper.

Students are required to pass both coursework and examination components to guarantee to pass the course. Failing either component may lead to failure in the course.

Assessment Rubrics (AR)

Assessment Task

In-class Discussion and Activities (for students admitted before Semester A 2022/23 and in Semester A 2024/25 & thereafter)

Criterion

Ability to actively participate in interactive discussions and contribute to the discovery of contemporary knowledge and possible developments.

Excellent

(A+, A, A-) Exhibit excellent ability to actively participate in interactive discussions and contribute to the discovery of contemporary knowledge and possible developments.

Good

(B+, B, B-) Exhibit good ability to actively participate in interactive discussions and contribute to the discovery of contemporary knowledge and possible developments.

Fair

(C+, C, C-) Exhibit fair ability to actively participate in interactive discussions and contribute to the discovery of contemporary knowledge and possible developments.

Marginal

(D) Exhibit marginal ability to actively participate in interactive discussions and contribute to the discovery of contemporary knowledge and possible developments.

Failure

(F) Exhibit little to no ability to actively participate in interactive discussions and contribute to the discovery of contemporary knowledge and possible developments.

Assessment Task

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

Criterion

Ability to provide good analysis of conceptual and case questions and demonstrate excellent presentation on the provided answers.

Excellent

(A+, A, A-) Exhibit excellent ability to provide good analysis of conceptual and case questions and demonstrate excellent presentation on the provided answers.

Good

(B+, B, B-) Exhibit good ability to provide good analysis of conceptual and case questions and demonstrate excellent presentation on the provided answers.

Fair

(C+, C, C-) Exhibit fair ability to provide good analysis of conceptual and case questions and demonstrate excellent presentation on the provided answers.

Marginal

(D) Exhibit marginal ability to provide good analysis of conceptual and case questions and demonstrate excellent presentation on the provided answers.

Failure

(F) Exhibit little to no ability to provide good analysis of conceptual and case questions and demonstrate excellent presentation on the provided answers.

Assessment Task

In-class Discussion and Activities (for students admitted from Semester A 2022/23 to Summer Term 2024)

Criterion

Ability to actively participate in interactive discussions and contribute to the discovery of contemporary knowledge and possible developments.

Excellent

(A+, A, A-) Exhibit excellent ability to actively participate in interactive discussions and contribute to the discovery of contemporary knowledge and possible developments.

Good

(B+, B) Exhibit good ability to actively participate in interactive discussions and contribute to the discovery of contemporary knowledge and possible developments.

Marginal

(B-, C+, C) Exhibit marginal ability to actively participate in interactive discussions and contribute to the discovery of contemporary knowledge and possible developments.

Failure

(F) Exhibit little to no ability to actively participate in interactive discussions and contribute to the discovery of contemporary knowledge and possible developments.

Assessment Task

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

Criterion

Ability to provide good analysis of conceptual and case questions and demonstrate excellent presentation on the provided answers.

Excellent

(A+, A, A-) Exhibit excellent ability to provide good analysis of conceptual and case questions and demonstrate excellent presentation on the provided answers.

Good

(B+, B) Exhibit good ability to provide good analysis of conceptual and case questions and demonstrate excellent presentation on the provided answers.

Marginal

(B-, C+, C) Exhibit marginal ability to provide good analysis of conceptual and case questions and demonstrate excellent presentation on the provided answers.

Failure

(F) Exhibit little to no ability to actively participate in interactive discussions and contribute to the discovery of contemporary knowledge and possible developments.

Part III Other Information

Keyword Syllabus

Artificial Intelligence, Concept and Development History, Computerization and Automation, Robotics in Business and Accounting, Reasoning and Self-Learning Process, Contemporary AI Accounting Practices, Expert Systems, AI in the Finance Sector, Cost Benefit Analysis and Assessment, Obstacles and Challenges in AI Applications, Forecasted Future Development.

Reading List

Compulsory Readings

Title	
1	Superminds, Thomas Malone, MIT Center for Intelligence Collection (2019)
2	Delivery Notes from Course Lecturers

Additional Readings

Title	
1	Artificial Intelligence in Accounting and Auditing: Towards New Paradigms, Artificial Intelligence in Accounting and Auditing, Volume 4, Miklos A. Vasarhelyi and Alex Kogan (1998)
2	Superminds, how humans and machines can work together, Deloitte Review, Issue 24, Pages 120 – 131 (January 2019)