AC4361: AI IN ACCOUNTING PRACTICE

Effective Term
Semester A 2026/27

Part I Course Overview

Course Title
AI in Accounting Practice

Subject Code
AC - Accountancy
Course Number
4361

Academic Unit
Accountancy (AC)

College/School
College of Business (CB)

Course Duration
One Semester

Credit Units
3

Level
B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction
English

Medium of Assessment
English

Prerequisites
CB2100 Introduction to Financial Accounting

Precursors
AC3202 Corporate Accounting I

Equivalent Courses
Nil

Exclusive Courses
Nil

Part II Course Details

Abstract
This course equips students with practical skills to use Artificial Intelligence (AI) tools and workflows in everyday accounting work. The course emphasizes how to leverage Large Language Models (LLMs), AI applications, and automation

to enhance productivity and quality in core accounting functions. Students will explore key LLM platforms and learn effective prompting and workflow design, and apply AI to real accounting scenarios including transaction processing, financial reporting, auditing, tax compliance, and management reporting. Ethical responsibilities, professional governance, and the importance of maintaining human oversight are integrated throughout. Students will complete hands-on tutorials, a mid-semester test, a group project, and a final examination to prepare themselves as AI-capable future accountants who are equipped to lead the responsible and effective use of AI.

Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Explain the fundamentals of Artificial Intelligence (AI), Large Language Models (LLMs), and key AI platforms relevant to accounting work, and identify their strengths and limitations.	15%	x	x	
2	Identify and apply practical AI tools and LLMs to solve real accounting challenges in transaction processing, financial reporting, auditing, tax compliance, and management reporting.	30%	x	x	x
3	Design simple AI-enabled workflows and automation processes using no-code tools, demonstrating understanding of when to apply AI vs. traditional automation.	30%	x	x	x
4	Analyze and communicate ethical, governance, and professional responsibilities in using AI in accounting work, and distinguish between appropriate and inappropriate AI use cases.	10%	x	x	
5	Evaluate the quality and limitations of AI-generated outputs, implement review and control mechanisms, and maintain professional oversight of AI-assisted work.	15%	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	Interactive Lectures & Demonstrations	Students will attend lecturer-led sessions introducing AI concepts, LLM platforms, prompting techniques, automation tools, and accounting applications. These sessions will include live demos and Q&A to help students understand practical use cases.	1, 2, 3, 4, 5	1 - 1.5
2	Tutorial / Hands-on Activities	Students will participate in weekly structured tutorials where they work in small groups or individually to practice AI tools (ChatGPT, Gemini, etc.), test prompts, compare LLM outputs, design simple workflows, and apply AI to mock accounting tasks.	2, 3, 5	1.5 - 2
3	Project-Based Learning#	Students will work in groups to design and present an AI-enhanced accounting workflow or toolkit for a specified accounting role, including feasibility, controls, and ethical considerations. This project will culminate in the Week 13 presentation.	2, 3, 4, 5	Distributed across semester

Additional Information for LTAs

#DEC LTA element

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks ("-" for nil entry)	Allow Use of GenAI?
1	In-Class Discussion and Tutorial Participation: Students will be assessed on an ongoing assessment throughout the 13-week semester. They will actively participate in weekly tutorials, contribute to discussions, and complete tutorial tasks. Attendance and engagement will be mandatory.	1, 2, 3, 4, 5	10	Students may use GenAI tools to brainstorm, research, or draft preliminary ideas, but must disclose usage and show critical review/editing. Original work and professional judgement must be evident.	Yes
2	Mid-Semester Test (Week 7): Students will complete an individual written test (1.5 hours) assessing their conceptual understanding of AI/LLM fundamentals, their ability to apply AI to short case scenarios, and their professional reasoning on governance and limitations.	1, 2, 3, 4, 5	20	Use of GenAI tools is not permitted during in-class test or final examination. Violations will be treated as academic integrity breaches.	No
3	Group Project# & Presentation (Week 13): Students will work in groups of 3–5 to develop an AI-enabled workflow or toolkit for an accounting function, and present their findings in a 10-minute boardroom-style presentation in Week 13.	2, 3, 4, 5	20	Students may use GenAI tools to brainstorm, research, or draft preliminary ideas, but must disclose usage and show critical review/editing. Original work and professional judgement must be evident.	Yes

Continuous Assessment (%)

50

Examination (%)

50

Examination Duration (Hours)

3

Additional Information for ATs

#DEC AT element

Final Examination: Students will sit a 3-hour examination (after Week 13) consisting of short-answer and essay questions requiring application of AI concepts to realistic accounting scenarios, ethical analysis, and professional communication.

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 Tutorial Participation

Criterion

Active participation, contribution of accurate and relevant ideas, connection of AI concepts to practical accounting applications.

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

Mid-Semester Test

Criterion

Conceptual understanding of AI fundamentals, ability to apply AI to accounting scenarios, professional reasoning on governance and limitations.

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)
Basic

Failure (F)
Not even reaching marginal levels

Assessment Task
Group Project & Presentation

Criterion
Research, analysis, and application of AI solutions in accounting; strategic planning; governance and control considerations; professional presentation.

Excellent (A+, A, A-)
High

Good (B+, B, B-)
Significant

Fair (C+, C, C-)
Moderate

Marginal (D)
Basic

Failure (F)
Not even reaching marginal levels

Assessment Task
Final Examination

Criterion
Application of AI concepts to realistic scenarios, ethical analysis, professional communication, and analytical problem-solving.

Excellent (A+, A, A-)
High

Good (B+, B, B-)
Significant

Fair (C+, C, C-)
Moderate

Marginal (D)
Basic

Failure (F)
Not even reaching marginal levels

Part III Other Information

Keyword Syllabus

Artificial Intelligence (AI) fundamentals and Large Language Models (LLMs); LLM platforms and applications; prompt engineering and iterative prompting techniques; AI tools for accounting workflows; AI applications in transaction processing and routine accounting tasks; AI in financial reporting and period-end close; AI-assisted auditing and continuous monitoring; AI in tax compliance and reading regulations; Natural Language Processing (NLP) in accounting; AI + spreadsheets and no-code workflow automation; AI agents and semi-autonomous assistants; ethical responsibilities and professional governance in AI usage; data confidentiality and bias considerations; hallucination and limitations of AI models; Quality control and review mechanisms; Professional responsibility and "you lead AI" mindset; Future accounting roles in an AI-enabled environment.

Reading List

Compulsory Readings

	Title
1	Selected Articles on AI in Accounting (provided by lecturer): Recent case studies on AI implementation in accounting

Additional Readings

	Title
1	Prompt Engineering for ChatGPT and LLMs (Online Resources) – OpenAI official documentation and best practices – Tools and guides for effective prompting
2	AI Ethics and Governance in Professional Services – Selected chapters from recent publications on AI governance for accountants and auditors