Applied Learning

2024-26 Cohort; 2026 HKDSE

Item	Description
1. **Course Title**	AI in Business
2. **Course Provider**	School of Continuing and Professional Education, City University of Hong Kong
3. **Area of Studies/ Course Cluster**	Business, Management and Law/ Business Studies
4. **Medium of Instruction**	Chinese or English
5. **Learning Outcomes**	Upon completion of the course, students should be able to: (i) describe key concepts of business innovation with AI in different industries; (ii) discuss cybersecurity, ethical and social responsibility issues in the information and communications technology (ICT) sector; (iii) explain the primary functions of AI; (iv) apply design thinking principles and AI knowledge in business operation; (v) evaluate the performance of an AI business solution; (vi) demonstrate communication and interpersonal skills in the ICT sector; and (vii) enhance self-understanding and explore directions on further studies and career pursuits.

6. Curriculum Map – Organisation and Structure

Module 1: Introduction to Artificial Intelligence (AI) and Business (36 hours)

1. Challenges of digital transformation (6 hours)
   - Latest trends of emerging technologies
   - Impact of emerging technologies on the future of work

2. Business innovation (15 hours)
   - Business and business management
   - Benefits and challenges of business innovation
   - Organisational structure in the AI age

3. Design thinking (9 hours)
   - Essentials steps of design thinking
   - Identifying users' hidden needs
   - Visualisation of the emotions of customers

4. Ethics, sustainability, and responsibilities (6 hours)
   - Legal and ethical issues
   - Cybersecurity, data privacy and corporate social responsibility
   - Low carbon economy

**Module 3: AI in Practice (66 hours)**

1. Hands-on practice (48 hours)
   - Application of cloud computing
   - Application of machine learning

2. AI applications in business (18 hours)
   - Natural language processing
   - Chatbot
   - Cognitive vision

Module 4: Integrated Project (21 hours)

1. Group project (15 hours)
   - AI plan for business application
   - Design thinking framework

2. Experiential learning (6 hours)
   - Visits and seminars by practitioners

Module 2: Fundamentals of AI (57 hours)

1. AI technologies (21 hours)
   - Key concepts
   - Application and limitation
   - Latest development

2. Problem solving in AI (36 hours)
   - Data analytics
   - Regression
   - Clustering
   - Randomisation
   - Knowledge representation and reasoning
   - Learning and deep learning
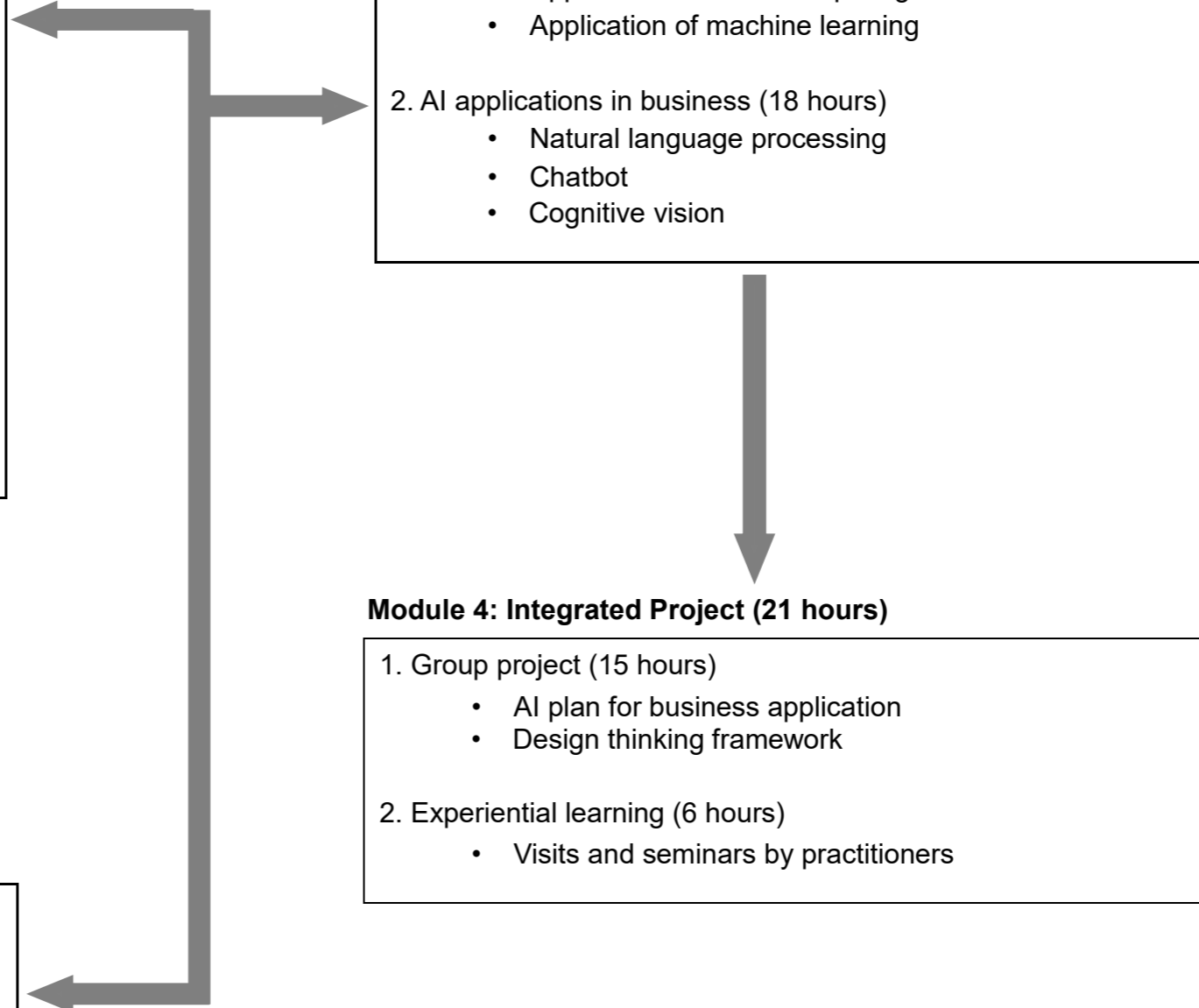
7. The Context

- The information on possible further study and career pathways is provided to enhance students' understanding of the wider context of the specific Applied Learning course.
- The recognition of Applied Learning courses for admission to further studies and career opportunities is at the discretion of relevant institutions. Students who have successfully completed Applied Learning courses have to meet other entry requirements as specified by the institutions.

Possible further study and career pathways

Further studies

- e.g. courses related to business administration, information technology, data science, data analytics, computing

Career development

- management (e.g. business innovation project manager, business analyst manager, business intelligence manager, business planning manager)
- technical (e.g. AI project assistant, AI user experience expert, AI customer engineer, AI product engineer, AI system engineer, AI software engineer, AI Algorithm expert)

Professional qualification

- e.g. Microsoft certified AI engineer associate, Certified AI Engineer of Artificial Intelligence Board of America, AI Certified Engineer (AICE)
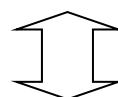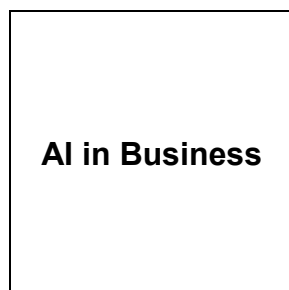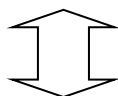

Complementarity with core subjects and other elective subjects

Enhancing and enriching, e.g.

- enhancing students' studies in **Mathematics** and **Physics** through preparing and acquiring data for machine learning

Expanding horizons, e.g.

- students taking **Physics** can broaden their knowledge in business management

AI in Business

Relations with other areas of studies/ courses of Applied Learning

e.g.

Engineering and Production

- business management skills for aviation services

Foundation knowledge developed in junior secondary education

The course is built upon the foundation knowledge students acquired in, e.g.

- **Chinese Language Education** and **English Language Education** – written report and verbal presentation
- **Mathematics Education** – calculation and data coordination
- **Technology Education** – computer skills, information processing and management
- **Personal, Social and Humanities Education** – interpersonal skills, social responsibility, economic and resources management

8.   Learning and Teaching

In this course, student-centred learning and teaching activities are designed to enable students to understand fundamental theories and concepts, develop their generic skills, and address their career aspirations in AI and business management.

Different modes of activities are employed to provide students with a systematic understanding about the context (e.g. lectures and seminars on AI applications in business) and eye-opening opportunities to experience the complexity of the context (e.g. company visits and industrial talks).

Students acquire an understanding of the requirements, fundamental knowledge and skills essential for further learning within the area through learning-by-practising opportunities in an authentic or near-authentic environment (e.g. hands-on experience in AI solution development and business innovation solution development).

Students are also encouraged to develop and apply conceptual, practical and reflective skills to demonstrate entrepreneurship and innovation. Students are given opportunities to integrate the knowledge and skills acquired and consolidate their learning (e.g. an integrated project provides students with the opportunity to create a plan for AI business innovation with a design thinking framework).

9. Curriculum Pillars of Applied Learning

Through related contexts, students have different learning opportunities, for example:

(i) Career-related Competencies
- review the roles and responsibility of information technology and business management in society;
- explain the relationship between emergent technologies, business innovation and social benefit;
- describe the major functions of AI;
- apply scientific information and inquiries to make informed decisions in providing AI solutions to business innovation;
- identify and discuss the practical skills required to work in AI in business; and
- propose a solution for business innovation.

(ii) Foundation Skills
- apply AI skills in handling business statistics and in making market prediction and fine-tuning business strategy;
- exchange ideas and interact effectively with peers on individual and group bases;
- communicate effectively and convey ideas and arguments to an audience through giving presentations; and
- present information logically in written form through reviewing different sources and types of material using an appropriate framework.

(iii) Thinking Skills
- discuss interconnectedness between information technology, business management, social benefit and the environment;
- identify data sources and use appropriate techniques to collect business data; and
- apply design thinking principles and problem-solving skills to propose a solution.

(iv) People Skills
- respect different points of view and resolve differences during class and group activities;
- understand and manage one's own emotions and those of others when discussing controversial or sensitive topics or being challenged; and
- demonstrate collaborative and team building skills through defining roles and sharing responsibilities among team members.

(v) Values and Attitudes
- show interest in and concern for cybersecurity, sustainability, ethical and social responsibility issues;
- manage and direct one's own learning; and
- show respect to intellectual property rights when conducting project.