

Subject Code	MM6415
Subject Title	AI for Business Leaders
Credit Value	3
Level	6
Normal Duration	1-semester
Pre-requisite/ Co-requisite/ Exclusion	None
Objectives	<p>This subject contributes to the achievement of the DBAI program outcome by increase students' ability to meet transformative challenges in AI revolution. (Outcome 3: Cultivating the capability to independently conduct pioneering applied research in technology-driven business domains).</p> <p>The objective is to empower business leaders with the capacity to navigate and influence the rapidly evolving landscape of the AI revolution.</p> <ol style="list-style-type: none"> 1. Develop a profound understanding of the principles and practices of Artificial Intelligence as they specifically apply to leadership and management in a variety of business contexts. 2. Equip business leaders with the ability to evaluate and implement AI strategies that will drive innovation, efficiency, and competitive advantage in their organizations. 3. Cultivate leadership skills tailored to the digital transformation era, enabling participants to lead AI initiatives ethically and effectively. 4. Advance the capability of business leaders to critically analyze and leverage data-driven insights for strategic decision-making and organizational growth. 5. Foster a community of practice where business leaders can share experiences, challenges, and solutions related to AI deployment in the business sphere. 6. Prepare leaders to address the ethical, economic, and social implications of AI technology in a business environment, ensuring responsible and sustainable adoption of AI.
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> 1. Analyze the opportunities and challenges posed by AI technologies within various business operations and strategize an effective response. 2. Utilize data to gain a foundational understanding of AI, its implications, and its capabilities for business applications. Construct and implement strategic plans that incorporate AI technologies to achieve classical strategic objectives, such as differentiation, focus, or cost leadership. 3. Apply knowledge of AI and machine learning (ML) concepts to improve business processes and enable data-driven decision-making. 4. Initiate and manage AI projects with a clear understanding of their potential impact and the technologies involved. 5. Effectively communicate the benefits, risks, and requirements of AI initiatives to stakeholders and team members. Demonstrate leadership skills essential for managing and guiding an organization in the adoption and integration of AI and ML technologies.

Subject Synopsis/ Indicative Syllabus	<ul style="list-style-type: none"> • Introduction to AI and its Business Applications: Overview of AI technologies and their rapidly expanding presence in the business world; Identifying business use cases for AI and understanding its capabilities and limitations; Setting strategic objectives for AI adoption and investment • AI Technologies and their Business Impact: Machine learning (ML) and deep learning (DL) technologies and their applications in business; Natural Language Processing (NLP) and computer vision (CV) technologies and their business use cases; Assessing the ROI of AI investments and identifying potential bottlenecks • AI Strategy and Implementation: Developing an AI strategy aligned with business objectives; Identifying potential ethical and strategic implications of AI adoption; Structure and management of AI implementation teams • AI in Practice - Case Studies and Clinics: Examining successful AI use cases in various industries (e.g., healthcare, finance, marketing); Developing action plans for implementing AI in participants' own organizations; Interacting with guest speakers from industry to gain insights into their AI journeys • Ethics, Governance, and Social Implications of AI: Understanding the ethical and societal implications of AI and its impact on various stakeholders; Developing ethical AI frameworks and ensuring responsible AI adoption in the business world; Managing AI governance and addressing potential AI-related risks in the organization • Innovation and Leadership in the AI Era: Cultivating a culture of innovation and collaboration within organizations: Encouraging leaders to embrace AI as a strategic tool for growth: Addressing potential disruptions and challenges arising from AI adoption • Preparing for an AI Future - Emerging Trends and Technologies: Keeping pace with emerging AI trends and technologies; Anticipating potential AI-driven business disruptions and opportunities; Developing strategies for long-term AI-driven innovation and growth
Teaching/Learning Methodology	<p>The teaching format of the subject will be a combination of lectures, case studies, guest speakers, individual presentation and assessments. The intensive learning experience will foster student engagement, encourage application of knowledge, problem-solving, and critical thinking skills. Active participation is essential.</p>

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)				
		a	b	c	d	e
Continuous Assessment*	100%					
1. Group project	30%		✓	✓		
2. Individual research report	40%	✓		✓		✓
3. Individual presentation on AI Business Revolution	10%	✓	✓		✓	✓
4. Class Discussion	20%	✓	✓	✓		✓
Total	100 %					

**Weighting of assessment methods/tasks in continuous assessment may be different, subject to each subject lecturer.*

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes: The chosen assessment methods are carefully designed to ensure comprehensive evaluation of all students in this subject.

Group project: The group project offers students a valuable opportunity to conduct a behavioral experiment. Working collaboratively in small teams, students are tasked with designing and implementing an experiment. They begin by selecting an intriguing area and conducting research on a proposed topic. Subsequently, the team narrows down the topic to a few falsifiable research problems and formulates theory-driven and testable hypotheses. Using these hypotheses, students design the experiment, collect and analyze data, and report their findings.

Individual research report: The individual research report aims to develop students' ability to independently carry out practical research work. Each student takes the initiative to discuss research ideas with classmates and lecturers, eventually selecting a specific research topic for further exploration. Students are required to write a comprehensive report outlining their research plan. This assessment method enhances their understanding of qualitative approaches to research.

Individual reflection: The individual reflection assesses students' comprehension of how qualitative and quantitative methods can be applied to comprehend artificial intelligence and entrepreneurship topics.

Class Discussion: As a crucial assessment method in this advanced workshop, class participation and interaction provide valuable feedback to each classmate regarding their research ideas. The experience sharing session in the workshop is evaluated based on active participation, which helps clarify concepts, methodologies, and critical success factors in conducting research projects.

Immediate feedback: Following presentations, students receive immediate feedback, and all students are encouraged to participate in the subsequent discussion.

To pass this subject, students are required to obtain Grade D or above in the Continuous Assessment components

Student Study Effort Expected	Class contact:	
	▪ Lectures	30 Hrs.
	Other student study effort:	
	▪ Preparation for lectures	30 Hrs.
	▪ Preparation for assignment / group project and presentation	60 Hrs.
	Total student study effort	120 Hrs.
Reading List and References	<p>Bughin, J., Hazan, E., Ramaswamy, S., Chui, M., Allas, T., Dahlström, P., & Henke, N. (2018). Artificial intelligence: The next digital frontier? McKinsey Global Institute.</p> <p>Brynjolfsson, E., & McAfee, A. (2014). The second machine age: Work, progress, and prosperity in a time of brilliant technologies. W. W. Norton & Company.</p> <p>Davenport, T. H., & Ronanki, R. (2018). Artificial intelligence for the real world. Harvard Business Review, 96(1), 108-116.</p> <p>Marr, B. (2018). Artificial intelligence in practice: How 50 successful companies used AI and machine learning to solve problems. Wiley.</p> <p>McAfee, A., & Brynjolfsson, E. (2017). Machine, platform, crowd: Harnessing our digital future. W. W. Norton & Company.</p> <p>Schmarzo, B. (2019). The art of thinking like a data scientist: A business leader's guide. Wiley.</p> <p>Sharma, R., & Aggarwal, S. (2020). AI-driven marketing: Understanding, designing, and executing effective marketing campaigns. Springer.</p> <p>Susskind, R., & Susskind, D. (2015). The future of the professions: How technology will transform professional services. Oxford University Press.</p> <p>Varian, H. R. (2019). Artificial intelligence, economics, and industrial organization. American Economic Review, 109(5), 1745-1759.</p> <p>Westerman, G., Bonnet, D., & McAfee, A. (2014). Leading digital: Turning technology into business transformation. Harvard Business Review Press.</p>	

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