Subject Code	MM6453
Subject Title	Digital Transformation and AI in Business
Credit Value	3
Level	6
Normal Duration	1-semester
Pre-requisite/ Co-requisite/ Exclusion	None
Objectives	This subject contributes to the achievement of the programme outcome by broadening, updating, and deepening students' understanding of fundamental business domain knowledge, cultivating a forward-thinking mindset that artificial intelligence as a transformative force (Outcome 2). The subject will focus on the latest business applications of information technology (IT) e.g., AI, Blockchain, and Big Data and the related research in the management and marketing fields. Knowledge gained in this subject will enhance students' understanding of the digital economy and AI in business.
Intended Learning Outcomes	Upon completion of the subject, students will understand: a. the value of digital transformation to the marketing and management fields; b. AI, blockchain, big data & business analytics c. digital marketing and e-commerce d. managerial & strategic issues related to business applications of IT
Subject Synopsis/ Indicative Syllabus	<u>Module 1: Overview of Digital Transformation in Marketing and Management</u> This module introduces the transformative role of digital technologies in marketing and management. Students will learn how businesses adopt digital strategies to gain competitive advantages and meet customer demands in the digital age. <u>Module 2: Artificial Intelligence and Emerging Technologies in Business</u> This module focuses on the applications of AI in business. Students will explore how AI enhances business operations, customer insights, and decision-making. <u>Module 3: Digital Marketing and E-Commerce Strategies</u> Students will learn about the latest developments in digital marketing and e-commerce. The module emphasizes the integration of AI tools for customer engagement and predictive analytics, providing insights into creating and sustaining competitive advantages in the digital economy. <u>Module 4: Other Managerial and Strategic Issues in IT Applications</u> This module addresses the impact of AI and other emerging technologies on managerial practices and strategic decision-making.

<table>
<tr><td></td><td>Additionally, this subject will review the topics of blockchain, big data, and business analytics that drive innovation and business performance.</td></tr>
<tr><td>Teaching/Learning Methodology</td><td>There will be a mix of seminars, team presentations, and discussions in this course. Recent developments and research in the area of business information systems will be reviewed during seminars. Participants are required to produce a tentative exploratory research plan on a self-selected topic. Participants will have the flexibility to tailor the research plan to his/her personal interest.</td></tr>
<tr><td>Assessment Methods in Alignment with Intended Learning Outcomes</td><td>
<table>
<tr><td rowspan="2">Specific assessment methods/tasks</td><td rowspan="2">% weighting</td><td colspan="4">Intended subject learning outcomes to be assessed (Please tick as appropriate)</td></tr>
<tr><td>a.</td><td>b.</td><td>c.</td><td>d.</td></tr>
<tr><td>Continuous Assessment*</td><td>100%</td><td colspan="4"></td></tr>
<tr><td>1. Class Participation/Discussion</td><td>20%</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr>
<tr><td>2. Group Assignment – 1st review</td><td>20%</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr>
<tr><td>3. Individual Assignment – 2nd review</td><td>20%</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr>
<tr><td>4. Research Proposal</td><td>40%</td><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr>
<tr><td>Total</td><td>100 %</td><td colspan="4"></td></tr>
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*Weighting of assessment methods/tasks in continuous assessment may be different, subject to each subject lecturer.

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

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:
Readings are assigned to course participants. They are required to critique these articles and prepare for discussion. Student teams also need to make presentations in class and exchange views regarding conceptual, methodological and managerial issues. The final research proposal is introduced to assess whether participants are able to integrate what they have learned, and more importantly, generate research ideas of both academic and business significance within the provided timeframe.
</td></tr>
<tr><td>Student Study Effort Expected</td><td>
<table>
<tr><td>Class contact:</td><td></td></tr>
<tr><td>▪ Lectures</td><td>30 Hrs.</td></tr>
<tr><td>Other student study effort:</td><td></td></tr>
<tr><td>▪ Preparation for lectures</td><td>30 Hrs.</td></tr>
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</td></tr>
</table>

	▪ Preparation for assignment / presentation / examination	60 Hrs.
	Total student study effort	120 Hrs.
Reading List and References	Varian, H. R. (2019). Artificial intelligence, economics, and industrial organization. American Economic Review, 109(5), 1745-1759. Marr, B. (2018). Artificial intelligence in practice: How 50 successful companies used AI and machine learning to solve problems. Wiley. Sharma, R., & Aggarwal, S. (2020). AI-driven marketing: Understanding, designing, and executing effective marketing campaigns. Springer. Westerman, G., Bonnet, D., & McAfee, A. (2014). Leading digital: Turning technology into business transformation. Harvard Business Review Press. <u>Journals:</u> *MIS Quarterly* *Information Systems Research* *Journal of Management Information Systems* *Management Science* *Marketing Science* *Journal of Marketing Research* <u>Magazines:</u> *Harvard Business Review* *Sloan Management Review* *The Economists* *Communications of the ACM*	

July 2025