## H9EEAI: Engineering and Evaluating Artificial Intelligence Systems

Module Code:		H9EEAI				
Long Title		Engineering and Evaluating Artificial Intelligence Systems APPROVED				
Title		Engineering and Evaluating Artificial Intelligence Systems				
Module Level:		LEVEL 9				
EQF Level:		7				
EHEA Level:		Second Cycle				
Credits:		5				
Module Coordina	ator:	Rejwanul Haque				
Module Author:		Shauni Hegarty				
Departments:		School of Computing				
Specifications of and experience r	f the qualifications required of staff					
Learning Outcon	nes					
On successful cor	On successful completion of this module the learner will be able to:					
#	Learning Outcome	Description				
LO1	Comprehend, contra	ast, assess, and apply software architecture principles in the design of AI systems.				
LO2	Theoretically evaluate the AI systems in terms of completeness, complexity, and admissibility.					
LO3	Evaluate, summarise, critique, and present the quality and performance of AI systems.					
LO4	Determine and critique the infrastructure for the deployment of AI systems.					
Dependencies						
Module Recommendations						
No recommendati	No recommendations listed					
Co-requisite Modules						
No Co-requisite modules listed						
Entry requirements						

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## H9EEAI: Engineering and Evaluating Artificial Intelligence Systems

Module Workload							
Module Target Workload Hours 0 Hours							
Workload: Full Time							
Workload Type	Workload Description	Hours	Frequency	Average Weekly Learner Workload			
Lecture	Lectures	24	Per Semester	2.00			
Independent Learning	Independent Learning		Per Semester	7.42			
Tutorial	Tutorials		Per Semester	1.00			
Total Weekly Contact Hours				3.00			

Module Resources					
Recommended Book Resources					
Bass, L., Clements, P., & Kazman, R. (2022). Software Architecture in Practice(4th ed.). Addison-Wesley Professional. SEI Series in Software Engineering. [ISBN: 978-0136886099].					
Bass, L., Weber, I., & Zhu, L. (2016). DevOps: A Software Architect's Perspective. Addison-Wesley Professional. SEI Series in Software Engineering. [ISBN: 978-9332570375].					
Mahfuz, A. S. (2016). Software Quality Assurance: Integrating Testing, Security, and Audit. Auerbach Publications. [ISBN: 978-1498735537].					
Supplementary Book Resources					
Arora, S. & Barak, B. (2009). Computational Complexity: A Modern Approach. Cambridge University Press. [ISBN: 978-0521424264].					
Cervantes, H. & Kazman, R. (2016). Designing Software Architectures: A Practical Approach. Addison-Wesley Professional. [ISBN: 978-0134390789].					
Hulten, G. (2018). Building Intelligent Systems: A Guide to Machine Learning Engineering. Apress. [ISBN: 978-1484234310].					
Humble, J. & Farley, D. (2010). Continuous Delivery: Reliable Software Releases through Build, Test, and Deployment Automation. Addison-Wesley Professional.[ISBN: 978-0321601919].					
Richards, M. & Ford, N. (2020). Fundamentals of Software Architecture: An Engineering Approach. O'Reilly. [ISBN: 978-1492043454].					
Tarlinder, A. (2016). Developer Testing: Building Quality into Software. Addison-Wesley Professional.[ISBN: 978-0134291062].					
This module does not have any article/paper resources					
This module does not have any other resources					

Discussion Note: