

Approved, 2022.02

Summary Information

Module Code	5222COMP
Formal Module Title	Knowledge Based Systems
Owning School	Computer Science and Mathematics
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 5
Grading Schema	40

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Silvester Czanner	Yes	N/A

Module Team Member

Contact Name	Applies to all offerings	Offerings
Martin Randles	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
Contact Name	Applies to all offerings	Offerings

Teaching Responsibility

LJMU Schools involved in Delivery	
Computer Science and Mathematics	

Learning Methods

Learning Method Type	Hours
Lecture	22
Practical	22

Module Offering(s)

Offering Code	Location	Start Month	Duration
JAN-CTY	CTY	January	12 Weeks

Aims and Outcomes

	To provide knowledge understanding and experience on the development process, tools and
Aims	techniques for producing knowledge-based and 'intelligent' systems.

Learning Outcomes

After completing the module the student should be able to:

Code	Description
MLO1	Apply knowledge of knowledge-based and multi-agent systems
MLO2	Effectively communicate techniques used to facilitate Knowledge Based Systems
MLO3	Evaluate methods of knowledge acquisition and processing for application to a real-world problem
MLO4	Apply knowledge-based system techniques to construct a moderately sized intelligent system given a set of requirements

Module Content

Outline Syllabus

Knowledge Based Systems ArchitectureDevelopment of Knowledge Based SystemsKnowledge ManagementLogic and ReasoningEpistemic LogicAgentsAgent Knowledge Based Systems ComponentsMulti-Agent SystemsUncertain ReasoningModal LogicsAgent PlanningSystems' Simulation

Module Overview

This module introduces you to the theory, methods, techniques and tools involved in the development of knowledge-based systems and intelligent systems. It will provide you with the knowledge, understanding and experience of the development process, tools and techniques used for producing knowledge–based and 'intelligent' systems.

Additional Information

This module introduces the theory, methods, techniques and tools involved in the development of knowledge-based systems and intelligent systems.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Learning Outcome Mapping
Report	Report	40	0	MLO2, MLO1
Technology	Technology	60	0	MLO3, MLO4