

Advanced Multimedia

Module Information

2022.01, Approved

Summary Information

Module Code	6127COMP
Formal Module Title	Advanced Multimedia
Owning School	Computer Science and Mathematics
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 6
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
Computer Science and Mathematics

Learning Methods

Learning Method Type	Hours
Lecture	22
Workshop	33

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-CTY	CTY	September	12 Weeks

Aims and Outcomes

Aims	To develop a theoretical knowledge of the concepts of advanced media types and the advanced media production techniques and technologies required to design and develop digital media systems.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Critically evaluate the issues related to advanced media production and technologies.
MLO2	2	Appraise and apply the techniques involved in the implementation of an interactive multimedia application.
MLO3	3	Critically evaluate the techniques and challenges behind the design and development of an interactive multimedia application.

Module Content

Outline Syllabus	Rich internet applications: concepts and definitions, modelling approaches, technologies. User experience: concepts, lifecycle and benefit of UX, tools of UX (e.g. user testing, expert review, persona and etc.). Introduction to Media Production –Media Production standards, Video/Audio CODEC and Compression Techniques Hardware and software technologies - Discussion of the technologies required to support media production Advanced Media Production Technologies: Sound and Video production (capture, format, archiving, streaming, etc...), Media player technologies and Codec, Image and model based scene representations, 3D-modelling from images and video, Media Production online deployment Architecting interactive multimedia solution: information architecture design, dynamic content, data storage, technology integration, application optimization, security and etc. Advance multimedia scripting: media scripting, interaction scripting, real-time animation scripting, data processing and visualization scripting. Workshop session involving the design of a media production artefact in form of a video, animation, or game and using relevant advanced tools and technologies, through group work.
Module Overview	
Additional Information	This module broadens the awareness of the design and development of interactive multimedia applications such as Rich Internet Applications.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Technology	Coursework 1	50	0	MLO1, MLO2
Report	Coursework 2	50	0	MLO2, MLO3

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Yuanyuan Shen	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings