

Risk Analysis

Module Information

2022.01, Approved

Summary Information

Module Code	7094RTC
Formal Module Title	Risk Analysis
Owning School	Engineering
Career	Postgraduate Taught
Credits	10
Academic level	FHEQ Level 7
Grading Schema	50

Teaching Responsibility

LJMU Schools involved in Delivery
Engineering

Learning Methods

Learning Method Type	Hours
Lecture	8
Online	1
Tutorial	8

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
APR-PAR	PAR	April	12 Weeks

Aims and Outcomes

Aims	To provide a solid foundation of knowledge of risk assessment tools, with an emphasis on the concept of risk and qualitative risk assessment techniques.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Logically deduce the most appropriate risk assessment tool / technique to be used, depending on the circumstances
MLO2	2	Apply certain risk assessment techniques
MLO3	3	Critically review example risk assessments and techniques.

Module Content

Outline Syllabus	Introduction to risk assessment Identifying and recording hazards – registers, schedules, inventories The risk assessment matrix Risk Analysis and risk reduction through the project/facility lifecycle Qualitative risk assessment techniques Significance of environmental aspects – environmental risk assessment Human factors in design Health Risk Assessment (HRA) Security risk assessment Business / commercial risk assessment Quantitative risk assessment techniques Safety Integrity Level (SIL) assessment Layers of Protection Analysis (LOPA) External hazards Good practice in risk analysis
Module Overview	
Additional Information	The aim of this module is to provide risk assessment definitions and deliver a critical review of certain well established and recognised qualitative risk assessment tools. It also introduces some quantitative techniques (which are the subject of separate, more detailed analysis in dedicated modules). Assessment is in the form of an essay combined with activities (e.g. exercises, discussions, etc.). The module is delivered via distance learning, described as follows: Lecture (using slides and slide notes): Online self-study Tutorial/Activities (Exercises and reviews): Online activities with teacher feedback, and virtual classrooms Tutor-supported Online: Tutor feedback for activities, virtual classrooms and email support. In this module, the knowledge learning outcomes are K1, K2, the skills learning outcomes are S1, S2, S5 and the behaviours learning outcomes are B1, B2, B3 and B4.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Essay	Essay	95	0	MLO2, MLO3
Test	Test	5	0	MLO1

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Ben Matellini	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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