Liverpool John Moores University

Title:	Risk Analysis
Status:	Definitive
Code:	**7094RTC** (127360)
Version Start Date:	01-08-2021
Owning School/Faculty:	Engineering
Teaching School/Faculty:	Engineering

Team	Leader
Ben Matellini	Y

Academic Level:	FHEQ7	**Credit Value:**	10	**Total Delivered Hours:**	16.5
Total Learning Hours:	100	**Private Study:**	83.5		

Delivery Options
Course typically offered: Summer

Component	Contact Hours
Lecture	8
Online	.5
Tutorial	8

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	An essay question comprising several component parts, based around a case study, up to 2,500 words long.	95	
Test	AS2	Individual and group activities eg. test, discussion.	5	

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.

Learning Outcomes

After completing the module the student should be able to:

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

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Essay	2	3
Test	1	

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

Learning Activities

A combination of lectures, exercises and supported self study.

Notes

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