

Liverpool John Moores University

Title: Hazard Identification
Status: Definitive
Code: **7084RTC** (127352)
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: Semester 2

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 e. g. quiz, forum.	5	

Aims

To provide an understanding and awareness of the tools and techniques available for hazard identification, where they can be applied and what limitations may exist.

Learning Outcomes

After completing the module the student should be able to:

- 1 Assess the role of hazard identification in the risk management process
- 2 Critically review the tools and techniques available to carry out effective hazard identification at each lifecycle stage
- 3 Design a fit for purpose hazard identification study

Learning Outcomes of Assessments

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

Essay	1	3
Test	2	

Outline Syllabus

Introduction – basic concepts

Overview of hazard identification techniques, e.g:

-Critical examination

-Codes and Standards

-Hazard indices

-Concept Safety Analysis / Preliminary Hazard Review

-What If?

-Safety Audits

-Fault / Event Trees

-Sneak Analysis

-Human Error / Task Analysis

Hazard identification through the project lifecycle

Failure Modes and Effects Analysis

Hazard and Operability Studies

HAZID/Checklist approach

HAZID versus HAZOP

Making recommendations

Learning Activities

A combination of lectures, exercises and supported self study.

Notes

The module aims to provide an understanding and awareness of the tools and techniques available for hazard identification, where they can be applied and what limitations may exist. Students will be introduced to the concept of HAZID, including the HAZID team and process. Other hazard identification techniques will be

introduced, but these are explained in greater detail in related 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