

Liverpool John Moores University

Title: Bowtie Risk Management
Status: Definitive
Code: **7078RTC** (127348)
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 1

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. quiz, forum.	5	

Aims

To provide an in-depth analysis of how bowtie analysis can be used to manage risk. To critically review its practical uses and benefits, with hands-on practice at using the technique.

Learning Outcomes

After completing the module the student should be able to:

- 1 Analyse hazard scenarios by applying the bowtie method and designing a bowtie diagram
- 2 Develop integrity assurance for bowtie barriers
- 3 Devise risk acceptance criteria for hazards in bowties.

Learning Outcomes of Assessments

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

Essay	1	2
Test	3	

Outline Syllabus

Introduction to risk assessment and bowties

The bowtie method – what is a bowtie and how to build one

Assuring barrier integrity

Effectiveness and ALARP for bowties

Practical uses of bowties

Facilitating bowtie workshops

Bowtie software tools

Learning Activities

A combination of lectures, exercises and supported self study.

Notes

This module introduces bow-tie methodology and examines in detail the various bowtie analysis components. The module also provides a critical review of the method's practical uses, with hands-on practice at applying the technique.

Assessment is in the form of an essay combined with activities (e.g. exercises, discussions, etc.).

The module is delivered using a mixture of face-to-face and online learning, described as follows:

Lecture (using slides and slide notes): face-to-face workshop sessions

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.

