Liverpool John Moores University

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Title: BOWTIE ANALYSIS
Status: Definitive
Code: **7518ENGRSK**   (113883)
Version Start Date: 01-08-2019

Owning School/Faculty: Maritime and Mechanical Engineering
Teaching School/Faculty: Risktec Solutions

Team	Leader
Alan Wall	Y

Academic Level:	FHEQ7	**Credit Value:**	10	**Total Delivered Hours:**	16
Total Learning Hours:	100	**Private Study:**	84		

Delivery Options
Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	6
Tutorial	10

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Coursework Case Study Approx 2000-3000 words	100	

Aims

To provide an introduction to bow-tie methodology, 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   Deconstruct the various components of a bowtie diagram
2   Analyse hazard scenarios by applying the bowtie method and designing a bowtie diagram
3   Design HSE critical tasks to support the bowtie diagram

Learning Outcomes of Assessments

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

case study   1   2   3

Outline Syllabus

•Introduction to risk assessment and bowtie theory
•The bowtie method – how to build a bowtie
•HSE-critical activities and tasks
•HSE-critical elements
•Acceptance criteria and ALARP
•Practical uses of bowties
•Bowtie software tools

Learning Activities

A combination of lectures and group exercises.

Notes

The purpose of this module is to provide an introduction to bow-tie methodology, its practical uses and benefits, with hands-on practice at applying the technique.

The assessment for this module is coursework.