D21HM Human Factors Methods

COURSE DETAILS
Course Code: D21HM
Full Course Title: Human Factors Methods
SCQF Level: 11
SCAF Credits: 15
Available as Elective: No

DELIVERY LEVEL
Undergraduate: Yes  Postgraduate Taught: Yes  Postgraduate Research: No

COURSE AIMS
The course will equip students from academic and/or industrial backgrounds with knowledge on, and the means to deploy, a wide range of specialist human factors techniques. The emphasis is on method selection, application, combination and integration within existing business practices. Students will develop a critical awareness of what methods exist, how to apply them in practice and their principle benefits and limitations.

LEARNING OUTCOMES – SUBJECT MASTERY
On completion of this course, learners will be able to:

- Demonstrate knowledge and understanding of how human factors problems can differ from each other
- Demonstrate knowledge and understanding of how to select appropriate method(s).
- Apply this knowledge and understanding to a variety of problems and scenarios.
- Demonstrate critical awareness by showing how methods can be combined.

Demonstrate commercial relevance by showing how human factors methods can be embedded in existing business practices.

LEARNING OUTCOMES – PERSONAL ABILITIES

- An analytical approach to problems and an ability to generate novel solutions.
- An ability to relate theory and methods to practice.

SYLLABUS
The course covers the following key areas:

- Introduction to human factors problems and human factors methods
- Task analysis
- Cognitive task analysis
- Human error identification
• Situation awareness assessment
• Mental workload assessment
• Team assessment
• Interface analysis
• Design methods
• Performance time prediction
• Method integration
• Human factors integration

COURSE RELATIONSHIPS
N/A

LOCATION AND ASSESSMENT METHODS

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HW Online students can complete the assessment in any semester.

|     | Y   |     |     |       |     |      | Y   |    | Examination | 100    | 180       | Assessment  | Semester 3    |                 |

HW Online students can take the assessment in any semester.