

Information Engineering

Module Code:	COS6010-B
Academic Year:	2018-19
Credit Rating:	20
School:	Department of Computer Science
Subject Area:	Computer Science
FHEQ Level:	FHEQ Level 6
Module Leader:	Professor Marian Gheorghe

Additional Tutors:

Pre-requisites:

Co-requisites:

Contact Hours

Type	Hours
Lectures	24
Tutorials	12
Laboratory	24
Directed Study	140

Availability Periods

Occurrence	Location/Period
MSA	Management Development Institute of Singapore (MDIS) / Semester 1
NLA	Namal College / Semester 1 (Sep - Jan)
BDA	University of Bradford / Semester 2 (Feb - May)

Module Aims

1. To provide an awareness of the range of Information Engineering Systems (IES) development methodologies.
2. To provide an understanding of using appropriate analysis and design notations,

implementation and testing approaches.

3. To provide the opportunity to analyse a real-life IES scenario and implement an adequate system.

Outline Syllabus

1. A review of IES development methodologies.
2. Notations and concepts used in IES analysis and design.
3. The use of rigorous notations in IES specification.
4. Testing methods used in IES projects.
5. Critical analysis of a real-life IES product.
6. Software project management approaches and notations.
7. Implementation of an adequate software system illustrating the use of appropriate methods, notations and tools.

Module Learning Outcomes

On successful completion of this module, students will be able to...

- 1 Explain the IES theory, methods and techniques.
- 2 Apply the concepts, notations and methods to analyse complex IES products.
- 3 Apply analytical and problem solving skills.

Learning, Teaching and Assessment Strategy

The contact time consists of lectures, tutorials/seminars, laboratories and directed study. Lectures introduce the analysis, design and development methods and techniques which are applied in practical lab sessions. Different approaches to problem solving are explored and discussed in tutorial/seminar sessions. Preparatory reading will be set in advance so that students can prepare for the module.

The course work of the module consists of an individual project with several outcomes, including documents and code. The individual project will be submitted by the end of week 6..The exam will be a closed book type, requesting to solve 2 out of three questions

Mode of Assessment

Type	Method	Description	Length	Weighting	Final Assess'
Summative	Examination - closed book	The key concepts methods and models will be assessed.	2 hours	50%	Yes
Summative	Coursework	Individual projects on the use of adequate IES concepts and tools	0-2000 words	50%	No

Legacy Code (if applicable)

CM-0504D

Reading List

To view Reading List, please go to [rebus:list](#).