

<b>Module Title:</b>	System and Network Management
<b>Module Code:</b>	04I
<b>Level:</b>	5
<b>Credits:</b>	15
<b>Pre-Requisites:</b>	

**Module Description:**

This module builds on students' knowledge of networks, gained in earlier modules and in modules being studied at the same time, to increase their understanding of how system and networks are monitored, managed and supported to serve the needs of clients.

Lectures, scenario based workshops and role play will be used to develop students' understanding of the importance and cost of reliability, resilience and scalability in networks.

Technical support skills, including procedures, techniques, and organisation will also be covered.

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**Indicative Content:**

- SNMP
- Applications and Agents
- Internet Engineering Task Force (IETF) OID naming scheme
- MIB tree
- Tools available for Network Monitoring and Management
- Version control
- Configuration management
- System and database security
- System and database backup and recovery
- ITIL best practices in various system and network management functions
- Legal and ethical issues

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**Learning and Teaching Methods:**

The module will be delivered through lectures and workshops which will provide opportunity for research, group work and role play. A case study will be analysed and a further case study will be used for assessment. Learning will be supported by the use of a virtual learning environment.

## Module Specifications: Schools of Business & Management & Information Technology

### Specific Learning Resources:

Access to PCs on which network monitoring and management

### Bibliography

#### Highly Recommended

Subramanian, M. (2012) Network Management: Principles and Practice, Prentice Hall

#### Recommended

Burke, J. Richard (2004) Network Management: Concepts and Practice, A Hands-On Approach. Upper Saddle River: Pearson

Ding, Jianguo (2009) Advances in Network Management, London: Taylor and Francis.

#### Background Reading

Agutter, C. (2012) ITIL Foundation Handbook. Norwich: Stationery Office

E. Brewser, R. Griffiths, A. Lawes, J. Sansbury (2012) IT Service Management: A Guide for ITIL Foundation Exam Candidates. London: British Computer Society

## Module Learning Outcomes

### Subject Specific Learning Outcomes

*On successful completion of this module you will be able to:*

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**LO 1** | Evaluate different approaches to system and network management

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**LO 2** | Evaluate system and network design

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**LO 3** | Explain and justify system administration tasks

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**LO 4** | Apply and justify ITIL best practices in change management and configuration management

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### Assessment Title or element

### Weighting (%)

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Assignment: evaluate the network management of a company, and recommend improvements (2000 words) [late semester]	50%
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Examination: network and service management (1 hr 30min) [end semester]	50%
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