

<b>Module Title</b> <b>Introduction To Data Networks</b>	Reference EN4535 SCQF SCQF 8 Level SCQF Points 15 ECTS Points 7.5 Created May 2002 Approved July 2009 Amended August 2011 Version No. 2
<b>Keywords</b> Network design, router configuration, Switches, VLANs, Fault finding and testing	

## This Version is No Longer Current

The latest version of this module is available [here](#)

### Prerequisites for Module

EN3533 Network Design or equivalent.

### Corequisite Modules

None.

### Precluded Modules

None.

### Aims of Module

To provide the student with the ability to understand the practicalities of requirements analysis, design and implementation of computer networks in the industrial and commercial environment.

### Learning Outcomes for Module

### Indicative Student Workload

<i>Contact Hours</i>	Full Time
Assessment	10
Lectures	12

#### *Directed Study*

Directed Study	48
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#### *Private Study*

Private Study	80
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### Mode of Delivery

The module is based on a series of lectures supplemented by guest speakers and student research.

### Assessment Plan

	Learning Outcomes Assessed
Component 1	3

On completion of this module, students are expected to be able to:

1. Identify the issues involved in developing a requirements analysis document for industry based computer networks.
2. Appraise the methodologies used when designing a network in commercial environments.
3. Evaluate the various designs currently implemented in enterprise networks.

### **Indicative Module Content**

The module is a series of case studies of network design, implementation and maintenance, based on a mixture of lectures, guest speakers, and private research. The lectures will give an insight into the practicalities of designing, implementing and maintaining a network in a commercial environment. Students will also be expected to make their own individual investigations into other enterprise networks.

Component 2	1,2
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Component 2 requires the student to design and document an enterprise network given outline requirements. (70% weighting).

Component 1 is coursework which will consist of a comprehensive report and critical comparison of the design of enterprise networks identified as a result of student research. (30% weighting).

### **Indicative Bibliography**

1. TEARE D., PAQUET C., 2005. Campus Network Design Fundamentals. Cisco Press
2. OPPENHEIMER P., 2004. Top-Down Network Design. 2nd Edition. Cisco Press