

Module Title Wireless LANs	Reference EN4533
Keywords Wireless, WLAN	SCQF SCQF
	Level 10
	SCQF Points 15
	ECTS Points 7.5
	Created November 2003
	Approved March 2004
	Amended August 2011
	Version No. 3

This Version is No Longer Current

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

Prerequisites for Module

Network Design (EN3533) or equivalent

Corequisite Modules

None.

Precluded Modules

None.

Aims of Module

To provide the student with the ability to understand the operation, installation and management of Wireless LANs.

Learning Outcomes for Module

On completion of this module,

Indicative Student Workload

<i>Contact Hours</i>	Full Time
Lectures	12
Tutorials	12

Directed Study

Practical exercises	26
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Directed Study	25
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Private Study

Private Study	75
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Mode of Delivery

The module is taught using a structured programme of lectures, tutorials, practical exercises and student-centred learning

Assessment Plan

students are expected to be able to:

1. Discuss the operation of Wireless LANs
2. Undertake the installation of Wireless LANs
3. Undertake the configuration of Wireless LANs

Indicative Module Content

Wireless Technologies.
Components and Topologies.
Wireless standards. Modulation Techniques. Multiple Access and Bandwidth. Radio Wave Propagation. Wireless Topologies. VLAN, QoS, and Proxy Mobile IP. Access Points. Wireless Bridges. Antennas. Security. Site Survey. Troubleshooting: Management, Monitoring, and Diagnostics. Emerging Technologies: Ultra-Wideband Wireless, VoIP and Voice over WLANs, Mobile Wireless, Wireless Organizations and Certification.

	Learning Outcomes Assessed
Component 1	2,3
Component 2	1,3

Component 2 is a formal, closed book, examination. (50% weighting)

Component 1 is coursework which is assessed by a case study of Wireless Local Area Network Specification and Design and Operation.(50% weighting)

Indicative Bibliography

1. ROSHAN, P., Leary, J., 802.11 Wireless LAN Fundamentals 2009. Cisco Press, Cisco Networking Academy, Part of the Fundamentals series.