Heriot-Watt University
Module Templates - Module Descriptor

Module Title	Communications and Networks		School	Engineering and Physical Sciences				On or Off-Campus	On Campus
Module Co-ordinator	Cheng-Xiang Wang		Level	11 (SCQF)	Module Code	B39QE	Term	1	Credits	12 SCQF

Any changes to the Module Descriptor may be made only with approval of the Undergraduate/Postgraduate Studies Committee

1.	Pre-requisites	Mathematics and Computing at level 7 appropriate to electrical communications
2.	Linked Modules	None
3.	Excluded Modules	None
4.	Degrees for which this is a core module	MSc IT (software systems)(MACS), (applied systems)(EPS), (mobile communications)(EPS)

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<tr><td colspan="2" align="center">5. Aims</td></tr>
<tr><td colspan="2">
(a) To equip students with an understanding of concepts in digital communications.
(b) To give an introduction of mobile communication systems.
(c) To investigate network protocols and theory for both communication systems and computers.
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6. Learning Outcomes		7. Assessment & Re-assessment Methods
Subject Mastery	***Understanding, Knowledge and Subject-Specific skills*** • Critical understanding of concepts in communication networks at the physical layer, data link layer, MAC sublayer, network layer, and transport layer of the ISO OSI model. • Ability to critically analyze and solve problems in communication networks.	• Formative assessment by coursework. • Summative assessment by written examination.
Personal Abilities	***Cognitive skills, Core skills and Professional Awareness*** • Ability to critically discuss technical issues associated with digital communications and networking technologies. • Ability to critically apply the theory to the analysis and design of communication network protocols.	• Formative assessment by coursework. • Summative assessment by written examination.

<table>
<tr><td colspan="6" align="center">Date and Version</td></tr>
<tr><td>Date</td><td>4/8/00</td><td>Date of Change</td><td>15/8/05</td><td>Version Number</td><td>1.4</td></tr>
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See accompanying Module Syllabus and Module Administration for further details about this module