

AMITY GLOBAL INSTITUTE

MODULE SYLLABUS

Course	Advanced Diploma in Computing
Module Title	Computer Modern Networks
Syllabus / Content / Learning Outcomes	<p>The Computer Modern Networks course will discuss the technologies (hardware/software) and how these are utilised in modern networks. This understanding is used to develop the necessary skills to design and implement (programming) software to be deployed within modern networks.</p> <p><u>Learning Objectives</u></p> <ol style="list-style-type: none"> 1. Provide an insight and understanding of the technologies, both hardware and software, which make up modern networks and how they are utilised. 2. To provide students with the skills necessary to design and implement software which are to be deployed to use modern networks <p><u>Learning Outcomes</u></p> <p>On successful completion of the module, students will be able to:</p> <p>Knowledge and Understanding</p> <ol style="list-style-type: none"> 1. Understand and explain modern networks, both fixed and mobile, to a satisfactory level. 2. Understand and explain the operation of the mobile cellular system to a satisfactory level. 3. Understand and explain the principles of mobile device programming to a satisfactory level. <p>Subject Specific Skills</p> <p>On successful completion of the module students, will have demonstrated their ability to:</p> <ol style="list-style-type: none"> 1. Satisfactorily evaluate and use networks, in both fixed and mobile contexts, that are used for device programming. 2. Evaluate and appraise the use of modern networks, used in fixed and mobile contexts to an adequate level. 3. Design and implement programs for use on modern networks. <p>Key Skills</p> <p>On successful completion of the module, students will have the following key skills:</p> <ol style="list-style-type: none"> 1. Competently identify relevant sources of information 2. Communication. Write clearly about complex subjects in a form adequate to the purpose. 3. Managed Learning: Satisfactorily make, justify and implement decisions following evaluation of options. 4. Problem solving: Develop skills to satisfactorily design and implement appropriate software and systems.
No. of Teaching Hours	<p>Teacher Managed Learning</p> <p>Lectures, Tutorials, Seminars etc : 48 hours</p> <p>Student Managed Learning</p> <p>Independent Preparation, pre-reading and analysis etc : 22 hours</p> <p>TOTAL = 70 hours</p>
Teaching Methods	Lectures, tutorials, case-studies analysis, research journals and group discussion
Assessment Methods and Weightages	<p>Written Assessment 1 (1500 Words) – 50%</p> <p>Written Assessment 2 (1500 Words) – 50%</p>
Skills for Maximising Learning Outcomes	Reading and Research
Dates of Examination and Submission of Assignment	To be advised and confirmed by respective module lecturer on detailed/specific assignment deadlines
Recommended Text & Reference	<p>This module is designed to give an understanding of the technologies (hardware/software) and how these are utilised in a modern networks. This understanding is then use to develop the necessary skills to design and implement (programming) software to be deployed within modern networks</p> <p>Walter Gorlaski The Illustrated Networks – Morgan Koffman</p>

Note: All Information provided to Amity will be kept strictly confidential except for those required under statutory requirements and by government authorities and relevant university partners and accreditation bodies as part of the regulatory or course requirements.

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Lesson No.	Learning Outcome
1	Modern wireless technology
2	Operation of mobile telephone systems and associated standards.
3	Modern digital wireless local area networks such as WiFi and Bluetooth.
4	Modern digital wireless wide area networks used by telecommunications, such as CDMA, GSM, GPRS and UMTS for 3G.
5	Modern WiFi networks used by LANs, such as 802 and related protocols.
6	Relationship between mobile network provision and IP.
7	Mobile wireless computing.
8	Computer Communications programming, IP Address representation.
9	Network programming architectures.
10	UDP, API, TCP API.
11	Client and Server programming, Peer to Peer programming & Application Level Protocols.

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