

Module Specification

1. Factual information			
Module title	T215A: Communication and Information Technologies A	Level	2
Module tutor	TBA	Credit value	30
Module type	Taught	Notional learning hours	8

2. Rationale for the module and its links with other modules

Students will begin with Communication and information technologies (T215) – learning about the core principles upon which new technologies are built. They will gain an understanding of the ways in which data is stored, manipulated and transmitted; and discover how new processes and services are transforming our lives.

Digital communication and information technologies have become fundamental to the operation of modern societies. New products and services are rapidly transforming our lives, both at work and at play.

This module will help students learn more about these developments, and will equip them with the understanding and skills to continue learning about new developments in the future. Students will study the core principles on which the technologies are built and, through a range of online and offline activities, investigate new topics and technologies.

After studying this module, students will be in a better position to appreciate the potential of developments in communication and information technologies.

3. Aims of the module

- 1 To introduce students to modern topics in ICTs.
- 2 To develop student's skills in managing technologies of data storage and computer networks.
- 3 To develop students skills in the technologies of mobile communication systems with an emphasis on mobile telephony.

4. Pre-requisite modules or specified entry requirements

Students are expected to have completed their study of the module TM112 before they can undertake the T215A module.

5. Intended learning outcomes	
A. Knowledge and understanding	Learning and teaching strategy
<p>Upon completing this module, students should be able to:</p> <p>A1. Describe key principles and concepts of digital communication and information systems and their component devices, including such topics as LANs, WLANs, mobile communication networks, encoding, modulation, multiplexing, routing, and standards.</p> <p>A2. Explain key principles and concepts relating to digital data including the storage, manipulation and transmission of digital data.</p> <p>A3. Identify major trends in communication and information technologies.</p> <p>A4. Enhance their scientific reading and writing skills for writing short reports.</p>	<ul style="list-style-type: none"> • 25% face-to-face tutorial sessions • TMA work • Module learning booklets and support material
B. Cognitive skills	Learning and teaching strategy
<p>Upon completing this module, students should be able to:</p> <p>B1. Produce descriptions and explanations of the communication and information systems that feature in the module and of their underlying technologies and component devices</p> <p>B2. Apply their understanding of the communication and information systems that feature in the module, their underlying technologies and component devices in specified contexts, updating themselves about the systems, technologies and devices as necessary.</p> <p>B3. Use knowledge gained from the module to help them to figure out new or unfamiliar communication and information systems in specified situations; describe and explain such systems and their technologies and devices; apply their understanding in specified contexts.</p> <p>B4. Analyze and discuss some of the technological, social, legal, ethical and personal issues that relate to communication and information systems, technologies and devices.</p> <p>B5. Realize an overview of the way in which mobile telephone systems have developed from its first generation till LTE stage.</p>	<ul style="list-style-type: none"> • 25% face-to-face tutorial sessions • TMA work • Module learning booklets and support material

C. Practical and professional skills	Learning and teaching strategy
<p>Upon completing this module, students should be able to:</p> <p>C1. Critique draft materials in order to improve them C2. Use standard office and communication software effectively to support their work</p>	<ul style="list-style-type: none"> • 25% face-to-face tutorial sessions • TMA work • Module learning booklets and support material

D Key transferable skills	Learning and teaching strategy
<p>Upon completing this module, students should be able to:</p> <p>D1. Communicate complex information, arguments and ideas effectively and without plagiarism on a range of topics relating to communication and information systems through a variety of different media, using styles, language and images appropriate to purpose, audience and medium D2. Perform simple calculations relating to communication and information systems, use and manipulate simple algebraic equations and interpret and produce graphical and tabular data D3. Use information technology to find information from various sources and evaluate that information D4. Develop a range of skills as an independent learner to support them in learning through the module materials and through other resources that they seek out for themselves.</p>	<ul style="list-style-type: none"> • 25% face-to-face tutorial sessions • TMA work • Module learning booklets and support material

6. Indicative content.
<p>The content of the module is split into three blocks, blocks 1 to 3. The content of blocks 1 to 3 is briefly described below:</p> <ol style="list-style-type: none"> 1. Block 1 - Storing and Sharing. This block introduces students to the technologies of data storage and computer networks and helps them to develop their skills in managing these technologies efficiently and safely. It also helps them to develop their skills in finding information on-line and evaluating it. Finally it develops students' skills in sharing their knowledge with others by writing technological documents.

6. Indicative content.

2. Block 2 – Exploring and Enquiring. This block looks at the technologies of mobile communication systems with an emphasis on mobile telephony. This block picks up on the ‘exploring and enquiring’ themes of the title in its skills development – exploring through visualisation and enquiring through the use of technical documents. Both these ideas come together to develop the skills of engaging with ‘difficult’ documents.
3. Block 3 – Creating and developing. The theme of this block is to give students experience of practical web development work. This block also provides further opportunities for student to develop his/her information and skills for writing short reports.

7. Assessment strategy, assessment methods and their relative weightings

TMA Work: 20%
MTA: 30%
Exam: 50%

8. Mapping of assessment tasks to learning outcomes

Assessment tasks	Learning Outcomes														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	D1	D2	D3	D4
TMA	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
MTA	✓			✓	✓		✓						✓		
Exam	✓	✓		✓	✓		✓	✓					✓		

9. Teaching staff associated with the module

<u>Tutor's name and contact details</u>	<u>Contact hours</u>
Dr. Farid jradi Faculty of computer studies	

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Arab open university-Kuwait P.O. Box 830 Ardiya, 92400 Kuwait ☐ +965 2439 4294 , ☐ fjradi@ou.edu.kw	

10. Key reading list				
<u>Author</u>	<u>Year</u>	<u>Title</u>	<u>Publisher</u>	<u>Location</u>
Module adopted from OU, UK.				

11. Other indicative text (e.g. websites)
https://lms.arabou.edu.kw