



## MODULE SPECIFICATION

Part 1: Information			
Module Title	Mobile Networks		
Module Code	UFCFJC-15-3	Level	Level 6
For implementation from	2019-20		
UWE Credit Rating	15	ECTS Credit Rating	7.5
Faculty	Faculty of Environment & Technology	Field	Computer Science and Creative Technologies
Department	FET Dept of Computer Sci & Creative Tech		
Module type:	Standard		
Pre-requisites	Computer Networks and Operating Systems 2019-20		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p><b>Educational Aims:</b> See Learning Outcomes</p> <p><b>Outline Syllabus:</b> Telecommunication systems (e.g., GSM, DECT, TETRA, UMTS)</p> <p>Wireless LANs</p> <p>Mobile IP</p> <p>Routing in mobile networks</p> <p>Communication algorithms</p> <p>Ad hoc Networks</p> <p>Wireless Mesh Networks</p> <p>QoS constraints</p> <p>Advances topics in mobile communications</p>

## STUDENT AND ACADEMIC SERVICES

**Teaching and Learning Methods:** Contact time: 36 hours

Assimilation and development of knowledge: 69 hours

Exam preparation: 30 hours

Coursework preparation: 15 hours

Total study time: 150 hours

A mixture of readings, lectures and case studies will be used. There will be a significant practical element to the module and students will be expected to analyse, design and implement examples of web-based information systems using a variety of technologies.

### Part 3: Assessment

The module is assessed by a 3 hour examination at the end of the teaching and also by coursework. The exam assesses the students' understanding of the theoretical aspects of the module. The coursework allows the student to demonstrate practical application of methodologies, tools and techniques.

First Sit Components	Final Assessment	Element weighting	Description
Set Exercise - Component B		50 %	Individual research based assignment
Examination - Component A	✓	50 %	Exam (3 hours)
Resit Components	Final Assessment	Element weighting	Description
Set Exercise - Component B		50 %	Individual research based assignment
Examination - Component A	✓	50 %	Exam (3 hours)

STUDENT AND ACADEMIC SERVICES

<b>Part 4: Teaching and Learning Methods</b>																	
Learning Outcomes	<p>On successful completion of this module students will achieve the following learning outcomes:</p> <table border="1"> <thead> <tr> <th style="text-align: left;"><b>Module Learning Outcomes</b></th> <th style="text-align: left;"><b>Reference</b></th> </tr> </thead> <tbody> <tr> <td>Research the problems associated with mobile networks using appropriate techniques currently deployed by different technologies</td> <td>MO1</td> </tr> <tr> <td>Analyse and evaluate the deployment of advanced features in the design of mobile networks</td> <td>MO2</td> </tr> <tr> <td>Specify the necessary requirements for providing quality of service in mobile networks</td> <td>MO3</td> </tr> <tr> <td>Investigate and evaluate the communication applications of different mobile technologies, considering the QoS constraints</td> <td>MO4</td> </tr> <tr> <td>Research the problems associated with efficient group communication patterns in mobile networks</td> <td>MO5</td> </tr> </tbody> </table>	<b>Module Learning Outcomes</b>	<b>Reference</b>	Research the problems associated with mobile networks using appropriate techniques currently deployed by different technologies	MO1	Analyse and evaluate the deployment of advanced features in the design of mobile networks	MO2	Specify the necessary requirements for providing quality of service in mobile networks	MO3	Investigate and evaluate the communication applications of different mobile technologies, considering the QoS constraints	MO4	Research the problems associated with efficient group communication patterns in mobile networks	MO5				
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Reading List	<p><i>The reading list for this module can be accessed via the following link:</i></p> <p><a href="https://uwe.rl.talis.com/index.html">https://uwe.rl.talis.com/index.html</a></p>																

<b>Part 5: Contributes Towards</b>
This module contributes towards the following programmes of study: