

## Module Specification

### Module Summary Information

1	<b>Module Title</b>	Network Fundamentals
2	<b>Module Credits</b>	20
3	<b>Module Level</b>	4
4	<b>Module Code</b>	CMP4269

5	<b>Module Overview</b>
<p>The module provides the opportunity to learn and critically reflect the skills required in building and designing basic networks and their requirements within a network infrastructure. This module builds on the underpinning knowledge and theory of networking systems.</p> <p><b>The module consists of:</b></p> <ul style="list-style-type: none"> <li>• Subject specific lectures/laboratory sessions to introduce knowledge and skills relevant to network and information systems, along with communication architecture</li> <li>• Lectures/laboratory sessions to introduce principles and techniques for information communication within a network and ensuring effective communication.</li> <li>• Global view on information system communication.</li> </ul> <p><b>Relationship to programme philosophy:</b></p> <p>This module supports opportunities for learners to develop knowledge and skills that contribute towards the acquisition of key BCU graduate attributes; creative problem solvers, global outlook, enterprising, professional and work ready. In the context of the information and data communication industries and at this academic level, this means an ability to: respond to a critical brief to find practical solutions to problems; evaluate and respond to the opportunities and challenges of interdisciplinary approaches to the realisation of a task; respond flexibly and imaginatively to a set, or group-determined brief within a fixed timescale.</p> <p><b>Creative Problem Solvers</b></p> <ul style="list-style-type: none"> <li>• Defining network requirements for a given network design</li> </ul> <p><b>Global Outlook</b></p> <ul style="list-style-type: none"> <li>• Understanding and implementing network protocols</li> </ul> <p><b>Enterprising</b></p> <ul style="list-style-type: none"> <li>• Developing global communication systems</li> </ul> <p><b>Professional</b></p> <ul style="list-style-type: none"> <li>• Discussing and disseminating requirements in a business context</li> </ul>	

<b>6</b>	<b>Indicative Content</b>
	<ul style="list-style-type: none"> <li>• Networking Models and standards</li> <li>• Hierarchical Addressing schemes</li> <li>• Networking Application services</li> <li>• Networking infrastructure and security</li> </ul>

<b>7</b>	<b>Module Learning Outcomes</b>
	<b>On successful completion of the module, students will be able to:</b>
	<b>1</b> Use standardised layered models in the analysis and design of structured communication networks
	<b>2</b> Design an appropriate network system (including devices, addressing schemes, protocols, etc.) to meet a given network specification.
	<b>3</b> Deploy, manage and secure network devices.

<b>8</b>	<b>Module Assessment</b>
<b>Learning Outcome</b>	
	<b>Coursework</b>
	<b>Exam</b>
	<b>In-Person</b>
<b>1-4</b>	<b>X</b>

<b>9</b>	<b>Breakdown Learning and Teaching Activities</b>
<b>Learning Activities</b>	<b>Hours</b>
<b>Scheduled Learning (SL)</b> includes lectures, practical classes and workshops, peer group learning, Graduate+, as specified in timetable	48
<b>Directed Learning (DL)</b> includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE	90
<b>Private Study (PS)</b> includes preparation for exams	62
<b>Total Study Hours:</b>	200