



## Module Descriptor

Title	CCNA3: Enterprise Networks, Security & Automation		
Session	2025/26	Status	Published
Code	COMP08098	SCQF Level	8
Credit Points	20	ECTS (European Credit Transfer Scheme)	10
School	Computing, Engineering and Physical Sciences		
Module Co-ordinator	Duncan Thomson		
<b>Summary of Module</b>			
<p>This module covers part 3 (of 3) of the Cisco Certified Network Associate (CCNA) curriculum. It is based on the current version of the curriculum materials, currently v7.</p> <p>The curriculum covers the skills and knowledge required for configuring, securing and managing enterprise networks, including: OSPF Concepts and Configuration; Network Security; WAN Concepts; Network Optimisation, Monitoring &amp; Troubleshooting; Emerging Network Technologies.</p>			

<b>Module Delivery Method</b>	<b>On-Campus<sup>1</sup></b> <input checked="" type="checkbox"/>		<b>Hybrid<sup>2</sup></b> <input type="checkbox"/>		<b>Online<sup>3</sup></b> <input type="checkbox"/>		<b>Work -Based Learning<sup>4</sup></b> <input type="checkbox"/>
<b>Campuses for Module Delivery</b>	<input type="checkbox"/> Ayr <input type="checkbox"/> Dumfries		<input type="checkbox"/> Lanarkshire <input type="checkbox"/> London <input checked="" type="checkbox"/> Paisley		<input type="checkbox"/> Online / Distance Learning <input type="checkbox"/> Other (specify)		
<b>Terms for Module Delivery</b>	Term 1	<input type="checkbox"/>	Term 2	<input checked="" type="checkbox"/>	Term 3	<input type="checkbox"/>	
<b>Long-thin Delivery over more than one Term</b>	Term 1 – Term 2	<input type="checkbox"/>	Term 2 – Term 3	<input type="checkbox"/>	Term 3 – Term 1	<input type="checkbox"/>	

<sup>1</sup> Where contact hours are synchronous/ live and take place fully on campus. Campus-based learning is focused on providing an interactive learning experience supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus contact hours will be clearly articulated to students.

<sup>2</sup> The module includes a combination of synchronous/ live on-campus and online learning events. These will be supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus and online contact hours will be clearly articulated to students.

<sup>3</sup> Where all learning is solely delivered by web-based or internet-based technologies and the participants can engage in all learning activities through these means. All required contact hours will be clearly articulated to students.

<sup>4</sup> Learning activities where the main location for the learning experience is in the workplace. All required contact hours, whether online or on campus, will be clearly articulated to students

Learning Outcomes	
<b>L1</b>	Demonstrate an understanding of concepts such as dynamic routing, address translation, security, monitoring and automation in networks,
<b>L2</b>	Configure and secure a network using dynamic routing and address translation
<b>L3</b>	N/A
<b>L4</b>	N/A
<b>L5</b>	N/A

Employability Skills and Personal Development Planning (PDP) Skills	
<b>SCQF Headings</b>	<b>During completion of this module, there will be an opportunity to achieve core skills in:</b>
<b>Knowledge and Understanding (K and U)</b>	<b>SCQF 8</b> Understanding Access Control Lists and their uses Understanding dynamic routing and the OSPF protocol Understanding where and how to use Network Address Translation Understanding methods of managing and monitoring a scalable and flexible network
<b>Practice: Applied Knowledge and Understanding</b>	<b>SCQF 8</b> Configuring Cisco routers and switches using the IOS command line Implementing ACLs to meet given requirements
<b>Generic Cognitive skills</b>	<b>SCQF 8</b> Troubleshooting basic switched and routed networks
<b>Communication, ICT and Numeracy Skills</b>	<b>SCQF 8</b> Working with a Command Line Interface Managing documentation, configuration and IOS image files
<b>Autonomy, Accountability and Working with Others</b>	<b>SCQF 8</b> Working in coordination with others in a networked environment

<b>Prerequisites</b>	<b>Module Code</b> COMP07012	<b>Module Title</b> CCNA1: Introduction to Networks
	<b>Other</b>	
<b>Co-requisites</b>	<b>Module Code</b> COMP08097	<b>Module Title</b> CCNA2: Switching, Routing & Wireless Essentials (alternatively, may be taken as a prerequisite)

Learning and Teaching
In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours.

<b>Learning Activities</b>	<b>Student Learning Hours</b>
During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	(Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture / Core Content Delivery	18
Laboratory / Practical Demonstration / Workshop	30
Independent Study	152
Please select	
Please select	
Please select	
<b>TOTAL</b>	200

<b>Indicative Resources</b>
<p><b>The following materials form essential underpinning for the module content and ultimately for the learning outcomes:</b></p> <p>Cisco's online curriculum at <a href="https://www.netacad.com/">https://www.netacad.com/</a></p> <p>Access to a networking labs with equipment supporting the latest version of the CCNA curriculum</p> <p>Software: Packet Tracer, VirtualBox, Wireshark, Putty, TFTP and Syslog servers</p> <p>Please ensure the list is kept short and current. Essential resources should be included, broader resources should be kept for module handbooks / Aula VLE.</p> <p>Resources should be listed in Right Harvard referencing style or agreed professional body deviation and in alphabetical order.</p>
<p><b>(N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)</b></p>

<b>Attendance and Engagement Requirements</b>
<p><b>In line with the <a href="#">Student Attendance and Engagement Procedure</a>, Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time.</b></p> <p><b>For the purposes of this module, academic engagement equates to the following:</b></p> <p>The School of Computing, Engineering and Physical Sciences considers attendance and engagement to mean a commitment to attending, and engaging in, timetabled sessions. You will scan your attendance via the scanners each time you are on-campus and you will login to the VLE several times per week. Where you are unable to attend a timetabled learning session due to illness or other circumstance, you should notify the Programme Leader that you cannot attend. Across the School an 80% attendance threshold is set. If you fall below this, you will be referred to the Student Success Team to see how we can best support your studies.</p>

<b>Equality and Diversity</b>
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**The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: [UWS Equality, Diversity and Human Rights Code](#).**

Aligned with the University's commitment to equality and diversity, this module supports equality of opportunity for students from all backgrounds and learning needs. Using the VLE, material will be presented electronically in formats that allow flexible access and manipulation of content. This module complies with University regulations and guidance on inclusive learning and teaching practice. This module has lab-based teaching using specialist networking hardware, and as such you are advised to speak to the Module Co-ordinator to ensure that specialist assistive equipment, support provision and adjustment to assessment practice can be put in place, in accordance with the University's policies and regulations.

**(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)**

### Supplemental Information

<b>Divisional Programme Board</b>	<b>Computing</b>
<b>Overall Assessment Results</b>	<input type="checkbox"/> Pass / Fail <input checked="" type="checkbox"/> Graded
<b>Module Eligible for Compensation</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>If this module is eligible for compensation, there may be cases where compensation is not permitted due to programme accreditation requirements. Please check the associated programme specification for details.</b>
<b>School Assessment Board</b>	Business and Applied Computing
<b>Moderator</b>	Steve Eager
<b>External Examiner</b>	R Khusainov
<b>Accreditation Details</b>	
<b>Module Appears in CPD catalogue</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Changes / Version Number</b>	2.03

### Assessment (also refer to Assessment Outcomes Grids below)

#### Assessment 1

Completion of "Checkpoint Tests", a series of open-book computer-based assessments (multiple attempts allowed) – worth 20%

#### Assessment 2

A final closed book online test taken in exam conditions – worth 40%

#### Assessment 3

A timed, lab-based assessment taken in exam conditions on real network equipment – worth 40%

(N.B. (i) Assessment Outcomes Grids for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed.

(ii) An indicative schedule listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

### Component 1

Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
Portfolio of online open book quizzes, multiple attempts permitted	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20	0

Component 2							
Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
Online closed book class test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	40	1.5

Component 3							
Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
Timed laboratory assessment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	40	2
<b>Combined total for all components</b>						100%	3.5 hours

### Change Control

What	When	Who
Attendance and Engagement and Equality and Diversity statements updated	20/1/25	L Smith
update to E&D statement highlighting use of specialist hardware; student hours adjusted to total 48; minor rewording of Assessment 1	19/2/25	D Thomson