

NCFE Level 5 Diploma: Cloud Systems and Secure Networking - HTQ

A Level 5 Higher Technical Qualification (HTQ) in cloud and secure networking: cloud protocols and topologies, cyber threats and risk management, network ...

**Study it online.
Finish with a qualification
that is on your record for life.**

WHERE IT SITS

- Entry
- Level 1
- Level 2
- Level 3
- Level 4
- **Level 5**

Level 5

REGULATED LEVEL

540

LEARNING HOURS

6

UNITS

100%

ONLINE

**Delivered online**

Tutor support. Start when you are ready.

**Assessed on your work**

A portfolio of your own work. No written exam.

**Awarded by NCFE**

Ofqual-recognised. We are approved centre 11001657.

**Ask us**

For the fee and the next start date.

WHERE THIS ONE LEADS

cloud engineer

cloud solutions architect

cyber security analyst

network engineer

related apprenticeships

cloud computing degree

networking degree

cyber security degree

degree apprenticeship

The progression routes NCFE publishes for this qualification.

**Start when you are ready**

540 guided learning hours, 1200 total qualification time, self-paced online

**Tutor support throughout**

Questions answered within 2 working days, feedback within 10.

**Nothing paid at application**

Payment only after you accept an offer.

WHAT YOU WILL STUDY

6 units, 540 guided learning hours



Cloud networking protocols, services and topologies	130 h · 24%
Cyber security threats and risk management	90 h · 17%
Network performance, optimisation, and maintenance	90 h · 17%
Change management and business continuity in network infrastructure	90 h · 17%
Security compliance and legislation	70 h · 13%
Secure system administration	70 h · 13%

UNIT BY UNIT

What each unit covers

01. Cloud networking protocols, services and topologies

130 hours

- ✓ Explore cloud computing concepts and within organisations
- ✓ Explore components of IT system and their role in supporting organisational solutions
- ✓ Examine devices, applications, and services within the context of conceptual models
- ✓ Explore and apply the key concepts of and switching
- ✓ Explore network topologies and networking technologies and their provide a secure, scalable, and efficient IT infrastructure
- ✓ Examine the functions and core network services in supporting IT operations

02. Cyber security threats and risk management

90 hours

- ✓ Explore how different cyber threats systems and infrastructure
- ✓ Evaluate human and organisational cyber threats and actor behaviour
- ✓ Apply threat modelling and mitigation to reduce organisational cyber risk

03. Network performance, optimisation, and maintenance

90 hours

- ✓ Explore and apply techniques for system performance
- ✓ Explore network maintenance ensures network functionality
- ✓ Apply troubleshooting methodologies network and IT infrastructure
- ✓ Explore cloud management of networks

04. Change management and business continuity in network infrastructure

90 hours

- ✓ Explore common failures within cloud infrastructure systems
- ✓ Explore how to integrate services into a network
- ✓ Explore the role of organisational procedures in maintaining compliance with industry practices and stakeholder requirements
- ✓ Explore and apply approaches to change management

05. Security compliance and legislation

70 hours

- ✓ Assess how current legislation operational practice
- ✓ Assess the implications of legislation and cloud provider policies on data handling
- ✓ Apply industry- recognised for cloud compliance

06. Secure system administration

70 hours

- ✓ Explore methods of configuring and administering network security
- ✓ Explore system hardening their impact on availability
- ✓ Explore secure scripting techniques to administrative tasks and performance
- ✓ Apply techniques for upgrading and components

The learning outcomes NCFE publishes for each unit. The assessment criteria beneath them are on the qualification page.

6

UNITS TO COMPLETE

24

LEARNING OUTCOMES

540

GUIDED LEARNING HOURS

Guided learning hours are the taught time NCFE specifies. Your own study time is on top, and how long you take is up to you.

HOW IT WORKS

From your first unit to your certificate

01

You produce evidence

A portfolio of your own work, against the published criteria.

02

An assessor marks it

Qualified, and required to show current competence in the sector they assess.

03

The marking is checked

Sampled internally each term, and quality assured by NCFE from outside the school.

04

NCFE certificates you

Claimed through the NCFE portal. Recognised independently of us.

WHAT WE COMMIT TO

Answers, in working days



Within 2 working days

General questions



Within 10 working days of submission

Assessment feedback



Within 1 working day

Technical problems



Within 1 working day

Urgent welfare concerns

Published in DAIS-POL-024 Online Learning and Digital Delivery, and on every qualification page.

GETTING ON

Entry requirements



Learners should be aged 18 or above to undertake this qualification.



This is a Level 5 higher technical qualification, so learners will typically have achieved a relevant Level 3 qualification or hold equivalent knowledge, skills or industry experience in IT, networking or digital.



You will need a computer with internet access and, for the practical units, access to appropriate networking and cloud tools.



Registration is at the discretion of the centre, in accordance with equality legislation.

WHERE IT LEADS

What this qualification leads to



EMPLOYMENT

cloud engineer

cloud solutions architect

cyber security analyst

network engineer

security architect



FURTHER EDUCATION

related apprenticeships



HIGHER EDUCATION

cloud computing degree

networking degree

cyber security degree

degree apprenticeship

The progression routes NCFE publishes for this qualification. We make no claim about salary or about getting a job.

THE COST

How paying works

TWO WAYS

Pay in full, which costs less than the published fee, or pay monthly. No interest and no credit agreement, and the payments stop on their own.

THE CURRENT FEE

On the qualification page at dataaischool.com, or ask us and we will tell you. It is not printed here, so nothing in this guide can quote you a price we are no longer charging.

Nothing is paid when you apply. Payment is taken only after you accept an offer, and we confirm the amounts with you first.



How long it takes. 540 guided learning hours, 1200 total qualification time, self-paced online

BEFORE YOU START

What you need to take part



Device

Laptop or desktop computer



Operating system

Windows 10 or macOS 10.15 or later



Browser

Google Chrome or Mozilla Firefox, latest version



Internet speed

10 Mbps download and 5 Mbps upload



Webcam

Required for live sessions and identity verification



Microphone

Required for live sessions

Published in DAIS-POL-024, and told to every learner before enrolment.

IN MORE DETAIL

About this qualification

This is a regulated Level 5 Higher Technical Qualification (HTQ) (NCFE qualification number 610/5971/7). It gives you the knowledge, skills and behaviours to design, secure, optimise and administer cloud and networked IT systems, aligned to employer and industry requirements. On completion you can progress to employment in roles such as network engineer, cloud engineer or security engineer, or to further higher education. You study six mandatory units totalling 540 guided learning hours and 120 credits. Unit 01 (Cloud networking protocols, services and topologies) builds the foundations: cloud computing concepts and deployment models (SaaS, IaaS, PaaS), IT system architecture and virtualisation, the OSI and TCP/IP conceptual models, routing and switching, network topologies and technologies, and core network services. Unit 02 (Cyber security threats and risk management) covers threats to IT systems, threat actors and human factors, and threat modelling and mitigation using the confidentiality, integrity and availability (CIA) triad. Unit 03 (Network performance, optimisation and maintenance) covers performance optimisation, proactive and reactive maintenance, troubleshooting methodologies and root cause analysis, and cloud management of wireless networks. Unit 04 (Change management and business continuity in network infrastructure) covers failures and redundancy, integrating services, disaster recovery and business continuity, service-level agreements, and change management including Secure Access Service Edge (SASE) and zero trust. Unit 05 (Security compliance and legislation) covers UK legislation (UK GDPR, the Data Protection Act 2018 and the Computer Misuse Act 1990), industry-recognised compliance frameworks such as ISO/IEC 27001 and the NIST Cybersecurity Framework, and international data protection law. Unit 06 (Secure system administration) covers access control, patch management and system hardening, secure scripting and automation (including the role of artificial intelligence), and upgrading and testing components. Each unit is internally assessed through a portfolio of evidence, including task-based assessments, and externally quality assured by NCFE. Units are graded pass, merit ...

ASKED BEFORE

Questions people ask

Who awards NCFE Level 5 Diploma: Cloud Systems and Secure Networking - HTQ, and how do I get my certificate?

NCFE Level 5 Diploma: Cloud Systems and Secure Networking - HTQ is awarded by NCFE, an Ofqual-approved awarding organisation, and sits on the Regulated Qualifications Framework (RQF). The qualification number is 610/5971/7. The Data and AI School of London is an NCFE approved centre (Account ...

How long does NCFE Level 5 Diploma: Cloud Systems and Secure Networking - HTQ take?

This qualification carries 540 guided learning hours. It is studied online at your own pace, so how long it takes in calendar time depends on how much you can commit each week.

What do I need before I can start?

Learners should be aged 18 or above to undertake this qualification. We assess every applicant individually and will tell you if a different level would suit you better.

Can I study this entirely online?

Yes. Teaching, materials and assessment are all delivered through our Moodle-based virtual learning environment, so you can study from anywhere in the UK. You need a laptop or desktop computer, a current version of Chrome or Firefox, and a broadband connection of at least 10 ...

Can I enrol now, and when do I pay?

Enrolment is open, so you can apply online today. Nothing is paid at application: payment is taken only after you accept an offer. The current fee is on the qualification page at dataaischool.com, or ask us and we will tell you.

The same answers as the qualification page, built from the same record.

NEXT STEP

Apply, or ask us first

Applying costs nothing and commits you to nothing. Eight short steps, no card details and no deposit. We check the qualification suits you and say so if another fits better, and payment is taken only after you accept an offer.

+44 207 0990 956

info@dataaischool.com

We reply within 2 working days



Scan for the full details

The Data and AI School of London. NCFE approved centre, account 11001657. Office LG06, 1 Quality Court, Chancery Lane, London WC2A 1HR. Company 16953235. ICO ZC086597.

