# NPA National 4/5 Cyber Security
# Faculty of Business and Digital Education


**"Cybercrime is the greatest threat to every company in the world." (IBM Chairman)**

- A device is hacked every 39 seconds
- 30,000 websites are hacked every day
- over 4,000 ransomware attacks take place daily
- 23,000 DDoS attacks are happening every 24 hours
- there are 65,000 attempts to hack businesses in the UK daily
- since COVID-19 cybercrime has increased 300%
- $42 billion was spent on cybersecurity globally by 2020
- there are over 4 million unfilled cybersecurity jobs worldwide.

## Want one of those jobs?

Hacking, ransomeware, DDoS, phishing, trojans, viruses, adware, keyloggers, malware, dark web, spoofing. This course will introduce you to some of the most frequent types of cyber threat – including all of those listed above. It will show you the methods used – yes, how hackers hack. You will learn practical skills in penetration testing, data acquisition, data security, the laws protecting data and computer systems and the practicalities of protecting computer systems. In short, the basics of what it takes to become a white hat hacker and get a foot on the ladder of a career in cyber security. Starting salary for jobs in cyber security range from £25,000 - £35,000 with around 100,000 currently unfilled jobs.

NPAs are nationally recognised qualifications that provide progression to further learning in a specific field with a focus on practical abilities. The NPA is an entry-level qualification and is popular with learners who wish to consider careers in the fast growing and highly lucrative field of Cyber Security.

## Employment:

This course is essential for all learners who may be interested in becoming a:
Ethical Hacker
Security Systems Installer
Security Officer
Forensic Computer Analyst
Private Investigator

## Content:

There are three main themes in the course:

## Unit 1:
## Data Security

Students will examine how personal data can be stored, used and shared by social media and the risks associated with storing and sharing personal data and basic practical methods of protecting personal data. They will look at the legal and ethical obligations around storing

and sharing personal and business data and explain the causes and effects of data security breaches and how to protect data against security breaches.

## Unit 2:
## Digital Forensics

The digital forensics process teaches students how to examining a computer system using specialised software, apply basic techniques of data acquisition and examine digital evidence to gather evidence indicating a system or data may have been compromised or a crime may have been committed.

## Unit 3:
## Ethical Hacking

Students will familiarise themselves with current legislation relating to computer crime and hacking, as well as the basic methods that ethical and malicious hackers use to compromise computer systems. Using current software tools and techniques used by ethical and malicious hackers they will learn how to apply basic hacking methods to compromise computer systems and perform a routine penetration test on a computer system, **all in a controlled environment**.

## Course Assessment:

There is no final examination or coursework component. Each unit has two assessment elements: (1) a practical task and (2) a multiple-choice theory test which is taken online. Learners are required to demonstrate that they have achieved all of the performance criteria for that unit by the successful completion of both of these elements.

## My World of Work:

Click the link below to take you to My World of Work which lists jobs and careers in the field of Cyber Security – have a look and see if there is anything that interests you.

My World of Work – Cyber Security Opportunities

## Pupil Reviews:

Joanna has gained her National 5 in Cyber Security:

"I absolutely loved this course, it was pretty much all hands on using a special laptop which I had to build before we could start. I was given all the instructions and help I needed to install the software. I learned some really cool stuff and I am definitely going to do something in this area when I leave school.

We all worked together on the course learning from each other which was really ace.

We looked at real-world hacks plus social engineering and how to forensically analyse a device to look for evidence of hacking. I would recommend this course to everyone because knowing how to hack can keep you safe and you can earn lots of money for your salary too."