

# Science

**A background in Science can lead to many important and exciting job opportunities. It enables students to become better placed in understanding some of the World's biggest and most important ongoing issues, especially those related to Human health.**

Students studying Science are the future in terms of solving such problems like, mechanisms of disease, pharmacology and drug design, environmental monitoring and change, and medical instrumentation for diagnosis and cure. We are very proud of what our students go on to do in HE and the workplace. Our Science team is enthusiastic and proud to pass the baton of its knowledge and experience to its students, that hopefully leads to the World being a safer and better place to live.



## Science – Where we learn

The Science programmes are delivered in S Block – a modern building equipped with purpose built laboratories maintained and run by two laboratory technicians.



## Science – Where we learn – Crime scene recreation



# Science – What we learn – Essential Laboratory Skills



**Better Careers** Begin Here

## Science – Where we learn – Team Work and Analysis Skills



**Better Careers** Begin Here

## What will you be learning?

We offer two levels of Science programme:

Pearson BTEC Level 1/Level 2 Extended Certificate in Applied Science

Pearson BTEC Level 3 National Extended Diploma in Applied Science

Pearson BTEC Level 3 National Extended Diploma in Forensic and Criminal Investigation

# GAP – Graduate and Professional and Industry Placement

## **Graduate and Professional**

All learners are required to collect 30 Graduate and Professional hours whilst on their programme. This can be engaging with potential employers for example, on an industrial visit or organising voluntary hours to develop transferable work skills.

## **Industrial Placement**

Learners are encouraged and supported to find up to 315 hours of industrial placement, this considerably enhances employment prospects and prepares learners for the next step. Essential employability skills can be developed such as communication, professional etiquette and specialist industry knowledge.

## Pearson BTEC Level 1 / Level 2 First Extended Certificate in Applied Science

This is a full time, one year programme for learners with a minimum of **four GCSE's at Grade 3** or above including English Language.

The programme includes units Chemistry and our Earth, Energy and our Universe, Biology and our Environment, Application of Chemical Substances, Application of Physical Science, Health Applications of Life Science, Practical Scientific Project, The Living Body, Investigating a Crime Scene, Chemical Analysis and Detection, and Employability Skills.

Assessment is mostly by coursework and one 60 minute examinations on Principles of Science and one 75 minute examination on Scientific Skills, which must be passed to complete the programme. Learners can have up to two attempts to pass the examinations.

Progression can be to employment or a suitable Level 3 programme..



## Pearson BTEC Level 3 National Extended Diploma in Applied Science

This Pearson BTEC Level 3 Foundation / Extended Diploma is for learners who want to continue their education through applied learning and who aim to progress to higher education and ultimately to employment in the science industry sector.

This is a full time, two year programme equivalent to three GCE 'A' Levels, and is suitable for progression to University. Learners will have **5 GCSE's at Grade 4** or above including English language, maths and science. A Merit/Distinction in a suitable Level 2 programme is also accepted.

Learners will be assessed by coursework, examinations and practical laboratory skills.

In Year one there are two units that use examinations, a total of four exams are sat in January, with a resit opportunity in May/June. In Year 2, three short examinations are sat for one unit, and a two and a half examination for the another unit.

Learners achieve the National Foundation Diploma in Applied Science in Year 1.

Learners must pass all units in year one to progress to year two of the programme.

### **Work placement**

Progression can be to employment or Higher Education.

## Pearson BTEC Level 3 National Extended Diploma in Applied Science



*“The course gave me a broad introduction to science which helped me understand what direction I want to take my career in, as I have been able to learn about so many areas. I have a much better understanding of the subject and where I would like to develop my skills further.”*  
Level 3 Applied Science learner



**Better Careers** Begin Here

## Pearson BTEC Level 3 National Extended Diploma in Forensic and Criminal Investigation

The Pearson BTEC Level 3 National Extended Diploma in Forensic and Criminal Investigation is intended for post-16 learners who aim to progress to higher education to study forensic science, criminology or psychology and ultimately on to employment. The qualification is equivalent in size to 3 A Levels (Extended Diploma) studied over two years.

This is a full time, two year programme equivalent to three GCE 'A' Levels, and is suitable for progression to University. Learners will have **5 GCSE's at Grade 4** or above including English language, maths and science. A Merit/Distinction in a suitable Level 2 programme is also accepted.

Learners will be assessed by coursework, examinations and practical laboratory skills.

There are four examinations, two in each year in January, with a resit opportunity in May/June.

Learners achieve the National Foundation Diploma in Forensic Investigation in Year 1.

Learners must pass all units in year one to progress to year two of the programme.

## GCSE Maths and English Language and other additional qualifications

If you did not manage to achieve a GCSE Grade 4 in **English Language**, or **Mathematics**, resit sessions will form part of your study programme for your time at college.

You will attend these sessions until you achieve the Grade 4 required by the Government.

As part of your Science study programme you will also complete a **British Values** qualification, and a **Keeping Safe and Healthy** qualification, both excellent additions to your CV, and relevant to future progression.

# Support for you on your study programme

You are well supported during your time at Colchester Institute!

You will be allocated an **Academic Tutor** who you can see on a regular basis to discuss coursework and preparation for examinations.

We also have **Student Welfare** who give advice on health, finance and can refer to counselling support.

We also offer support on progression, including preparing you for University applications and interviews, job interviews and developing your CV.

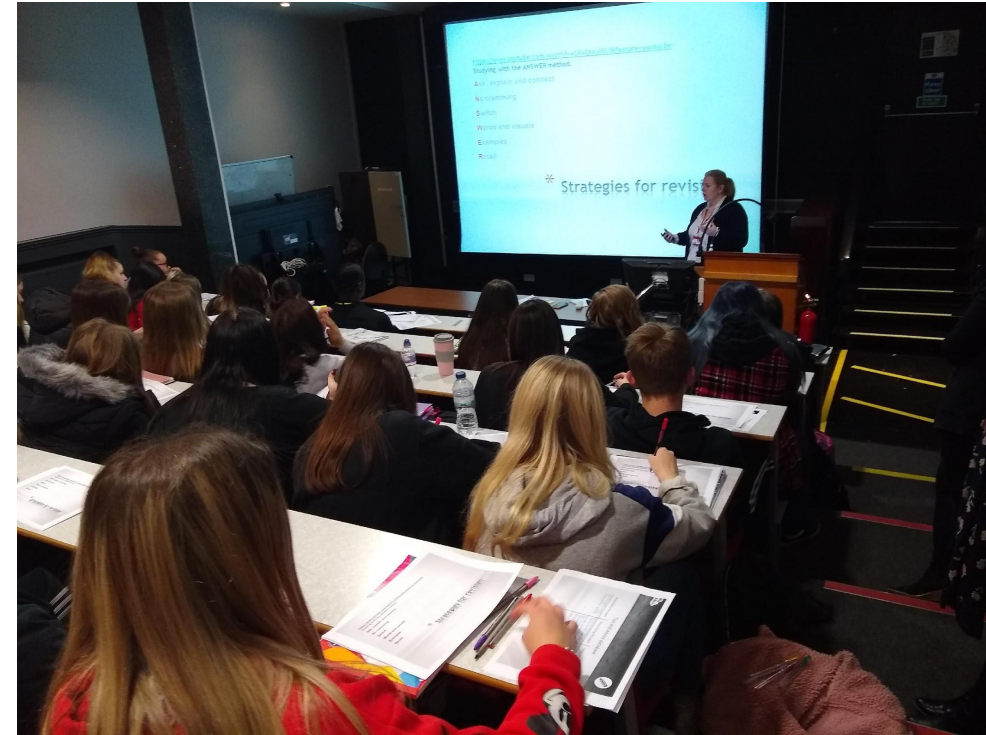
*One learner said: "I just wanted to say a massive thank you! From the moment you became my teacher it was amazing. I was struggling so much with Biology and lacking confidence in every aspect. With your help and support you guided me through. I had a teacher who believed in me and made me believe in myself. I am so grateful. I cannot say thank you enough, from the bottom of my heart for helping me reach my goals"*

# Preparing for the examinations

The Level 2 and 3 Applied Science programmes include examinations, which the learner must pass.

The Science and Health and Social Care team organise a comprehensive mock examination programme to support you, and have special Exam Preparation events and revision days to ensure you have the maximum opportunity to be successful.

The team also include workshop on managing exam anxiety and revision techniques.



# Where do our Science learners go?

## Learners predominantly progress to Higher Education

### Employment

Police Service Emergency Call Handler

Police Constable Training

Phlebotomist

### Higher Education

Biochemistry

Microbiology

Chemistry

Psychology

### Higher Education

Occupational Therapy

Biomolecular Science

Politics and International Relations

Sport and Exercise Science

Computer Science

Biomedical Science

Paramedic Science

Forensic Science

Crime and Investigative Studies

Forensic Psychology

Physiotherapy

Marine Biology

## What our learners say

*“Just thought I’d let you know that I’ve started university and have now been doing two weeks of lectures. I’m enjoying it so much so far as we’re covering cell biology, integrative biochemistry, human anatomy and physiology, and professional practice: crime scene to court. I’m looking forward to being here for the next few years and I’m very glad you recommended Lincoln Uni for Forensic Science!”*

*“I just wanted to say thank you to you directly. I have really enjoyed the course and am so grateful for all of the help you've given me. You have been massively inspirational, particularly for me wanting to go into anthropology in the future. It's really nice to see people, especially women who have succeeded in that kind of career. I just hope that I can do the same.”*

**My View...**



**Cameron  
Rushen**

“ What I like the most is learning about the forensic science side of science. It’s very enjoyable to learn and to meet new faces with the same passion for science as you. ”

**Course:**  
Forensic and Criminal Investigation Level 3  
**Progressed from:**  
Chelmer Valley High School

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**Jessica  
Tassier-Gotts**

This course made me fall in love with science. The tutors provide maximum support. Each piece of work we do is a challenge but completing them is so rewarding.

**Course:**  
Applied Science Level 3  
**Progressed from:**  
The Gilbert School ”