Frequently Asked Questions

BTEC Applied Science

Question: Why study BTEC Applied Science?

Answer: A BTEC in Applied Science opens up level 3 qualifications in Science to a wider range of students. Over 95% of Universities now recognise BTECs and Applied Science opens the door to a extensive choice of Science based degrees when combined with appropriate A-levels or other BTECs. These include Pharmaceutical Science, Forensic Science, Biomedical Science, Paramedic Science, Nursing, Psychology and Environmental Science amongst many others. Furthermore, a BTEC in Applied Science allows progression to higher and degree Apprenticeships. A significant proportion of our students choose this path many undertaking Apprenticeships in Chemical, Health or Engineering related subjects. The course covers both practical and written content and is designed to provide students with the relevant skills and knowledge that universities & employers value, as well as the confidence to progress into a fulfilling, exciting career.

Question: What are some of the key topics I would cover?

Answer: In year 1 of the double Diploma in Applied Science students study key theory in Biology (cells and tissues), Chemistry (quantitative chemistry and periodicity) and Physics (waves and communication). In addition, students complete two practical based Units; Practical Scientific Procedures and Techniques (titration, colorimetry, calorimetry and chromatography) and Science Investigation Skills (diffusion, enzymes, plant growth, electronics and fuels). The final year 1 Unit is Physiology of Human Body Systems in which students study the musculoskeletal, lymphatic and digestive systems in detail.

In year 2 of the double award students study more advanced topics in Biology (circulatory, respiratory and urinary systems), Chemistry (industrial chemistry, organic chemistry and enthalpy) and Physics (thermodynamics, mechanical properties and fluid properties). In addition, students again complete two practical based Units; Laboratory Techniques (synthesis of ethyl ethanoate and aspirin) and an Investigative Project of the student's own devising. The final year 2 Unit is Astronomy and Space Science.

Single Extended Certificate in Applied Science students study the year 1 Units of the double award spread over two years.

Question: How many other subjects can I choose alongside this one?

Answer: If you choose to take the double Diploma then you can choose one other subject to study alongside your BTEC Applied Science. This may be chosen from one of the other A-level science courses on offer (Environmental Science, Geology, Psychology and Electronics) or may be a contrasting subject chosen from all the available level 3 courses (BTECs and A-levels). For example, in previous years we have had students studying additional subjects as diverse as Politics, Photography, BTEC Health and Social Care, English and Sport.

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If you choose to take the single Extended Certificate then you can choose two other subjects to study alongside BTEC Applied Science. These can be chosen from all the available level 3 courses as appropriate to your progression ambitions.

Question: What is the learning style like within this subject?

Answer: While we have standard class teaching combining new learning with the chance to apply it to complete worksheets, there is a greater emphasis on practical work in the BTEC. We also provide students with opportunities to improve their communication skills through presentations to the class and run workshops in IT rooms for assignment-based assessments.

Question: How will I be assessed?

Answer: Double award students will sit examinations on the core science content in January of both year 1 and year 2 as well as undertaking a practical exam in April/May of year 1. The remainder of the course is assessed via written assignments. Overall, the split for the Diploma is 46% assessed through external exams and 54% by assignments. In addition to these we have a suite of end of topic tests to track students' progress.

Single award students will sit examinations on the core science content in June of year 1 and take the practical exam in April/May of year 2. The remainder of the course is again assessed via written assignments. Overall, the split for the Extended Certificate is 58% assessed through external exams and 42% by assignments.

The spreading of exams over the two years helps reduce the anxiety some students feel when approaching assessments that heavily influence their future progression.

Question: What support can I access if I am struggling?

Answer: The department currently runs remedial workshops for students who struggle with particular topics as evidenced by end of topic test scores. In normal circumstances we would also run after school workshops open to all students who have questions about the content or would appreciate support in completing independent learning tasks. Under COVID arrangements students also know that they can post questions via Teams chat and that they will be answered the same day. Staff are also available during Enrichment for students to bring along any questions they have.

Question: Are there any subject specific entry requirements?

Answer: 3 x grade 4's from three Single Award GCSE Sciences, or 2 x grade 4 from Double award GCSE Science + grade 4 in Maths. Grade 5's in GCSE Sciences and Maths are preferred. Please refer to the prospectus here for any other general and subject specific entry requirement queries.

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Question: Are there normally any trips that I can go on?

Answer: In normal times we have an inspirational day visit to UCL's Mullard Space Science Laboratory and have astronomy evenings to enable observation of night sky objects to support the year 2 Space Science unit. If possible, students will also get to visit a brewery to illustrate Health and Safety in the workplace. We would also usually have speakers from industry come in to share their experience of data management in a scientific workplace and to discuss treatment of musculoskeletal disorders.

Question: What do students who have studied this area normally do after Collyer's?

Answer: Students' career paths are very wide ranging, and the course is relatively new so we cannot yet define a 'normal' progression path. However, to give a flavour of where students go after Collyer's about a third of this year's graduates went on to Apprenticeships. Another third went on to University degrees in a wide range of subjects including Geology, Psychology, Biomedical Science, Nursing, Animal Therapy and Mechanical Engineering. A couple of students went straight into employment, one to work for his family's firm and another into a supervisory role in Health and Social Care. In these uncertain times the remainder have opted for a gap year, but this is likely to be a far lower proportion in normal circumstances.