

### UPCOMING DATES

|                    |  |
|--------------------|--|
| 2nd December       | Year 11 Mock Exams                       |
| 5th December       | Fujitsu Trip                             |
| 10th December      | College closes at 2pm for staff training |
| 12th/13th December | Reward Trips                             |

### PAT SESSIONS

|           | Year 10                      |
|-----------|------------------------------|
| Monday    | Drop Everything & Read       |
| Tuesday   | Applying for Work Experience |
| Wednesday | Register, Read, Response     |
| Thursday  | 360 Reviews with Students    |
| Friday    | Positive Reinforcement       |

|           | Year 11    |
|-----------|------------|
| Monday    | Mock Exams |
| Tuesday   | Mock Exams |
| Wednesday | Mock Exams |
| Thursday  | Mock Exams |
| Friday    | Mock Exams |

|                 | Year 12                   | Year 13                   |
|-----------------|---------------------------|---------------------------|
| SMSC            | 360 Reviews with Students | 360 Reviews with Students |
| Friday Assembly | 360 Reviews with Students | 360 Reviews with Students |

### WORD OF THE WEEK

**Logy:** the study of (Greek word root)  
**Criminology** – the scientific study of crime and criminals.  
**Psychology** – the scientific study of the human mind and reasons for people's behaviour.  
**Cardiology** – the scientific study of the heart and its diseases.

### CYBER TRIPS

There are a number of trips for students studying cyber courses over the coming weeks. Please return any reply slips to Mr Gee or Mr Pownall:

- Fujitsu day trip - 5th December
- Cyber Discovery trips - 12th or 19th December

### SUBJECT ON A PAGE

We will be sharing a subject summary for our courses over the coming weeks. Scroll down to find out more our BTEC Level 3 Applied Science.

WWW.UTCW.CO.UK

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E: PARENTENQUIRIES@UTCW.CO.UK

### ENGINEERING SECTOR CALLS FOR MORE SPECIALIST EMPLOYEES

The UK's engineering and manufacturing sector has a proud history across the north of England. The Royal Academy of Engineering estimates that the UK needs to find more than one million new engineers by 2020 to meet demand. According to Engineering UK, there's a shortfall of 69,000 engineers and technicians entering engineering or STEM-related subjects. There is a growing demand for fresh talent and employers are working with the UTC to identify suitable candidates for engineering jobs. Over 36% of UTCW's leavers secured a high status STEM apprenticeship; that's over six times the national average (5%). This week, we have met with Nuclear Engineering company AECOM who are looking to engage with UTC Warrington students, including the offer of bespoke work placements for our students.



### GEOGRAPHY REVISION

Geography students have received a pack with knowledge organisers (a summary of what they need to know) for each topic plus a bank of short response knowledge check questions. These are perfect for parents to use to help test their son/daughter.

Revision guides for new Y10 students and for any Y11 who didn't get one last year are available to purchase on parent pay. Priced at £3.50.

### PHYSICS REVISION

Equations which need to be learnt for paper 2 Physics exam:

|       |  |                    |
|-------|--|--------------------|
| 1 P8  | moment = force x distance                      | $M = F d$          |
| 2 P9  | distance = speed x time                        | $s = v t$          |
| 3 P9  | acceleration = change in velocity / time taken | $a = \Delta v / t$ |
| 4 P10 | weight = mass x gravity                        | $W = m g$          |
| 5 P10 | force = spring constant x extension            | $F = k e$          |
| 6 P10 | force = mass x acceleration                    | $F = m a$          |
| 7 P10 | momentum = mass x velocity                     | $p = m v$          |
| 8 P11 | pressure = force / area                        | $p = F/A$          |
| 9 P13 | wave speed = frequency x wavelength            | $v = f \lambda$    |

### CHRISTMAS APPEAL

Every year at Christmas, UTC Warrington like to support a local charity. Last year our students/parents/teachers supported the Warrington Womens Refuge - a charity that supports anyone living in Warrington who is experiencing domestic violence. UTC Warrington would like to support this charity again.

We would like your support in donating some of the following items:

- Soaps;
- Pyjamas- sizes 10-12, 12-14, 14-6 and childrens/boys and girls/new born;
- Toys appropriate for girls aged 5-9 and boys aged 1-5.


All gifts can be left in reception for the care and attention of Mr Vary. Thank you for your support.

## AECOM

### ENGINEERING INTERVENTION

At present Year 11 Engineering and Manufacture are covering exam content in lesson time to prepare for mock exams in December and GCSE exams in January. However, it has been requested that they attend an intervention session at least one lunch time or after college with their class teacher. This is to ensure that they are completing outstanding coursework.

Class lists are currently being sent to Head of Year for students to be notified and letters will be sent home.



**Yvonne Jameson**  
School Nurse

I am a School Nurse who is responsible for the health and wellbeing of all pupils in your school. I work with other professionals to help you stay healthy and safe.

Phone: 01925 867830  
Email: [alwch.0to19@nhs.net](mailto:alwch.0to19@nhs.net)

**University Technical College Warrington**  
Drop in information

Day: Thursday  
Drop in: 13:00-14:00 - Booked appointments: 14:00-14:30  
Room: safeguarding officer's room  
Appointments/Referral: via Jemma or via school nurse email address.

- Keeping Healthy
- Immunisations
- Feeling Down
- Emotional Health
- Weight Management
- Sexual Health
- Drugs & Alcohol
- Smoking
- Relationships
- Family Problems
- Bereavement
- And loads more...

**For more information visit**  
[www.bridgewater.nhs.uk/warrington/0-19-services/](http://www.bridgewater.nhs.uk/warrington/0-19-services/)

## MOCK EXAMS

Pre-public examinations begin next week for Year 11 & 13 students. It is important to take these exams seriously as they will provide us with an indication of progress and what we can do to support students before the real exams in May/June. Please check the timetable and ensure you bring the correct equipment to all exams.

| DECEMBER   | MONDAY 2nd   | TUESDAY 3rd  | WEDNESDAY 4th  | THURSDAY 5th  | FRIDAY 6th  |
|--|--|--|--|---|---|
| <b>AM P1 and 2</b><br>Exams Start at 8.50am<br>Unless otherwise stated | <b>English Language Paper 1</b> (1hr 45)<br>All year 11  | <b>English Literature Paper 1</b> (1hr 45)<br><i>All B side +14 students from A side</i> | <b>Maths Paper 1</b> (1hr 30)<br>All year 11   | <b>Maths Paper 2</b> (1hr 30)<br>All year 11                                    | <b>Maths Paper 3</b> (1hr 30)<br>All year 11  |
| <b>AM P3 and 4</b><br>Exams start at 11.10am                           | <b>Biology Paper 1</b> (1hr 15)<br>All year 11   | <b>Chemistry Paper 1</b> (1hr 15)<br>All year 11   | <b>Comp Science</b> (1hr 30)-11g/cs1<br><b>I Media</b> (1hr 15)-11g/cs2<br><b>Geography Paper 1</b> (1hr 30)-11g/11b/gg1 |   | <b>Physics A level Paper 1</b> (2hr)<br><b>Art</b> (11h/ar1)<br>Room 310<br><b>Start Period 3(12-2)</b> |
| <b>PM P5 and 6</b><br>Exams start at 1.10pm<br>Unless otherwise stated |  | <b>Art</b> (11h/ar1)<br>Room 310   |  | <b>Business Studies</b> (1hr 30)-11ab/bs1<br><b>Astronomy</b> (1hr 45)-11ab/as1 |   |
| DECEMBER   | MONDAY 9th   | TUESDAY 10th   | WEDNESDAY 11th   | THURSDAY 12th   | FRIDAY 13th   |
| <b>AM P1 and 2</b><br>Exams start at 8.50 am                           | <b>English Literature Paper 2</b> (2hr 15)<br><i>All B side +14 students from A side</i>               | <b>Physics Paper 1</b> (1hr15)<br>All year 11  | <b>English Language Paper 2</b> (1hr 45)<br>All year 11  | <b>Geography Paper 2</b> (1hr 15)<br>11g/11b/gg1)                               | DROP DOWN DAY YEAR 11   |
| <b>AM P3 and 4</b><br>Exams start at 11.10am                           |  | <b>Art</b> (11h/ar1)<br>Room 310<br><b>Computer Science A level</b> (2hr 30)             | <b>Engineering Design</b> (1hr)<br>11ab/ed1,2/11b/ed1/11h/ed1  | <b>Manufacturing</b> (1hr)<br>11a/mn1,2,311b/mn1,2                              | <b>Physics A level Paper 2</b> (2hr)<br><b>Start Period 3(12-2)</b>                                     |
| <b>PM P5 and 6</b><br>Exams start at 1.10pm Unless otherwise stated    | <b>Sport</b> (1hr)-11g/pe1<br><b>Systems &amp; Control</b> (1hr)-11ab/sy1<br><i>Period 5 start 2pm</i> | <b>Art</b> (11h/ar1)<br>Room 310   |  | <b>ICT</b> (1hr 30)<br>11h/it1  |   |

## Be Exam Ready

What you can take in with you...



- A black pen** - and maybe a couple of spares, just in case.
- Additional equipment** - a rubber, a pencil, a ruler & a scientific calculator for specific papers.
- A clear pencil case**
- A water bottle** - all labels must be removed. Energy drinks are not allowed.
- A wrist watch** - No smart watches allowed.

### Exam Techniques...

If you feel you've forgotten everything, it may be just nerves. Take a few deep breaths to help you stay calm.

Read the instructions; make sure you know how many questions to answer.

If you can't answer a question, move on to the next question and come back later.

Take your time, read all the questions carefully until you understand exactly what is needed.

Look for the command words. Identify key words before you answer the question.

Use your answer book to brainstorm and mind-map content or ideas as you go. This will also help jog your memory if you 'draw a blank'.

Use the allocated marks to guide how much time you spend on each answer.

## 5 Key Qualities of Exam Resilient Students at UTC Warrington

### 1 Arrive on Time

In fact, if you can, get there early. There will be free breakfast, snacks and water provided and your teachers will be available for pre-exam meet ups

### 2 Be Prepared

Make sure you bring all the equipment that you need including a calculator. Prepare your revision in manageable chunks so that you are relaxed on the day and make sure you eat well and have a good night's sleep the day before. Check the seating plan so you know where to go

### 3 Maintain Examination Conditions

The JCQ stipulates clear guidance that all students must follow or they risk being disqualified from examinations so practise these now and get used to them. They include the handing in of mobile phones and electronic devices and no talking or communication once in the examination room

### 4 Attempt 100% of the Examination

Do not give up! Even when you find something challenging, have a go at it, do not waste any time or leave out any questions

### 5 Display a Positive Attitude and a Growth Mindset

All we can ever ask of you is that you try your best. Challenge yourself and try to see these challenges as an opportunity to improve and develop. The way you think and talk about yourself will directly impact how well you achieve - so read our 'Growth Mindset' tips and challenge your inner voice!



# APPLIED SCIENCE



|                      |                            |                       |            |
|----------------------|----------------------------|-----------------------|------------|
| <b>Course Title:</b> | BTEC L3<br>Applied Science | <b>Course Code:</b>   | 601/7437/7 |
| <b>Exam Board:</b>   | Edexcel                    | <b>Course Length:</b> | 2 years    |

## Units Covered:

- Principles and Applications of Science 1
- Practical Scientific Procedures and Techniques
- Science Investigation Skills
- Laboratory Techniques and their Application
- Principles and Applications of Science 2
- Contemporary Issues in Science
- Physiology of Human Body Systems
- Electrical Circuits and their Application
- Microbiology and Microbiological Techniques
- Biomedical Science
- Materials Science
- Forensic Evidence, Collection and Analysis

## PROGRESSION

Students who gain a BTEC Extended Diploma in Applied Science are generally well regarded by companies and apprenticeship providers as they will have both good theoretical knowledge and evidence of developing practical skills. The course also provides a clear pathway to studying Science at university and can often be combined with an A-Level in Mathematics to strengthen these applications. This subject can lead to careers in: Laboratory Scientist, Forensic Science, Biomedical Science, Paramedic, Biomedical Technician.

## WHY APPLIED SCIENCE?

The course has been developed in the science sector to focus on giving students the opportunity to acquire technical and employability skills, knowledge and understanding of Biology, Physics and Chemistry in real world contexts. Studying science will broaden your understanding of the world around you and will equip you with the skills needed to approach most matters in a reasoned and analytical manner.

## HOW AM I ASSESSED?

- The course is split into modules with each module being assessed upon completion. Therefore there will be multiple assessment point throughout the year.
- There are four externally assessed modules and these will be assessed in either February or May of each year.
- The attained grades for each module will be combined to give an overall grade for the course.

## HOW TO BE SUCCESSFUL?

- Complete all units of work within the set timeframe.
- Engage in practical activities to develop laboratory skills and techniques to support learning.
- Read relevant scientific literature to develop knowledge of a range of science concepts.

6 X NATIONAL  
AVERAGE

HIGH QUALITY STEM  
APPRENTICESHIP