

WMG

Academy for Young



engineers

YEAR 10

CURRICULUM BOOKLET

2017/2018



Introduction from Mr Brady

We are very pleased to welcome your child to WMG Academy and are delighted that they have chosen to complete their KS4 study with us. We recognise that our students can only be successful if they continue to be supported by their parents throughout years 10 and 11. To that end, this guide has been produced to give you comprehensive and, we hope, valuable information about the next two years.

On induction at the age of 14, all students completed baseline assessment to determine setting and target grades. This data is made available for you at our 'settling' parents' evening in the early part of Year 10.

We hope that the next two years go well and that all students develop into young engineers of the future. Please do not hesitate to contact us with any questions and we look forward to working together.

Best wishes

Matt Brady
Associate Principal

Data, Reporting and Parents Evenings

Term Dates

Autumn Term

Academy opens for Autumn Term – YR10: Wednesday 6 September 2017

Academy closes for Half Term: Friday 20 October 2017

Academy opens for Half Term: Monday 30 October 2017

Academy closes – Autumn Term: Thursday 21 December 2017

Spring Term

Academy opens for Spring Term: Monday 8 January 2018

Academy closes for Half Term: Friday 16 February 2018

Academy opens for Half Term: Monday 26 February 2018

Academy closes – Spring Term: Thursday 29 March 2018

Summer Term

Academy opens for Summer Term: Monday 16 April 2018

Academy closes for Half Term: Friday 25 May 2018

Academy opens for Half Term: Monday 4 June 2018

Academy closes – Summer Term: Wednesday 25 July 2018

Staff Training Days 2017/2018

Monday 4 September 2017

Tuesday 5 September 2017

Friday 24 November 2017

Friday 9 February 2018

Friday 4 May 2018

School Day

Monday

Period 1	8.30 – 9.25
Period 2	9.25 – 10.20
Break	10.20 – 10.40
Period 3	10.40 – 11.35
Period 4	11.35 – 12.30
Period 5	12.30 – 13.25
Lunch	13.25 – 14.05
Period 6	14.05 – 14.20 - Mentoring
Period 7	14.20 – 15.15

Tuesday to Friday

Period 1	8.30 – 9.25
Period 2	9.25 – 10.20
Break	10.20 – 10.40
Period 3	10.40 – 11.35
Period 4	11.35 – 12.30
Period 5	12.30 – 13.25
Lunch	13.25 – 14.05
Period 6	14.05 – 14.20 - Mentoring
Period 7	14.20 – 15.25
Period 8	15.25 – 16.30

Parents Evening

- Settling in parents evening with tutors Thursday 19th October 2017
- Year 10 Parents Evening Tuesday 8th May 2018

Mock Examinations

- W/C Monday 25th June

Reporting

- KA1 Progress review Friday 6th October
- KA2 Progress review Monday 18th December
- KA3 Progress review Friday 8th March
- KA4 Progress review Friday 4th May
- KA5 Full written review Friday 20th July

Explaining your child's report

When you receive a Progress Review or Report from the Academy, it will contain the following information:

Targets

This grade is an expected outcome at the end of Year 11. It is aspirational in nature and is therefore a challenging goal to achieve. We use FFT, a nationally recognised (and largest) targeting system to calculate this grade based on performance at KS2 results to arrive at the target grade.

WAG (Working at Grade)

This is the grade that is based on the overall level subject teachers believe your child is currently working at. Subject teachers make their grade assessment here based on the evidence they have seen so far in the course.

ATL (Attitude to Learning)

6	Excellent
5	Very Good
4	Good
3	Requires Improvement
2	Unsatisfactory
1	Inadequate

Concern Codes

BEH	you are concerned about the learner's behaviour
ENG	you are concerned about the learner's engagement
ATT	you are concerned about the learner's attendance
CLA	you are concerned about the learner's classwork
HOM	you are concerned about the learner's homework
CDM	you are concerned that the learner has missed coursework deadlines

In addition, once a year, you will receive a full written report about your child's progress in each subject area from their teaching staff.

At each key assessment point, each form tutor will be given a copy of the tutor group's reports. They will use these reports to help have meaningful conversations with students who are:

- Not making the required progress
Have poor attendance
Have a poor attitude to learning

Members of Staff

Senior Leadership Team

Mrs Kate Tague	Executive Principal
Mr Matt Brady	Associate Principal
Mrs Diane Campton	Director of Finance
Mrs Kerry Hall	Assistant Principal

Extended Senior Leadership Team

Mr Andrew Kyprianou	Leader of Engineering, Design and IT
Mr Matthew Underwood	Deputy Director of Pastoral/Head of KS5
Mrs Imogen Davies	Head of Key Stage 4 Pastoral

Lead Teachers

Mr Rob Grute	Lead Teacher for Mathematics
Mrs Erin Riordan-Jarvis	Lead Teacher of Science (KS5)
Mr Nick Rossell	Lead Teacher of Science (KS4)

Trust Staff

Mr Graham Jacklin	IT & Facilities Manager
Mrs Calista Lewis	Marketing Manager
Mrs Sarah Rhodes	MIS and Data Manager

Teaching Staff

Mr Audley Allen	Teacher of Science
Mr Nick Baldwin	Teacher of Engineering
Dr Helen Brown	Teacher of Biology
Ms Helen Cameron	Teacher of Maths
Ms Gillian Cranmer	Teacher of French (PT)
Mr David Crosbie	Teacher of Geography (PT)
Miss Edyta Dzikon	Teacher of Engineering (PT)
Mrs Philippa Foord	Teacher of Science
Mr Ian Jones	Teacher of Computer Science (PT)
Ms Jane Kinsella	Teacher of German (PT)
Ms Claire Nicoll	Teacher of Art & Design (PT)
Mr Adam Parry	Teacher of Engineering
Mr Ben Sinclair	Teacher of Maths
Ms Geraldine Spelman	Teacher of Computer Science
Mr Paul Spence	Teacher of Engineering
Ms Gaynor Thompson	Teacher of English
Mr Dominic Vipond	Teacher of Maths
Mr Thomas Wonzeri	Teacher of Engineering

Learning Support Staff

Mrs Cheryl Badham	Behaviour & Pastoral Lead
Mrs Rachel Coyle	Learning Assistant
Mr Desmond Mahon	Learning Assistant
Mrs Amanda Reddington	Pastoral Counsellor

Operational Staff

Mrs Laura Beeston	Finance Administrator
Mrs Theresa Bird	Core Curriculum Support Administrator
Miss Catherine Burns	Careers Advisor
Mrs Michelle Dunckley	Exams Officer
Mr Ian Fitzgerald	Associate Teacher
Miss Beth Haynes	Engineering Technician
Mr Joseph Jacklin	Engineering Technician
Mrs Caroline Murley	Finance Administrator
Mrs Marie Parekh	Receptionist/Clerical Assistant
Mrs Harjeet Rayat	Academic Intervention Officer
Mr Peter Rivett	Art, Design & Technology Technician
Mr Trevor Roberts	Engineering Technician
Ms Natalie Taylor	Receptionist/Clerical Assistant
Ms Julie Thomson	Science Technician
Ms Claire Weatherall	Office Manager

Your son/daughter has been allocated to a dedicated year 10 tutor group. The supporting tutor is best placed to answer any initial queries you may have and these should be the first point of contact for your son/daughter

Tutors

- **10.1** **Mr D Vipond**
- **10.2** **Miss H Cameron**
- **10.3** **Mr A Allen**
- **10.4** **Mr T Wonzeri**

The overarching aim of the KS4 tutor is to ensure that KS4 students receive the pastoral care which is specifically needed by them. In more detail the aims are:-

- Ensure that tutor time is worthwhile, enjoyable and informative.
- Complete applications to WMGA Sixth Form and other providers (Y11 only)
- Support students who are underperforming through regular mentoring
- Improve levels of literacy, organisation and team-working
- Monitor and improve attendance
- Discussing appropriate career choices
- Writing personal references as required
- Assisting tutees in completion of apprenticeship/college applications
- Reviewing each tutee's progress half termly
- Identifying where additional support may be needed

YEAR 10 ENGLISH

Exam Board	AQA
Syllabus Name	GCSE English Language
Syllabus Code	8700
QAN Number	601/4292/3
Do you do Controlled Assessment / Coursework / Practical	<ul style="list-style-type: none"> • One spoken language endorsement • Giving you a Pass / Merit / Distinction
If Yes to the above when will this take place	Summer 2019
When will the exam be?	Summer 2019
What should a student do before each lesson?	
What should a student do before each lesson?	<ul style="list-style-type: none"> • Bring all expected equipment • Bring completed homework • Read a wide range of texts for pleasure to improve vocabulary. • Revisit the work completed in the last lesson and ensure homework is ready for submission
What should a student do during each lesson?	<ul style="list-style-type: none"> • Engage immediately with starter activity • Participate by asking and answering questions • Aim to improve your skills in every lesson • Respond to the written feedback given by the teacher
What should a student do after each lesson?	<ul style="list-style-type: none"> • Review your notes • Complete all homework to the best of your ability • Read a wide range of non-fiction and fiction texts.
How should I use my revision guide	<ul style="list-style-type: none"> • During each unit to consolidate learning at the end of a unit to revise key aspects
Where can I go to download past papers?	<ul style="list-style-type: none"> • http://www.aqa.org.uk/subjects/english/gcse/english-language-8700 •
What is the best way to use past papers	<ul style="list-style-type: none"> • To practise exam style answers once confident with basic skills taught in lessons
Extra Guidance for Parents	
Do you provide any additional support / Revision Guide?	<ul style="list-style-type: none"> • Revision materials given to students in lessons and available on parent pay in year 11
What are the best revision sources? Can I purchase	<ul style="list-style-type: none"> • Study Guides (your notes) • CGP Revision Guides • These can be purchased through the academy – details have been provided separately
How can I support my child?	<ul style="list-style-type: none"> • Encourage to read a variety of fiction and non-fiction texts, newspaper, magazines etc • Ensure homework is submitted on time and is completed to the highest standard possible • Encourage full and punctual attendance
My child likes to revise using digital media – where should they go?	<ul style="list-style-type: none"> • https://www.bbc.co.uk/education/examspecs/zcbchv4https://www.youtube.com/user/mrbruff
Any additional information	STUDENTS WILL NOT BEGIN STUDYING FOR THIS QUALIFICATION UNTIL JULY 2018

YEAR 10 ENGLISH LITERATURE

Exam Board	AQA
Syllabus Name	GCSE English Literature
Syllabus Code	8702
QAN Number	601/4447/6
Do you do Controlled Assessment / Coursework / Practical	<ul style="list-style-type: none"> • Controlled Assessment No • Coursework No • Practical No
When will the exam be?	Summer 2018
Date	22nd May 2018 25 th May 2018
Extra Guidance for Parents	
What should a student do before each lesson?	<ul style="list-style-type: none"> • Bring all expected equipment • Bring completed homework • Reread the novels and plays being studied: • An Inspector Calls • The Sign of Four • Romeo and Juliet • Power & Conflict Poetry Anthology
What should a student do during each lesson?	<ul style="list-style-type: none"> • Engage immediately with starter activity • Participate by asking and answering questions • Aim to improve your skills every lesson
What should a student do after each lesson?	<ul style="list-style-type: none"> • Review / complete notes for each text • Complete all homework tasks to the best of your ability
How should I use my revision guide	<ul style="list-style-type: none"> • During each unit to consolidate your learning at the end of a unit to revise key characters, themes, quotes
Where can I go to download past papers?	<ul style="list-style-type: none"> • http://www.aqa.org.uk/subjects/english/gcse/english-literature-8702
What is the best way to use past papers	<ul style="list-style-type: none"> • To practise exam style essays once confident with basic structure of essays.
Extra Guidance for Parents	
Do you provide any additional support / Revision Guide?	Revision booklets are made available to download and published copies can be purchased via Parent Pay – please see separate communication
What are the best revision sources? Can I purchase	Study guides Your notes CGP Guides
How can I support my child?	<ul style="list-style-type: none"> • Encourage to read and discuss literature texts • To re-read texts
My child likes to revise using digital media – where should they go?	<ul style="list-style-type: none"> • https://www.bbc.co.uk/education/examspecs/zxqncwx • https://www.youtube.com/user/mrbruff

YEAR 10 - Mathematics

Exam Board	AQA
Syllabus Name	GCSE Mathematics
Syllabus Code	8300
QAN Code	601/46008/4
Do you do Controlled Assessment / Coursework / Practical	<ul style="list-style-type: none"> ● Controlled Assessment NO ● Coursework No ● Practical NO
When will the exam be?	Summer 2019
What should a student do before each lesson?	<ul style="list-style-type: none"> ● Ensure all homework set on Show My Homework has been completed. ● Check that you have a calculator, pen, pencil and ruler (as a minimum). ● Think back to the last lesson topic, and try to remember the key points.
What should a student do during each lesson?	<ul style="list-style-type: none"> ● Listen carefully to teaching and instructions from the teacher. ● Ask questions whenever you're unsure or stuck on a problem. ● Complete work to the very best of your ability. The only way to learn maths is to do maths. Lots of it!
What should a student do after each lesson?	<ul style="list-style-type: none"> ● Check that you've understood the key concepts of the lesson. ● Ask your teacher if you had any questions you didn't ask in class. ● Write revision notes on the topics covered.
How should I use my revision guide	<ul style="list-style-type: none"> ● In conjunction with past papers and exam style questions. See the section on using past papers below.
Where can I go to download past papers?	<ul style="list-style-type: none"> ● There aren't any past papers publicly available yet as it's a very new qualification, but specimen papers can be found by going to www.aqa.org.uk/exams-administration/exams-guidance/find-past-papers-and-mark-schemes and filtering for Maths GCSE 8300. ● Practice papers will also be added to the school vle as they become available, and old specification papers can be found by using the link above and filtering by Maths GCSE 4365. These papers are still appropriate for practice, but grade boundaries are no longer representative.
What is the best way to use past papers	<ul style="list-style-type: none"> ● Complete and mark one paper, using the mark scheme. Identify one or two topics you've not done well on, revise topics using a revision guide or website, complete some questions on those topics (from a revision workbook or sets of exam questions from a website such as

	www.mathedup.co.uk/gcse-maths-takeaway). Then try another past paper.
Extra Guidance for Parents	
Do you provide any additional support / Revision Guide?	The recommended revision guide is the Collins GCSE Maths Higher All-in-One Revision and Practice book by Collins (ISBN 9780008112509 for Higher tier, 9780008112516 for Foundation). These are available from Amazon for around £8. Unfortunately, we're not able to offer any individual 1-2-1 tuition.
What are the best revision sources? Can I purchase	Revision guides, past papers and sets of exam style questions on a particular topic; available from sites like www.mathedup.co.uk/gcse-maths-takeaway)
How can I support my child?	<ul style="list-style-type: none"> ● Encourage them to begin practicing exam style questions <u>early</u>, either by completing sections of a revision workbook, past papers, practice papers or specimen papers. ● Having someone available out of school (a friend or relative) who they can get help from quickly when they get stuck is very effective. ● Ensure they have a working, scientific calculator (and other essential mathematical equipment) for use in every maths lesson (currently every day from Monday to Thursday).
My child likes to revise using digital media – where should they go?	<ul style="list-style-type: none"> ● BBC bitesize ● Youtube videos (Corbett Maths and Heggarty Maths are both highly recommended) ● Gojimo app (Free) ● www.mymaths.co.uk ● www.mrbartonmaths.com/students/gcse/

YEAR 10 COMBINED SCIENCE

Exam Board	AQA
Syllabus Name	Combined Science (Trilogy)
Syllabus Code	8464
QAN Number	601/8758/X
Do you do Controlled Assessment / Coursework / Practical	<ul style="list-style-type: none"> • Controlled Assessment No • Coursework No • Practical Yes
If Yes to the above when will this take place	Required Practical Activities take place in Science lessons throughout the course. These, and the skills students gain from completing them, will be assessed in their exams, rather than through coursework.
When will the exam be?	Summer 2019
Extra Guidance for Parents	
What should a student do before each lesson?	<ul style="list-style-type: none"> • Review their learning from Key Stage 3, and any similar topic from your Year 10 learning. • Complete any set home learning. • Ensure that they are properly equipped with a pen, pencil, ruler and scientific calculator.
What should a student do during each lesson?	<ul style="list-style-type: none"> • Try their best on all activities. • Be confident to attempt difficult tasks, without fear of making a mistake. • Review their learning effectively to identify areas they need to improve.
What should a student do after each lesson?	<ul style="list-style-type: none"> • Consider the applications of your science learning in daily life. • Review topics from the lesson that you need to improve on. • Write down or email any questions for your teacher to help you improve.
How should I use my revision guide	<ul style="list-style-type: none"> • Review or preview lesson content and complete exam style questions.
Where can I go to download past papers?	<ul style="list-style-type: none"> • http://www.aqa.org.uk/subjects/science/gcse/combined-science-trilogy-8464/assessment-resources
What is the best way to use past papers	<ul style="list-style-type: none"> • Begin by completing questions individually, with resources and without time limits, and build up to completing a complete paper in timed exam conditions.
Do you provide any additional support / Revision Guide?	Review and revision materials are available on the school TeamSite, listed under the appropriate subcategory of Science.
What are the best revision sources? Can I purchase	<p>We recommend CGP Revision and Exam Practice Booklets:</p> <p>https://www.cgpbooks.co.uk/School/books_gcse_science_new.books_gcse_science_aqa_revision.book_SCBAS41</p> <p>https://www.cgpbooks.co.uk/School/books_gcse_science_new.books_gcse_science_aqa_revision.book_SCCAS41</p> <p>https://www.cgpbooks.co.uk/School/books_gcse_science_new.books_gcse_science_aqa_revision.book_SCPAS41</p> <p>Exam Practice Workbooks may also be useful:</p>

	https://www.cgpbooks.co.uk/School/books_gcse_science_new.books_gcse_science_aqa_practiceworkbooks.book_SAHQ41 https://www.cgpbooks.co.uk/School/books_gcse_science_new.books_gcse_science_aqa_practiceworkbooks.book_SAFQ41
How can I support my child?	<ul style="list-style-type: none"> • Discuss the content of their lessons with them and help them to build links with their lives outside of school. • Encourage students to pursue science based projects, especially those that they can link to their online studies. • Encourage students to complete all of their home learning to support their work in lessons.
My child likes to revise using digital media – where should they go?	<ul style="list-style-type: none"> • http://www.bbc.co.uk/education/subjects/zrkw2hv • https://www.my-gcse-science.com/ • https://www.youtube.com/channel/UCqbOeHaAUXw9II7sBVG3_bw • There are also many revision and flash card apps available.
Any additional information	<p>Please note that the course has recently changed specification, and many resources available refer to the old specification (4005/4008). Although in many cases the content is similar between the two courses, please use the new specification to check for the appropriateness of the resource. Please also be advised that the new course follows a very different scheme of assessment to the old course (notably the absence of coursework), and uses grades 9-1 in place of the old style A*-G.</p>

YEAR 10 BIOLOGY

Exam Board	AQA
Syllabus Name	Biology
Syllabus Code	8461
QAN Number	601/8752/9
Do you do Controlled Assessment / Coursework / Practical	<ul style="list-style-type: none"> • Controlled Assessment No • Coursework No • Practical Yes
If Yes to the above when will this take place	Required Practical Activities take place in Biology lessons throughout the course. These, and the skills students gain from completing them, will be assessed in their exams, rather than through coursework.
When will the exam be?	Summer 2019
Extra Guidance for Parents	
What should a student do before each lesson?	<ul style="list-style-type: none"> • Review their learning from Key Stage 3, and any similar topic from your Year 10 learning. • Complete any set home learning. • Ensure that they are properly equipped with a pen, pencil, ruler and scientific calculator.
What should a student do during each lesson?	<ul style="list-style-type: none"> • Try their best on all activities. • Be confident to attempt difficult tasks, without fear of making a mistake. • Review their learning effectively to identify areas they need to improve.
What should a student do after each lesson?	<ul style="list-style-type: none"> • Consider the applications of your science learning in daily life. • Review topics from the lesson that you need to improve on. • Write down or email any questions for your teacher to help you improve.
How should I use my revision guide	<ul style="list-style-type: none"> • Review or preview lesson content and complete exam style questions.
Where can I go to download past papers?	<ul style="list-style-type: none"> • http://www.aqa.org.uk/subjects/science/gcse/biology-8461/assessment-resources
What is the best way to use past papers	<ul style="list-style-type: none"> • Begin by completing questions individually, with resources and without time limits, and build up to completing a complete paper in timed exam conditions.
Extra Guidance for Parents	
Do you provide any additional support / Revision Guide?	Review and revision materials are available on the school TeamSite, listed under the appropriate subcategory of Science.
What are the best revision sources? Can I purchase	<p>We recommend CGP Revision and Exam Practice Booklets: https://www.cgpbooks.co.uk/Student/books_gcse_science.books_gcse_biology_revision.book_BAS45</p> <p>Exam Practice Workbooks may also be useful: https://www.cgpbooks.co.uk/Student/books_gcse_science.books_gcse_biology_practiceworkbooks.book_BAQ41B</p>
How can I support my child?	<ul style="list-style-type: none"> • Discuss the content of their lessons with them and help them to build links with their lives outside of school.

	<ul style="list-style-type: none"> • Encourage students to pursue science based projects, especially those that they can link to their online studies. • Encourage students to complete all of their home learning to support their work in lessons.
My child likes to revise using digital media – where should they go?	<ul style="list-style-type: none"> • http://www.bbc.co.uk/education/subjects/zrkw2hv • https://www.my-gcse-science.com/subject/biology • https://www.youtube.com/channel/UCqbOeHaAUXw9II7sBVG3_bw • http://www.s-cool.co.uk/gcse/biology • There are also many revision and flash card apps available.
Any additional information	<p>Please note that the course has recently changed specification, and many resources available refer to the old specification (4001). Although in many cases the content is similar between the two courses, please use the new specification to check for the appropriateness of the resource. Please also be advised that the new course follows a very different scheme of assessment to the old course (notably the absence of coursework), and uses grades 9-1 in place of the old style A*-G.</p>

YEAR 10 CHEMISTRY

Exam Board	AQA
Syllabus Name	Chemistry
Syllabus Code	8462
QAN Number	601/8757/8
Do you do Controlled Assessment / Coursework / Practical	<ul style="list-style-type: none"> • Controlled Assessment No • Coursework No • Practical Yes
If Yes to the above when will this take place	Required Practical Activities take place in Chemistry lessons throughout the course. These, and the skills students gain from completing them, will be assessed in their exams, rather than through coursework.
When will the exam be?	Summer 2019
Extra Guidance for Parents	
What should a student do before each lesson?	<ul style="list-style-type: none"> • Review their learning from Key Stage 3, and any similar topic from your Year 10 learning. • Complete any set home learning. • Ensure that they are properly equipped with a pen, pencil, ruler and scientific calculator.
What should a student do during each lesson?	<ul style="list-style-type: none"> • Try their best on all activities. • Be confident to attempt difficult tasks, without fear of making a mistake. • Review their learning effectively to identify areas they need to improve.
What should a student do after each lesson?	<ul style="list-style-type: none"> • Consider the applications of your science learning in daily life. • Review topics from the lesson that you need to improve on. • Write down or email any questions for your teacher to help you improve.
How should I use my revision guide	<ul style="list-style-type: none"> • Review or preview lesson content and complete exam style questions.
Where can I go to download past papers?	<ul style="list-style-type: none"> • http://www.aqa.org.uk/subjects/science/gcse/chemistry-8462/assessment-resources
What is the best way to use past papers	<ul style="list-style-type: none"> • Begin by completing questions individually, with resources and without time limits, and build up to completing a complete paper in timed exam conditions.
Do you provide any additional support / Revision Guide?	Review and revision materials are available on the school TeamSite, listed under the appropriate subcategory of Science.
What are the best revision sources? Can I purchase	We recommend CGP Revision and Exam Practice Booklets: https://www.cgpbooks.co.uk/Student/books_gcse_science.books_gcse_chemistry_revision.book_CAS45 Exam Practice Workbooks may also be useful: https://www.cgpbooks.co.uk/Student/books_gcse_science.books_gcse_chemistry_practiceworkbooks.book_CAQ41B
How can I support my child?	<ul style="list-style-type: none"> • Discuss the content of their lessons with them and help them to build links with their lives outside of school.

	<ul style="list-style-type: none"> • Encourage students to pursue science based projects, especially those that they can link to their online studies. • Encourage students to complete all of their home learning to support their work in lessons.
My child likes to revise using digital media – where should they go?	<ul style="list-style-type: none"> • http://www.bbc.co.uk/education/subjects/zrkw2hv • https://www.my-gcsescience.com/subject/chemistry • https://www.youtube.com/channel/UCqbOeHaAUXw9II7sBVG3_bw • http://www.s-cool.co.uk/gcse/chemistry • There are also many revision and flash card apps available.
Any additional information	<p>Please note that the course has recently changed specification, and many resources available refer to the old specification (4002). Although in many cases the content is similar between the two courses, please use the new specification to check for the appropriateness of the resource. Please also be advised that the new course follows a very different scheme of assessment to the old course (notably the absence of coursework), and uses grades 9-1 in place of the old style A*-G.</p>

YEAR 10 PHYSICS

Exam Board	AQA
Syllabus Name	Physics
Syllabus Code	8463
QAN Number	601/8751/7
Do you do Controlled Assessment / Coursework / Practical	<ul style="list-style-type: none"> • Controlled Assessment No • Coursework No • Practical Yes
If Yes to the above when will this take place	Required Practical Activities take place in Physics lessons throughout the course. These, and the skills students gain from completing them, will be assessed in their exams, rather than through coursework.
When will the exam be?	Summer 2019
Extra Guidance for Parents	
What should a student do before each lesson?	<ul style="list-style-type: none"> • Review their learning from Key Stage 3, and any similar topic from your Year 10 learning. • Complete any set home learning. • Ensure that they are properly equipped with a pen, pencil, ruler and scientific calculator.
What should a student do during each lesson?	<ul style="list-style-type: none"> • Try their best on all activities. • Be confident to attempt difficult tasks, without fear of making a mistake. • Review their learning effectively to identify areas they need to improve.
What should a student do after each lesson?	<ul style="list-style-type: none"> • Consider the applications of your science learning in daily life. • Review topics from the lesson that you need to improve on. • Write down or email any questions for your teacher to help you improve.
How should I use my revision guide	<ul style="list-style-type: none"> • Review or preview lesson content and complete exam style questions.
Where can I go to download past papers?	<ul style="list-style-type: none"> • http://www.aqa.org.uk/subjects/science/gcse/physics-8463/assessment-resources
What is the best way to use past papers	<ul style="list-style-type: none"> • Begin by completing questions individually, with resources and without time limits, and build up to completing a complete paper in timed exam conditions.
Do you provide any additional support / Revision Guide?	Review and revision materials are available on the school TeamSite, listed under the appropriate subcategory of Science.
What are the best revision sources? Can I purchase	We recommend CGP Revision and Exam Practice Booklets: https://www.cgpbooks.co.uk/Student/books_gcse_science.books_gcse_physics_revision.book_PAS47 Exam Practice Workbooks may also be useful: https://www.cgpbooks.co.uk/Student/books_gcse_science.books_gcse_physics_practiceworkbooks.book_PAQ41B
How can I support my child?	<ul style="list-style-type: none"> • Discuss the content of their lessons with them and help them to build links with their lives outside of school.

	<ul style="list-style-type: none"> • Encourage students to pursue science based projects, especially those that they can link to their online studies. • Encourage students to complete all of their home learning to support their work in lessons.
My child likes to revise using digital media – where should they go?	<ul style="list-style-type: none"> • http://www.bbc.co.uk/education/subjects/zrkw2hv • https://www.my-gcsescience.com/subject/physics • https://www.youtube.com/channel/UCqbOeHaAUXw9II7sBVG3_bw • http://www.s-cool.co.uk/gcse/physics • There are also many revision and flash card apps available.
Any additional information	<p>Please note that the course has recently changed specification, and many resources available refer to the old specification (4003). Although in many cases the content is similar between the two courses, please use the new specification to check for the appropriateness of the resource. Please also be advised that the new course follows a very different scheme of assessment to the old course (notably the absence of coursework), and uses grades 9-1 in place of the old style A*-G.</p>

YEAR 10 CAMBRIDGE NATIONAL –
ENGINEERING MANUFACTURE

Exam Board	OCR
Syllabus Name	Cambridge National
Syllabus Code	J842 - R109/R110/R111/R112
QAN Number	601/1219/0
Do you do Controlled Assessment / Coursework / Practical	<ul style="list-style-type: none"> • Controlled Assessment YES • Coursework YES • Practical YES
If Yes to the above when will this take place	Academic year 2017/2019
When will the exam be?	Summer 2019
Extra Guidance for Parents	
What should a student do before each lesson?	<ul style="list-style-type: none"> • Ensure they have read through material from previous lessons. • Arrive to lesson punctually • Bring the correct equipment to each lesson.
What should a student do during each lesson?	<ul style="list-style-type: none"> • Always listen to the member of staff. • Ask questions whenever needed
What should a student do after each lesson?	<ul style="list-style-type: none"> • Complete HW in a timely manner • Spend 1-2hrs each week, working independently on their coursework.
How should I use my revision guide	<ul style="list-style-type: none"> • No revision guides available
Where can I go to download past papers?	<ul style="list-style-type: none"> • Search for the qualification title + past papers on google
What is the best way to use past papers	<ul style="list-style-type: none"> • Complete the past papers independently and compare your answers against the mark scheme.
Extra Guidance for Parents	
Do you provide any additional support / Revision Guide?	<ul style="list-style-type: none"> • Additional support and guidance is available through RM unify.
What are the best revision sources? Can I purchase	<ul style="list-style-type: none"> • Exemplar coursework portfolios located on RM unify. There are no revision guides available.
How can I support my child?	<ul style="list-style-type: none"> • Using Show my Homework to monitor homework.
My child likes to revise using digital media – where should they go?	<ul style="list-style-type: none"> • RMunify

YEAR 10 CAMBRIDGE NATIONAL –

ENGINEERING DESIGN

Exam Board	OCR
Syllabus Name	Cambridge National
Syllabus Code	J841 - R105/R106/R107/R108
QAN Number	601/1411/3
Do you do Controlled Assessment / Coursework / Practical	<ul style="list-style-type: none">• Controlled Assessment YES• Coursework YES• Practical YES
If Yes to the above when will this take place	Academic year 2017/2019
When will the exam be?	Summer 2019
What should a student do before each lesson?	
	<ul style="list-style-type: none">• Ensure they have read through material from previous lessons.• Arrive to lesson punctually• Bring the correct equipment to each lesson.
What should a student do during each lesson?	
	<ul style="list-style-type: none">• Always listen to the member of staff.• Ask questions whenever needed
What should a student do after each lesson?	
	<ul style="list-style-type: none">• Complete HW in a timely manner• Spend 1-2hrs each week, working independently on their coursework.
How should I use my revision guide	
	<ul style="list-style-type: none">• No revision guides available
Where can I go to download past papers?	
	<ul style="list-style-type: none">• Search for the qualification title + past papers on google
What is the best way to use past papers	
	<ul style="list-style-type: none">• Complete the past papers independently and compare your answers against the mark scheme.
Extra Guidance for Parents	
Do you provide any additional support / Revision Guide?	
	<ul style="list-style-type: none">• Additional support and guidance is available through RM unify.
What are the best revision sources? Can I purchase	
	<ul style="list-style-type: none">• Exemplar coursework portfolios located on RM unify. There are no revision guides available.
How can I support my child?	
	<ul style="list-style-type: none">• Using Show my Homework to monitor homework.
My child likes to revise using digital media – where should they go?	
	<ul style="list-style-type: none">• RMunify

YEAR 10 CAMBRIDGE NATIONAL –

SYSTEMS AND CONTROL

Exam Board	OCR
Syllabus Name	Cambridge National
Syllabus Code	J843 - R113/R114/R115/R116
QAN Number	601/1407/1
Do you do Controlled Assessment / Coursework / Practical	<ul style="list-style-type: none"> • Controlled Assessment YES • Coursework YES • Practical YES
If Yes to the above when will this take place	Academic year 2017/2019
When will the exam be?	Summer 2019
Extra Guidance for Parents	
What should a student do before each lesson?	<ul style="list-style-type: none"> • Ensure they have read through material from previous lessons. • Arrive to lesson punctually • Bring the correct equipment to each lesson.
What should a student do during each lesson?	<ul style="list-style-type: none"> • Always listen to the member of staff. • Ask questions whenever needed
What should a student do after each lesson?	<ul style="list-style-type: none"> • Complete HW in a timely manner • Spend 1-2hrs each week, working independently on their coursework.
How should I use my revision guide	<ul style="list-style-type: none"> • No revision guides available
Where can I go to download past papers?	<ul style="list-style-type: none"> • Search for the qualification title + past papers on google
What is the best way to use past papers	<ul style="list-style-type: none"> • Complete the past papers independently and compare your answers against the mark scheme.
Extra Guidance for Parents	
Do you provide any additional support / Revision Guide?	<ul style="list-style-type: none"> • Additional support and guidance is available through RM unify.
What are the best revision sources? Can I purchase	<ul style="list-style-type: none"> • Exemplar coursework portfolios located on RM unify. There are no revision guides available.
How can I support my child?	<ul style="list-style-type: none"> • Using Show my Homework to monitor homework.
My child likes to revise using digital media – where should they go?	<ul style="list-style-type: none"> • RMunify

YEAR 10 ART & DESIGN

Exam Board	AQA
Syllabus Name	Art Craft and Design
Syllabus Code	8201
QAN Number	601/8088/2
Do you do Controlled Assessment / Coursework / Practical	<ul style="list-style-type: none"> • Controlled Assessment YES • Coursework YES • Practical YES
If Yes to the above when will this take place	Academic year 2017/2019
When will the exam be?	Summer 2019
Extra Guidance for Parents	
What should a student do before each lesson?	<ul style="list-style-type: none"> • Ensure they have read through material from previous lessons. • Arrive to lesson punctually • Bring the correct equipment to each lesson.
What should a student do during each lesson?	<ul style="list-style-type: none"> • Always listen to the member of staff. • Ask questions whenever needed
What should a student do after each lesson?	<ul style="list-style-type: none"> • Complete HW in a timely manner • Spend 1-2hrs each week, working independently on their coursework.
How should I use my revision guide	<ul style="list-style-type: none"> • No revision guides available
Where can I go to download past papers?	<ul style="list-style-type: none"> • Search for the qualification title + past papers on google
What is the best way to use past papers	<ul style="list-style-type: none"> • Complete the past papers independently and compare your answers against the mark scheme.
Extra Guidance for Parents	
Do you provide any additional support / Revision Guide?	<ul style="list-style-type: none"> • Additional support and guidance is available through RM unify.
What are the best revision sources? Can I purchase	<ul style="list-style-type: none"> • Exemplar coursework portfolios located on RM unify. • AQA course book available through Hodder education
How can I support my child?	<ul style="list-style-type: none"> • Using Show my Homework to monitor homework.
My child likes to revise using digital media – where should they go?	<ul style="list-style-type: none"> • RMunify

YEAR 10 BUSINESS STUDIES

Exam Board	OCR
Syllabus Name	BUSINESS (9-1)
Syllabus Code	J204
QAN NUMBER	603/0295/1
Do you do Controlled Assessment / Coursework / Practical	<ul style="list-style-type: none"> • Controlled Assessment NO • Coursework NO • Practical NO
When will the exam be?	SUMMER 2019
Extra Guidance for Parents	
What should a student do before each lesson?	Before each lesson, students should read over the topics from the previous lesson to ensure they have a thorough understanding of the topic. Using the lesson PowerPoints which are available on RM Unify will be vital to supporting this, and these can be accessed from anywhere. As an added extra, it is always good for a student to reading around current Business contexts, utilising the BBC news website is a good starting point.
What should a student do during each lesson?	A student should take part in all tasks, and if not clear should always ask for assistance. Part of being successful in Business is asking questions and exploring a topic, so students should actively try and link topics to current Business contexts.
What should a student do after each lesson?	After each lesson a student should be reading over the work that was done in the lessons to extend and enhance their understanding, they should also prepare a list of questions about topics they haven't understood ready for the next lesson. In addition, completing all the homework tasks set will be vital to the students being successful in the Business qualification.
How should I use my revision guide	After each lesson, go back and recap the topic from that lesson and the previous lesson to keep abreast of revision consistently. Once a half term a student should look back through all the lessons done that half term to recap all work.
Where can I go to download past papers?	www.ocr.org.uk
What is the best way to use past papers	The best way to utilise past papers is to attempt questions in relation to the topics covered in that lesson. In addition, doing these under timed conditions will be helpful in preparing for the real exam scenario.
Extra Guidance for Parents	
Do you provide any additional support / Revision Guide?	All lessons are placed on RM Unify for students to access from wherever is best for them. A revision guide will be able to purchase through parent pay and close to the exams, additional revision sessions will be put on to help and support students.
What are the best revision sources? Can I purchase	<p>BBC Bitsize http://www.bbc.co.uk/education/subjects/zpsvr82</p> <p>Tutor2u http://www.tutor2u.net/business/topics</p> <p>BEEBUSINESSBEE http://www.beebusinessbee.co.uk/index.php/business-topics</p>

How can I support my child?	The best way to support your child with Business is to ask them questions regarding what is in the news, and getting them to link this back to the topics done in the lesson. Further to this, asking them revision questions periodically using their exercise book will be of great assistance in helping to recall knowledge.
My child likes to revise using digital media – where should they go?	APPS  Business Studies GCSE Revision Games By madebyeducators

YEAR 10 - Computer Science

Exam Board	OCR
Syllabus Name	Computer Science (9-1) - J276 (from 2016)
Syllabus Code	J276
QAN Code	601/8355/X
Do you do Controlled Assessment / Coursework / Practical	<ul style="list-style-type: none"> ● Controlled Assessment YES ● Coursework NO ● Practical NO
If Yes to the above when will this take place	Starts in the second half of the Autumn term 2018 and will be finished by the Spring half-term break 2019.
When will the exam be?	Summer 2019
Extra Guidance for Parents	
What should a student do before each lesson?	<ul style="list-style-type: none"> ● Ensure that they do the homework set. Homework will be explained in lesson and it will be on Show My Homework. ● Bring the correct equipment to lesson, for computer science your child will need a pen, a pencil and a ruler.
What should a student do during each lesson?	<ul style="list-style-type: none"> ● Come to lesson on time and do the starter task. ● Do all tasks set to the best of their ability. ● Ask for help when needed. ● With the help of the teacher develop strategies to become resilient when solving programming problems. ● Have fun!
What should a student do after each lesson?	<ul style="list-style-type: none"> ● Review the lesson presentation and start to build their own revision notes/cards with key words. ● Do wider reading on the topics covered. ● Email the teacher with any questions/concerns.
How should I use my revision guide	<ul style="list-style-type: none"> ● Traffic light the specification identifying areas of strength and potential gaps, use this to prioritise your revision topics.
Where can I go to download past papers?	<ul style="list-style-type: none"> ● http://ocr.org.uk/qualifications/gcse-computer-science-j276-from-2016/
What is the best way to use past papers	<ul style="list-style-type: none"> ● Your child should attempt past questions and then compare their answers to the mark scheme, they should ask their teacher if the need any help with this.
Extra Guidance for Parents	
Do you provide any additional support / Revision Guide?	<ul style="list-style-type: none"> ● Revision materials and links to revision sources will be added to the VLE as we progress through the course.
What are the best revision sources?	<ul style="list-style-type: none"> ● OCR Computer Science for GCSE Student Book – George Rouse, Sean O’Byrne (ISBN: 9781471866142)
Can I purchase	

<p>How can I support my child?</p>	<ul style="list-style-type: none"> ● Encourage them to practise their programming skills. ● Encourage them to learn a new programming language independently using an online tutorial such as Code Academy.
<p>My child likes to revise using digital media – where should they go?</p>	<ul style="list-style-type: none"> ● BBC Bitesize - GCSE Computer Science ● http://www.bbc.co.uk/education/subjects/z34k7ty ● YouTube Automate the boring stuff with Python (link below) ● https://www.youtube.com/watch?v=1F_OggRuSdl&list=PL0-84-yl1fUnRuXGFe_F7qSH1LEnn9LkW&index=1 ● www.computerscienceuk.com
<p>Any additional information</p>	<p>Your child should download and practise Python version 3 from www.python.org/downloads</p>

YEAR 10 - CiDA

Exam Board	Edexcel
Syllabus Name	Pearson Edexcel Level 2 Certificate in Digital Applications (CiDA)
QAN Code	600/6627/1
Do you do Controlled Assessment / Coursework / Practical	<ul style="list-style-type: none"> ● Controlled Assessment YES ● Coursework NO ● Practical YES
If Yes to the above when will this take place	C/A - Summer Term 2018 Practical – Summer Term 2019
When will the exam be?	Summer 2018
Extra Guidance for Parents	
What should a student do before each lesson?	<ul style="list-style-type: none"> ● Review/catch up on previous lesson's activities ● Complete all homework tasks ● Be prepared for practical tasks
What should a student do during each lesson?	<ul style="list-style-type: none"> ● Make sure they understand the tasks set ● Complete all tasks set to the best of their ability ● Check the grading criteria to achieve the best marks
What should a student do after each lesson?	<ul style="list-style-type: none"> ● Complete all tasks ● Complete all homework
How should I use my revision guide	<ul style="list-style-type: none"> ● Useful to complete with keywords and "how to do" activity tasks
Where can I go to download past papers?	<ul style="list-style-type: none"> ● http://qualifications.pearson.com/en/qualifications/digital-applications-cida-dida/cida-2012.html
What is the best way to use past papers	<ul style="list-style-type: none"> ● Practice previous sample tasks
Extra Guidance for Parents	
Do you provide any additional support / Revision Guide?	<ul style="list-style-type: none"> ● Using the website above, you can access all previous tasks and complete them using the mark sheets
What are the best revision sources? Can I purchase	<ul style="list-style-type: none"> ● All the parts of this course are practical, and the best way to achieve the highest grade is constant practice of the activities
How can I support my child?	<ul style="list-style-type: none"> ● By asking them about their work and to show you the activities they have been attempting in class, and for you to critique their work in a positive manner

My child likes to revise using digital media – where should they go?	<ul style="list-style-type: none">● http://qualifications.pearson.com/en/qualifications/digital-applications-cida-dida/cida-2012.html
Any additional information	<ul style="list-style-type: none">● There are two units to this course, both practical, so the more your son/daughter practises the required skills the better they will become and the higher the grade they will achieve.

YEAR 10 FRENCH

Exam Board	Edexcel
Syllabus Name	GCSE (9-1) French
Syllabus Code	1FRO
QAN Number	601/8708/6
Do you do Controlled Assessment / Coursework / Practical	<ul style="list-style-type: none"> • Controlled Assessment No • Coursework No • Practical No
When will the exam be?	Summer 2019
Extra Guidance for Parents	
What should a student do before each lesson?	<ul style="list-style-type: none"> • Read through what has been covered in the previous week's lessons. • Make sure all homework is complete. • Regularly revise vocabulary lists for the Studio text book or on www.memrise.com
What should a student do during each lesson?	<ul style="list-style-type: none"> • Make a note of new vocabulary • Use their exercise book if they cannot remember a grammar point • Use a dictionary if necessary • Participate to the best of your ability – the best way to speak a new language is to make mistakes and learn from your mistakes.
What should a student do after each lesson?	<ul style="list-style-type: none"> • Consolidate what has been covered in the lesson and learn new vocabulary. • Look over any new grammar to make sure you remember it • Complete your homework in good time so you can ask before the next lesson if you have any issues
How should I use my revision guide	<ul style="list-style-type: none"> • During each unit to learn additional vocabulary
Where can I go to download past papers?	<ul style="list-style-type: none"> • www.edexcel.com • Other exam board websites (AQA, OCR)
What is the best way to use past papers	<ul style="list-style-type: none"> • To practise exam-style questions and understand the way the exam papers are formatted
Extra Guidance for Parents	
Do you provide any additional support / Revision Guide?	Revision materials and vocabulary lists are given to students in lessons
What are the best revision sources?	Edexcel Revision Guide- academy will provide details on how to purchase
How can I support my child?	<ul style="list-style-type: none"> • Encourage them to spend a little time each day on French • Ask them to teach you what they have learned that day • Get them to use French in their daily life and encourage him/her to listen to French radio/music and watch French TV and films.
My child likes to revise using digital media – where should they go?	<ul style="list-style-type: none"> • Memrise.com – there a plenty of generic vocabulary lists to use, and there is a Year 10 group administered by the French teacher with specific vocabulary learning lists. • BBC Bitesize

YEAR 10 GEOGRAPHY

Exam Board	OCR
Syllabus Name	Geography B (Geography for enquiring minds)
Syllabus Code	J384
QAN Number	601/8224/6
Do you do Controlled Assessment / Coursework / Practical	<ul style="list-style-type: none"> • Controlled Assessment No • Coursework No • Practical Fieldwork Yes
If Yes to the above when will this take place	Summer Term 2018
When will the exam be?	Summer 2019
Extra Guidance for Parents	
What should a student do before each lesson?	<ul style="list-style-type: none"> • Make sure all equipment is ready • Have homework ready to hand in • Be prepared to learn
What should a student do during each lesson?	<ul style="list-style-type: none"> • Listen carefully • Be involved in all activities • Think like a geographer
What should a student do after each lesson?	<ul style="list-style-type: none"> • Review notes • Complete set homework
How should I use my revision guide	<ul style="list-style-type: none"> • Either after the end of a unit before text or before a unit
Where can I go to download past papers?	<ul style="list-style-type: none"> • OCR website
What is the best way to use past papers	<ul style="list-style-type: none"> • At the end of the course with mark schemes
Extra Guidance for Parents	
What are the best revision sources? Can I purchase	<ul style="list-style-type: none"> • CPG revision book for OCR B
How can I support my child?	<ul style="list-style-type: none"> • Discuss geographical news items and their implications
My child likes to revise using digital media – where should they go?	<ul style="list-style-type: none"> • BBC Bitesize • Cool Geography • Quizet
Any additional information	Both fieldwork tasks need to be revised for the written exam

YEAR 10 GERMAN

Exam Board	Edexcel
Syllabus Name	GCSE (9-1) German
Syllabus Code	1GN0
QAN Number	601/8709/8
Do you do Controlled Assessment / Coursework / Practical	<ul style="list-style-type: none"> • Controlled Assessment No • Coursework No • Practical No
When will the exam be?	Summer 2019
Extra Guidance for Parents	
What should a student do before each lesson?	<ul style="list-style-type: none"> • Read through what has been covered in the previous fortnight or so • Make sure all homework is complete
What should a student do during each lesson?	<ul style="list-style-type: none"> • Make a note of any vocabulary • Use their exercise book if they cannot remember a grammar point • Use a dictionary if necessary • Participate to the best of your ability – the best way to speak a new language is badly!
What should a student do after each lesson?	<ul style="list-style-type: none"> • Look through any new vocabulary with a view to learning it • Look over any new grammar to make sure you remember it • Complete your homework in good time so you can ask before the next lesson if you have any issues
How should I use my revision guide	<ul style="list-style-type: none"> • During each unit to learn additional vocabulary
Where can I go to download past papers?	<ul style="list-style-type: none"> • Edexcel Website • Other exam board websites (AQA, OCR)
What is the best way to use past papers	<ul style="list-style-type: none"> • To practise exam-style questions and understand the way the exam papers are formatted
Extra Guidance for Parents	
Do you provide any additional support / Revision Guide?	Revision materials and vocabulary lists are given to students in lessons
What are the best revision sources?	Edexcel Revision Guide – the academy will advised on how to purchase
How can I support my child?	<ul style="list-style-type: none"> • Encourage them to spend a little time each day on German • Ask them to teach you what they have learned that day • Get them to use German in their daily life
My child likes to revise using digital media – where should they go?	<ul style="list-style-type: none"> • Memrise.com – there a plenty of generic vocabulary lists to use, and there will be a Year 10 group administered by Frau Kinsella with bespoke vocabulary • BBC Bitesize

COMPANIES INVOLVED WITH WMG ACADEMY

Business Partner Engagement

As a University Technical College, we commit to the principle that engineering is best taught in partnership between teachers at the academy and professional engineers from industry. The way in which this is done will vary, from company visits to academy-based seminars and from special projects to employer-led presentations.

What follows is a an overview of the companies we have worked with over the last three years and those organisations who have made commitments to improving student outcomes over the coming academic year. We've included names of engineers as well as a short history of involvement to illustrate how individual projects have unfolded, however this changes every year and we expect to see new styles of commitment and delivery over the next twelve months.

If of course you have any questions about the extent to which our business partners engage with us, or if you feel that that business partner engagement can be improved or developed in any way, please speak to either Mr Brady or Mr Kyprianou.

Please bear in mind the following approaches to business engagement whilst at the academy.

- Every time an employee of a business partner is in the academy, you have an opportunity to impress them with your personal appearance, enthusiasm and interest. Some of our most successful degree apprenticeship applicants made themselves visible to our partners very early during their time with us - it can work for you too.
- Key signs of successful engagement with business partners include punctuality to presentations and seminars and the confidence to ask questions - don't be shy and work with us if you want us to support you in self-confidence.
- Our business partners lead us in our curriculum and approach to business behaviours. Please feel free to ask them about their approach to learning and successful behaviours in their business.

**ENGINEERING BRANCH:****AERONAUTICAL ENGINEERING**

Headquartered in the UK, Meggitt PLC is a global engineering group specialising in extreme environment components and smart sub-systems for aerospace, defence and energy markets.

Some 11,000 people are employed across manufacturing facilities in Asia, Europe and North America and regional bases in Brazil, India and the Middle East.

Meggitt's civil aerospace presence covers large commercial transports, regional aircraft, business jets, helicopters and general aviation.

Its defence markets cover all military aircraft types, land systems, naval platforms and aerial, land-based and marine threat simulation training and weapons systems development. The firearms element of this capability extends into law enforcement and security organisations.

The group's growing presence in energy is driven by our core fluid controls, heat management and sensing and monitoring capabilities, many of which are deployed to help reduce the maintenance costs, fuel consumption and carbon emissions of industrial gas and steam turbines.

Academy Involvement

Meggitt's have been involved since their first Year 12 interactive day in December 2016. The company plans to take on apprentices from the academy and give an insight into working in the braking systems/aeronautical field.

**ENGINEERING BRANCH:****AUTOMOTIVE /
MECHANICAL
ENGINEERING**

Jaguar Land Rover Automotive PLC is the holding company of Jaguar Land Rover Limited, a British multinational automotive company with its headquarters in Whitley, Coventry, United Kingdom, and a subsidiary of Indian automaker Tata Motors. The principal activity of Jaguar Land Rover Limited is the design, development, manufacture and sale of vehicles bearing the Jaguar and Land Rover marques. Both marques have long and complex histories prior to their merger, going back to the 1940s, first coming together in 1968 as part of the ill-fated British Leyland conglomerate; and later existed independently of each other as subsidiaries of BMW, and Ford Motor Company; Ford later acquired Land Rover from BMW in 2000 following the break-up of the former Rover Group; which was effectively the remainder of British Leyland.

Academy Involvement

Jo Lopes (Head of Technical Excellence) at Jaguar Land Rover is WMGA Coventry's chair of governors and a proud supporter of UTCs. The company has supported commission in engineering design as well as instrumentation and control and has taken on both advanced and degree apprentices from the academy.



Rolls-Royce

ENGINEERING BRANCH:
AERONAUTICAL ENGINEERING

About Rolls-Royce

Rolls-Royce is a pre-eminent engineering company focused on world-class power and propulsion systems. The Rolls-Royce Group is organised into five customer-facing businesses: Civil Aerospace, Defence Aerospace, Power Systems, Marine and Nuclear.

What we do

We are one of the world's leading producers of aero engines for large civil aircraft and corporate jets. We are the second largest provider of defence aero engines in the world. Rolls-Royce is well established in the marine sector where we design vessels and integrate power systems. We have a growing presence in civil nuclear power, drawing on our skills and experience of over 50 years in powering nuclear submarines. Our MTU brand is world-renowned in high-speed diesel engines powering applications as diverse as rail locomotives and luxury yachts.

We support our customers through a worldwide network of offices, manufacturing and service facilities.

Vision: 'better power for a changing world'

Academy Involvement

The chair of governors at WMGA Solihull (Stuart Baker) is a director at Rolls Royce and has driven the company involvement since our first module in manufacturing for Y12 BTEC in 2014. The company is committed to growing its profile locally and across all UTCs,



ENGINEERING BRANCH:
AUTOMOTIVE ENGINEERING

Squires Gear and Engineering Ltd has been established as the market leader in its field since 1985, specialising in suspension, braking, steering components and various fasteners.

An ISO/TS 16949 Reg Co supplying worldwide for over 25 years, Squires has developed the skills and expertise to keep one step ahead of the competition.

From product design and development, bespoke components through to high volume production, Squires Gear meet your requirements with Quality, Value and Delivery being our main priority.

Apart from braking and suspension components, we produce a wide array of other products.

Academy Involvement

Squires Gears have been involved since their first Y12 interactive day in December 2016. The company plans to take on apprentices from the academy and give an insight into working in the braking systems/aeronautical field.



ENGINEERING BRANCH:

**MATERIALS / AUTOMOTIVE
ENGINEERING**

The Autins Group combines around 50 years of manufacturing experience with state-of-the art technology. Set up in 1966 as Automotive Insulations, the company became well known within the automotive sector for manufacturing parts for the original Mini. From these origins supplying the car industry, we have built a solid reputation for developing heat and sound solutions across a range sectors, including automotive, marine commercial and industrial.

As a company we have grown rapidly over the past few years and are moving into new sectors such as interior design and construction.

Our portfolio of clients includes some highly respected global brands including Bentley, Jaguar Land Rover, Honda and VW Group.

Academy Involvement

The Autins group involvement in the academy dates back to our inception. Former CEO Jim Griffin and HR Director Liz Northwood have provided the inspiration and were the first company to take on an apprentice in our first few months of operation, seconded to Toyota Motors in Derby. Autins help the academy with a variety of HR and commission inputs.



ENGINEERING BRANCH:

ELECTRICAL ENGINEERING

Our business model

We are an international electricity and gas company based in the UK and north eastern US. We play a vital role in connecting millions of people safely, reliably and efficiently to the energy they use.

We are at the heart of one of the greatest challenges facing our society – delivering clean energy to support our world long into the future.

We work with all our stakeholders to promote the development and implementation of sustainable, innovative and affordable energy solutions.

And we are proud that our work, and our people, underpin the prosperity and wellbeing of our customers, communities and investors.

Academy Involvement

Richard Earp was chair of our Business Advisory Board (BAB) in the early years of operation of the academy and he and his colleague Luke Fieldhouse have supported the academy to deliver on our business-led ethos. The company have supported the now legendary wind turbine day and have had input into a variety of business and electrical engineering commissions.

Sarginsons

PIONEERS IN ALUMINIUM DIECASTING

ENGINEERING BRANCH:

MATERIALS ENGINEERING

Sarginsons is the most technically sophisticated aluminum diecaster in the UK

At the forefront of aluminum diecasting for 80 years, we're one of the few European companies to offer low pressure diecasting, sandcasting and gravity diecasting in a single foundry. We pride ourselves on our ability to resolve even the most complex diecasting challenges quickly and cost effectively, so you receive exactly what you need, when you need it.

Our skilled engineers work with you from prototype design through to finished casting to optimise the manufacturing process for your component, production run, time scale and budget.

Academy Involvement

Anthony Evans was the force behind Sarginsons' involvement in the academy. This very special organisation has provided work for our students, inspirational input in our metallurgy programmes and has also provided the opportunities for students to cast their projects and engage in destructive testing.



ENGINEERING BRANCH:

MECHANICAL ENGINEERING

Cummins Inc.

A Global Power Leader

Cummins Inc. designs, manufactures, sells and services diesel and alternative fuel engines from 2.8 to 95 litres, diesel and alternative-fueled electrical generator sets from 2.5 to 3,500 kW, as well as related components and technology.

The Engine Segment designs and manufactures state-of-the-art diesel and natural gas powered engines for on-highway and off-highway use. The business also offers new parts and remanufactured parts and engines.

Academy Involvement

Cummins have been a partner since our first year of operation and have been vital in supporting our students in engineering design. The company works with mainly KS5 students in engineering design commissions and sets this in a broad general engineering context.



**ENGINEERING
BRANCH:**

CIVIL ENGINEERING

We are Balfour Beatty, a leading infrastructure group operating internationally - engineers, builders, project and facilities managers, analysts, consultants and more.

For more than 100 years we have created and cared for the vital assets that enable societies and economies to grow: road and rail; airports, seaports, tunnels and bridges; health and education facilities; heat, light, power and water; places to live and places to work - the infrastructure that underpins all our lives and drives progress.

From our beginnings in 1909 we have grown to become an international business operating in emerging and mature economies alike. We are one of the few companies with the skills to deliver complex projects of huge scale and take advantage of the growth in long-term infrastructure markets.

Our impact is in iconic structures, bold engineering feats, behind-the-scenes innovation and joined-up thinking - financing and partnerships that make up the world's great infrastructure projects today.

Academy Involvement

Balfour Beatty established their relationship with the company in our third year of operation, providing an opportunity to visit to their operational sites and a chance to promote apprenticeships. They are now a full commission partner and lead our strategy to promote civil engineering at the academy,



ASTON MARTIN

ENGINEERING BRANCH:

AUTOMOTIVE ENGINEERING

POWER. BEAUTY. SOUL.

The very essence of Aston Martin is something you feel each time you look at one of our cars. It sweeps over you on every unforgettable drive. Powerful, exhilarating and precise yet timelessly elegant and sophisticated; our cars blend iconic design, exceptional engineering and unrivalled craftsmanship to create an unforgettable, emotional experience. Each car is the essence of Power, Beauty and Soul.

Aston Martin's state-of-the-art headquarters in Gaydon, Warwickshire is built upon the passion, skill and creativity of the people who dedicate their working lives to the most iconic brand in the world.

Academy Involvement

Karen Botting (HR Director) at Aston Martin has been the inspiration behind the company's involvement with the academy. 30% of the brand's national apprenticeship uptake comes from our Coventry academy and the iconic manufacturer is now a fully-fledged commission partner in design.



ENGINEERING BRANCH:

**ELECTRONIC / SYSTEMS
ENGINEERING**

In a world undergoing constant change, VINCI Energies focuses on connections, performance, energy efficiency and data to fast-track the rollout of new technologies and support two major changes: the digital transformation and the energy transition.

As a major player in a constantly changing world, VINCI Energies works at the crossroads of society's most important issues of today and tomorrow. Such as the growing demand for energy and transport, optimisation of industrial processes, improvement of energy performance, and changes in demand in the telecommunications sector, among others. In all of these areas, the VINCI Energies Group knows how to combine its different fields of expertise to provide solutions that meet market demands.

Academy Involvement

Ruth Ottley was the person responsible for opening the relationship with Vinci (whose son successfully graduated from the academy in 2017). Vinci are a key player for us, supporting us in the development of systems control and electronic engineering, having been a partner since 2015.



ENGINEERING BRANCH:

HIGH VALUE MANUFACTURING

Warwick Manufacturing Group is an academic department of the University of Warwick and has a global reputation in the co-operation of manufacturing companies with high-quality academic research.

Our work with WWMG has been varied, with a wide variety of Warwick academic staff delivering lectures to our students on innovative design, manufacturing planning and business development. This support has been crucial in supporting VI form study in particular.

Academy Involvement

It was Professors Jan Godsell and Steve Maggs who were instrumental in establishing WWMG's relationship with its daughter academy. Since 2014, WWMG have partnered with the academy, providing inspirational academic tutors from the University of Warwick to develop our design programmes.



ENGINEERING BRANCH:
AUTOMOTIVE ENGINEERING

Tata Motors European Technical Centre (TMETC), based in Coventry, is a wholly-owned subsidiary of Tata Motors. Created in 2005, as a UK-based centre of excellence for automotive design and engineering, TMETC provides research and development principally for Tata Motors but also for selected partners in the automotive industry.

TMETC's 250 strong workforce complements Tata Motors' own engineering skill sets and provides international standards in product design, craftsmanship, quality and reliability, and product delivery mainly to the company's passenger and light commercial vehicles. Its facilities in the UK West Midlands include an engineering centre, design studios, and a vehicle test and development workshop.

The company has been an active partner in a number of collaborative projects in low carbon vehicle technology since 2009, notably the TSB supported CABLED programme and the ERDF supported Low Carbon Vehicle Technology Project (LCVTP), and is the centre of excellence for Tata Motors in electric and hybrid vehicle technology for future passenger and light commercial vehicles.

Academy Involvement

Tata Motors have been involved with the academy since 2015 and have provided expertise in every domain, including electrical engineering as well as design and manufacture. The company have provided higher level apprenticeships for our students and act as final project consultants for our BTEC programmes.



ENGINEERING BRANCH:

**AUTOMOTIVE / MATERIALS
ENGINEERING**

Prodrive is a world leading motorsport and technology business. While we are perhaps best known for motorsport, today it is just one part of an organisation, which has diversified to become a technology business working in a range of sectors with operations in Banbury and Milton Keynes in the UK and employing more than 500 staff. Find out more about our company, our culture and our motorsport achievements.

With the innovative technology and techniques used in motorsport, it was a natural progression that Prodrive would offer its engineering skills to the mainstream automotive market and beyond. Today this division represents more than half of the company's sales with more than 100 engineers working on projects for leading vehicles manufacturers, as well as businesses in the aerospace, defence and marine sectors.

We have developed a particular specialism in electro-hydraulic and electro-mechanical actuation systems, the latest electric and flywheel hybrid systems; DC-DC converters for electric cars; as well as the design and manufacture of limited edition performance and luxury cars.

Academy Involvement

Governor Shaun Clayton has been involved in the development of the academy since its inception and takes a keen interest in our business behaviours and vulnerable groups. Prodrive engineers have run seminars for both key stages, including visits to their main facility at Banbury. Apprenticeships have been offered to graduating students and the company is positive about further developments.