Sixth Form Options
2017 - 2019
Celebrating Success

In a year where there were concerns nationally about grade variability our academic results remained impressive and I was delighted that our students achieved 52% of A* -A grades at A Level with 96% at A* - C and 82% at A* - B. Nearly one third of all the students who sat their A Levels this year obtained three A grades or better. Eleven students secured highly competitive university places to study Medicine, Dentistry or Veterinary Science and five gained places at Oxford or Cambridge. Putting these achievements into context, BMS was placed 111th in the country for A Level results in the recent Daily Telegraph league tables representing a climb of 11 places on last year’s ranking.

We continue to develop the school estate and our new, state-of-the-art Science Centre is due for completion in Spring 2017 which will, I am sure, provide an inspirational learning environment for our students for many years to come. However, an education at Bedford Modern School extends far beyond the classroom. Academic study is complemented by extensive sporting, music, drama and a wealth of other co-curricular programmes. All of our Sixth Form students are involved in so many activities outside of formal study whether that is supporting charity work or as a member of our thriving Combined Cadet force. The range on offer is extensive and we encourage our students to participate as fully as possible to develop them as young adults and to equip them for life after school.

In January 2014, the Independent Schools Inspectorate published their inspection report grading Bedford Modern School as excellent in all categories – a outcome of which I am still immensely proud. Below you will find some excerpts taken directly from the report which describe the School far better than I ever could.

Michael Hall, Headmaster

“Pupils are mature, articulate and eager to benefit from the many opportunities presented to them. They realise their responsibilities to others and, extremely well prepared for the next stage of their lives, they are ready to meet the challenges of the future.”

“Pupils throughout the School reach high standards of personal fulfilment across a wide range of activities. The extra-curricular programme is extensive and many successes, from local to national level, are achieved in a variety of fields.”

“Staff are committed to providing an excellent all-round education. The teachers' subject knowledge is excellent, and their high levels of enthusiasm promote considerable application from pupils of all ages.”

“The ethos in the School community encourages pupils to flourish and grow into self-confident, well-informed young people with a strong sense of who they are and what they believe in.”

“Relationships are excellent throughout the School, which is a lively and purposeful place; the pupils are very proud of it and feel a strong sense of belonging.”
Sixth Form 2017-19

The school has a thriving Sixth Form which provides a structured and supportive environment for each student as well as being an integral part of the whole community of Bedford Modern School. It is also an important stage in the transition from compulsory education to university, training or employment.

The highest standards of academic and personal development are both expected and encouraged, the latter entailing not only achievement in the wide range of extra-curricular activities, but also the conscious need for service to the community.

Preparation for examinations at A Level is the central focus of the Sixth Form curriculum. The emphasis is on offering breadth of education as well as preparing students for their particular career direction. Consequently, most students select four subjects of study in Year 12 with the expectation that three of these subjects will be pursued to A Level in Year 13. In order to meet the demands of study at this level it is expected that members of the Sixth Form will undertake work outside the classroom. As a rough guide they can expect around three hours work per subject per week in Year 12 and four hours per subject in Year 13.

Registration is lesson by lesson, and specific times are allocated for tutorial meetings during the week. As students move through the Sixth Form, timetabled private study is provided in increasing measure to enable best use of non-teaching time at School.

Curriculum Enrichment
At Bedford Modern School we recognise that students come into Year 12 at varying stages of development. Our Curriculum Enrichment course has been devised to support and broaden the knowledge of each individual. The program is designed to raise awareness of issues that will affect them as young adults as well as equipping them with the knowledge to make informed choices. Students in Year 13 may opt to complete an Extended Project Qualification on a title of their choosing which, although unlikely to form the basis of a university offer, will develop their skills of independent learning and make them more attractive to top universities.

Community Service, Outreach, Monitoring and Activities Afternoon
We are committed to the concept of service in the Sixth Form. To this end we offer a variety of opportunities outside the curriculum. We expect all students in Year 12 to participate in some form of Monitoring in the Sixth Form either within departments or assisting in Open Evenings and Open Mornings. In Year 13 we run a series of Outreach opportunities which includes assisting in the running of a drop in centre for the elderly.

Our activities afternoons in Year 13 allow students the opportunity to gain additional experience in areas such as leadership through to sailing and adventure. The afternoons offer over twenty activities.

All students are encouraged to take advantage of the many opportunities to assume positions of leadership and responsibility, and involve themselves in the life of the School. These include the opportunity to apply for the position of School Monitor (Prefect), standing for election to the Sixth Form Council as well as involvement in many teams and societies.
A Level Qualifications

Following government reform, AS exams have been decoupled from A Level exams. What this means is that students will be examined on all the work covered in both Year 12 and Year 13 in their A Level exams at the end of Year 13.

Poor grades at the end of Year 12 will highlight, to both school and parents, which students need to work harder if they are to succeed at A Level. It will also mean that students have already revised work which will be needed for the main A Level.

We expect most students will choose four subjects at the beginning of Year 12 and drop one after receiving their exam results, but continue the other three subjects to full A Level in Year 13. Some students may continue with four A Level courses – most commonly a combination involving those taking Mathematics and Further Mathematics. Others may continue with three A Levels, perhaps with another new AS course taken in a Year 12 set. Our expectation for most students will be that in Year 13 three A Level subjects will be taken.

Entry to Year 13 will be dependent on performance in the exams at the end of Year 12 – therefore, progression to full A Level is not automatic. Students are required to have a grade C or above at the end of Year 12 to be guaranteed acceptance on the full A Level course for each subject.

Some students may begin Year 12 on three subjects after discussion with Mr White or other senior members of staff but need to be aware that the requirement is still that they should gain at least a grade C in all three exams to continue their study to A Level. Other students may begin Year 12 on four but drop down to three before the exam season in May. The same warning as above applies.

Individual cases will be assessed on their merits when the exam results are released, and recommendations for changes to students’ patterns of study may then be made. It is possible that we may advise a student that he/she should not continue with one or more subjects that ideally he/she would have wished to continue to the full A Level, or even that it is inadvisable to move on to A Level courses at all. It is School policy that no student in Year 13 should be studying for just one A Level, even in combination with one or more new AS Levels.

Transition into Year 12

We aim to build a course to suit the strengths and aspirations of each student. To facilitate this process we provide tailored interviews for members of Year 11, commencing at the beginning of the year, where possible post-16 pathways are discussed. To assist the students in making informed option choices, an Information Morning takes place in November where students choose 8 subjects to sample. After which provisional course choices are made. These choices are reviewed and further discussed after the January Trial exams. The parents of pupils who perform below their potential in the January trial exams will be invited into school to meet with the Transition team at the Parents’ Evening in February for further discussions and to establish how best the student can be supported into the final run up to the exams. In July of Year 11 students are invited back for a Move Up Day to confirm their final option choices, which are then reviewed after GCSE results. Each stage is designed to inform and support, and enable students to make the right choices for their future.

The basic entry requirement onto most courses is a minimum of a grade B (6) at GCSE in an appropriate subject, however those pupils who embark on A Level studies with an A grade or above are likely to find the transition much easier. In some cases there may be further restrictions eg a minimum of a grade 6 in Maths to do AS Physics. Please see the following subject pages for further details.
Students must also have achieved at least a grade C (5) in both Maths and an English to qualify for entry into the Sixth Form.

The A Level Information System (ALIS) that we use in the School counts GCSE grades as follows:

<table>
<thead>
<tr>
<th>GCSE</th>
<th>A*</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

A worked example:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number achieved of each</th>
<th>Calculated value</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/8</td>
<td>3</td>
<td>$8 \times 3 = 24$</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>$7 \times 5 = 35$</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>$6 \times 1 = 6$</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>$5 \times 1 = 5$</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>70</td>
</tr>
<tr>
<td>ALIS Score</td>
<td>10 subjects</td>
<td>$70/10 = 7.0$</td>
</tr>
</tbody>
</table>

- Candidates with an ALIS score of 6.0 or above (derived, for example, from 10 grade Bs) will have automatic entry to the Sixth Form but BMS retains the right to ask students to re-consider their course choices in light of their overall GCSE grades;
- The ALIS score will be derived from ALL the subjects that candidates have taken at GCSE; those with fewer than nine subjects will be considered on an individual basis;
- For candidates who fall below the 6.0 threshold there will be a process of discussion and negotiation to see whether or not there is a viable course available for them.

The School reserves the right NOT to offer Sixth Form courses to any candidate whose behaviour and attitude has been unsatisfactory.

Confirmation of each subject choice will depend on:-

- The grade achieved at GCSE and the student’s performance during the course;
- The pupil’s overall ALIS score and their chosen combination of subjects;
- The view taken by those most closely associated with the student (subject staff, Tutor, Head of Year) as to his/her academic potential;
- The viability of set numbers;
- The School’s capacity to timetable subject combinations.

All subjects are guaranteed to be available as two-year courses. However, it cannot be guaranteed that the same number of sets per subject will be maintained over the two year period – the fact that students can choose to give up a subject at the end of Year 12 means that the number of sets available needs to be reviewed at that stage. It is therefore possible that students will have different teachers in Year 12 and 13. (Additionally, the nature of the timetable means that it is not possible to accommodate requests for students to be taught by particular members of staff.)

Please note that the school will not allow you to do both English Literature and English Language and Literature or both strands of Design and Technology. Many university courses would also advise that certain combinations or particular subjects are inadvisable at AS and especially A Level, so we advise that you check out the specific course requirements via the UCAS website if you know that you want to pursue a particular degree.
Conversely, certain choices are recommended or essential if students wish to pursue certain courses or career paths in the future. These include studying both Chemistry and Biology if Medicine is the intended path, and both Physics and Mathematics if Mechanical Engineering is the intended path. For more advice on this, please contact the relevant Heads of Subjects, Miss Burns (Head of Careers), Ms Webb (Year 11 Transition Co-ordinator), Mr White or Mr Price.

If you require more guidance about individual subjects, please talk to either the subject teacher or the Head of Subject; if you require more information about the option process, the viability of combinations, etc. then please contact Mr Price directly.

**How to choose your A Levels**

What to consider:

I. Subjects you enjoy – you will have on average a lesson every day, sometimes two
II. Subjects that you are good at – universities like to see top grades
III. Subjects which complement each other eg Geography, Economics, Maths and Biology
IV. Remember you are unlikely to continue all 4, so one can be a bit different eg Maths, Physics, Chemistry and Latin
V. Retaining a breadth and balance eg both Arts and Sciences
VI. Variety within the workload - it can be problematic if you pick subjects which all have a high coursework component eg Art, DT and Computer Science
VII. Check if any particular A Levels are seen to be compulsory by your likely institution/course choice eg Maths for degree level Economics at some institutions – best discovered by looking on the UCAS site [http://search.ucas.com/](http://search.ucas.com/)
VIII. Taking too many new subjects is a big gamble eg. Film Studies, Business, Politics and Psychology
IX. Take advice from those who have done the courses – current Year 12 and Year 13s like your Year Monitors
X. Talk to your current teachers
XI. Have a look at the specification online (see web addresses in subject entries)
XII. If you are really unsure, select subjects from the facilitating subjects list. These come from a report entitled “Informed Choices” produced by The Russell Group of Universities. A link to the report can be found here: [http://www.russellgroup.ac.uk/informed-choices.aspx](http://www.russellgroup.ac.uk/informed-choices.aspx)

How not to decide:

I. Cult of the celebrity – there are no guarantees that you will get the teacher who inspired you through GCSE
II. Doing the same options as your friends – you may well be in different sets, and these decisions are just too important to be made for such a poor reason
III. The subjects that you think will be an easy ride

The following pages will give you a flavour of the courses that you can choose from. For further details, ask your subject teacher or the Head of Subject, check out the department web page or go direct to the exam board webpage where you can find the specification, past papers, student guides etc.
<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Evenings</td>
<td>29 September 2016 (internals) &amp; 11 October 2016 (externals)</td>
</tr>
<tr>
<td>Provisional choices</td>
<td>21 November 2016 (internal candidates only)</td>
</tr>
<tr>
<td>Parents’ Evening Part 1</td>
<td>9/17 November 2016 (internal candidates only)</td>
</tr>
<tr>
<td>Assessment Day</td>
<td>Saturday 14 January 2017 (external candidates only)</td>
</tr>
<tr>
<td>Parents’ Evening Part 2</td>
<td>1/6 February 2017 (internal candidates only)</td>
</tr>
<tr>
<td>Final choices</td>
<td>10 February 2017 ALL</td>
</tr>
<tr>
<td>Move Up Days</td>
<td>26/27 June 2017 ALL</td>
</tr>
<tr>
<td>Results Day</td>
<td>Thursday 24 August 2017 ALL</td>
</tr>
<tr>
<td>Induction Day</td>
<td>Tuesday 5 September 2017 ALL</td>
</tr>
<tr>
<td>Start of Term</td>
<td>Wednesday 6 September 2017 ALL</td>
</tr>
</tbody>
</table>

Matt Price - Deputy Head (Academic)

John White - Director of Sixth Form

**List of subjects offered in BMS Sixth Form**

- Fine Art
- Biology
- Business
- Chemistry
- Classical Civilisation
- Computer Science
- *Design Technology – Design Engineering*
- *Design Technology – Product Design*
- Drama & Theatre Studies
- Economics
- #English Literature
- #English Language & Literature
- Film Studies
- French
- Geography (International A Level) – still modular
- German
- History
- Latin
- Mathematics
- Further Mathematics (must be done alongside Mathematics)
- Music
- Music Technology
- Philosophy
- Physical Education
- Physics
- Politics
- Psychology
- Religious Studies
- Spanish

* Students may not select both of these courses.
# Students may not select both of these courses.
The Art course challenges students to extend their knowledge of artists and to improve their own practical skills across a range of areas during the course of the year. This will include exploration of a range of techniques and skills whilst developing their understanding of the ideas and concepts that inform Art.

There is a strong emphasis on experimentation and engagement with a full range of techniques, including painting, drawing, printmaking and sculpture with a willingness to test ideas and concepts through to the development and realisation of final pieces of work.

A Level follows a similar course structure to AS but with a requirement for greater depth and analysis. The theme for the A Level coursework component is determined at the end of AS with students choosing individual areas of study. Students are also required to write a critical studies essay examining the work of two artists.

**Syllabus Content**

**AS Level: 2 Papers**
- Unit 1: Coursework: 50% create a non-examined assessment portfolio.
- Unit 2: Examination paper: 50% with a terminal exam of 10 hours.

**A Level: 2 Papers**
- Unit 1: Coursework: 50% create a non-examined assessment portfolio, with a supporting contextual studies essay.
- Unit 2: Examination Paper: 50% with a terminal exam of 15 hours.

**Non-examined assessments:**
AS students undertake an initial coursework project (50% of course weighting) in response to a given title that is open to interpretation. During the course of this project, students will produce a range of work that explores and identifies an individual theme for the project that is then developed into a final outcome.
A Level follows a similar structure to AS, but students identify their own area of study for their coursework project.

**Resources**
Sixth form students have their own Art studio and are encouraged to make full use of this during free periods. Individual student practise is supported with Life Drawing Sessions, a visiting artist workshop and study trips to augment studio work.

**Career paths and complementary subjects**
The Art A Level prepared students for a range of degrees in the creative and heritage sectors. These include Architecture, Curatorship, Graphic Design, Industrial & Product Design and related business careers such as Fashion Buying and a range of other professions.

**Entry Requirements**
Grade B or above at GCSE in Art & Design.
Biology is a versatile A Level, suitable for diligent students with an interest in how living organisms interact and function. All of the A Level courses that are available provide both a sound grounding and exposure to the main areas of Biology, allowing students to make informed decisions about which area might be of interest for post-18 study. Students will follow the Edexcel Biology B specification.

**Syllabus Content**

**AS Level: 2 Papers**
Topics covered: basic biochemistry of the fundamental macromolecules in biology, gene expression, ultrastructure of the eukaryotic and prokaryotic cell and virus particle, cellular reproduction and viral life cycles, classification (natural selection and speciation), gaseous exchange and mass transport in animals and flowering plants.

**A Level: 3 Papers**
Topics covered (including those above): advanced biochemistry (respiration and photosynthesis), microbiology and immunology, epigenetics, gene technologies, Mendelian inheritance and natural selection, chemical and nervous co-ordination in animals and flowering plants, homeostasis and excretory systems, ecology and conservation.

**Non-examined assessments:**
Practical work is an integral component of the A Level Sciences; however, there will no longer be a separate, extended piece of controlled assessment. Instead, there will be a Practical Skills Endorsement, which is assessed throughout the two years of the A Level, based upon the competence of the students in the laboratory. It does not count in any way towards the letter award (A* - U) of the A Level, but will instead be expressed in addition to this grade.

**Resources**
There are seven members of staff in the Department and you will be taught by two of them, each delivering half of the course content. We strongly encourage all students to actively take the opportunity to seek help and clarification at any time throughout the year, either in person or by email. Members of staff run drop in sessions after school and at some lunch times. The Upper Sixth spend a day studying a Norfolk salt marsh and have the opportunity to extend the depth of their study during the enrichment sessions.

**Career paths and complementary subjects**
Biology is required for most degrees in medicine, veterinary medicine, dentistry and physiotherapy, as well as the traditional degrees in the biological sciences. Students who are considering post-18 study in a biological field will find that some other subjects, such as Chemistry and Mathematics (particularly for the molecular biology courses), along with possibly Geography (for the environmental sciences) will strengthen their applications.

**Entry Requirements**
It is a requirement that students wishing to study Biology in the Sixth Form have achieved at least a grade B in Biology at GCSE or grades BB in Dual Award.
Business was one of the first subjects to adopt the linear format at A Level. We follow the AQA board specification given the strong ties the Department has with the board and its reputation as the “gold standard” for A Level Business. Independent research has shown it to be the preferred specifications with institutions like Warwick, York and Durham Universities. The focus in Business is to develop students with an understanding of the business world and to prepare them for a role in management. They will study the complete range of business structures from small start up’s to global conglomerates whose operations impact upon all our lives. Students will develop the knowledge and skills needed to analyse data, think critically about issues and make informed decisions – all skills that are needed for further study and employment.

**Syllabus Content**

**AS Level: 2 Papers**
The focus in Year 1 is on the study of decision making within a business and will cover:
- The interrelated nature of business activities
- The competitive environment and the markets in which businesses operate
- The influences on functional decisions and plans including ethical and environmental factors
- How technology is changing the way decisions are made
- The factors that determine whether a decision will be successful
- The use of quantitative and non-quantitative data in decision making

**A Level: 3 Papers**
Year 2 builds upon the study of decision making in the functional areas and looks at strategic decision making. This will include:
- The impact of technology on strategic decision making
- The influences of Corporate Social Responsibility, ethical and environmental issues
- The difficulties in forecasting future trends
- The importance of assessing feasibility and risk
- The impact on stakeholders of strategic decisions and their response to such decisions

**Non-examined assessments:** None.

**Resources**
Text books for Year 1 and Year 2. In addition Business students have access to the PPE Library within the Rutherford Building. A vast range of specialist websites are used in addition to newspaper website Business Review Magazine.

**Career paths and complementary subjects**
An A Level in Business will equip a student with the skills to either go on to study the subject further at university or to enter the world of work. Increasingly the latter option is done in the form of sponsored places linked to university study.

**Entry Requirements**
No prior study of Business is required for this course. There is a considerable emphasis on numerical, statistical and data evaluation skills as tools of analysis and therefore candidates must have achieved at least a grade B in Mathematics and English at GCSE.
Chemistry has often been described as “The Central Science” due to its significant role in a wide variety of scientific disciplines. Chemistry’s application to a wide range of areas, from Biochemistry to Geochemistry, makes it a key contributor to modern life. 

The study of Chemistry at AS and A Level provides students with an understanding of important scientific concepts and equips them with a range of valuable skills. Chemists can follow a wide range of degree courses and careers. Degrees in Chemistry are highly valued in both the scientific and commercial worlds. 

We follow the OCR Chemistry A specification. Both the AS and A Level courses place practical work at the core of students’ learning. Students keep comprehensive records of their practical work in Laboratory Notebooks and are required to follow up their laboratory work in order to develop their analytical and evaluative skills.

**Syllabus Content**

**AS Level: 2 Papers**  
Organic Chemistry: alkanes, haloalkanes, alkenes, alcohols, organic analysis  
Inorganic Chemistry: periodicity, Group 2, Group 7  
Physical Chemistry: atomic structure, chemical quantities, bonding, energetics, kinetics, equilibria  

There are two written examination papers:  
Breadth in Chemistry, 70 marks, 1 hour 30 minutes  
Depth in Chemistry, 70 marks, 1 hour 30 minutes  

**A Level: 3 Papers**  
Organic Chemistry: optical isomerism, carbonyl compounds, arenes, amines, polymers, amino acids, proteins, DNA, synthesis, NMR spectroscopy and chromatography  
Inorganic Chemistry: Period 3, transition elements, reactions of ions in aqueous solution  
Physical Chemistry: thermodynamics, kinetics, electrochemistry  

There are three written examination papers:  
Periodic Table, Elements and Physical Chemistry, 37% of total A Level  
Synthesis and Analytical Techniques, 37% of total A Level  
Unified Chemistry, 26% of total A Level  

**Non-examined assessments:**  
The Practical Endorsement in Chemistry is awarded if students meet the required standards in their practical work. This is assessed internally through a series of Endorsed Practical Tasks.

**Resources**  
As well as a comprehensive A Level text students have access to online resources, including an e-book, via Kerboodle.

**Career paths and complementary subjects**  
Chemistry opens up a wealth of opportunities including Medicine, Dentistry, Veterinary Medicine, Biochemistry, Chemical Engineering, Forensic Science, Analytical Chemistry  
Complementary subjects: Biology, Physics, Mathematics

**Entry Requirements**  
Grade B in Chemistry at GCSE or grades BB in Dual Award Science.
**Introduction:**

Classical Civilisation gives students the opportunity to engage with a range of topics as diverse as the oldest surviving works of Western literature, the origins of democracy, the birth of theatre and art and artistry. Learners are enabled to respond critically and to engage with a wealth of sources and ideas, equipping them with readily transferable analytical skills.

**Syllabus Content**

**AS Level: 2 Papers**

The world of the hero: one 1½ hour paper. We read Homer’s *Iliad*, the story of Trojan War, culminating in the killing of the Trojan prince Hector by Achilles.

Culture and the arts: one 1½ hour paper. We study either Greek theatre or Greek art. A decision will be made about this during the course of this academic year.

**A Level: 3 Papers**

The world of the hero: one 2 hour 20 minute paper. We study Virgil’s *Aeneid* alongside Homer’s *Iliad*.

Culture and the arts: one 1¾ hour paper. See comments above.

Beliefs and ideas: one 1¾ hour paper. We shall probably study the Love and Relationships topic, but Democracy and the Athenians is also a possibility.

**Non-examined assessments:** None.

**Resources**

The department produces its own study guides for students to use alongside the recommended text books for the course.

**Career paths and complementary subjects**

Traditionally the course has attracted a wide range of students, from those with a particular interest in the arts, to serious scientists who wish to retain the breadth that an arts subject can provide. It can lead, too, to a variety of degree courses, including Classical Studies, Archaeology, Ancient History and Anthropology. Former students are now pursuing careers in law, marketing, music and writing.

**Entry Requirements**

Prospective students are not expected to have a GCSE in Classical Civilisation, though those with such a qualification are welcome on the course. We would normally expect students to have achieved a grade B in either Classical Civilisation, English Literature or History at GCSE.
Bedford Modern School offers AQA Computer Science at both AS and A Level. Computer Science students will all take the AS Level as a stand-alone qualification at the end of Year 12. Those who wish to can carry on and take the full A Level in Year 13. The course brings together a mix of practical and theoretical Computing which will appeal to students with a creative approach to problem solving.

**Syllabus Content**

**AS Level: 2 Papers**
Paper 1 (50%) is an on-screen practical programming exam, for which we use the C# language.
Paper 2 (50%) is a written paper covering logic gates, Boolean algebra, computer architecture and the fetch-execute cycle, hardware devices, the structure of the internet, assembly language, network communications, legal and ethical issues.

**A Level: 3 Papers**
The A Level course encompasses the topics covered in AS but extends the depth and level of understanding required and also adds additional topics. There are two exams, worth 80% of the A Level grade, and a coursework project worth 20%.

Paper 1 (40%) is an on-screen programming paper in the same format as the AS Paper 1.

Paper 2 (40%) is a written paper on the theoretical aspects.

**Non-examined assessments:**
The coursework project (20%) is an opportunity for students to write a substantial program of their own choosing using a range of different languages according to their own interests and abilities.

**Resources**
We have a dedicated Computer Science suite.

**Career paths and complementary subjects**
Computer Science A Level leads naturally on to taking the subject at degree level. It also provides a range of skills and experience which will support students heading for a business or management career. Students of Computer Science also often choose Maths, Physics and Business.

**Entry Requirements**
It is hoped that students will have studied GCSE Computer Science, but those who have not done so will be considered for the course if they demonstrate a suitable aptitude and enthusiasm for programming.
The Design Engineering course is focused towards engineering and electronic products/systems. This course has replaced the original Systems and Control course that the Department previously delivered. Students will analyse the function, operation, components and materials of different engineered products and electronic systems. Students will take on the role of a designer and manufacturer; building up awareness and experience of using materials, components and systems in order to design and manufacture functioning products. They will gain an understanding of all the issues to be considered in the planning, design, manufacture and marketing of engineered products and systems.

**Syllabus Content**

**AS Level: 1 Paper plus coursework**

**Principles of Design Engineering (Exam Components 01)** Written paper (50% of the course weighting)

This is an exam paper set out through five sets of questions that cover the full scope of the specification:

- Analyse existing products
- Demonstrate Mathematical skills
- Applying technical knowledge
- Demonstrate understanding and design thinking – Social, moral cultural issues for manufacturers

**Non-examined assessments:**

Students undertake a ‘product development’ unit (50% of the course weighting) in response to a given content that is open to their own interpretation. Product development will be user centred, applying improvements to existing products/re purposing products for different uses.

**A Level: 2 Papers plus coursework**

**Principles of Design Engineering (Exam Component 01)** Written paper (25% of course weighting)

This is an exam paper set out through four sets of questions that predominantly cover technical principles of product design. Students will need to:

- Analyse existing products
- Demonstrate Mathematical skills

**Unseen Challenge (Exam Component 02)** Design/written Paper (25% of course weighting)

There are two sections to this component:

**Section A** focuses on students applying their knowledge, understanding and skills of designing and manufacturing prototypes and products. **Section B** requires students to reflect on the design task in section A in relation to wider factors/issues from the design principles.

**Non-examined assessments:**

`Iterative Design Project’ (50% of course weighting) requires students to undertake a substantial design, make, and evaluate project centred on the iterative processes of explore, create and evaluate. Students identify a design opportunity or problem from a context of their own choice, and create a portfolio of evidence in real time through the project to demonstrate their competence.
Resources
As well as a comprehensive A Level text (due for release in 2017), students will have access to online resources.

Career paths and complementary subjects
Students who study the course at A Level could progress on to a variety of university courses related to systems and electronics. These could include Electronic engineering, Aeronautical design, mechanical engineering and mechatronics to name but a few. Complementary subjects at A Level would include Maths and Physics.

Entry Requirements
Students are expected to have a grade B in Systems and Control at GCSE.
The course is designed to offer students the opportunity to study, propose, develop and realise prototype solutions to a variety of designing and making situations, closely related to the real world of product design and manufacture. Students will take on the role of a designer; building up awareness and understanding of all the issues to be considered in the planning, design, manufacture and marketing of products. They will carry out critical evaluations of existing products, explore possible design developments and create functioning prototypes. Students will be encouraged to produce high quality products that could be seen in a given consumer market.

**Syllabus Content**

**AS Level: 1 Paper plus coursework**

**Principles of Product Design (Exam Components 01)** Written paper (50% of the course weighting)

This is an exam paper set out through five sets of questions that cover the full scope of the specification:

- Analyse existing products
- Demonstrate Mathematical skills
- Applying technical knowledge
- Demonstrate understanding and design thinking – Social, moral cultural issues for manufacturers

**Non-examined assessments:**

Students undertake a `product development’ unit (50% of the course weighting) in response to a given content that is open to their own interpretation. Product development will be user centred, applying improvements to existing products/re purposing products for different uses.

**A Level: 2 Papers plus coursework**

**Principles of Product Design (Exam Component 01)** Written paper (25% of course weighting)

This is an exam paper set out through four sets of questions that predominantly cover technical principles of product design. Students will need to:

- Analyse existing products
- Demonstrate Mathematical skills

**Unseen Challenge (Exam Component 02)** Design/written Paper (25% of course weighting)

There are two sections to this component:

**Section A** focuses on students applying their knowledge, understanding and skills of designing and manufacturing prototypes and products. **Section B** requires students to reflect on the design task in section A in relation to wider factors/issues from the design principles.

**Non-examined assessments:**

`Iterative Design Project’ (50% of course weighting) requires students to undertake a substantial design, make, and evaluate project centred on the iterative processes of explore, create and evaluate. Students identify a design opportunity or problem from a context of their own choice, and create a portfolio of evidence in real time through the project to demonstrate their competence.
Resources
As well as a comprehensive A Level text (due for release in 2017), students will have access to online resources.

Career paths and complementary subjects
Students who have studied the course at A Level have progressed on to a variety of university courses related to the design field. These include industrial design, product design, architecture and engineering to name a few. Complementary subjects at A Level could include Maths, Physics, Geography, Business or Art. The key skills learnt from the course are transferable to many other subjects too.

Entry Requirements
Students are expected to have studied Resistant Materials, Graphics, Systems and Control or Product Design at GCSE. Under most circumstances it is expected that students have gained at least a grade B as evidence of ability, and to be able to demonstrate a real commitment to and interest in the subject.
The course requires and develops a range of academic and creative skills, as well as personal awareness and confidence. Students can pursue their interests and study a range of practical drama elements including acting, directing, costume, mask or technical design. The written components develop students’ knowledge and understanding of theatre through the ages through a study of set texts, live productions and a range of practitioners. The new specifications will be weighted as follows: 60% practical / non-exam assessments and 40% examinations.

**Syllabus Content**

**AS Level: 2 Papers**

**Component 1 – Interpreting Drama.** Study of one set text from a perspective of an actor, director and designer. Analysis and evaluation of the work of live theatre makers from the perspective of the audience. Assessment: 2 hour written examination. 40% of AS.

**Component 2 – Process and Performance.** Interpretation and practical exploration of two extracts of text, which apply the methodology of a prescribed practitioner. Students must also produce a portfolio evidencing their process, analysis and performance evaluation. Assessment: Performance (30 marks) and Portfolio (30 marks). 60% of AS.

**A Level: 3 Papers**

**Component 1 – Drama and Theatre.** As Component 1 of AS with study of one more contrasting set text. Assessment: 3 hour written examination. 40% of A Level.

**Component 2 – Creating Original Drama.** Students create an original piece of performance with an accompanying working notebook. Assessment: Notebook (40 marks) and Devised performance (20 marks). 30% of A Level.

**Component 3 – Making Theatre.** As Component 2 of AS but with development and practical exploration of one extra extract. Assessment: Performance (40 marks) and Reflective Report (20 marks). 30% of A Level.

**Non-examined assessments:**


**Resources**

Dedicated Drama studio with lighting, sound and projection capabilities. Two full time Theatre Technicians to assist with the practical assessments and design elements.

**Career paths and complementary subjects**

Students can go on to a range of careers in the creative industries, but the transferable skills are relevant to all employment.

**Entry Requirements**

Grade B in English Language or Literature at GCSE. Drama GCSE is desirable but not essential. Students must be enthusiastic about performance and performing.
Economics is about scarcity and choice; we have limited resources and so choices have to be made on how these resources can best be allocated. The subject is live and ever-changing. Economics will give you a greater understanding of current local, national and global economic issues, from the macroeconomic implications of Brexit to the microeconomic effects of a sugar tax aimed at reducing UK obesity.

Economics is a newly reformed, linear subject and students will be studying the Edexcel Economics A course, as well as having the opportunity to take part in a wide variety of extra-curricular activities and trips in the department and the PPE Faculty.

**Syllabus Content**

**AS Level: 2 Papers**
In Year 12, students cover both microeconomics and macroeconomics and assessed with two written AS papers on these areas (both 50% of the AS). In microeconomics students will study how markets work and fail, as well as key policy tools. In macroeconomics students study the performance of the UK economy and macroeconomic policies.

**A Level: 3 Papers**
In Year 13, students will take three written A Level examinations, one on microeconomics (35%), one on macroeconomics (35%) and a final synoptic paper (30%). Students will develop their microeconomics further by looking at business economics and their macroeconomics by looking beyond the UK economy at the global economy.

**Non-examined assessments:** None.

**Resources**
Students will be issued with the Anderton Economics textbook, specifically written for the Edexcel Economics A course. The department also benefits from comprehensive resource packs, subject specialist teachers and effective use of ICT and multimedia in lessons.

**Career paths and complementary subjects**
Career paths include jobs in the financial sector (such as investment banking and finance), in economic analysis (such as for independent think tanks and in government) and for non-government organisations (such as aid agencies). For those looking to study Economics at university, A Level Mathematics is often required and Further Mathematics seen as desirable. However, Economics can provide breadth to a wide variety of A Level option choices and careers, such as medicine, law and engineering.

**Entry Requirements**
Grade B or better in both Mathematics and English Language GCSE, as the subject requires both quantitative and extended writing skills.
A good grade in A Level English Literature speaks volumes to universities and employers about your capacity to think for yourself and to communicate your ideas effectively. Perhaps more importantly, the opportunity to study great literature offers all open-minded people a stimulating challenge. Students who are proficient in English are sensitive, value different perspectives and many students from Bedford Modern School progress to study the subject at a higher level. We have chosen the Edexcel syllabus which we believe gives students the breadth of study necessary to develop an informed and engaged appreciation of prose, poetry and drama along with key analytical and writing skills.

**Syllabus Content**

**AS Level: 2 Papers**  
Paper 1 Poetry and Drama – written exam: 2 hours – 60%  
Paper 2 Prose – written exam: 1 hour – 40%

**A Level: 3 Papers**  
Paper 1 Drama – written exam: 2 hours 15 minutes – 30%  
Paper 2 Prose – written exam: 1 hour – 20%  
Paper 3 Poetry – written exam: 2 hours 15 minutes – 30%

**Non-examined assessments:**  
There is 20% coursework weighting at A Level while AS is 100% examined assessment. Students have a free choice of two texts to study. Chosen texts must be different from those studied elsewhere in the A Level and must be complete texts. They may be linked by theme, movement, author or period and may be selected from poetry, drama, prose or literary non-fiction. Students produce one assignment – a comparative essay.

**Resources**  
We are able to supply students with their primary and secondary texts and to guide their independent reading. We also have on our doorstep the Bedford Modern School Library Resource Centre which houses over 20,000 books, has 17 computers, 3 iMacs and 20 Chromebooks.

**Career paths and complementary subjects**  
The skills you develop through the study of English are marketable in a wide variety of professional areas and English is seen, along with Maths, as a facilitating A Level subject. For the English graduate research shows there is a huge range of jobs on offer, such as journalist, editor, barrister, teacher, curator, scriptwriter, forensic linguist, radio presenter, TV producer.

**Entry Requirements**  
Grade B or above at GCSE in both English Language and English Literature.
A good grade in A Level English Literature speaks volumes to universities and employers about your capacity to think for yourself and to communicate your ideas effectively. The specification we have chosen develops literary and linguistic analysis, enabling students to become critical, independent readers. It is designed to nurture personal responses to literary and non-literary texts, allowing students to play to their strengths.

**Syllabus Content**

**AS Level: 2 Papers**
- Paper 1 Views and Voices – written exam: 1 hour 30 minutes (75 marks) Closed Book
- Paper 2 People and Places – written exam: 1 hour 30 minutes (75 marks) Closed Book

**A Level: 2 Papers**
- Paper 1 Telling Stories – written exam: 3 hours (100 marks)
- Paper 2 Exploring Conflict – written exam: 2 hours 30 minutes (100 marks)

**Non-examined assessments:**
Making Connections – 50 marks – A personal investigation that explores a specific technique or theme in both literary and non-literary discourse (2,500-3,000 words). Novel and non-literary material.

**Resources**
We are able to supply students with their primary and secondary texts and to guide their independent reading. We also have on our doorstep the Bedford Modern School Library Resource Centre which houses over 20,000 books, has 17 computers, 3 iMacs and 20 Chromebooks.

**Career paths and complementary subjects**
The skills you develop through the study of English are marketable in a wide variety of professional areas and English is seen, along with Maths, as a facilitating A Level subject. For the English graduate research shows there is a huge range of jobs on offer, such as journalist, editor, barrister, teacher, curator, scriptwriter, forensic linguist, radio presenter, TV producer.

**Entry Requirements**
Grade B or above at GCSE in both English Language and English Literature.
Film Studies is an exciting and challenging discipline that explores film’s intellectual and emotional appeal. It enables students to develop a critical awareness and understanding of film, and its relationship with society, utilising transferable skills that are key to many intellectual and practical situations. A distinctive feature of the course is the practical element that enables students to put theory into practice by creating their own films, thus affording opportunities for engagement in creative work at a high level.

Syllabus Content

AS Level: 3 Papers
Component 1 American Film (35%): An exploration of American films with different historical contexts. Films studied could include Django Unchained and Inception.
Component 2 European Film (35%): An exploration of British and non-English language films. Films studied could include Brief Encounter and Atonement.
Component 3 Production (30%): The production of a film text with an evaluative analysis.

A Level: 3 Papers
Component 1 American and British Film (35%): An exploration of American films with different historical contexts. Films studied could include Casablanca and Some Like it Hot.
Component 2 Varieties of Film (35%): An exploration of films from film movements, documentary film, global film and short films.
Component 3 Production (30%): The production of a film text with an evaluative analysis.

Non-examined assessments:
Component 3 Production (30%): The production of a film text with an evaluative analysis.

Resources
Dedicated Film Studies classroom; high definition digital cameras; MacBook Pros; Adobe Premiere editing software; lighting equipment; track & dolly.

Career paths and complementary subjects
Students often study English, Humanities, and other Arts subjects alongside Film at A Level, and have gone on to study a wide range of courses including Politics, Law, Theology, Architecture, English and Film. It is a highly-regarded subject at university, where it has been offered for many years at prestigious Russell Group universities such as St. Andrews, Nottingham and Warwick, as well as an MA course at Oxford University.

Entry Requirements
Grade B or better in both English Language and English Literature.
As much of our trade is conducted with Europe, there is no doubt that knowledge of French will continue to be an important asset in the jobs market in the years to come. French is spoken as the first language in six countries within Europe and it is also widely spoken in North America, Africa and the Middle East, so proficiency in French can present the student with opportunities to work or study across several continents. In addition French has long been an official language of bodies such as the Olympic Games, United Nations, FIFA and the IOC, underlining its importance as a means of communication on a global scale. All students are encouraged to spend some time in a French-speaking country during their studies.

Syllabus Content

**AS Level: 2 Papers plus a speaking test**
- Non-exam assessment: Speaking Test (30% of AS) (12-14 minutes plus 15 minutes preparation time).
- Paper 1 Listening / Reading / Translation into English (40% of AS) (1 hour 45 minute written exam).
- Paper 2 Translation into French / Writing about a set book or film from the prescribed list (30% of AS) (1 hour 15 minutes).

**A Level: 2 Papers plus a speaking test**
- Non-exam assessment: Speaking Test (30% of A Level) (21-23 minutes plus 5 minutes preparation time).
- Paper 1 Listening / Reading / Translation into English and French (40% of A Level) (2 hours 30 minutes).
- Paper 2 Writing about two books from the prescribed list of set texts or one book and one film from the prescribed list (30% of A Level) (2 hours).

**Non-examined assessments:**
Speaking test (30% of AS and A Level).

**Resources**
The new A Level syllabus at AS and A Level textbook; a grammar exercise and reference book; a video of Au Revoir Les Enfants (AS) and a novel ‘L’Étranger’ by Albert Camus (A2); Kerboodle for listening, extension and independent learning. Resources also include a suitable range of DVDs, newspapers, magazines and other publications, books, on-line resources and the language laboratory. Each student has a weekly conversation class with our French Assistant.

**Career paths and complementary subjects**
French is useful for any career involving translation, working in the foreign language in business, marketing, sales, retail, teaching, politics, the hotel, restaurant and tourist trade, banking, the telecommunications industry, service industries as well as law, medicine, dentistry, the caring professions and social work.

**Entry Requirements**
Pupils require a minimum of a grade B in French at GCSE but a grade A or higher offers more guarantees of success at achieving a higher grade at AS and A Level.
Your A Level Geography course will cover both the physical and human environments and the complex interaction of processes that shape our world. It will also, importantly, show the applied side of the subject – how human intervention affects the environment and how people adapt and mitigate the effects of processes on their environment. The students will follow the Cambridge International A Level. Students will be able to do the stand alone qualification of an AS in Year 12 and/or take the full A Level over two years. The A Level is based on performance in exams over the two years.

**Syllabus Content**

**AS Level: 1 Paper**
Candidates for AS certification take Paper 1 only which is called Core Geography. This paper is split into Physical and Human and is sat at the end of Year 12. Marks will be carried over to Year 13 if you continue with the subject. Physical Geography includes: Hydrology and fluvial geomorphology, Atmosphere and weather and Rocks and weathering.

**A Level: 2 Papers**
Candidates who already have AS certification and wish to achieve the full A Level qualification may carry their AS marks forward and take just Papers 2 and 3 in Year 13. Some students might decide to re-sit Paper 1 as well.
- Paper 2 – Advanced Physical – Coastal environments and Hazardous environments
- Paper 3 – Advanced Human – Production, location and change, Environmental management, Global interdependence or Economic transition (students will study 2 of these).

**Non-examined assessments:**
Fieldwork will be an essential part of your A Level course. Although there is no specific coursework you will be expected to use practical techniques when answering exam questions. You will even get the chance to go on one residential trip to another country to experience a very different environment to the one where you live.

**Resources**
Our five teaching rooms are well equipped with audio visual equipment and ceiling mounted projectors that enable us to incorporate interactive materials into lessons. There is also plenty of fieldwork equipment for our sessions outside of the classroom.

**Career paths and complementary subjects**
Geography is highly valued by universities as an A Level choice. Geography combines well with both arts and science subjects. Geography is a broad based subject that really fits well for any future progression. For example, for careers in sustainability and green issues, urban regeneration, energy supply, retail location and managing the effects of climate change to name a few.

**Entry Requirements**
We expect at least a B grade at GCSE. If you don’t have a GCSE in Geography we would be looking for an A grade (9, 8 or 7) minimum in English Language.
German is the most widely used language within the European Community for a start, spoken by well over eighty million people. Since the fall of the Berlin Wall and the opening up of Eastern Europe, the German language has become the first foreign language in many Eastern European countries. This means that knowing the German language and culture will give you a huge competitive advantage when working in a European context. A look at the job adverts in the national press shows that fluency in German is a much sought-after skill, in particular since German is less widely spoken in Britain than French. Many employers favour linguists because of their broad academic education, their creative approach to problem-solving and their excellent ability to communicate. Over the last five years German graduates have had one of the highest rates of employment for all new graduates in the UK.

**Syllabus Content**

**AS Level:** 2 Papers plus a speaking test
- Non-exam assessment: Speaking Test (30% of AS) (12-14 minutes plus 15 minutes preparation time).
- Paper 1 Listening / Reading / Translation into English (40% of AS) (1 hour 45 minute written exam).
- Paper 2 Translation into German / Writing about a set book or film from the prescribed list (30% of AS) (1 hour 15 minutes).

**A Level:** 2 Papers plus a speaking test
- Non-exam assessment: Speaking Test (30% of A Level) (21-23 minutes plus 5 minutes preparation time).
- Paper 1 Listening / Reading / Translation into English and German (40% of A Level) (2 hours 30 minutes).
- Paper 2 Writing about two books from the prescribed list of set texts or one book and one film from the prescribed list (30% of A Level) (2 hours).

**Non-examined assessments:**
Speaking test (30% of AS and A Level).

**Resources**
The new A Level syllabus at AS and A Level textbook; a grammar exercise book; a video of Goodbye Lenin (AS and A2) and a play “Biedermann und die Brandstifter” by Max Frisch (A2); Kerboodle for independent learning. There are also regular lessons with native German speaking Assistants.

**Career paths and complementary subjects**
German is useful for any career involving translation, working in the foreign language in business, marketing, sales, retail, teaching, politics, the hotel, restaurant and tourist trade, banking, the telecommunications industry, service industries as well as law, medicine, dentistry, the caring professions and social work.

**Entry Requirements**
Pupils require a minimum of a grade B in German at GCSE but a grade A or higher offers more guarantees of success at achieving a higher grade at AS and A Level.
History is a well-established subject in the Sixth Form at BMS. Results in recent years have been excellent with 88% of A Level students obtaining grades A* - B since 2012. The course, constructed from the AQA specification, combines both early modern and modern elements. This combination is beneficial for students as they study a period of History before the nineteenth and twentieth centuries, adding breadth to their overall historical understanding, and study modern History, so developing an understanding of the key issues in the world around them.

**Syllabus Content**

**AS Level: 2 Papers**
The two AS units are both examined components and each worth 50% of the total mark:
- Breadth Study: 1C: The Tudors: England, 1485-1529
- Depth Study: 2Q: The American Dream: Reality and Illusion 1945-1963
The examinations will contain a combination of source-based questions and essays.

**A Level: 3 Papers (Two Examined and One Non-Examined)**
- Breadth Study: 1C: The Tudors: England, 1485-1603 (worth 40%)
- Depth Study: 2Q: The American Dream: Reality and Illusion 1945-1980 (worth 40%)
The examinations at A Level will contain a combination of source-based questions and essays, however these will be at a higher level than those set at AS.

**Non-examined assessments:**
The Historical Investigation takes the form of an extended essay centred on Britain and South Africa, 1815-1910. This will be assessed internally and moderated by the board. It is worth 20% of the total mark at A Level.

**Resources**
Access to all books and resources (including DVDs) suggested on the AQA resource lists for the examined units via the Learning Resource Centre and online.
Dedicated area in the Learning Resource Centre for specialist resources to assist with the completion of the Historical Investigation.

**Career paths and complementary subjects**
History A Level is excellent preparation for a wide range of degree courses and careers, such as Law, Business and the Media. However, studying History at A Level can also enhance more science based careers due to the cross-over of skills such as the ability to evaluate evidence and to create an argument. As such, History A Level complements and enriches any subject combination.

**Entry Requirements**
Anyone wishing to study History at A Level should have a genuine interest in the subject and at least a grade B in GCSE History. Students who have not taken History at GCSE are welcome providing their performance in English is grade B or above.
For the student whose interest is in language and literature, Latin is an ideal and challenging subject. Students acquire the language skills to enable them to read literary texts in the original language, and the course’s focus on analytical and evaluative skills gives them the confidence to approach language sensitively and critically. Through the study of literature, students also acquire an understanding of the culture, politics and social life of Rome at significant periods in its history.

Syllabus Content

AS Level: 2 Papers
- **Language: one 1½ hour paper.** This will involve translation of a Latin passage into English and comprehension questions on a second passage.
- **Literature: one 2 hour paper.** We study one verse and one prose set text.

A Level: 4 Papers
- Unseen translation: this will involve translation of two passages into English and is worth 33% of the total A Level.
- Comprehension: this will involve answering questions on a prose passage and is worth 17% of the total A Level.
- Latin Prose Literature: you will study a prose text of about 200 lines in length, and will be asked to translate a short section of text and to answer a selection of factual and stylistic questions relating to it. This paper will be worth 25% of the total A Level.
- Latin Verse Literature: you will study a verse text of about 200 lines in length. This paper will also be worth 25% of the total A Level.

Non-examined assessment: None.

Resources
Students are issued with copies of both texts, along with a Latin grammar and defined vocabulary list. There is also access to online vocabulary testers.

Career paths and complementary subjects
Latin is highly regarded by employers and universities alike, and goes with more or less any combination of subjects at A Level. As well as going on to study Classics or Latin, recent students have followed a wide range of courses at university, including English, Politics, Economics, Medicine, Veterinary Medicine and Business Studies. There are also joint courses available, combining Latin with English, a modern language or History. Former students have gone on to pursue careers in law, accountancy, medicine and journalism.

Entry Requirements
Students should have at least a grade A in GCSE Latin.
Mathematics is being reformed for first teaching from September 2017.

**Syllabus Content**

**AS Level:**
At present we do not have exact information on the format of the new AS Level in Mathematics.

**A Level:**
The new A Level Mathematics and Further Mathematics specifications are currently being reviewed by Ofqual and we hope to hear details shortly. It is likely that the new A Level in Mathematics will consist of three 2-hour papers, two of which will cover Pure Mathematics, and the other a mix of Statistics and Mechanics. The content of the new A Level will be very similar to the current A Level.

Further Mathematics is likely to be examined in four 1½ hour papers. Again the content will be broadly the same as the current Further Mathematics A Level. Pupils opting for Further Mathematics must also choose Mathematics.

**Non-examined assessments:** None.

**Resources**
There will be textbooks and additional resources for the new AS/A Levels ready for next September. We intend to continue to provide students will access to MyMaths.

**Career paths and complementary subjects**
Mathematics A Level is highly valued by both universities and employers. If you are considering studying for a degree in Engineering or Economics then you should be studying Further Mathematics.

**Entry Requirements**
For Mathematics you need a minimum grade A at GCSE. To study Further Mathematics A Level you need a minimum of an A* grade (or 8 on the new scale) at GCSE, and will ideally have studied either Further Mathematics GCSE or Additional Mathematics FSMQ (level 3).
The Music course for Years 12 and 13 prepares students for the AQA AS and A Level qualification in Music. The core skills required are listening and appraising music, performing music and composing music. The AS Level qualification in Music extends the skills required at GCSE by developing practical and creative skills and through fostering critical and analytical thinking about music.

**Syllabus Content**

**AS Level: 3 Papers**
- **Unit 1: Appraising Music (40% of AS).** Set works from the Western Classical Tradition 1650-1910 and Musical for Theatre.
- **Unit 2: Performance (30% of AS).** Students are required to perform a solo and/or ensemble as an instrumentalist, or vocalist and/or music production (via technology). A minimum of six minutes of performance in total is required. Students should perform at a minimum of Grade 5 standard.
- **Unit 3: Composition (30% of AS).** Students produce two compositions. Composition 1 is a composition to a brief and Composition 2 is a free composition. The compositions must have a combined time of four and a half minutes in total. Each composition is marked out of 25 and students are required to demonstrate a range of musical techniques within their work.

**A Level: 3 Papers**
- **Unit 1: Appraising Music (40% of A Level).** Set works from Western Classical Tradition 1650-1910 and Musical for Theatre, and Art Music since 1910. Students complete a listening paper that requires both aural and extended writing skills.
- **Unit 2: Performance (35% of A Level).** Students are required to perform a solo and/or ensemble as an instrumentalist, or vocalist and/or music production (via technology). A minimum of ten minutes of performance in total is required. Students should perform at a minimum of Grade 6 standard.
- **Unit 3: Composition (25% of A Level).** Students produce two compositions. Composition 1 is a composition to a brief and Composition 2 is a free composition. The compositions must have a combined time of four and a half minutes in total.

**Non-examined assessments:**
- **Unit 2: Performance.** Students are required to perform a solo and/or ensemble as an instrumentalist, or vocalist and/or music production (via technology). A minimum of ten minutes (A Level) or six minutes (AS Level) of performance in total is required.
- **Unit 3: Composition.** Students produce two compositions. Composition 1 is a composition to a brief and Composition 2 is a free composition. The compositions must have a combined time of four and a half minutes in total.

**Resources**
Suite of Mac computers with Logic Pro 9 and Sibelius software; nine practice rooms each with a piano; musical scores and relevant text books.

**Career paths and complementary subjects**
Music works in combination with a wide variety of other A Levels as has been seen in recent history. In the last five years, students who took AS and/or A Level Music went on to study: Music, Music Composition, Veterinary Medicine, Archaeology and Anthropology, Science,
Dance, Sound Technology, German and Russian, Psychology, Acoustical Engineering, History and Russian, Audio Engineering.

**Entry Requirements**

Students should have grade B in GCSE Music, or have equivalent musical experience in lieu of this. Students should also be a minimum of Grade 5 standard on their main instrument. We expect A Level students to participate in ensembles relevant to their instrument.
Music Technology aims to provide students with a detailed understanding of the processes and theory involved in producing Music in a variety of genres. There is a firm emphasis on how the technology behind Music works rather than on traditional Music theory. Students are able to take a practical approach to learning these skills with a 40% weighting on non-examined assessment and two exams that ask them to undertake both practical and theoretical tasks in a controlled environment.

**Syllabus Content**

**AS Level: 4 Papers**
Unit 1 & 2: Create the first non-examined assessment portfolio. This is made up of one technology based composition and one multi-track recording from set briefs from the board (worth 40%).
Unit 3: Listening and Appraising exam where students demonstrate an understanding of recording principles and techniques in response to unfamiliar extracts of music (worth 25%).
Unit 4: Producing and Analysing exam; a practical exam where students apply their knowledge of processes, both modern and historical (worth 35%).

**A Level: 4 Papers**
At A Level students are expected to demonstrate the same skills as AS but in greater depth and maturity of understanding. Students will need to create a second portfolio of non-examined assessment material. The four unit focusi remain the same.

**Non-examined assessments:**
This constitutes 40% of the course at both AS and A Level.

**Resources**
The Music Faculty boasts a high quality digital recording studio with control and live rooms and a suite of Mac computers running the latest Logic Pro, Reason and Sibelius software packages. Students get the chance to work with professional session musicians throughout the course.

**Career paths and complementary subjects**
An A Level in Music Technology prepares students for a career in various Music industries including: Audio Engineering, Creative Production, Song writing and Acoustics. Music Technology complements students with an interest in Music, Physics, Mathematics and Computer Science.

**Entry Requirements**
It is expected that all students will have achieved at least a grade C in both GCSE Music and Physics before embarking on the course. Concession may be made for equivalent experience at the discretion of the subject teachers.
Philosophy enables you to think with precision and clarity about some of life’s most important questions. You will learn to think through complex trains of thought and to identify the strengths and weaknesses or arguments. You can then evaluate ideas and theories past and present; we discuss questions like how we should live, what counts as knowledge, and whether the mind is the same as the brain. Students at AS will explore “What is knowledge?” and “What do good, bad, right and wrong really mean?” At A Level they will go further by considering: “Is the concept of God incoherent?” and “What is mind?”.

**Syllabus Content**

**AS Level: 1 Paper**
Moral Philosophy: how should we live? Epistemology: what can we know?
- Written exam: 3 hours (5 questions on Moral Philosophy and 5 questions on Epistemology).

**A Level: 1 Paper**
Metaphysics of Mind: what is consciousness?
Metaphysics of God: the concept and existence of God.
- Written exam: 3 hours (5 questions on Metaphysics of Mind and 5 questions on Metaphysics of God).

**Non-examined assessments:** None.

**Resources**
The department has a wealth of books and electronic resources to supplement the two new textbooks written especially for the new syllabus.

**Career paths and complementary subjects**
Philosophy provides training in critical thinking which will enhance your studies in all academic subjects. It can complement other PPE subjects, humanities and languages as well as creative disciplines. It often enables a science student to enjoy a broader curriculum. Philosophy can lead to a career in law, journalism, politics, industry, and many other professions. Philosophy graduates are highly employable.

**Entry Requirements**
A minimum of a B grade in English Language.
Physical Education aims to equip learners with an understanding in a wide variety of areas relating to the scientific, socio-cultural and practical aspects of sport. Students will gain an understanding of how physiological and psychological states affect performance and recognise how socio-cultural factors can influence the involvement in physical activity and sport. Within the course, students will look at the role technology plays in an ever developing sporting world, as well as enhancing their own ability to analyse and evaluate sporting performance. We follow the OCR specification and within both the AS and A2 courses, students will regularly take part in practical sessions in order to increase their learning and gain a greater understanding.

Syllabus Content

AS Level: 2 Papers plus coursework
Students complete two written examination papers and one non-exam assessment:
- Physiological factors affecting performance, 70 marks, 1 hour 15 minutes (35%) – Applied anatomy and physiology, exercise physiology, biomechanics (including technology in sport)
- Psychological and Socio-cultural themes in physical education, 70 marks, 1 hour 15 minutes (35%) – Skill acquisition, sport psychology, sport and society
- Performance in physical education, 60 marks, non-exam assessment (30%) – Performance or coaching and evaluation of performance for improvement (EPI)

A Level: 3 Papers plus coursework
Students complete three written examination papers and one non-exam assessment:
- Physiological factors affecting performance, 90 marks, 2 hours (30%) – Applied anatomy and physiology, exercise physiology and biomechanics
- Psychological factors affecting performance, 60 marks, 1 hour (20%) – Skill acquisition and sport psychology
- Socio-cultural issues in physical activity and sport, 60 marks, 1 hour (20%) – sport and society and contemporary issues in physical activity and sport
- Performance in physical education, 60 marks, non-exam assessment (30%) – Performance or coaching and evaluation and analysis of performance for improvement (EAPI)

Non-examined assessments:
AS and A2 Level:
- Students will perform or coach one activity. The practical specification builds upon the knowledge and skills used from GCSE level and students are required to demonstrate effective performance, the use of tactics or techniques and the ability to observe the rules and conventions under applied conditions.
- In addition to the practical performance, students will observe a live or recorded performance in their chosen activity and provide an oral response, analysing and critically evaluating what they see.

Resources
Students have access to ‘My PE exam’ which is a comprehensive resource with revision presentations and exam relevant tests. This allows learners to undertake self-paced independent study and confidently master subject topics.
**Career paths and complementary subjects**
Complementary Subjects: Biology, Psychology, Sociology, English.

**Entry Requirements**
Grade B in GCSE Physical Education theory paper and Grade B in GCSE Biology.
Physics looks to explain the Universe around us, from the very smallest quantum phenomena to astronomical interactions. The A Level course expands upon the classical areas of Physics whilst introducing these exciting new areas of study. Here is a useful summary http://qualifications.pearson.com/content/dam/pdf/A%20Level/Physics/2015/teaching-and-learning-materials/At-a-glance-guide-to-the-new-A-level-Physics.pdf

A key component of the study of Physics is experimentation and practical work underpins our course. One or two periods each week will be dedicated to an experiment and its analysis, enabling students to explore the current topic and develop appropriate practical skills.

**Syllabus Content**

**AS Level: 2 Papers**
Foundations of physics – Physical quantities and units, Making measurements and analysing data, nature of quantities
Forces and motion – Motion, Forces in action, Work energy and power, Materials, Momentum
Electrons, waves and photons – Charge and current, Energy power and resistance, Electrical circuits, Waves, Quantum physics

**A Level: 3 Papers**
All AS Level content plus Newtonian world and astrophysics – Thermal physics, Circular motion, Oscillations, Gravitational fields, Astrophysics and cosmology
Particles and medical physics – Capacitors, Electric fields, Electromagnetism, Nuclear and particle physics, Medical imaging

**Non-examined assessments:**
Students will keep a lab book for all experiments which will form the basis of a ‘practical competency’ endorsement at the end of the A Level.

**Resources**
As well as a comprehensive A Level text book, students have access to online resources, including an e-book, via Kerboodle.

**Career paths and complementary subjects**
Physics is vital in present day society and lies at the heart of the multitude of science and engineering disciplines. The study of Physics encourages an enquiring, logical and analytical mind; important traits for many less obviously related careers in for example computing, business and finance. Complementary subjects: Biology, Chemistry, Mathematics, Design and Technology, Computing.

**Entry Requirements**
Grade B in Physics at GCSE or grades BB in Dual Award Science.
AS or A Level Politics has a very wide appeal, not only to those with an interest in politics and current affairs, but also those who seek to broaden their debating, presentation and analytical skills. Our results at both AS and A Level are excellent and both teachers are examiners for the subject. This has been achieved by there being a huge number of day, evening and residential trips offered to allow students to access Politics outside the classroom. For AS students there has been a trip to Edinburgh to study Devolution and Scottish Parliament. For A Level students there is a trip to Washington DC to study American Politics and visit important institutions such as Congress and the Supreme Court. We also participate in Model UN conference, European Youth Parliament plus a Mock Trial competition at Bedford Magistrates Court for those interested in a career in Law.

Syllabus Content (subject to accreditation)

AS Level: 2 Papers – 50% each paper
- **UK Politics – 1 hour 30 mins exam consisting of short and longer answers** – topics covered include: Democracy and Participation, Political Parties, UK Elections and voting behaviour and the role of the media.
- **UK Governing – 1 hour 30 mins exam consisting of short and longer answers** – topics covered include: the Prime Minister and Cabinet, Parliament, Devolution in the UK, the role of EU and Judiciary and Civil Liberties.

A Level: 3 Papers – 50% on UK Politics and 50% on US Politics and Ideologies
- **UK Politics and Core Political Ideas – 2 hours** – topics covered include: Democracy and Participation, Political Parties, UK Elections and voting behaviour and the role of the media – plus ideologies such as Socialism, Liberalism and Conservatism.
- **UK Government and Optional Political Ideas – 2 hours** – topics covered include: the Prime Minister and Cabinet, Parliament, Devolution/EU and judiciary and Civil Liberties – plus an optional ideology such as Nationalism.
- **US Politics and Comparative Politics – 2 hours** – topics covered include Presidential elections, the US Constitution, US Pressure Groups, Racial and ethnic politics, US Congress, the US Supreme Court and Federalism. In the Comparative Politics section, students will compare UK/US Politics and consider questions such as who is more powerful – President or PM?

Non-examined assessments: None.

Resources
The media is used a great deal to help students keep up to date but wider reading and intelligent use of social media, TV, and newspapers contribute significantly to the development and success of all pupils in this subject. We also produced our own student packs which enable students to organise their notes in preparation for University style of independent study. There are subject specific text books written for the specification which each student will receive. We also have subscriptions to a variety of A Level Politics websites and magazines for students’ use to supplement the lesson activities.

Career paths and complementary subjects
An A Level qualification in Politics could be useful for careers in Law, Journalism, the Civil Service, local or national government, Business administration, teaching or indeed any field...
where a basic knowledge of the activities of government is of assistance. We have also provided opportunities for work experience with many MPs and public relations companies. Politics may usefully be combined with History, English, Business, Economics or Geography in particular and may be attractive as one of the more obviously relevant courses or as an additional subject to accompany mathematical or scientific specialisms. It is noteworthy how many pupils go on to study Politics successfully as a whole or part-degree

**Entry Requirements**
Students should have an interest in current affairs and a willingness to debate and discuss.
Studying Psychology at Bedford Modern School offers students the opportunity to learn core scientific psychological knowledge and develop theoretical and practical skills valued by Higher Education and employers, including critical analysis, independent thinking and research. The study of Psychology contributes to students’ broader understanding of scientific, ethical and social issues. Thus, it develops an appreciation of the variety and complexities of the human condition. It promotes understanding of self and others, and challenges previously acquired perceptions.

**Syllabus Content**

**AS Level: 2 Papers**
Social influence, memory, attachment, psychological approaches (including biopsychology), psychopathology and research methods. 10% of marks are awarded for mathematical skills. There are 2 written examinations including short and extended answer questions. Each paper is 90 minutes in duration and worth 50% of total marks awarded.

**A Level: 3 Papers**
Students are tested on the entire AS content plus: Issues & debates, relationships, aggression & schizophrenia. There are 3 written examinations including short and extended answer questions. Each paper is 2 hours in duration and worth 33% of total marks awarded.

**Non-examined assessments:** None.

**Resources**
Students are issued with an AQA endorsed textbook that is supported by an online version containing additional resources. The Psychology Department and main school library has an extensive library of additional books for those students who wish to read beyond the specification.

**Career paths and complementary subjects**
Studying A Level Psychology is useful for a range of social science, arts and healthcare related degrees including Nursing, Occupational therapy, Sports Science, Psychology, Sociology, and Speech Therapy and Social Work. Some universities accept it for entry into Medical degrees.

**Entry Requirements**
Grade B in Biology and one other science.
Grade B in English Language or Literature and Mathematics.
Religious Studies is an increasingly popular subject to study at AS and A Level. This is due in part to the consistently strong GCSE results in the subject at Bedford Modern School, but mostly because of the content of the course. The courses aim to promote an enquiring, critical and empathetic approach to the study of belief systems. It is therefore equally appropriate to those taking predominantly science focussed subjects as those with a Humanities or wider Arts portfolio. There is a great deal of contiguity and complementarity across the curriculum, particularly in terms of the skills required in other essay based subjects such as English or History. As a Department we focus on the skills of academic argument and reasoning, which link to and assist in the development of clarity of thought.

**Syllabus Content**

**AS Level: 3 Papers**
- Paper 3 – Ethics – comprising of three theme areas: Ethical thought part 1, Deontological Ethics part 1 and Teleological ethics parts 1 & 2.

**A Level: 3 Papers**
- Paper 3 – Ethics – comprising of three theme areas: Ethical thought part 2, Deontological Ethics part 2 and Determinism and Free Will parts 1 & 2.

**Non-examined assessments:** None.

**Resources**
There are two student textbooks covering the entirety of the course.

**Career paths and complementary subjects**
Religious Studies provides an excellent stepping stone to a wide variety of courses at the top universities. More generally, Religious Studies A Level is excellent preparation for a wide range of careers.

**Entry Requirements**
Pupils should have gained at least grade B in RS at GCSE. Candidates who have not studied the subject before must have achieved well in subjects such as English and History.
Why settle for just one world language........

........ when you could be speaking two?

As the Mexican author Carlos Fuentes said in 1998: “Hablar más de una lengua no daña a nadie. El monolingüísmo es una enfermedad curable”. (Speaking more than one language never hurt anyone...but speaking just one language can be cured.) If you decide to take Spanish at AS Level at Bedford Modern School you will follow the AQA GCE Spanish syllabus.

Syllabus Content

AS Level: 2 Papers plus a speaking test
- Non-exam assessment: Speaking test (30% of AS) (12-14 minutes plus 15 minutes preparation time).
- Paper 1 Listening / Reading / Translation into English (40% of AS) (1 hour 45 minute written paper).
- Paper 2 Translation into Spanish/Writing about a set film `Volver' (30% of AS) (1 hour 15 minutes).

A Level: 2 Papers plus a speaking test
- Non exam assessment: Speaking test (30% of A Level) (21-23 minutes plus 5 minutes preparation time).
- Paper 1 Listening / Reading / Translation into English (40% of A Level) (2 hours 30 minutes).
- Paper 2 Writing about two set books or a film and a book from the prescribed list (30% of A Level) (2 hours).

Non-examined assessments:
Speaking test (30% of AS and A Level).

Resources
The new A Level syllabus at AS and A Level textbook; a grammar exercise and reference book; a DVD of `Volver' (AS) and a play `La casa de Bernada Alba' by Lorca (A2); Kerboodle for listening, extension and independent study. There are also regular lessons with native Spanish speaking Assistants.

Career paths and complementary subjects
Spanish is useful for any career involving translation, working in the foreign language in business, marketing, sales, retail, teaching, politics, the hotel, restaurant and tourist trade, banking, the telecommunications industry, service industries as well as law, medicine, dentistry the caring professions and social work.

Entry Requirements
Pupils require a minimum of a grade B at GCSE but a grade A or higher offers more guarantee of success.
96% A*-C

Nearly one third of students obtained 3 A grades or better.

Destination by institution of leaving Year 13 students July 2016

Institutions are shown in different sizes proportional to the number of students choosing that destination.