
Sixth Form Education

2019/2020



Sixth Form Studies at Landau Forte College Derby

Thank you for your interest in sixth form studies at Landau Forte College Derby.

The information in this booklet is designed to help you make informative decisions about your future studies. The Admissions Criteria and Procedure are outlined, along with detailed information on each subject available to sixth form students.

It is important that you examine these subject pages carefully, particularly concentrating on the subjects you are interested in studying at sixth form.

If you have any queries regarding your choices, please email us: sixthform@landau-forte.org.uk

Contents

Sixth Form Admissions Procedure.....	4
Sixth Form Admissions Criteria – 2019/2020.....	4
Sixth Form Admissions Procedure for Existing Students – 2019/2020.....	4
Sixth Form Admissions Procedure for New Students – 2019/2020.....	5
Sixth Form Course Information.....	6
An Introduction to Level 3 Qualifications.....	7
AS and A Levels.....	7
Level 3 Vocational Courses.....	8
Raising of the Participation Age.....	8
Approaches to Learning.....	11
The Core Programme.....	12
BTEC Level 3 National Diploma in Applied Science.....	13
BTEC Level 3 National Extended Certificate in Applied Science.....	14
BTEC Level 3 National Diploma in Business.....	15
BTEC Level 3 National Extended Certificate in Business.....	16
BTEC Level 3 National Extended Certificate in Engineering.....	17
BTEC Level 3 National Extended Certificate in IT.....	18
OCR Level 3 Cambridge Technical Extended Certificate in Performing Arts.....	19
Level 3 Cambridge Technical Extended Certificate in Sport and Physical Activity.....	20
A Level Art and Design: Fine Art.....	21
A Level Biology.....	22
A Level Business Studies.....	23
A Level Chemistry.....	24
A Level Computer Science.....	25
A Level Design and Technology: Product Design (3-D Design).....	26
A Level English Language and Literature.....	27
A Level English Literature.....	28
A Level Geography.....	29
A Level German.....	30
A Level History.....	31
A Level Mathematics.....	32
A Level Further Mathematics.....	33
A Level Physics.....	34
A Level Psychology.....	35
A Level Religious Studies.....	36
A Level Spanish.....	37

Sixth Form Admissions Procedure

Sixth Form Admissions Criteria – 2019/2020

Students must:

- be interested in studying within the range of subjects and the permitted combinations on offer.
- have five GCSEs at grades 9-4, including English and Mathematics, for all pathways.
- Meet the specific subject entry requirements (see table on page 10).

Sixth Form Admissions Procedure for Existing Students – 2019/2020

Open Evening: Wednesday 10 October 2018 – 5.00pm

All Year 11 Landau Forte College Derby students together with parents/carers are invited to attend the Open Evening on Wednesday 10 October 2018, when subject teams will be available to meet you. There will be a presentation at 5.00pm in the Theatre.

Students will receive a Sixth Form application form on which they can indicate their chosen courses in October, which must be returned by Friday 16 November via the students' Personal Tutor to Reception.

January 2019

A conditional offer will be made by the end of January 2018, which states the combination of subjects offered. Please note that courses offered are subject to demand. The pro-forma indicating whether the student intends to accept the offered place should be returned by the date indicated on the letter.

Thursday 22 August 2019 – GCSE Results Day

When GCSE results are published, the conditional offer will be confirmed or a revised offer may be made because of GCSE results. The student should inform us immediately whether they wish to take up their place at Landau Forte College Derby.

The new term for sixth form students will begin with an Induction programme on Thursday 5 and Friday 6 September 2019.

Sixth Form Admissions Procedure for New Students – 2019/2020

Open Evenings

- Wednesday 10 October 2018 – 6.00pm students together with parents/carers are invited to attend the Open Evening when subject teams will be available to meet you. There will be a presentation at 6.00 pm in the Theatre.
- Thursday 11 October 2018 – 5.00pm students together with parents/carers are invited to attend the Open Evening when subject teams will be available to meet you. There will be a presentation at 5.00 pm in the Theatre.
- Thursday 17 January 2019 – Students together with parents/carers are invited to attend the Open Evening from 5.00 pm when staff from the Sixth Form team will be available to speak to you.

Friday 25 January 2019

This is the final deadline for admission to sixth form education at Landau Forte College Derby, commencing in September 2019.

February 2019

Letters will be sent out in late February 2019, once predicted grades are known, informing students of the outcome of their application. If they have been successful then a conditional offer will be made which states the combination of subjects offered (please note that courses offered are subject to demand).

Students will either receive a conditional offer, or a 'hold' until GCSE results are known. Return slips indicating whether the student wishes to accept or decline the conditional place must be completed and returned to the College by the date indicated on the letter.

Thursday 22 August 2019 – GCSE Results Day

On receiving their GCSE results in August, students holding a conditional or hold offer from the College must contact the office to give their results. A definite 'accept' or 'decline' will be offered at that time and students must confirm whether they wish to take up their place at Landau Forte College Derby.

The new term for sixth form students will begin with an Induction programme on Thursday 5 and Friday 6 September 2019.

Sixth Form Course Information

Types of Courses

- BTEC Level 3 (Diploma and Extended Certificate)
- A Level
- Level 3 Cambridge Technical

General Entry Requirements

Five GCSE passes (grades 9-4) including English and Mathematics

N.B. Many subjects may require entry grades of 9-6 or higher in relevant GCSEs. More specific information is confirmed in the table on page 10

An Introduction to Level 3 Qualifications

AS and A Levels

Following a period of consultation, new AS and A Levels in a number of subjects have been delivered in schools and colleges across England since September 2015. This led to the first results for new AS levels in 2016 and for the new A Levels in 2017. Subsequently, new AS and A levels in further subjects were launched for first teaching in 2016 and the remainder were launched in September 2017.

Traditionally, AS (Advanced Subsidiary) and A (Advanced) Level qualifications were courses that were assessed mainly through examinations, though may include some elements of controlled assessment. There was also assessment of practical skills in subjects like the sciences, Design Technology and the arts.

A Levels are highly valued by colleges, universities, employers and professional bodies, both across the United Kingdom and worldwide.

The AS Level qualification was normally completed in Year 12. Previously, if students continued to study the subject in Year 13, they would have normally completed the A2 course, leading to an A Level qualification. This was because A Levels were traditionally, on the legacy specifications, made up of the AS level and the A2, where the A2 was not a separate qualification, but was designed to deepen the knowledge gained during AS Level. Each part of the A Level (AS and A2) made up 50 per cent of the overall grade.

Previously students did not complete the A Level course in every subject they took at Sixth form; they used to study the AS level as a free-standing qualification. Most sixth form students at the College would have started on a four A Level (or equivalent) pathway in Year 12 but would have continued with three subjects into Year 13; the other subject would be certificated at the AS Level. However, due to the enhanced rigour and challenge of the new A Levels, most students now start a three subject pathway which they will continue with into Year 13.

The main features of the new qualifications, most of which were launched in September 2015 are:

- a) Although assessment remains largely through examination, other types of assessment are only used where they are needed to test essential skills
- b) AS and A levels are only assessed at the end of the course. Usually, AS assessments take place after one year of study with A levels after two years. Courses are no longer divided into modules and there are no exams in January. The vast majority of students at Landau Forte College will not sit A Levels.
- c) AS and A levels have been decoupled, ie: AS results no longer contribute towards an A level.
- d) AS levels have been designed to be taught alongside the first year of A levels. Therefore, if a student takes an AS examination in the new linear courses at the end of Year 12, then goes on to study the second year of the A Level in Year 13, they must be examined on the whole of the course content at the end of Year 13.
- e) The content of the new A levels has been reviewed and updated.

Adapted from: [4 http://www.ofqual.gov.uk/files/A-levelGuide.pdf](http://www.ofqual.gov.uk/files/A-levelGuide.pdf)
Reformed GCSEs and A Levels – An overview. SSAT. 15th February 2015

Level 3 Vocational Courses

BTECs and OCR Cambridge Technical Introductory Diplomas are work-related qualifications designed to accommodate the needs of employers and allow progression to university. They provide a practical, real-world approach to learning alongside a key theoretical background. BTECs and OCR Cambridge Technical Introductory Diplomas are recognised by colleges, universities, employers and professional bodies across the United Kingdom and in over 100 countries worldwide.

OCR Cambridge Technical Introductory Diplomas are not exam-based qualifications; instead, students study real-life, work-based case studies and complete projects and assessments, which contribute to achieving each unit studied. However, following the launch of new specifications for first teaching in 2016, Level 3 BTECs now also have examined units which contribute to the final overall outcome.

They can be taken as well as, or in place of, A Levels in schools and colleges; as such, these qualifications are suitable for students aged 16 upwards and are recommended for those who have achieved at least five 9-4 graded GCSEs.

Each BTEC subject is made up of units. The number of units is dependent on the level and size of BTEC being studied. In order to complete each unit, students must achieve against a set of outcomes. Students are required to demonstrate their understanding of the theory through completing practical exercises. The projects that students undertake form the basis of their unit results which are graded as a Pass, a Merit or a Distinction. It is also possible to achieve Distinction*, which is equivalent to A* at A Level.

There are two types of Level 3 BTECs, each of which is offered as a two-year course at the College:

- BTEC Diploma - this is equivalent to two GCE A levels and is made up of 12 units.
- BTEC Extended Certificate – this is equivalent to one GCE A level, and is made up of 6 units.
- OCR Cambridge Technical Introductory Diplomas are equivalent to one GCE A level. Students will be graded pass, merit, distinction or distinction* for each unit, which will then be added together, using a points system, to give an overall grade for the whole qualification.

Adapted from: http://www.edexcel.com/quals/introd/Documents/BTEC_Parents_Guide.pdf

Raising of the Participation Age

Did you know that all young people now remain in education or training until they are 18? In the past, young people could leave education when they were 16 but Government policy means all young people are now expected to stay in some form of learning until they are 18.

Why do I need to stay in education longer?

The world of work is changing. New jobs are being created and many will be more complicated and demanding. Therefore, employers will be looking for people with more skills, training and qualifications. The more training and qualifications you have, the better your chances of getting a good job that you enjoy in the future. In fact, why stop at 18? You can carry on into Higher Education or training after you are 18 to further improve your chances.

Does this mean I've got to stay at school until I'm 18?

No, it's not just about staying at school — although lots of people will choose to. There will be lots of other routes available as well. These will be offered by employers, colleges and training providers and will include Apprenticeships, vocational courses, voluntary work and jobs with training.

What does this mean for me?

It means that you should start thinking about the type of learning or training you need to do, to get you where you want to be in the future.

From the age of 14, you will have more choice about the different pathways to follow – not just GCSEs and A levels but lots of other types of qualification will also be available including Apprenticeships and vocational courses.

For more information you can go to The National Careers Service, which can be accessed via the website www.nationalcareersservice.direct.gov.uk or by calling 0800 100 900.

For more local information about qualifications log onto www.connexions-derbyshire.org — click on **Education** and then Qualifications explained. You can also log on to www.routes-ahead to find out what courses are on offer in your area.

SUBJECT COURSE REQUIREMENTS 2019/20

a) **General Entry Requirements - Five GCSE passes (grades 9-4) including English Language & Mathematics**

Course Choice	Entry Requirements
BTEC Level 3 National Diploma in Applied Science	GCSEs graded 9 to 5 in two Science subjects, OR BTEC First in Science Level 2 graded Distinction* to Merit, and a grade 9-5 in Maths.
BTEC Level 3 National Extended Certificate in Applied Science	
BTEC Level 3 National Diploma in Business	b) BTEC First in Business Level 2 graded Distinction* to Merit, OR GCSE Business graded 9 to 5, and GCSE Mathematics graded 9-5 OR c) For students who have not previously studied Business, GCSEs graded 9-5 in English AND Mathematics
BTEC Level 3 National Extended Certificate in Business	
BTEC Level 3 National Extended Certificate in Engineering	GCSE graded 9-6 in Mathematics, GCSEs graded 9 to 5 in Science AND a Technology (Engineering, Electronics, Product Design, Resistant Materials or Systems and Control only) OR BTEC Engineering First Certificate or Award Level 2 Distinction* to Merit.
BTEC Level 3 National Extended Certificate in IT	Applied GCSE ICT graded 9 to 5, OR GCSE ICT graded 9 to 5, OR Distinction to Merit in DIDA or CIDA, OR OCR Nationals in ICT Award or Certificate graded Level 2 Distinction to Merit, OR OCR Nationals in ICT First Certificate graded Distinction to Merit, OR BTEC First in ICT Level 2 graded Distinction* to Merit.
OCR Level 3 Cambridge Extended Certificate in Performing Arts	GCSE grade 9 to 5 in Performing Arts, Drama, Music or Dance; OR a high level qualification in any of the art forms from a recognised Awarding Body OR evidence of advanced skills in Theatre, Sound or Lighting Technology.
OCR Level 3 Cambridge Extended Certificate in Sport and Physical Activity	a) GCSE Physical Education graded 9 to 5 OR OCR National in Sport graded Level 2 Distinction to Merit OR BTEC Sport graded Level 2 Distinction* to Merit, OR b) For students who have not previously studied Physical Education/Sport, GCSE English graded 9-5 AND GCSE Biology graded 9 to 5 OR Combined Science graded 9 to 5)
AS/A Level Art	GCSE graded 9 to 6 in Art & Design (OR BTEC First in Art and Design graded Level 2 Distinction* to Merit) AND GCSE English Language or Literature graded 9-5.
AS/A Level Biology	Two GCSEs graded 9 to 6 in Combined Science (OR GCSEs graded 9 to 6 in Biology AND Chemistry OR Physics) AND Mathematics graded 9-6.
AS/A Level Business Studies	a) GCSE Business graded 9 to 6, (OR BTEC First in Business graded Level 2 Distinction* to Merit) and GCSE Mathematics graded 9-6, OR b) For students who have not previously studied Business, GCSEs graded 9-6 in English AND Mathematics
AS/A Level Chemistry	Two GCSEs graded 9 to 6 in Combined Science (OR GCSEs graded 9 to 6 in Chemistry AND Biology OR Physics) AND Mathematics graded 9-6.
A Level Computer Science	GCSE Mathematics graded 9-6.
AS/A Level Design & Technology: Product Design	GCSE Technology graded 9 to 6 (Systems & Control, Engineering, Graphics, Product Design or Resistant Materials) OR BTEC Engineering First Certificate Level 2 Distinction* to Merit.
AS/A Level English Language and Literature	GCSEs graded 9-6 in English Language AND English Literature.
AS/A Level English Literature	GCSEs graded 9-6 in English Language AND English Literature.
AS/A Level Geography	a) GCSE graded 9-6 in Geography, OR b) For students who have not previously studied Geography, GCSE English graded 9 to 6.
AS/A Level German	GCSE graded 9-6 in German.
AS/A Level History	a) GCSE graded 9 to 6 in History, OR b) For students who have not previously studied History, GCSE English graded 9 to 6.
AS/A Level Mathematics	GCSE Mathematics graded 9-7.
AS/A Level Further Mathematics	GCSE Mathematics graded 9-7.
AS/A Level Physics	Two GCSEs graded 9-6 in Combined Science (OR GCSEs graded 9-6 in Physics AND Biology OR Chemistry) AND Mathematics graded 9-6.
AS/A Level Psychology	GCSEs graded 9-6 in English Language or Literature AND Mathematics AND GCSE Graded 9-6 in a Science subject.
AS/A Level Religious Studies (Philosophy & Ethics)	a) GCSE Religious Studies graded 9-6, OR b) For students who have not previously studied GCSE Religious Studies, GCSE English graded 9-6.
AS/A Level Spanish	GCSE graded 9-6 in Spanish.

* Please note course and specific entry requirements may be subject to change in light of changes to the curriculum.

Approaches to Learning

At Landau Forte College Derby, there are a number of key learning behaviours which are developed throughout all of our courses, as part of our focus on maximising each student's outcomes.

We encourage students to be **enquiry-minded** about their learning, to **ask questions** of themselves, their tutors, their peers and resources used.

We want our students to develop **positive learning habits** which will provide the basis for effective lifelong learning.

This means that we want our students to **notice details** in everything they do; to be able to **make links** and **identify patterns** which are transferrable across all areas of the curriculum.

An effective learner will be able to think through their ideas and **plan** things out; they will be able to work closely with others on **collaborative** tasks which will improve their understanding; they will **regularly review** their learning and have the opportunity to **amend** their ideas.

Independent learning is a strong feature of all courses at sixth form, and students are expected to draw on all of these habits in order to learn effectively outside of formal sessions.

The Core Programme

Detailed below are the elements of sixth form studies which we call the Core Programme and is all compulsory to all students.

As part of the Core Programme students will undertake preparation for their Year 12 Work Placement, as well as building personal statement for UCAS application and CVs for apprenticeship applications.

Alongside this students will enjoy an introduction to Politics and Law. Furthermore, they will learn about a range of issues that could affect their well-being.

Induction Programme

During this programme, held at the start of September over two days, students will receive information and guidance which will enable them to make an immediate and effective start to their sixth form studies. During this time, students will be introduced to their Personal Tutor and their tutor group and students who are new to the College will receive appropriate training in the use of the IT network. Students will focus on becoming organised for the challenges of sixth form learning with emphasis placed on developing effective relationships with Learning Tutors and on preparing students to make full use of their private study sessions.

Careers Guidance

Students have access to both Landau Forte College Derby Careers tutors and to our Careers Counsellor who attends the College to help with careers sessions and to offer individual interviews on request. Students are carefully guided through their application to University, Further Education, Apprenticeships or Employment.

Work Placement Programme

During Year 12, students will undertake a major compulsory work placement that will support their academic/vocational studies and their application to Higher Education or employment.

Enrichment Activities

All students have the opportunity to participate in a range of physical and performance activities through the College's enrichment programme. The primary objective of the programme, mainly scheduled on Wednesday afternoons and after College on other days, is to provide the chance for students to gain competitive and recreational experiences.

BTEC Level 3 National Diploma in Applied Science

Examination Board: Edexcel

Aims of the Course

This is designed to provide highly specialist work-related qualifications in a vocational sector. It will give learners the knowledge, understanding and skills that they need to prepare for employment, or to progress onto higher education, degree and professional development programmes.

Programme of Study

Eight units of study which include:

- Unit 1: Principles and applications of science I (external examination)
- Unit 2: Practical scientific procedures and techniques (portfolio)
- Unit 3: Scientific investigation skills (external task)
- Unit 4: Laboratory Techniques and their Applications (portfolio)
- Unit 5: Principles and applications of Science II (external examination)
- Unit 6: Investigative Project (portfolio)
- Unit 8: Physiology of Human Body Systems (portfolio)
- Unit 12: Infection and Disease

The optional units have been chosen to provide the students with a board curriculum, which exposes them to three science disciplines. Students will develop skills and knowledge which they were exposed to during GCSE science.

Assessment is through portfolio work, external set assignment and external examination. External tasks are practical tasks set by Edexcel which you will need to complete and then complete an examination based on the practical. External examinations are completed during the summer examination season, the examination are 1.5 hours in duration. Portfolio assignments are marked internally and take a variety of forms including written reports, verbal presentations, practical investigations and practical write ups.

The qualification is equivalent to two A Levels. Students will be graded Pass, Merit; or Distinction for each unit, which will then be added together, using a points system, to give an overall grade for the whole qualification. Students will receive 2 grades for the qualification; Pass Pass; Merit Pass; Merit Merit; Distinction Merit; Distinction Distinction; Distinction* Distinction; or Distinction* Distinction*.

Who is this course aimed at?

This course has an equivalency of two A Levels and is accepted as a qualification into Higher Education.

A BTEC is a good preparation for a career in the science industry and is an excellent route to employment and training as well as Higher Education.

Students will need the ability to work on their own initiative and work to deadlines.

BTEC Level 3 National Extended Certificate in Applied Science

Examination Board: Edexcel

Aims of the Course

This is designed to provide highly specialist work-related qualifications in a vocational sector. It will give learners the knowledge, understanding and skills that they need to prepare for employment, or to progress onto higher education, degree and professional development programmes.

Programme of Study

Four units of study which include:

- Unit 1: Principles and applications of science I (external examination)
- Unit 2: Practical scientific procedures and techniques (portfolio)
- Unit 3: Scientific investigation skills (external task)
- Unit 8: Physiology of Human Body Systems (portfolio)

Assessment is through portfolio work, external set assignment and external examination. External tasks are practical tasks set by Edexcel which you will need to complete and then complete an examination based on the practical. External examination is completed during the summer examination season, the examination in 1.5 hours in duration. Portfolio assignments are marked internally and takes a variety of forms including written reports, verbal presentations, practical investigations and practical write ups.

Students will be graded Pass, Merit or Distinction for each unit, which will then be added together, using a points system, to give an overall grade for the whole qualification. A Distinction* is equivalent to A* at A Level, Merit to a C and Pass to an E.

Who is this course aimed at?

This course has an equivalency of one A Level and is accepted as a qualification into Higher Education.

A BTEC is a good preparation for a career in the science industry and is an excellent route to employment and training as well as Higher Education.

Students will need the ability to work on their own initiative and work to deadlines. The modules studied will to give students a breadth of knowledge and understanding that will be essential in continuing their studies in the Science industry.

BTEC Level 3 National Diploma in Business

Examination Board: Edexcel

Aims of the Course

A two-year course which aims to advance and promote the quality and availability of work related education for students either preparing for employment or planning to progress to Higher Education. This qualification is made up of eight units and is equivalent to two A Levels.

Programme of Study

Eight units of study which include:

- Exploring Business (internal)
- Developing a Marketing Campaign (external)
- Personal and Business Finance (external)
- Managing an Event (internal)
- International Business (internal)
- Principles of Management (external)
- Plus two optional units (internal)

Five units are **internally assessed** through coursework, which is subject to external moderation. Three units are **externally assessed**. Developing a Marketing Campaign and Principles of Management involves students completing coursework tasks which are set and assessed by the examination board. Personal and Business Finance is assessed by an external examination.

Students will be graded pass, merit or distinction for each unit, which will then be added together, using a points system, to give overall grades for the whole qualification. Grades awarded range from Distinction* Distinction* (D*D*) which is the equivalent to A*A* at A Level and Pass Pass (PP) which is equivalent to EE at A Level.

Who is this course aimed at?

Students do not need a prior knowledge of Business Studies as the course will start from the basics. However, it would be an advantage.

This course has an equivalency of two A Levels and is accepted as a qualification into Higher Education.

A BTEC is a good preparation for a career in business and is an excellent route to employment and training as well as Higher Education.

BTEC Level 3 National Extended Certificate in Business

Examination Board: Edexcel

Aims of the Course

A two-year course which aims to advance and promote the quality and availability of work related education for students either preparing for employment or planning to progress to Higher Education. This qualification is made up of four units and is equivalent to one A Level.

Programme of Study

Four units of study which include:

- Exploring Business (internal)
- Developing a Marketing Campaign (external)
- Personal and Business Finance (external)
- The Recruitment and Selection Process (internal)

Two units are **internally assessed** through coursework, which is subject to external moderation. Two units are **externally assessed**. Developing a Marketing Campaign involves students completing a coursework task which is set and assessed by the examination board. Personal and Business Finance is assessed by an external examination.

Students will be graded pass, merit or distinction for each unit, which will then be added together, using a points system, to give an overall grade for the whole qualification. A Distinction* is equivalent to A* at A Level, Merit to a C and Pass to an E.

Who is this course aimed at?

Students do not need a prior knowledge of Business Studies as the course will start from the basics, however, it would be an advantage.

This course has an equivalency of one A Level and is accepted as a qualification into Higher Education.

A BTEC is a good preparation for a career in business and is an excellent route to employment and training as well as Higher Education.

For more detail on the specification visit: www.edexcel.org.uk/quals/nat/business

BTEC Level 3 National Extended Certificate in Engineering

Examination Board: Edexcel

Aims of the Course

This is a two-year course which aims to advance and promote the quality and availability of work-related education for students either preparing for employment or planning to progress to Higher Education.

Programme of Study

Four units of study which include:

- Engineering Principles
- Delivery of Engineering Processes Safely as a Team
- Engineering Product Design and Manufacture
- Optional Unit (To be confirmed)

The course features both internally and externally marked assessments. Students will be graded pass, merit or distinction for each unit, which will then be added together, using a points system, to give an overall grade for the whole qualification. A Distinction* is equivalent to A* at A Level, Merit to a C and Pass to an E.

Who is this course aimed at?

The course is aimed at students who are interested in some form of engineering as a career or for further study. A fair degree of practical ability together with a mathematical/scientific interest would be helpful.

On completion of the course you might consider a career in mechanical, electrical, electronic, manufacturing, or civil engineering etc. This could be at technician level or a traditional or modern apprenticeship.

This course has an equivalency of one A Level and is accepted as a qualification for entry into Higher Education. It will provide an entry qualification for a wide range of degree courses (mechanical engineering, electronics, manufacturing systems, aerospace, etc.) at both B.Eng and M.Eng level.

BTEC Level 3 National Extended Certificate in IT

Examination Board: Edexcel

Aims of the Course

This course aims to provide candidates with high quality, industry related qualifications. It is a vocationally related qualification which provides valuable opportunities for individuals to develop skills and gain relevant knowledge and understanding in IT. This course will support entry into employment or Higher Education.

Programme of Study

AS Level equivalent – 2 units

A2 Level equivalent – 4 units

There are 4 units studied over the 2 years 3 of which are Mandatory and 1 optional:

- Unit 1: Information Technology Systems
- Unit 2: Creating Systems to Manage Information
- Unit 3: Using Social Media in Business
- Unit 6: Website Development

Approaches to Learning

Students are expected to gain an understanding and appreciation of the use of ICT by learning in a variety of ways:

- Practical tasks
- Group research tasks
- Case studies
- Visits and external visitors

In the BTEC Nationals units are assessed in three different ways.

- Assignment set and marked internally
- Assignment set and marked by Edexcel
- Written exam set and marked by Edexcel.

The full award and individual units from this qualification are graded as Pass, Merit or Distinction.

Who is this course aimed at?

These qualifications are aimed at young people aged 16-19 in full-time further education who are seeking a career in ICT or wishing to further their studies in Further or Higher Education.

OCR Level 3 Cambridge Technical Extended Certificate in Performing Arts

Examination Board: OCR

Aims of the Course

Cambridge Technical is new vocational qualification designed as a work-focused alternative to A Levels. The course is designed to give you opportunities to demonstrate and develop the practical application of knowledge and understanding in production techniques and performance craft. Students can specialise in one or more areas of Dance, Music and Drama. Students will have to demonstrate and evidence skill development, knowledge of the performing arts industry, professional practice and performance craft through both written and practical examinations and also through the creation of written portfolios.

Programme of Study

Students will work collaboratively as a Production Company, taking on individual roles and responsibilities that best suit their skills and interests. Your Production Company will be required to produce public and community performances throughout the course.

This is a 2 year course that includes the completion of 5 units of work:

Unit 1: Prepare to work in the Performing Arts GLH 120 (Mandatory)

Examination paper set and marked by the exam board. Requires students to pitch to a camera, preparation of written documents to support the brief and perform to the camera for 5 minutes maximum. Unit consists of acquiring and developing skills and understanding the complexities of working freelance in this Industry.

Unit 2: Proposal for a Commissioning Brief GLH 60 (Mandatory)

Written Examination paper set and marked by the exam board. Requires students to complete a written report. Unit comprises understanding how to work as a Community Artist developing specific projects.

Unit 3: Influential Performance practise GLH 60 (Mandatory)

Examination paper set and marked by the exam board. Requires students to write a report and perform to the camera for 5-8 minutes. Unit consists of developing knowledge and understanding about different genres, styles and periods, social, cultural and historical influences and significant developments and practitioners.

The 2 other units are optional and these will be decided by the tutors based on the knowledge and experience of the students in the group.

Who is this course aimed at?

Students who have already recognised their own need and aspirations to develop skills knowledge and understanding of Performing Arts and have a track record of participation in rehearsals and performances, commitment and enthusiasm, during and beyond the normal college day. A vital dimension of extension work in this course is the participation in one or more performance ensembles that meet between 3:30 and 4:30pm during the college week. You will not be able to achieve the qualification unless you have attended at least one extension group in Music, Dance or Drama. These groups meet once a week for an hour.

Level 3 Cambridge Technical Extended Certificate in Sport and Physical Activity

Examination Board: OCR

Why choose Cambridge Technicals in Sport and Physical Activity?

Launching for first teaching September 2016, our Level 3 Cambridge Technicals in Sport and Physical Activity offer specialist pathways in coaching, leadership and physical education. Students will apply their practical skills and knowledge in preparation for further study or the workplace.

This qualification is not just about being able to play sport; it will provide learners with the skills, knowledge and understanding to progress into Higher Education on a sport-related programme such as Sport and Physical Education, Sport Science, Sport Coaching and Development or Sport and Leisure Management.

Programme of Study

Learners will take between five and six units made up of mandatory and optional units:

Everybody will study the following mandatory units:

- Body systems and the effects of physical activity – Externally examined unit
- Sports coaching and activity leadership
- Sports organisation and development – Externally examined unit

These units will give learners an understanding of sport in the wider contexts of coaching and leadership, anatomy and physiology, the body's short- and long-term responses to physical activity and the framework of sport in the UK and the organisations involved.

Learners will also develop transferable skills such as planning, communication, adaptability and leadership.

Students will be graded pass, merit, or distinction for each unit, which will then be added together, using a points system, to give an overall grade for the whole qualification. A Distinction* is equivalent to A* at A Level, Merit to a C and Pass to an E.

Who is this course aimed at?

Students do not need a prior knowledge of Sport or Physical Education, however, it would be an advantage.

The Certificate takes 360 guided learning hours to deliver. This means it's a similar size to an A level. This gives learners the flexibility to take other qualifications, vocational or academic, in preparation for further study in the sector.

A Level Art and Design: Fine Art

Aims of the Course

Art is both a form of communication and a means of expression of ideas and feelings. A Level Art provides an ideal structure for students who wish to pursue Art & Design at degree level or as a career.

You will also:

- Explore, research and acquire techniques to develop skills knowledge and understanding in a range of media
- Use traditional methods and or digital techniques to produce work
- Explore relevant images, artefacts and resources
- Develop chosen themes, ideas or issues to support you skills and knowledge understanding
- Record through drawing or other media
- Develop understanding of mind in relation to developing own ideas, refining own intentions in order to present a personal and meaningful outcome

Programme of Study

At Year 12 students will study:

“Linear”

Skills acquisition, development & critical understanding, through a sustained project.

External set task

100% of total AS Level. Students will select and respond to theme, released in January. The outcome will be made during a 10 hour controlled period. This component is internally assessed, and if entered for AS externally moderated.

At Year 12 students will study in addition to the AS content:

Personal Investigation

60% of total A Level. This requires two elements; A portfolio of practical work showing a personal response to a starting point; and a related study of continuous prose with a guided minimum of 1000 words. This component is internally assessed and externally moderated.

Externally set task

40% of total A level. Students will select and respond to theme, released in February. The outcome will be made during a 15 hour controlled period. This component is internally assessed and externally moderated.

Who is this course aimed at?

We are looking for students who have a real interest for this subject, who believe in Art with a passion. They need to be willing to experiment and take risks. It is very important that students have the literacy skills necessary to deal with the extended writing required within the Personal Investigation.

A Level Biology

Examination Board: OCR

Accreditation Number: 601/4260/1

Aims of the Course

The aim of A Level Biology is to develop interest in and enthusiasm for Biology, and to allow students to develop their knowledge and understanding of biological facts and principles drawn from different areas of the biological sciences. Through studying Biology, students will gain an appreciation of how society makes decisions about scientific issues, and how the sciences contribute to the economy and society.

Programme of Study

Year 12

This is a stand-alone qualification, which is taught alongside the full A level but which does not count towards it. There are four taught modules.

The first module is the **Practical Skills module** which covers skills of planning, implementing, analysis and evaluation. **Foundations in Biology** covers fundamental concepts needed throughout the course, for example; cell structure and cell division, and biological molecules. During **Exchange and Transport**, students learn about transport in animals and plants. **In Biodiversity, Evolution and disease topics covered include** classification, evolution and how biodiversity can be maintained as well as communicable diseases and the immune system.

The two papers are taken at the end of the year:
Breadth in Biology – multiple choice and short answer questions covering all four modules
Depth in Biology –structured and extended answer questions again covering all four modules

Year 13

Students will study the same four modules as those on the AS course in the first year and in the second year will study two further modules.

Communication, Homeostasis & Energy

includes many of the central aspects of Biology: photosynthesis, respiration, excretion and communication through nerves and hormones. Students will also study plant and animal responses. The ways in which our knowledge of genetics and the genome are used are explored within **Genetics, Evolution and Ecosystems**.

Also in this unit students will study Biotechnology and cloning and issues of sustainability.

The final examination, at the end of two years of study, consists of three papers;

Biological Processes – a variety of questions covering modules one, two, three and five.

Biological Diversity covering modules one, two four and six

Unified Biology – covering all six modules

Practical Skills Assessments at A Level

In both Year 12 and Year 13, practical skills will be assessed through completion under controlled conditions of a minimum of 12 internally assessed practical activities. At A level the students will be awarded a certificate of practical competence. This will not count towards their final grade. At AS level there is no separate practical assessment though students will still be taught the relevant practical skills.

Who is this course aimed at?

This course suits students who have studied GCSE Combined Science or GCSE Separate Sciences (Biology, Chemistry and Physics) to a minimum of a grade 6 and achieved a minimum of a grade 6 in Mathematics. You need to be confident in your practical abilities as well as being interested in how science is used by society. A Level Biology may lead to a wide variety of courses in Higher Education.

A Level Business Studies

Examination Board: Edexcel

Aims of the Course

This course aims to advance and promote the quality and availability of work-related education to students who are either preparing for employment or planning to progress to higher education.

Programme of Study

The AS comprises 2 themes and will be studied in Year 12. To achieve the A Level qualification, two further themes will need to be studied in Year 13.

Year 12 Themes:

- Marketing and people
- Managing business activities

Year 13 Themes:

- Business decisions and strategy
- Global business

Each theme is assessed through external examinations.

Who is this course aimed at?

Students do not need a prior knowledge of Business Studies as the course will start from basics, but it would be an advantage. The course opens up a wide variety of options in Higher Education, including: Business, Economics, Accounting and Finance, Management, HR, International/European Business, Law, Information Systems with Business. It also offers a creditable route into employment and training.

A Level Chemistry

Examination Board: OCR

Aims of the Course

The aim of A Level Chemistry is to develop interest in and enthusiasm for Chemistry, and to allow students to develop their knowledge and understanding chemical principles drawn from different areas.

Programme of Study

Year 12

This is a stand-alone qualification, which is taught alongside the full A level but which does not count towards it. There are four taught modules.

The first module is the **Practical Skills module** which underpins the whole of the specification and covers the practical skills that students should develop throughout the course.

The second is **Foundations in Chemistry** covering the fundamental concepts needed throughout the course, for example; atomic structure, bonding and the mole.

During **The periodic table and energy**, students learn about enthalpy changes, reaction rates and group 2 and 7.

In Core organic Chemistry topics covered include the study of hydrocarbons, alcohols and halogen alkanes.

The two papers are taken at the end of the year: **Breadth in Chemistry** – multiple choice and short answer questions covering all four modules

Depth in Chemistry – structured and extended answer questions again covering all four modules

Year 13

Students will study the same four modules as those on the AS course in the first year and in the second year will study two further modules.

Physical chemistry and transition elements develops students understanding of many of the central concepts in chemistry, including rates of reaction, pH enthalpy, entropy, electrode potentials and transition elements.

Organic chemistry and analysis builds on students work at AS and introduces new analytical techniques including NMR.

The final examination, at the end of two years of study, consists of three papers;

Periodic table, elements and physical chemistry - a variety of questions covering modules one, two, three and five.

Synthetic and analytical techniques - covering modules one, two four and six

Unified Chemistry – covering all six modules

Practical Skills Assessments at A Level:

In both Year 12 and Year 13, practical skills will be assessed through completion under controlled conditions of a minimum of 12 internally assessed practical activities. At A level the students will be awarded a certificate of practical competence. This will not count towards their final grade. At AS level there is no separate practical assessment though students will still be taught the relevant practical skills.

Who is this course aimed at?

This course suits students who have studied GCSE Combined Science or GCSE Separate Sciences (Biology, Chemistry and Physics) to a minimum of a grade 6. You need to be confident in your practical abilities as well as being interested in the application of Chemistry. A Level Chemistry may lead to a wide variety of courses in Higher Education, including Medicine, Dentistry, Nursing, Chemistry, Chemical Engineering, Law and Accountancy.

A Level Computer Science

Examination Board: OCR

Aims of the Course

The course will provide insight into, and experience of, how computer science works, stimulating learners' curiosity and encouraging them to engage with computer science in their everyday lives and to make informed choices about further study or career choices.

Programme of Study

Year 12

Unit 01: Computing Principles (Externally Assessed Exam)

This unit is assessed by means of a 1 ¼ hour written examination.

Topics covered in this unit include:

The characteristics of contemporary processors, input, output and storage devices, software and software development, programming, exchanging data, data types, data structures and algorithms as well as legal, moral, ethical and cultural issues

Unit 02: Algorithms and Problem Solving (Externally Assessed Exam)

This unit is assessed by means of a 1 ¼ hour written examination.

This unit is designed to develop elements of computational thinking, problem solving and programming as well as algorithms.

Year 13

Students will enhance their knowledge gained in the initial two units of the course. This knowledge will be assessed by two 2 ½ hour written examinations.

Unit 03: Programming Project (Internally Assessed Coursework)

In this unit students will choose a computing problem to work through according to the guidance in the specification. The project will cover the whole life cycle of software development including the analysis of the problem, design of the solution, developing the solution and a final evaluation of the completed project.

Who is this course aimed at?

You will need a good knowledge of ICT and computer systems and you must have evidence that you are able to produce a good standard of coursework on your own. You will not be expected to have any prior knowledge of programming but should be able work though analytical problems in a logical manner with confidence. You will need access to a computer at home and if you wish to become a programmer or study for a Computer Science degree you must also take Mathematics and/or A Level Physics.

A Level Design and Technology: Product Design (3-D Design)

Examination Board: AQA

Aims of the Course

Product Design aims to:

- develop and sustain innovation, creativity and design and technology capability;
- develop a critical understanding of the influences of the processes and products of design and technological activity;
- apply essential knowledge of understanding and skills of design production processes to a range of technological activities;
- use (ICT) to enhance design and technological capability;
- recognise the social, moral, spiritual and cultural values inherent in design and technological activity, and develop critical evaluation skills in technical, aesthetic, ethical, economic, environmental, social and cultural contexts;
- develop as discerning consumers able to make informed choices;
- develop positive attitudes of co-operation and citizenship and work collaboratively.

Programme of Study

Year 12

Paper 1: Core technical principles and designing and making principle with additional specialist knowledge.

Externally assessed examination

50% of AS

NEA: Practical application of technical principles, designing and making principles with specialist knowledge.

Single design and make project. Context set by AQA

50% of AS

Year 13

Paper 1: Core technical principles and designing and core designing and making principles

Externally assessed examination - 25% of A Level

Paper 2: Specialist knowledge, technical and designing and making principles.

Externally assessed examination - 25% of A Level

NEA: Practical application of technical principles, designing and making principles and specialist knowledge.

Substantial design and make project.

50% of A Level

Who is this course aimed at?

The course provides an opportunity for students to involve themselves in practical problem solving activities and to relate knowledge and skills to that activity. The work is very practical in nature, and will encompass the use of wood, metal and plastic materials. The course will build upon the design process used in GCSE Design Technology and some of the work will be computer or graphically orientated. Much of the Specification content will be taught through practical assignments. On completion the successful candidate would be suited to study any one of a wide range of Design and Technical based degree level courses, such as Architecture, Interior Design, Industrial Design, Product Design and Transport Design.

A Level English Language and Literature

Examination Board: AQA

Aims of the Course

The course seeks to encourage the study and enjoyment of Language and Literature and the ways that they complement each other. In this respect, it is a natural progression from GCSE English, incorporating the study of a wide and diverse range of texts and the consideration of how meanings are created for a particular audience. At the same time, the course will develop skills in using language for a variety of purposes.

Programme of Study

Year 12

- Paper 1 - Views and Voices
- Paper 2 - People and Places

Texts studied will include *The Handmaid's Tale* by Margaret Atwood, AQA Anthology: Paris, poetry by Carol Ann Duffy and a variety of texts on which to base re-creative writing tasks.

Year 13

- Paper 1 - Telling Stories
- Paper 2 - Exploring Conflict
- Non-exam Assessment

At A Level, students will study the same texts as at AS Level plus *The Kite Runner* by Khaled Hosseini, *Othello* by William Shakespeare and produce a piece of Non-exam Assessment or NEA

Year 12 Level English Language and Literature will be assessed through examinations. At A Level, students will be required to complete a Non-exam Assessment (NEA) and a terminal examination. Students will be examined on the study of a novel, poetry and re-creative writing at AS Level and two novels, poetry, non-fiction texts and a Shakespeare play at A Level.

Who is this course aimed at?

An open mind and a genuine interest in and enjoyment of reading are vital. A curiosity about language and the way it is used to influence others will aid your studies in all areas of the course. This course will obviously benefit those who have a particular interest in English, and it is complementary to any Modern Foreign Language study, Humanities study or Arts study.

Degree courses which lead on from your study of this subject will obviously be influenced by the other A Levels which you have taken, however, if this is your area of interest options include: English Language and Literature courses, Journalism, Law, Communications courses, Sociology/Humanities-based courses, and Primary and Secondary Teaching.

A Level English Literature

Examination Board: AQA

Aims of the Course

The course seeks to encourage the study and enjoyment of English Literature and the variety of perspectives it can give us on the world. In this respect, it is a natural progression from GCSE English, incorporating the study of a wide and diverse range of texts and the consideration of how meaning is produced by the contexts they are created in. At the same time, the course will encourage students to explore different ways of reading and approaching literary texts.

Programme of Study

Year 12

- Paper 1 - Literary Genres: Drama - Tragedy
- Paper 2 - Literary Genres: Prose and Poetry - Tragedy

Texts studied will include drama, poetry and prose from the literary canon such as *Tess of the D'Urbervilles* by Thomas Hardy, poetry by John Keats and two plays: *Death of a Salesman* by Arthur Miller and *Othello* by William Shakespeare.

Year 13

- Paper 1 - Literary Genres – Tragedy
- Paper 2 - Texts and Genres – Elements of Political Writing
- Non-exam Assessment (NEA): Theory and Independence

At A Level, students will continue to study the texts above and *The Kite Runner* by Khaled Hosseini, *Hard Times* by Charles Dickens and poetry by William Blake. Students will also be expected to research and read a wide selection of texts to support this area of study. Students will also be required to write about unseen texts as part of their terminal examination. In their Non-exam Assessment (NEA), students will be given a pre-release anthology of critical material on which they will then write two pieces of coursework. They will be expected to use particular critical approaches in dealing with these texts such as Marxism or Feminism.

Who is this course aimed at?

A passion for reading and a love of a wide range of texts from a variety of literary genres is vital to success for any student who chooses to study this course. The ideal student will have a curiosity about English Literature, from Chaucer to the modern era. This course will obviously benefit those who have a particular interest in English Literature, and it is complementary to any Humanities or Arts study.

Degree courses which lead on from your study of this subject will obviously be influenced by the other A Levels which you have taken; however, if this is your area of interest, options include: English Literature courses, Journalism, Law, Communications courses, Sociology/Humanities-based courses, and Primary and Secondary Teaching.

A Level Geography

Examination Board: AQA

Aims of the Course

This new specification has been chosen to excite students' minds, challenge perceptions and stimulate investigative and analytical skills.

The units have been chosen to reflect the world today whilst retaining key elements of traditional Geography such as hazards and population.

Programme of Study

Component 1: Physical Geography

How it's assessed:

- Written exam: 2 hours 30 minutes
- 120 marks
- 40% of A-level

Topics include: Water and carbon cycles, Coastal systems and landscapes, and Hazards

Component 2: Human Geography

How it's assessed:

- Written exam: 2 hours 30 minutes
- 120 marks
- 40% of A-level

Topics include: Global systems and global governance, Changing places and Contemporary urban environments

Component 3: Geographical Investigation

Students complete an individual investigation which must include data collected in the field. The individual investigation must be based on a question or issue defined and developed by the student relating to any part of the specification content.

3000-4000 words

60 marks

20% of A-level

Marked by teachers

Moderated by AQA

Who is this course aimed at?

The course is aimed at students who wish to investigate the inter-relationship between people and place, changes over time and through space at a variety of scales from the local to the global.

Success at A Level Geography will open up extensive university and career pathways from town planning, law, accountancy, tourism, recruitment, and sales, to petrology.

A Level German

Examination Board: AQA

Aims of the Course

The course aims to further develop a range of practical language skills already learned at GCSE, to enable students to better understand and communicate in written and spoken German. It has been designed to motivate and engage students in their learning of the language and will also stimulate their interest in and awareness of, the society and culture of the German-speaking world. It provides opportunities for students to develop their communication, critical thinking and creative skills and focuses on how the German-speaking society has been shaped both socially and culturally. It is designed to meet the future needs of candidates in terms of employment and entry requirements for further study. There is the opportunity to take part in a work-placement exchange with our partner school in Osnabrück, Gesamtschule Schinkel, during Year 12, which is a highly valuable opportunity to develop speaking skills and cultural knowledge, and an outstanding addition to students' CVs.

Programme of Study

At **Year 12** students will study:

Social Issues and Trends

Aspects of German-speaking society

Artistic Culture

Artistic culture in the German-speaking world

Literary texts and films

Grammar

Students will also develop their ability to translate in and out of German, as well as deepen their grammatical knowledge, setting them a solid foundation for university and beyond.

At **Year 13 Level** students will study:

Social Issue and Trends

Multiculturalism in German-speaking society

Political and Artistic Culture

Aspects of politics in the German-speaking world

Individual Research Project

Who is this course aimed at?

In addition to linguistic ability, students should have an interest in the cultural aspects of the German-speaking world. The course is suitable for students who are interested in pursuing a career with an international dimension, as well as those who understand the importance of language skills in the competitive global economy. Language skills are highly-valued by many employers in Derby and beyond, such as Rolls-Royce, and open up endless employment opportunities both in this country, and worldwide.

A Level History

Examination Board: AQA 7042CO

Aims of the Course

The aims of A Level History are to further stimulate your interest in the subject and to enhance and develop your historical enquiry skills. Students are encouraged to independently research topics and to extend their range of questioning and analytical skills. The course is designed to help students to understand the significance of historical events, the role of individuals in history and the nature of change over time. Students will gain a deeper understanding of the past through political, social economic and cultural perspectives.

Programme of Study

A Level History is a two year course. Students will have two exams at the end of year 13 and will be investigating and writing a 3,500 word historical enquiry. The course is arranged as follows:

- **Examined Units**

- **Paper One - The Breadth study – The Tudors 1485-1603 – 40% of A Level grade**

- Part One: Consolidation of the Tudor Dynasty: England, 1485 - 1547
 - Henry VII, 1485 - 1509
 - Henry VIII, 1509 - 1547
- Part Two: England: Turmoil and Triumph, 1547 – 1603
 - Instability and consolidation: the mid-Tudor crisis, 1547-1563
 - The Triumph of Elizabeth, 1563-1603

- **Paper Two – The Depth Study - Democracy and Nazism: Germany 1918 -1945 – 40% of A Level grade**

- Part One: The Weimar Republic 1918-1933
 - The establishment and early years of the Weimar Republic 1918-1924
 - The 'Golden Age' of the Weimar Republic 1924-1928
 - The collapse of democracy 1928-1933
- Part Two: Nazi Germany 1933-1945
 - The Nazi Dictatorship 1933-1939
 - The Racial State 1933-1941
 - The impact of war 1939-1945

- **Non Examined Assessment – 20% of A Level grade**

Students will study the European Reformation, being guided in designing an essay question that they will then independently research and write. Students will have sources and texts available to use in College however they are encouraged to use local libraries and visit universities to aid their research.

Who is the course aimed at?

The course is aimed at motivated students with a passion for the subject. Students of history are naturally inquisitive, independent learners who offer balanced answers to life's questions. The subject is highly regarded in occupations such as law, teaching, the media, banking, finance and local government. By studying history you will be developing the sorts of skills which are marketable and transferable to many areas of further education and employment.

A Level Mathematics

Examination Board: AQA QAN code is 603/1164/2

Aims of the Course

The aims of the course are to develop your understanding of mathematics and mathematical processes in a way that promotes confidence, enjoyment and a strong foundation for further study. Whilst the techniques will seem theoretical, you will see them applied to real-life situations which can be modelled mathematically.

Programme of Study

The course enables you to follow a variety of mathematical topics over two years

Year 12 Mathematics A combination of Pure Mathematics, Statistics and Mechanics is studied throughout the year. The course is assessed in two 1 hour 30 minute papers. Paper 1 is a combination of Pure Mathematics and Mechanics. Paper 2 is a combination of Pure Mathematics and Statistics. For those students who move on to A2, the AS results will not contribute to the full A-Level.

Year 13 Mathematics A combination of Pure Mathematics, Statistics and Mechanics is studied throughout the year which builds upon knowledge acquired in the AS Course. The course is assessed in three 2 hour papers. Paper 1 assesses Pure Mathematics, Paper 2 assesses Mechanics and Pure Mathematics, and Paper 3 assesses Statistics and Pure Mathematics.

Who is this course aimed at?

The main reason for studying Mathematics to an advanced level is that if you find it interesting and enjoyable. You like its challenge, its clarity, and the fact that you generally know when you are right. Solving a complex problem is exciting and very satisfying. This is what Mathematics is all about!

Post 16 Mathematics might be a requirement for what you want to study at university. Science-based courses (especially Physics), Psychology, Economics, Computing, and Business studies are just some of the subjects that prefer students to have studied Mathematics beyond GCSE level.

Studies have shown that people with an A Level in Mathematics also tend to earn more on average than those without. Whilst this in itself should not be the only reason to study Mathematics, the transferable skills that you develop (problem solving, teamwork, analytical and lateral thinking, and creativity) make you a very favourable candidate for any employer.

Ultimately Mathematics is an amazing subject to have at A Level and provided you have a solid understanding of the GCSE concepts before you start, with perseverance and effort, you should find this course extremely rewarding.

A Level Further Mathematics

Examination Board: AQA QAN code is 603/1841/7

Aims of the Course

Further Mathematics is for those students who wish to extend their study of Post 16 Mathematics. The course encourages students to understand mathematics and mathematical process that promote confidence, enjoyment and provide a strong foundation for further study, while extending your range of mathematical studies and techniques. The topics covered by Further Mathematics are more sophisticated and conceptually advanced compared to the single A-level Mathematics.

Programme of Study

Year 12 Further Mathematics

Alongside set compulsory content of prescribed Pure Mathematics topics, there is a choice of studying two modules from Mechanics, Statistics and Discrete Mathematics. This is assessed by two 1 hour 30 minute exams. Paper 1 is in Pure Mathematics and Paper 2 is a combination of the two chosen applied modules.

Year 13 Further Mathematics

A combination of Pure Mathematics, and two applied modules from Statistics, Mechanics and Discrete are studied throughout the year which build upon knowledge acquired in the AS Course. The course is assessed in three 2 hour papers. Paper 1 and Paper 2 assess Pure Mathematics, Paper 3 assesses a combination of the two chosen applied modules.

Who is this course aimed at?

The course is taken alongside AS/A2 Maths and suits those who have enjoyed and excelled at GCSE Mathematics. Students aiming to pursue Higher Education courses in Mathematics, Physics, Engineering or other courses with a high level of mathematical content should seriously consider this course. Indeed, Oxford, Cambridge and some other very selective universities rarely accept students for degrees in Mathematics or Physics if they have not studied Further Mathematics.

Further Mathematics is commonly expressed as the most challenging A-level currently offered in the UK, this is mainly because it is the only subject to further the study (as an extra AS or full A-level) of one particular subject. Consequently, its appeal to future employers is considerable.

The College has experience of preparing students for STEP (Cambridge and Warwick) and Oxford entrance examinations. Identified students will work towards these examinations alongside their Further Mathematics studies.

A Level Physics

Examination Board: OCR A Physics (H556)

Aims of the Course

To provide a stimulating and rewarding educational experience allowing students to study core A Level Physics topics as well as giving them the opportunity to pursue their own interests in the subject through practical projects and information research.

Programme of Study

Year 12

Module 1: Development of practical skills
Over the course of two years 12 assessed experiments are planned and carried out.

Module 2: Foundations of physics
This covers physical quantities and units, scalars and vectors and measurements.

Module 3: Forces and motion
This module is based around Newton's laws of motion and mechanics.

Module 4: Electrons, waves and photons
This module looks at electricity and waves, as well as an introduction to quantum Physics.

Year 13

Module 5: Newtonian world and astrophysics
This looks at thermal physics, gravitational fields and linking mechanics to astrophysics.

Module 6: Particle and medical physics
This covers electromagnetism, charges and fields, fundamental particles, high energy Physics and further work on nuclear physics and medical imaging.

A2 Practical Endorsement:

Series of practicals undertaken over the course. This is a pass or fail module.
This covers electrical circuits, waves and basic quantum physics

Examinations

Both Years exams are based on linear assessment with a selection of papers at the end of the year.

Who is this course aimed at?

This course suits students who have studied GCSE Combined Science or GCSE Separate Sciences (Biology, Chemistry and Physics) to a minimum of a grade 6. You should also have the ability to study A Level mathematics, even if you choose not to. You need to be confident in your practical abilities as well as being interested in how science is used by society.

The course opens up a wide variety of science courses, such as: Astrophysics, Applied or Theoretical Physics, Astronomy, Artificial Intelligence, Microelectronic Science and Optometry. Physics also gains entry to most engineering courses such as: Aeronautical, Electrical, Mechanical, Software and Computing, as well as Architecture and Technology in Higher Education and can also be a direct step to employment in IT or the communications industry as well as further vocational training.

A Level Psychology

Examination Board: AQA

Aims of the Course

The aim of A Level Psychology is to introduce students to key studies, theories, issues and debates in Psychology, as well as raising awareness of how Psychology applies to everyday life. Students will also learn about the varied ways in which psychologists collect their data through carrying out a range of investigations, practical activities and research projects.

Programme of Study

Year 12

This is a stand-alone qualification which does not count towards the full A level, though students opting to study only for AS will be taught in classes with the A level students as the units overlap. There are two externally assessed units, worth equal marks, taken at the end of one year of study. Each examination will include multiple choice, short answer and extended essay writing questions.

During **Introductory topics in psychology**, students will study research into attachment, social influences on behaviour, and memory, as well as discussing practical applications of these topics in everyday life, such as childcare, prejudice and eye witness testimony.

Paper 2, **Psychology in Context** introduces students to the different approaches and research methods psychologists use to study behaviour. In this unit students also study psychopathology, looking at depression, phobias and OCD

Year 13

There are three externally assessed units, taken at the end of two years of study. As with the AS qualification, each examination will contain multiple choices, short answer and extended essay questions. All exams have equal weighting.

Introductory topics in psychology covers four of the topics studied in the first year of the course, memory, attachment, social influences and psychopathology together with essays on how these topics relate to issues and applications in the wider world.

Paper two, **Psychology in context**, covers approaches, research methods and biopsychology.

The third paper, **Issues and Options in psychology** looks at issues and debates such as nature/nurture, and ethnocentrism, as well as giving students the chance to study three optional topics from a choice of nine. These are likely to be forensic psychology, eating behaviours and relationships.

Who is this course aimed at?

It is not necessary to have taken GCSE Psychology, though it is very important that students have the literacy skills necessary to deal with the extended writing required for examination success, and the numeracy skills to deal with the statistics associated with practical investigations. It is therefore necessary to have gained good GCSE qualifications in English, Mathematics and Science (minimum of a grade 6 in each).

The A Level course is appropriate for students who wish to follow an academic path in Psychology as well as equipping students with the knowledge and skills essential to both art and science disciplines. Psychologists are known for their analytical and critical skills, as well as being well-regarded for their ability to communicate their ideas effectively. This means that psychologists are found within many different organisations within business, law, health care, education and sport.

A Level Religious Studies

Examination Board: OCR

The feeling of wonder is the mark of the philosopher, for all philosophy begins in wonder.

– Plato

Aims of the Course

Ever since humankind started to think, religion has been a fundamental part of our development. As people ponder about the immensity of space or witness the wonder of birth, they contemplate the meaning of life and their own existence.

We all have ideas, opinions, prejudices and assumptions, yet it is rare that we have linked all of our thinking together into a coherent scheme. Religious Studies: Philosophy and Ethics attempts just such links, seeking to encourage joined-up thinking. In this pursuit various and wide ranging philosophers will be studied which will allow students to pit their minds against some of the most profound thinkers humanity has produced. We will embrace Plato's 'World of the Forms', Aristotle's concept of the 'soul' classical arguments for the existence of God which hold about as much water as a leaky bucket according to the great atheist philosopher David Hume, and we will take on concepts such as 'miracle' and belief in a good God despite the imperfection of his creation. Can such a God really reasonably be thought to exist? And if so what type of existence might it have?

Ethically are our morals based on anything other than our opinions? Can 'good, bad, right, wrong' in any sense be defined or are they like the colour yellow, knowable but undefinable? Can I only know good by experiencing bad? What have ethical theories such as Thomas Aquinas' Natural Law or Bentham and Mill's atheistic Utilitarianism got to say on matters of medical ethics, genetics, war, peace, pacifism, the environment and homosexuality? What do Christianity and the Bible have to say on such things and why do they matter anyway?

Programme of Study

Philosophy of Religion – Exploring key questions about the existence of God.

Religion and Ethics – A study of ethical theories and ethical issues.

Development in Religious Thought – An exploration of the Muslim or Christian tradition.

All sections are examined with an equal distribution of marks.

Who is this course aimed at?

It would be helpful if you have studied Philosophy and Ethics or Religious Studies at GCSE but it is not essential. Many subjects complement Religious Studies, including History, English, Geography and Psychology.

Universities like students who can reason and think in a mature and balanced way, as does the world of work. Religious Studies builds these skills of analysis and debate, critical thinking and mature reflection. These skills will be honed by challenging our thinking at every level.

A Level Spanish

Examination Board: AQA

Aims of the Course

The course aims to further develop a range of practical language skills already learned at GCSE to enable students to understand and communicate in written and spoken Spanish. It has been designed to motivate and engage students in their learning of the language and will also stimulate their interest in and awareness of the society and culture of the Spanish speaking world. It provides opportunities for students to develop their communication, critical thinking and creative skills and focuses on how the Spanish-speaking society has been shaped both socially and culturally. It is designed to meet the future needs of candidates in terms of employment and entry requirements for further study.

Programme of Study

At Year 12 students will study:

Current Issues and Trends in Hispanic society:

Traditional and Modern Values:

Cyberspace:

Equality:

Artistic Culture in the Hispanic world:

The influence of idols:

Regional identity in Spain:

Cultural heritage:

Film

El Laberinto del Fauno

Grammar

At Year 13 students will study in addition to the AS content:

Multiculturalism in Hispanic society:

Immigration:

Racism:

Coexistence:

Aspects of political life in the Hispanic world:

Young people:

The monarchy and dictatorships

Popular movements

Literary text

Como agua para chocolate

Individual research project (IRP)

Gives students the opportunity to learn about a subject of personal interest and linked to Spain or a Spanish speaking country. It is a key part of the A level speaking examination

Students will also develop their ability to translate in and out of the target languages setting them a solid foundation for university and beyond.

Who is this course aimed at?

In addition to linguistic ability, students should have an interest in the cultural aspect of the Spanish speaking world. The course is suitable for students who are interested in pursuing a career with an international dimension as well as those who understand the importance of language skills in the competitive global economy. Language skills are highly valued by many employers and open up endless employment opportunities both in this country and worldwide.