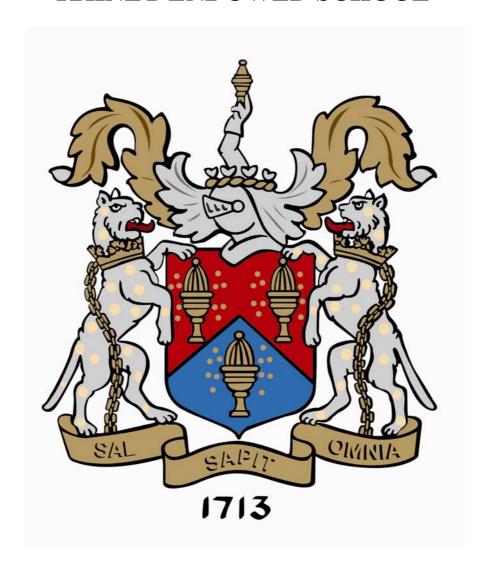
RAINEY ENDOWED SCHOOL



SIXTH FORM SUBJECT CHOICES

June 2011

Dear Parent

I trust that you will find the accompanying booklet helpful to you and to your son or daughter as you make decisions about which subjects should be chosen for Post-16 Level. It is important when choosing subjects to keep in mind those which are necessary for a career choice, those which offer the widest opportunity of University courses and, very importantly, those which your son or daughter is good at and enjoys. Universities look in the first instance at GCSE grades. The better the grades the greater the probability of your son or daughter being offered the course or courses he/she may wish to pursue. Universities look secondly at AS marks already awarded and at predicted 'A' Level grades. Your son or daughter will be well advised to choose those subjects at which they can hope to obtain the best grades. For detailed advice as to whether a subject is necessary for, as distinct from desirable for, a particular career please consult with Mr McDonnell or Mr Francis. It is also essential to consult University prospectuses as requirements can change from one year to the next.

It is important to remember that admission to Sixth Form is not automatic. The following General Academic Admissions Criteria are required for entry to Lower Sixth from pupils currently enrolled at Rainey Endowed:

- (i) A minimum of three B grades and three C grades in GCSE
- (ii) Passes at grade B or above in those subjects to be taken for AS Level (or in a related subject where a GCSE is not a prerequisite for AS study)
- (iii) A pass at grade C or above in GCSE English. (This is a University entrance requirement.)
- (iv) A pass at grade C or above in GCSE Mathematics for pupils taking any **one** of the following AS Levels: Applied Business, Applied ICT, Applied Performing Arts, Biology, Business Studies, Chemistry, Technology & Design, Geography, Home Economics, Mathematics, Physical Education, Physics or Psychology
- (v) A pass at grade D or above in GCSE Mathematics for pupils taking any combination of the following AS Levels: Art & Design, English Literature, French, History, Music, Religious Studies or Spanish.
- (vi) In certain circumstances, for only **one** of the subjects chosen for AS level, a grade C at GCSE in that subject **may** be acceptable following a recommendation by the HOD
- NB Pupils who obtain a Grade D in GCSE Mathematics will be required to resit Mathematics in November and if unsuccessful resit it again in June. (A GCSE pass in Mathematics is a University entrance requirement.)

Within a pupil's choice of AS level subjects a **maximum** of two 'new' subjects may be selected. In addition to the above, pupils should ensure that they meet the specific academic requirements detailed in this booklet for individual subjects and should also note that some subjects can be taken for AS Level even if not studied at GCSE. Pupils wishing to avail of a subject offered by the Magherafelt Learning Partnership (MLP) must satisfy the entry requirements for that particular subject. Pupils wishing to enter Lower Sixth should have had a good record of attendance, time keeping and behaviour during their GCSE years (Forms 4 and 5). The criteria for establishing such a record is to be found in Section 1 of the booklet. It is expected that pupils seek to make an active contribution to the general life of the school.

Initially pupils will have a free choice of subjects. However there are certain restrictions on class sizes and numbers of classes which mean that it is not always possible to satisfy 100% of choices. Nevertheless, we will do our best to do this and will discuss with your son/daughter and you, if necessary, why it has not been possible to allow him/her to have all his/her first choice subjects. In previous years some 95% of all pupils have had no difficulty with their subject choices and I am sure this will remain the case. Occasionally a Sixth Form subject is over-subscribed, in which case internal decisions will be made regarding selection for these courses. Conversely, where a course is not viable it may not be run.

The school welcomes applications for entry to Sixth Form from pupils who are not currently enrolled at Rainey Endowed and the same General Academic Admissions Criteria for Entry to Sixth Form will be applied. Preference will be given to pupils currently enrolled at the school who wish to return to Sixth Form and who have met the above criteria. The remaining places will be made available to external applications. From these applications, where the school is over subscribed for Sixth Form entry, the Headmaster will apply the following criterion:

The pupil's best six GCSE results would be chosen and allocated points:

A* 4 points A 3 points B 2 points C 1 point

The scores would be put into a rank order and places appointed according to this order from the highest to the lowest. In the case where, having applied the above criterion, more applications than places available exist, the admissions criteria used for entry to Year 8 will then be applied. I do realise that this is an important and sometimes stressful time in the educational career of a young person so I would encourage you if you have any concerns at all to get in touch with us and we will do our best to resolve them.

Yours sincerely

SECTION ONE

Entry To Sixth Form

The Responsibility for applying the criteria set out below is the Headmaster's and his decision is final.

- 1. It has become evident over the past number of years that by far the majority of those pupils who underachieve in Sixth Form are associated with poor attendance, poor time keeping and uncooperative behaviour. In addition to obtaining the necessary GCSE grades for entry to the Sixth Form the school regards it as reasonable to expect that any pupil entering Sixth Form in the Rainey will have had:
 - (a) a record of regular attendance
 - (b) a record of good time keeping and attendance at class
 - (c) a record of co-operative behaviour
- 2. Where any of the above have not been the case the Headmaster may refuse to admit a pupil to the Sixth Form or may admit him/her conditional upon interview between the pupil, his/her parents and the Headmaster in August and the pupil's and parents' acceptance of a contract with the school.

The following criteria will be used to determine a record of regular attendance and good time keeping:

- 3. Where a pupil's absences are substantial (15% absence in one year) except where such failure to attend has been as a result of medical circumstances for which evidence has been supplied, or where the parent had obtained the written agreement of the Headmaster for the pupil's extended absence, then such a record of attendance will be deemed as failing to meet the criterion of 'regular attendance'. The record of attendance will be determined by the C2K Registration System (Sims.net) as used in Post-Primary Schools in Northern Ireland.
- 4. Whether or not a pupil's time keeping and attendance at class has been good will be determined by reference to
 - Sims.net as used in Post-Primary Schools in Northern Ireland
 - The Late Book kept in the School Office
 - Teachers' Registers/Lesson Monitor as maintained on a period by period basis A record should demonstrate less than 15% per year of poor time keeping unless exceptional circumstances existed.
- 5. Criteria for failure to have a record of co-operative behaviour will be determined by:
 - (a) The Detention Book for Forms 4 and 5. Where a pupil has been placed in Detention for disciplinary matters on more than three occasions, he/she will be deemed not to have had a record of co-operative behaviour.
 - (b) Where a pupil has been suspended on more than one occasion for a disciplinary matter during their GCSE Years (Forms 4 and 5) then he/she will be deemed not to have had a record of co-operative behaviour.
 - (c) Reference may also be made for corroborating evidence, to the school end of term reports and any interim reports or Year Head records which may have been written during Forms 4 and 5 including, for example, details of the deliberate breach of school rules or the continued failure to submit GCSE coursework by the agreed timetable.

The Sixth Form Programme

Pupils entering Sixth Form at the Rainey can choose one of the following two options:

- (i) 4 AS Level Subjects
- (ii) 3 AS Level Subjects plus one subject from the enrichment programme offered in Lower Sixth

The list of AS & A2 Level subjects available at the Rainey, subject to demand and timetable constraints, is shown below:

Art & Design History Spanish

Biology Home Economics Technology & Design Applied Business *
Chemistry Music Applied ICT*

English Literature Physical Education D#

French Physics
Further Mathematics** Psychology
Geography Religious Studies

Subjects underlined can be taken in Lower Sixth without having been studied at GCSE, those with ^D indicate it is desirable for the subject to have been studied at GCSE Level.

- * This is available subject to demand and the ability of NRC to provide the teaching
- ** Pupils choosing Further Mathematics must also choose Mathematics
- [#] Pupils must be prepared to participate in extra-curricular activities which support this choice of subject.

A maximum of two 'new' subjects may be selected.

During the Lower Sixth year **only**, pupils studying three AS Level subjects, option (ii) above, will also take a certificated course in one of the following:

Sage Accounts and Student Finance

Young Enterprise

European Computer Driving Licence (ECDL)

Sports Leader

Further details on these and other subjects are provided in this Subject Choices Booklet.

Each pupil entering Lower Sixth is **strongly recommended** to participate in the **SEP programme**. This provides students with the opportunity to enhance their educational and personal development opportunities. Further information on subjects available can be obtained in the SEP booklet.

A number of additional subjects are provided via the MLP, further information is provided on these subjects towards the end of this booklet.

Accounting Health and Social Care

Government & Politics Moving Image Arts

National Diploma in Engineering

Travel and Tourism

The two year programme for each of the two options available in Sixth Form is shown below:

4 AS Level Programme

Year	Subjects	Periods	Year	Subjects	Periods
L6	AS Level/Applied Careers Games Private Study	24 1 1 4	U6	A2 Level/Applied Careers Games Private Study	18 1 1 10

3 AS Level Programme

Year	Subjects	Periods	Year	Subjects	Periods
L6	AS Level Additional Studies Careers Games Private Study	18 2 1 1 8	U6	A2 Level/Applied Careers Games Private Study	18 1 1 10

Entry to Upper Sixth:

Results in AS examinations are important indicators of success at A2 level. Progression into Upper Sixth remains at the discretion of the school and will be reviewed once the AS results are published using the following scoring system:

A = 60 points B = 50 points C = 40 points D = 30 points E = 20 points U = 0

Sage Accounts and Student Finance / Young Enterprise / ECDL / Sports Leader and Proxy Key Skills grades will not be included in this total.

Pupils who achieve a total score of 100 points or less will be reviewed. Their return to study at A2 level will not be guaranteed until a meeting takes place with the Headmaster or his Deputy. Pupils must be accompanied by a parent/guardian in order to review progression into Upper Sixth. The purpose of this meeting is to determine the best way forward for the pupil. Some of the following strategies may be implemented:

- A discussion with parents about the best way forward.
- Modules may be identified to be re-taken in January of Upper Sixth.
- Regular meetings with a teacher mentor, to discuss progress and targets, will be arranged.
- A decision to leave Rainey Endowed School and pursue an alternative course of study.

All Lower Sixth pupils wishing to progress into Upper Sixth should be aware of the following:

- A pass at AS-level subject (grade A E) is required to take that subject at A2
- A minimum of two AS-level subjects must be passed to return to take A2 subjects.

If performance in one or more AS-levels has been poor, **pupils must consult with subject teachers** about the feasibility of studying the same subject(s) at A2 level. In some cases, if an AS Level subject is passed at grade E, pupils may be advised not to continue with that subject at A2.

A pupil's attitude and commitment to his/her school studies and to the school community (high levels of attendance and punctuality form part of a student's commitment to his/her work) will also be considered for entry to Upper Sixth.

Section 3

Subject Details

In this section you will find information on all subjects available to you in the Sixth Form at The Rainey. You should read these carefully and use the information to help you choose your subjects for Sixth Form study. You will find the subjects arranged in the following order:

GCE Applied Applied Business

Applied ICT

Applied Performing Arts

AS Levels Art and Design

Biology

Business Studies

Chemistry

English Literature

French

Further Mathematics

Geography History

Home Economics Mathematics

Music

Physical Education

Physics Psychology Religious Studies

Spanish

Technology and Design

Additional Studies Sage Accounts and Student Finance

European Computer Driving Licence

Young Enterprise Sports Leader **Subject:** A Level in Applied Business **HOD:** Mr I Francis

Availability:

This course is available at AS and A2 Level.

Content of the Course:

The A Level in Applied Business has been designed to help those pupils with an interest in Business Studies to develop an in-depth knowledge of the business world by linking much of the work that is undertaken to real business scenarios and basing two thirds of the assessment for the course on assignment work. Essential skills of communication, ICT, team working and independent learning are developed throughout the course and those pupils who prefer a more practical approach to Business Studies will find this qualification particularly useful and interesting.

In Lower Sixth the following units are taken.

AS Unit 1 – The Enterprising Business – An introductory unit which encourages students to look at how a local business creates marketing opportunities to survive and grow.

AS Unit 2 – The Enterprising Manager – This unit gives an overview of how an enterprising manager uses people and finance effectively.

AS Unit 3 – External Influences on the Enterprise – This unit assesses the impact of external conditions on businesses.

In Upper Sixth the following units are taken.

A2 Unit 7 – Finance – pupils will investigate how a Business uses its accounts to manage and make business decisions.

A2 Unit 9 – Enterprise in Practice – Pupils will run a mini-company to use their business knowledge to produce a product or service.

A2 Unit 11 – Marketing – This is an opportunity to look at the marketing mix and marketing principles and apply them to a specific product or service.

Assessment Arrangements:

Units 3 and 7 will be assessed externally by a combination of exam questions and pre-seen case study work.

Coursework Details:

All other units are assessed internally. Pupils are required to produce assignments relating to the unit they are studying. These assignments will be marked by the teacher and will be moderated externally.

Subject Specific Requirements:

There are no subject specific requirements for this subject. However pupils must have GCSE English and Mathematics at Grade C or above.

Other Information:

The A Level in Applied Business provides pupils with the opportunity to develop a thorough understanding of Business Studies. It is suitable for pupils who enjoy a mix of practical work alongside examination work. It is suitable for any pupil who intends to study Business at university. Opportunities for employment include all management posts, accountancy, teaching, and many more. It is also particularly suitable for those who may wish to run their own business in the future.

Subject: A Level in Applied ICT

Availability

This course is available at AS and A2 Level

Content of the Course

In Lower Sixth the course consists of the following three units:

Unit 1 – Information and Communication – Students learn about the importance of information and communication within an organisation.

Unit 2 – Software Applications and Tools – This unit enables students to develop skills in the use of word processing, spreadsheets, databases and the Internet and to understand the role of operating systems.

Unit 3 - Organisations and Information Systems – This unit looks at organisations, how they are structured and how ICT can support the business Function.

Upper Sixth:

Unit 7 – 'Investigating Systems' – students learn why it is important to fully understand the systems development process, the role of Systems Analysis and Design and the Importance of the Use, in the Creation of the best working solutions to business problems.

Unit 8 – 'Database Development' – students examine database technology and develop database skills and modeling concepts.

Unit 9 – 'Web Site Design and Management' – in this Unit students learn how to develop and design websites using appropriate tools.

Assessment Arrangements

In Lower Sixth, Unit 2 'Software Applications and Tools' will be externally assessed. In Upper Sixth Unit 7 'Investigating Systems' will be externally assessed.

Coursework Details:

Units 1 and 3 in Lower Sixth will be assessed via coursework and Units 8 and 9 will be internally assessed in Upper Sixth.

Subject Specific Requirements:

There are no subject specific requirements for this subject. However, pupils must have GCSE English and Mathematics at Grade C or above.

Other Information:

This qualification provides pupils with the opportunity to develop a wide range of ICT skills to A2 Standard. It is suitable for those who enjoy a mix of practical work alongside examination work. The skills developed through this course will prepare students well for university and the world of work as ICT skills are essential to any occupation.

Subject: Art and Design HOD: Miss S McCracken

Availability:

This subject is available at AS and A2 Level

Content of Course:

Through studying GCE Art and Design, pupils have opportunities to:

- develop an interest in and enthusiasm for art, craft and design;
- gain knowledge and understanding of art, craft, design and media (including technologies) in contemporary and past cultures;
- gain experience in working in a broad range of media (including traditional and new media and technologies);
- gain an awareness of different roles, functions, audiences and consumers of art, craft and design practice; and
- develop and enhance their creative, intellectual and artistic abilities.

Assessment Arrangements & Coursework Details

AS 1 Creative Portfolio (coursework)

Pupils must freely demonstrate and communicate artistic interests, visual curiosity, creativity and personal skills in art, craft and design choosing the theme/starting point and selecting the work which reflects their ability and personal achievement in relation to the assessment objectives for this course. This will include:

- evidence of observations from primary sources;
- · work in a range of media; and
- a final outcome from one area of art, craft or design.

AS 2 Externally Set Assignment

Theme/starting point is set by CCEA.

Paper released in February.

Pupils produce the preparatory work; and a **final response** which is completed within an **8-hour supervised examination period**.

A2 1 Personal Investigation (coursework)

This is a further opportunity for pupils to freely demonstrate and communicate their artistic interests, visual curiosity, creativity and personal skills in art, craft and design.

Work should consist of:

- visual investigations; and
- written investigation

A2 2 Externally Set Assignment

Theme/starting point is **set by CCEA**.

Paper released in February.

Pupils produce the preparatory work; and a **final response** which is completed within a **12-hour supervised** examination period.

Subject Specific Requirements:

It is recommended that pupils wishing to study AS/A Level Art and Design should achieve Grade **A***, **A or B** in GCSE Art and Design.

Other Information:

Anyone taking this subject should have a high standard of artistic ability, be genuinely interested in the subject and be self-motivated. The course is designed to promote continuity and progression from the study of Art and Design at GCSE level and other similar art and design qualifications. The AS level builds on but does not depend upon the knowledge, understanding and skills developed at GCSE level. The GCE builds upon the knowledge, understanding and skills developed at AS.

Subject: Biology HOD: Mr R Kirkpatrick

This subject is available at AS and A2 Level.

Content of Course:

There are three modules to be completed for AS Level and a further three for A2 Level. All modules require some mathematical/statistical knowledge, but more so in the A2 modules. Topics studied in each module are as follows:

AS Unit AS 1 : Molecules and Cells

Unit AS 2 : Organisms and Biodiversity

Unit AS 3 : Assessment of Practical Skills in AS Biology

A2 Unit A2 1 : Physiology and Ecosystems

Unit A2 2 : Biochemistry, Genetics and Evolutionary Trends

Unit A2 3 : Assessment of Investigation and Practical Skills in Biology

Practical work is included in all modules.

Assessment Arrangements:

AS	Unit AS 1	:	1hr 30mins written external exam, 40% of AS, 20% of A Level
	Unit AS 2	:	1hr 30mins written external exam, 40% of AS, 20% of A Level

Unit AS 3 : Internal assessment, 20% of AS, 10% of A Level

A2 Unit A2 1 : 2hr written external exam, 40% of A2, 20% of A Level Unit A2 2 : 2hr written external exam, 40% of A2, 20% of A Level Unit A2 3 : Internal assessment, 20% of A2, 10% of A Level

Coursework Details (if appropriate):

AS	Unit AS 3	Assessment of two	practical tasks
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A2 Unit A2 3 Assessment of one practical investigation

Subject Specific Requirements:

It is strongly recommended that pupils wishing to study Biology at AS or A2 Level have either a Grade A*, A or B in GCSE Biology or Grades A*A*, AA or BB in Double Award Science. No additional teaching time will be provided in Lower Sixth for pupils with Double Award Science. In addition it is strongly recommended that pupils have at least a grade B in GCSE Mathematics.

Other Information:

Biology is essential for many careers and courses in the Biological and Environmental sciences and it is also highly recommended for careers in Biochemistry, Microbiology, Pharmacy, all careers related to Medicine, Veterinary Science, Dentistry, Clinical Science and many more

Subject: Business Studies ('A' Level) HOD: Mr I Francis

This subject is available at AS and A2 Level.

Content of Course:

The Competitive Business – Gain an understanding of the purpose of business activity, different forms of business organisations, marketing and operations management, business environment, how businesses try to meet the wants and needs of customers, quality, investment and productivity.

Managing Business Resources – Examine the management and organisation structures for a business and its employees, the role of accounting and financial information as an aid to decision-making and financial control.

Making Business Decisions – Examine conflict between the objectives of different stakeholder groups and suggest and evaluate resolutions to such conflict and the role of accounting and financial information as an aid to decision-making and financial control.

The Changing Business Environment - Examine the macroeconomic and international framework within which businesses operate, culture of organisations, social responsibilities and ethics, how businesses are affected by and react to their environment, taking particular account of the relationships which exist between the various stakeholders of the businesses.

Assessment Arrangements:

AS	Module 1	The Competitive Business	1 hour 30 mins
	Module 2	Managing Business Resources	1 hour 30 mins
A2	Module 1	Making Business Decisions	2 hours
	Module 2	The Changing Business Environment	2 hours

Assessment for A2 Module 2 includes an unseen case study with problem solving/decision making focus. Candidates are required to a produce business report analysing problems, evaluating evidence and proposing/justifying solutions.

Subject Specific Requirements:

There are no subject specific requirements in order to study this subject at AS/A2 Level; however, pupils who have studied GCSE Business Studies would be expected to have achieved at least a Grade B. It is strongly recommended that pupils have GCSE English and Mathematics at Grade C or above.

Pupils should have an interest in current affairs and business related topics as the ability to understand business concepts in the context of organisations and real businesses helps pupils to develop their knowledge of the subject throughout the course.

Other Information:

The subject gives pupils a very good grounding in the key areas of business. It is suitable for any pupil who intends to study Business at university. Opportunities for employment include all management posts, accountancy, teaching, and many more. It is also particularly suitable for those who may wish to run their own business in the future.

Subject: Chemistry **HOD:** Dr L Peggs

This subject is available at AS and A2 Level.

Content of Course:

Both AS and A2 Level courses are designed to stimulate and sustain the interest in, and the enjoyment of the subject. The course also allows the development of the abilities to interpret, summarise, evaluate and communicate information. It encourages the appreciation of the scientific, social, economic, environmental and technological aspects of Chemistry.

AS Level The subject content includes the study of selected topics from the three subject areas:

- (a) Inorganic
- (b) Organic
- (c) Physical

This includes both qualitative and quantitative analysis.

A2 Level This builds upon the foundation of knowledge, understanding and skills developed within the AS course and provides the basis for further study of Chemistry and related subjects.

Assessment Arrangements:

AS 1: Basic Concepts in Physical and Inorganic Chemistry

1½ hours

- AS 2: Further Physical and Inorganic Chemistry and Introduction to Organic Chemistry 1½ hours
- AS 3: Internal assessment –This includes two practical tasks, a planning exercise and further questions on practical techniques, observations and calculations $2\frac{1}{2}$ hours
- A2 1: Periodic Trends and Further Organic, Physical and Inorganic Chemistry 2 hours
- A2 2 Analytical Chemistry, Transition Metals, Electrochemistry and Further Organic Chemistry 2 hours
- A2 3: Internal Assessment a Practical examination consisting of a planning exercise and practical exercises.

Subject Specific Requirements:

It is recommended that pupils wishing to study Chemistry at AS/A2 Level have either a Grade A* or A in GCSE Chemistry or Grades A*A*or AA in Double Award Science. No additional teaching time will be provided in Lower Sixth for pupils with Double Award Science. In addition it is strongly recommended that pupils have at least a Grade B in GCSE Mathematics.

Other Information:

In their study of Chemistry pupils have the opportunity to develop their communication skills, sense of enquiry, practical skills and powers of observation and interpretation. These qualities form an excellent foundation for a wide range of university courses. These include Biological Sciences, Chemical Science, Environmental Studies, Geological Sciences, Medical Sciences and Medicine, Veterinary Science, Agriculture and Dentistry.

Subject: English Literature **HOD:** Miss C McClelland

The subject is available at AS and A2 Level.

Content of Course:

Pupils will study a minimum of six texts covering prose, poetry and drama at AS level and a further six texts at A2 level.

Assessment Arrangements:

AS Level

Module 1 The Study of Drama

Section A: The Study of Shakespeare

Detailed study of one play for internally assessed coursework.

Section B: Study of a Twentieth Century Dramatist

Study of two plays by a post-1900 dramatist for a personal, creative response to the plays - internally assessed coursework.

Module 2 The Study of Poetry and Prose

Section A: The Study of Poetry Written after 1800

The study of two post-1800 poets for comparison and contrast - open book examination.

Section B: The Study of Prose 1800-1945

Detailed study of one novel - closed book examination.

A2 Level

Module 1 The Study of Poetry and Drama

Section A: Study of one poetry text written between 1300-1800.

Clean text examination.

Section B: The study of two drama texts which explore the same theme.

Closed book examination.

Module 2: The Study of Prose (Theme Based)

Section A: Close analysis of an extract from a post-1990 novel.

Section B: Analysis of two novels exploring the same theme.

Closed book examination.

Subject Specific Requirements:

It is highly recommended that pupils who wish to study English Literature at AS/A2 Level should have studied it at GCSE Level and achieved at least a Grade B. However, in certain circumstances pupils may be able to study English Literature at AS Level without having studied it at GCSE, providing they have achieved a good grade, such as A or A*, in GCSE English and can demonstrate an interest in English Literature.

Other Information:

The study of literature at this level can prove to be a very stimulating and enjoyable experience, affording pupils the opportunity to read and discuss a wide range of texts. English Literature is recognised by employers and universities alike as an academically rigorous subject, which helps pupils to develop an invaluable range of communicative, analytical and interpersonal skills. Such skills are increasingly in demand in the modern workplace and thus the acquisition of an A level in this subject can be a very attractive asset in a competitive world.

Subject: French **HOD:** Mrs S Service (Acting)

Availability:

This subject is available at AS and A2 Level

Content of Course:

The specification builds upon the knowledge and understanding, concepts and skills acquired through the study of French at Key Stage 4 (GCSE). The examination will assess the four skill areas of Speaking, Listening, Reading and Writing, placing great emphasis on the use of French as the medium of assessment. Pupils are required to demonstrate their linguistic ability by understanding and responding to texts in French, drawn from a variety of sources such as magazines, newspapers and books; by understanding and responding to authentic spoken French from different sources, such as recorded news items, telephone messages and announcements; by demonstrating an ability to select and present information, opinions and ideas in written and spoken French. The course will develop the pupil's awareness, appreciation and knowledge of the culture and civilisation of France and contribute significantly to the European dimension of the school curriculum.

Type of Assessment:

AS 2 units to be assessed in May/June of Lower Sixth A2 2 units to be assessed in May/June of Upper Sixth

AS Topics: Relationships

Young people and Society Health and Lifestyle

A2 Topics: Local and Global citizenship Environmental awareness

Assessment Arrangements:

AS Module 1: Speaking test - a presentation and general conversation in French

-13 mins

AS Module 2: 3 sections: Listening: 2 questions based on 2 passages recorded on individual CDs -40 mins

Reading – Comprehension and Translation from French to English - 1hr05 mins

Extended Writing – 200-250 word response to a stimulus article - 1hr

A2 Module 1: Speaking test – discussion based on societal theme and conversation in French – 15 mins

A2 Module 2: 3 sections:

Listening: 2 questions based on 2 passages recorded on individual CDs

40mins

Reading: Comprehension and Translation from English to French — 1hr 20 mins Writing: 300-350 word response based on a literary text — 1 hr

Coursework Details:

There is no coursework option.

Subject Specific Requirements:

It is recommended that pupils wishing to study AS/A2 Level French have a Grade A*or A at GCSE in this subject. It is also recommended that pupils have at least a Grade A in GCSE English

Other Information:

Knowledge of a foreign language is becoming extremely sought after in the field of International Business where A Level French is needed to access certain degree courses.

A good degree in this subject would be essential for the following: teaching French, Interpreter, work in import and export trade, the Foreign Exchange branch of a Bank and can lead to openings in most fields ranging from Law, Business, Journalism, the Media, Entertainment, Civil Service, Local Government to Tourism and Travel, Secretarial and Administrative work, Catering and the Hospitality Industry and many other jobs and professions.

Subject: Further Mathematics **HOD:** Mr D Laughlin

Availability:

The subject is available at AS and A2 Level.

Content of Course:

As the title of the subject suggests, Further Mathematics is the study of mathematical topics and concepts at a level beyond that encountered in the standard A2 Level course. The Further Mathematics Syllabuses AS and A2 are designed to stretch the most talented mathematicians at school level and provide a deep insight into all the major branches of mathematics. Although the course is demanding, most pupils who embark on the course are more than able to cope and find the course very beneficial and rewarding. The A2 Further Mathematics specification contains 6 modules and incorporates a compulsory Pure Mathematics element together with various combinations of Mechanics and Statistics.

Assessment Arrangements:

A2	Paper FP1 (Pure Mathematics)	1½ hours
	Paper FP2 (Pure Mathematics)	1½ hours
	Paper FP3 (Pure Mathematics)	1½ hours
	Paper M2 (Mechanics)	1½ hours
	Paper M3 (Mechanics)	1½ hours
	Paper S2 (Statistics)/M4 (Mechanics)	1½ hours

Pupils who select Further Mathematics will study AS/A2 Mathematics in their Lower Sixth year and then AS/A2 Further Mathematics in their Upper Sixth year. Pupils will sit two module examinations in January and the remaining (four) examinations in June.

Coursework Details (if appropriate):

There is no coursework required for this subject.

Subject Specific Requirements:

Basically the requirement will be determined by whether or not pupils meet the criteria for entry into the Lower Sixth Further Mathematics class as detailed in the relevant section under A2 Level Mathematics. From the outset, pupils must decide at the beginning of September of their Lower Sixth year whether they want to pursue the study of Further Mathematics in Upper Sixth.

Other Information:

Further Mathematics is very beneficial to pupils who wish to study Engineering or Specialist courses in Mathematics or Mathematics related courses (including Actuarial Science) at University. In particular, pupils who are seeking offers from Oxbridge to study Mathematics or Mathematics related subjects would find Further Mathematics a definite advantage.

Subject: Geography **HOD:** Mr C T McDonnell

Content of Course:

- There are **four** assessment units each with 25 percent weighting:
- **AS 1**: Physical Geography with fieldwork skills;
- AS 2: Human Geography with skills and techniques;
- **A2 1**: (i) Human Geography: three options students need to study two from:
- Impact of Population Change;
- Issues in Ethnic Diversity; and
- Planning for Sustainable Settlements; and
- (ii) Global Issues: the study of global debates and their context students need to study one from:
- The Global Warming Debate;
- The Nuclear Debate;
- The GM Crops Debate; and
- The Ecotourism Debate;
- **A2 2** (i) Physical Geography: three options students need to study two from:
- Fluvial and Coastal Environments;
- Nature and Sustainability of Tropical Ecosystems; and
- The Dynamic Earth; and
- (ii) Decision-Making in geographical issues.

Assessment Arrangements:

- AS Paper 1 Physical Geography including fieldwork skills (1 hour 30 mins)
 AS Paper 2 Human Geography including skills and techniques (1 hour 30 mins)
- A2 Paper 1 Human Geography and Global Issues (1 hour 30 mins)
- A2 Paper 2 Physical Geography and Decision-Making (2 hours 30 mins)

Coursework Details (if appropriate):

No Centre-assessed coursework, but AS Paper 1 involves a short summary (100 words) on a fieldwork exercise which will be submitted along with AS Paper 1 answers for external assessment.

Subject Specific Requirements:

It is recommended that pupils wishing to study AS/A2 level in Geography have a Grade A*, A or B at GCSE level in this subject. Whilst it is not essential to have taken the subject at GCSE it is, in our experience and judgement, an advantage to have done so. Success in A2 Level Geography requires a willingness to supplement work in class by reading widely to keep up-to-date with current geographical issues and events in order to help acquire and develop a sound base of geographical knowledge.

Other Information:

Study of the subject develops analytical skills and the ability to write in a fluent style. Thus it bridges the gap between the rigour of a Science and the creative/expressive aspects of an Arts subject. Consequently it is accepted as a qualifying subject for a wide variety of University courses in both Arts and Science Faculties. Geography graduates have one of the highest rates of graduate employment and studying geography can provide you with good skills and a firm base for life-long learning.

Most Geography graduates enter into one of 3 career paths:

- 1) A career directly related to their Geography course
 - A first degree in Geography is an entry point to many careers e.g. town and transport planning, chartered surveying, land and water management, environmental consultancy, development, tourism, conservation, demography, housing and social welfare.
- 2) A more generalist career that uses geographers' wide range of skills
 - Many Geographers chose careers in information technology, administration and management, the financial sector, law, marketing, research, and industry and manufacturing
- 3) Further full-time study or training to develop a career in research (Masters or PhD) or teaching (PGCE), or to advance qualifications for entry into more specialised professions (Masters or PhD).

Subject: History **HOD:** Mr J A Winters

Availability:

This subject is available at AS and A2 Level.

Content of Course:

The course is divided into four modules, two to be taken at AS Level and an additional two modules at A2 Level should a pupil wish to continue to the A2 stage. The course provides a wide variety of topics and within each covers political, social, economic and cultural aspects of history.

At AS Level the focus of the modules is European History i.e. Nazi Germany and Revolutionary change in Russia.

At A2 Level the focus remains within the 20th Century but changes slightly to study the Partition of Ireland c1900-1925 and the Clash of Ideologies (Communism, Fascism, Cold War politics) during the broader 20th Century period.

Assessment Arrangements:

At AS/A2 Level assessment is entirely by written examination.

AS Module 1 1 hour and 30 minutes which includes use of sources

AS Module 2 1 hour and 30 minutes, two questions to answer both of which

involve a lengthy response.

A2 Module 1 1 hour and 15 minutes to answer one question to show

understanding over a period of 100 years.

A2 Module 2 2 hours in which candidates are expected to answer questions

evaluating sources and one essay style question

Coursework Details (if appropriate):

There is <u>no coursework</u> for this subject. However, working with sources in an essential element in one unit at both AS and A2 level and therefore a good Controlled assessment mark is an essential indicator of this skill.

Subject Specific Requirements:

It is recommended that pupils wishing to study AS/A2 Level History should have achieved a grade B or better at GCSE History. It is also useful to consider specifically the GCSE coursework and paper 2 scores as an indicator of ability in working with historical sources. Whilst it is not essential to have taken the subject at GCSE it is, in our experience and judgement, an advantage to have done so. Exceptions will be considered but only if a pupil has achieved a grade B in a related subject such as English Language or Literature or R.E. where literacy skills are evident. In such a case the matter should be discussed with the Head of Department. More specific information on the courses outlined above is available by speaking to the Head of Department or by consulting the CCEA website.

Other Information:

The study of History and the skills which are taught and developed alongside it are good preparation both for higher and further education and life. History develops many transferable skills. Its study can be immensely rewarding, giving its pupils a breadth of vision and understanding, not just of the past but of our contemporary world. History graduates with good degrees are eagerly sought in fields such as the Law, the media, the arts, education, business and even industry. A keen interest in the subject, a readiness to complete additional reading/research and a willingness to work with a greater degree of independence are crucial factors if pupils are to obtain the highest possible success at AS and A2 level.

Subject: Home Economics **HOD:** Mrs M Watson

Availability:

This subject is available at AS and A2 Level.

Content of Course:

The Assessment Modules are:

- 1. Nutrition for Optimal Health
- 2. Priority Health Issues
- 3. Consumer Issues
- 4. Research-based Assignment

Lower Sixth AS Assessment Modules 1 and 2 Upper Sixth A2 Assessment Modules 3 and 4

Assessment Arrangements:

	Module Name	<u>Time</u>	Weighting		
AS	Paper 1 Nutrition for Optimal Health Paper 2 Priority Health Issues	1 ½ hours 1 ½ hours	50%AS 25% A2 50%AS 25% A2		
A2	Paper 1 Consumer Issues Research-based assignment	2 hours	25% A2 25% A2		

Coursework Assignment:

Research-based Assessment

This requires pupils to submit a 4000 word report of a research based activity of their own choice using both primary and secondary sources from within the modules studied.

Subject Specific Requirements:

While there are no specific subject requirements for this subject a GCSE grade C in Mathematics is desirable. It is strongly recommended that pupils wishing to study AS/A2 Level in Home Economics have a grade A*, A or B at GCSE level in this subject. Biology or Chemistry at A Level would be beneficial to students studying Home Economics.

Other Information:

Home Economics is an education for life and develops communicative, analytical and interpersonal skills. It is accepted as a qualifying subject for a wide variety of University courses in both Arts and Science. Potential career opportunities are: Social Welfare, Retailing, Environmental Health, Family Therapy, Food Technology, Food Science, Housing, Health Promotion, Education and Consumerism.

Subject: Mathematics **HOD:** Mr D Laughlin

The subject is available at AS and A2 Level.

Content of Course:

To cater for the needs and varying abilities of pupils the Mathematics Department operates two streams of classes in GCE Mathematics. Pupils who have demonstrated exceptional ability throughout their study of GCSE Additional Mathematics and are deemed capable of doing Further Mathematics in Upper Sixth are given the opportunity of doing 'A' Level Mathematics in one year completing all AS/A2 examinations during their Lower Sixth year. Pupils who would find the one year course very demanding, or who may not want to study Further Mathematics in Upper Sixth, will study for their AS in Mathematics in Lower Sixth and then proceed to study for the A2 Level Mathematics in their Upper Sixth year.

The AS Level offered consists of three modules and incorporates the compulsory Pure Mathematics element together with a Mechanics module. The A2 Level offered consists of additional compulsory Pure Mathematics modules and a Statistics module. It is the intention of the Mathematics Department that pupils should leave school with a broad based knowledge of Mathematics and to this aim all A2 Level pupils will have studied Pure Mathematics, Mechanics and Statistics by the end of their Upper Sixth year.

Assessment Arrangements:

AS	Paper C1 (Pure Mathematics)	1½ hours
	Paper C2 (Pure Mathematics)	1½ hours
	Paper M1 (Mechanics)	1½ hours
A2	Paper C3 (Pure Mathematics)	1½ hours
	Paper C4 (Pure Mathematics)	1½ hours
	Paper S1 (Statistics)	1½ hours

Module C1 is a non-calculator paper.

Coursework Details (if appropriate):

There is no coursework required for this subject.

Subject Specific Requirements:

Grades A*, A or B in both GCSE Mathematics and GCSE Additional Mathematics are a prerequisite for all pupils in the school who intend to study at AS/A2 Level Mathematics. It is also desirable that pupils entering the Lower Sixth Further Mathematics class should have grade A* or A in both GCSE Mathematics and GCSE Additional Mathematics.

Other Information:

Mathematics is essential for pupils who wish to study Engineering, Actuarial Science, Computing or specialist courses in Mathematics at University. Indeed, any other course at Third Level Education which is in anyway mathematically orientated would benefit from studying this subject. Good Mathematics graduates are highly sought after and generally find employment in the highest paid sectors.

Subject: Music HOD: Mr J Watt (Acting)

Availability:

This subject is available at AS and A2 Level.

Content of Course:

The Music course is built around four compulsory core elements - composing, performing, listening and appraising and historical study. Each of these will be assessed both at AS and at A2 level. In addition, pupils choose one additional optional unit each year, allowing them to accommodate their own musical interests in a fairly flexible way.

The elements of the course are taught concurrently. Pupils continue to develop their own compositional styles and also explore a range of compositional techniques based on the work of other composers. They may opt too for music technology units involving multi-track recording or sequencing.

They continue to work on performing skills on either voice or instrument(s), developing these to an advanced level. They may also select ensemble work.

Aural perception classes develop pupils' listening skills in a focused way and relate closely to the study of set works and a range of historical periods and topics.

Assessment Arrangements:

The AS course is divided into two units: AS 1 and AS 2. Students following the A Level course must study two further units: A2 1 and A2 2. The content of these units is set out below.

Unit AS 1: Making and Appraising Music 1

Students should select on of the following options:

Opt. A: core solo or ensemble performance + composition task

Opt. B: core solo or ensemble performance + multi-tracking task

Opt. C: core solo or ensemble performance + sequenced arrangement task

Opt. D: core composition task+ solo or ensemble performance

This unit is worth 64% of the AS or 32% of the complete A Level.

Unit AS 2: Responding to Music 1

Test of Aural Perception lasting 1 hour

Written examination lasting 75 minutes

This unit is worth 36% of the AS or 18% of the complete A Level.

A2 1: Making and Appraising Music 2

Students should select on of the following options:

Opt. A: core solo or ensemble performance + composition task

Opt. B: core solo or ensemble performance + multi-tracking task

Opt. C: core solo or ensemble performance + sequenced arrangement task

Opt. D: core composition task+ solo or ensemble performance

Note: The performance also includes viva voce. Composition and music technology tasks also include a commentary. This unit is worth 30% of the A Level.

A2 2: Responding to Music 2

Test of aural perception lasting 1 hour

Written examination lasting 90 minutes

This unit is worth 20% of the A Level.

Coursework Details (if appropriate):

The composition units and optional sequenced realisation of a musical extract are coursework activities. All coursework is submitted for assessment by the end of April in the year of the examination.

AS1 Optional Units

One piece of free composition lasting $2\frac{1}{2}$ -3 minutes, accompanied by a detailed commentary Using multi-track recording techniques to create a performance (2-4 minutes).

Students must create a sequenced arrangement of a prescribed stimulus (1.5 - 2 minutes).

A21 Optional Units

One composition (3-4 minutes) based on one of three stimuli, which will be issued in September each year, accompanied by a detailed commentary.

One piece of free composition lasting 2-3 minutes, accompanied by a detailed commentary.

Using multi-track recording techniques to create a performance (6-8 minutes).

Students must create a sequenced arrangement of a prescribed stimulus (2-3 minutes).

Subject Specific Requirements:

Pupils should normally have gained a good grade (preferably an A) in Music at GCSE. They should be fluent readers of standard music notation. They should have reached a performing standard of at least Grade 4 by Lower 6th and Grade 6 by Upper 6th and should be committed to continued study and practice of their chosen instrument or voice. They must be prepared to take part in rehearsals and performances of the Orchestra, Chamber Choir and/or Senior Choir as directed by the Head of Music.

Other Information:

'A' Level Music is usually required for further study of music at college or university. It may also be useful for students of other arts-related courses. The wide range of practical and academic skills it helps to develop is relevant to many other areas of third-level education. In terms of eventual employment, the music industry offers a great variety of jobs, and its increasing importance in today's economy is reflected in the growing numbers of people involved. Jobs which are directly music-related include performing of all types, conducting, composing (for film and TV, for education etc), teaching, sound engineering, recording and broadcasting, journalism, publishing, arts administration, retailing, instrument making and repair and music therapy.

Subject: Physical Education **HOD:** Mrs C.Burns

Availability:

This subject is available at AS and A2 Level

Content of Course:

The AS course is made up of 2 Modules

Unit 1: Participation in Sport and Recreation.

This unit looks at issues relating the development of active leisure and recreation, healthy lifestyle, the effects of exercise- responses and adoptions of the body systems, fitness and training, fitness assessment, the development of competitive sport, performance pathways, lifelong involvement, and the long-term athlete.

Unit 2: the Critical Sports Performer

This unit focuses on a pupil's personal performance as a player, leader and official.

The A2 Course is made up of 2 Modules

Unit 3: Preparation for Optimum Sports Performance

This unit addresses issues relating to physiological preparation, technical preparation, fatigue and the recovery process in the short and long term as well as managing elite performance:

Unit 4: The Developing Sports Performer

This unit focuses on a pupil's personal performance as a player, leader and official.

Assessment Arrangements:

The AS course is assessed over two units. Unit 1 is externally assessed through a 1.5-hour examination paper. Unit 2 is internally assessed, through compiling a portfolio of evidence covering the **four** practical related tasks.

The A2 course is also assessed over two units, Unit 3 through a 2-hour examination paper. For Unit 4 pupils will submit four completed coursework tasks on their own student CD portfolio.

Subject Specific Requirements: Although it is not a requirement that pupils should have studied physical education at GCSE level in order to take an advanced course in PE, it is recommended that pupils wishing to study AS/A2 Level have at least a Grade B at GCSE PE. Several topics covered in the course are developments of work covered at GCSE but others are new. What is important is that pupils should have a lively and enquiring mind, an interest in physical education and sport, a willingness to explore new ideas and an ability to communicate their ideas effectively. It would also be an advantage and desirable, though not necessary, to be studying Biology at 'A' Level.

Other Information:

Pupils should be taking an active part in sports in

- (i) the school environment ie potential 1st XV/1st XI players etc
- (ii) playing/representing local clubs in the community ie Swimming Club, local soccer teams, Gaelic teams etc.

With an Advanced GCE Physical Education qualification, there is access to a wide range of possible career and higher education opportunities. Pupils learn and use a variety of transferable skills throughout the course which are in great demand by employers, universities and colleges.

Physical education combines with many AS and Advanced GCE subjects. It supports applications for a wide range of university courses like sports sciences, physiotherapy, recreation and leisure studies' and there are many new and exciting courses related to sport throughout higher education.

Subject: Physics HOD: Mrs K Beggs

Availability:

This subject is available at AS and A2 Level.

Content of Course:

Both AS and A2 level courses are designed to stimulate and sustain an interest in, and enjoyment of, Physics and its applications. They provide a knowledge and understanding of the principles and theories of Physics, and of how these contribute to our technologically-based society. The courses also develop and assess the pupil's written, numerical and graphical communication skills, as well as practical experimental skills.

AS Level:

This course begins with the basic concepts of Newtonian mechanics, electricity, waves, light and sound. It introduces pupils to quantum theory and wave-particle duality, two of the most revolutionary concepts in Physics. The course contains a section on Medical Physics, including recent developments in diagnosis and treatment.

A2 Level:

This builds on the AS course and extends the pupil's knowledge and understanding to include the kinetic theory of gases, gravitational and electric fields, electromagnetism, together with electron, atomic and nuclear Physics. It concludes with a section on Particle Physics, bringing pupils into contact with the most up-to-date theories of matter in the twenty-first century.

Assessment Arrangements:

AS Module 1 Exam: Forces, Energy, Electricity (1 hr 30 mins)
Module 2 Exam: Waves, Photons and Medical (1 hr 30 mins)
Module 3 Exam: Practical techniques (1 hr 30 mins)

A2 Module 4 Exam : Momentum, Thermal Circular Motion and

Oscillations, Atomic and Nuclear (1 hr 30 mins)

Module 5 Exam: Fields and their applications (1 hr 30 mins)
Module 6A Exam: Practical techniques (1 hr 30 mins)

Coursework Details (if appropriate):

There is no coursework required for this subject.

Subject Specific Requirements:

It is strongly recommended that pupils taking AS/A2 Level Physics have achieved Grade A*, A or B in GCSE Physics or Grades A*A*, AA in Double Award Science, plus grade A*, A or B in Additional Mathematics. It is strongly advised that pupils take 'A' Level Mathematics in addition to Physics.

Other Information:

In their study of AS/A Level Physics pupils have the opportunity to develop their mathematical ability, communication skills, sense of enquiry, practical capabilities and powers of observation. Together, these qualities form an excellent foundation for a wide range of careers. These include astronomy, astrophysics, communications, computing, all branches of engineering, environmental science, education, geophysics, health and medicine, scientific civil service, industry, space science and transport. Good 'A' Level grades also open the door to careers which do not involve the practice of Physics, but in which problem-solving and practical skills are valued. These include accountancy, the civil service, banking, commerce, journalism, law and management.

Subject: Psychology **HOD:** Ms K McCambridge

Availability:

This subject is available at AS and A2 Level

Content of Course:

AS Module 1 Cognitive psychology, including memory and eyewitness testimony, Developmental Psychology, including early social development, attachment and the effects of day care and Research methods, in the context of the topic areas.

AS Module 2 Biological psychology, including stress, factors affecting stress, coping with stress and managing stress, Social psychology, including majority and minority influence, obedience and independent behaviour and Individual differences, including definitions of abnormality, approaches and therapies.

A2 Module 3 Biological rhythms and sleep, Relationships and Aggression.

A2 Module 4 Psychopathology (Depression), Psychology in Action (Media Psychology) and Research Methods

Assessment Arrangements:

All pupils must meet the following assessment objectives:

- (i) Knowledge and Understanding
- (ii) Interpretation and "Commentary"
- (iii) Research Skills
- (iv) Quality of Written Communication

AS	Module 1 Module 2	1½ hours duration 1½ hours duration) Modules 1 and 2 are each worth 25% of) total 'A' Level mark
A2	Module 3 Module 4		orth 25% of total 'A' Level mark orth 25% of total 'A' Level mark

Subject Specific Requirements:

It is recommended that pupils wishing to study AS or A2 Level Psychology have a grade A*, A or B in GCSE English and at least a grade C in GCSE Mathematics. A grade C in Science is desirable. It is not necessary to have taken this subject at GCSE Level in order to study it at AS/A2 Level.

Other Information:

Psychology is the scientific study of Mind and Behaviour, both human and animal. It is useful for the following occupations: teaching, nursing, social work, probation service, personnel, marketing, counselling and of course the various applied branches of Psychology: - clinical, educational, industrial, health, sport and forensic.

Subject: Religious Studies **HOD:** Miss C Bingham

Availability:

The subject is available at AS and A2 Level.

Content of Course:

AS Module 1 Unit 2 Introduction to Acts of the Apostles

- Background to Acts

- Growth and Expansion the Church

- Faith, Work and Witness in Acts

AS Module 2 Unit 4 The Early Christian Church

- Expansion of Christianity/Persecution

- Church Government/Constantine

- Early Christian Thought of Apostolic Fathers/Apologists

A2 Module 1 Unit 2 A Study of Acts, Galatians and I Corinthians

- The Theology of Acts

- Galatians/ Corinthians

- Paul in Acts and Letters

A2 Module 2 Unit 4 Development of the Christian Church in the Roman Empire to

AD325

- Church life and worship

- Heresy and schism/Defining the faith/Council of Nicaea

- Early Christian Literature: Tertullian/Origen

Assessment Arrangements:

AS Level:

- Unit 2 80 minute Examination
- Unit 4 80 minute Examination

A2 Level:

- Unit 2 2hrs Examination
- Unit 4 2hrs Examination

Subject Specific Requirements:

While there are no specific subject requirements for this subject, it is recommended that pupils who wish to study Religious Studies to AS/A2 Level have a Grade A*, A or B at GCSE level in this subject (either full or short course).

Other Information:

A Level Religious Studies is accepted by all universities as providing pupils with excellent analytical, evaluative and research skills necessary to complete a broad range of undergraduate degree courses. The qualities developed in this course will enable pupils to eventually deal with people in various situations associated with such careers as Law, Journalism, Nursing, Management, Social Work, Teaching and Ministry.

Subject: Spanish HOD: Mrs S Service (Acting)

This subject is available at AS and A2 Level

Content of Course:

The specification builds upon the knowledge and understanding, concepts and skills acquired through the study of Spanish at Key Stage 4 (GCSE). The examination will assess the four skill areas of Speaking, Listening, Reading and Writing, placing great emphasis on the use of Spanish as the medium of assessment. Pupils are required to demonstrate their linguistic ability by understanding and responding to texts in Spanish, drawn from a variety of sources such as magazines, newspapers and books; by understanding and responding to authentic spoken Spanish from different sources, such as recorded news items, telephone messages and announcements; by demonstrating an ability to select and present information, opinions and ideas in written and spoken Spanish. The course will develop the pupil's awareness, appreciation and knowledge of the culture and civilisation of countries where Spanish is spoken and contribute significantly to the European dimension of the school curriculum.

Type of assessment:

AS 2 units to be assessed in May/June of Lower Sixth A2 2 units to be assessed in May/June of Upper Sixth

Topics:

AS: Relationships

Young people in Society Health and Lifestyle

A2: Local and Global Citizenship Environmental awareness

Assessment Arrangements:

AS 1: Speaking test - a 13 minute presentation and general conversation in Spanish

AS 2: 3 sections: Listening: 2 questions based on 2 passages recorded on individual CDs – 40 minutes Reading – Comprehension and Translation from Spanish to English – 1hr 05 minutes Extended Writing – 200-250 word response to a stimulus article – 1 hr

A2 1: Speaking test – A 15 minute discussion based on societal theme and conversation in Spanish
 A2 2: 3 sections: Listening: 2 questions based on 2 passages recorded on individual CDs – 40 minutes
 Reading: Comprehension and Translation from English – 1hr 20 minutes
 Writing: 300-350 word response based on a literary text – 1hr

Coursework Details:

There is no coursework option.

Subject Specific Requirements:

It is recommended that pupils wishing to study AS/A2 Level Spanish have a Grade A* or A at GCSE in this subject. It is also recommended that pupils also have at least an A in GCSE English.

Other Information:

Knowledge of a foreign language is becoming extremely sought after in the field of International Business where A Level Spanish is needed to access certain degree courses.

A good degree in this subject would be essential for the following: teaching Spanish, Interpreter, work in import and export trade, the Foreign Exchange branch of a Bank and can lead to openings in most fields ranging from Law, Business, Journalism, the Media, Entertainment, Civil Service, Local Government to Tourism and Travel, Secretarial and Administrative work, Catering and the Hospitality Industry and many other jobs and professions.

Subject: Technology and Design HOD: Mr J Palmer

Availability:

This subject is available at AS and A2 Level

Content of Course

Through studying GCE Technology and Design, students have opportunities to understand the potential impact of technology and why it is critical to the world around us.

Technology is not naturally good or bad. Instead, its effects are complex, hard to estimate accurately, and likely to have different values for different people at different times.

Technology and Design is concerned primarily with the design and manufacture of high quality technological products. Every design is influenced by outside factors such as consumer demand, the state of the market, customer expectations and consumer laws.

Studying Technology and Design at AS and A2 level provides opportunities to tackle and resolve design and technological problems to meet human needs. Essentially, the courses teach techniques for finding better ways to do things, inventing solutions and taking risks.

The specification is comprised of two levels: AS and A2. The AS can be taken as a stand-alone qualification without progression to A2. However, to obtain the Advanced GCE qualification, students must complete both the AS and A2 levels.

Assessment Arrangements & Coursework Details:

Students must complete two units at each level. These are listed below and are all compulsory:

AS Units

AS 1: Product Design and Systems and Control

- 1. Material Choice and Selection
- 2. Wood
- 3. Metal
- 4. Plastic
- 5. New Materials
- 6. Method of Processing Materials
- 7. Methods of Joining Materials
- 8. Manufacturing Systems and Production
- 9. Design and Manufacture
- 10. Quality Systems
- 11.Safety
- 12. Aesthetics, Ergonomics, Anthropometrics
- 13. Influences on Product Design

Examination - 50% of AS 25% of A Level

AS 2: Coursework – Product Development

This unit draws on the knowledge and skills covered in Unit AS 1.

- 50% of AS 25% of A Level

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A2 Units

A2 1: Systems and Control

Section A: Electronic and Micro-electronic Control Systems

- * Systems and Control
- * Safety
- * Electronic Input Components
- * Calculations
- * PICS
- * Output Devices
- * Electronic Systems

Examination - 25% of A Level

A2 2: Coursework - Product-System, Design and Manufacture

This unit draws on the knowledge and skills covered in all the units.

Students develop their own project and set their own context 25% of A Level

Subject Specific Requirements:

It is recommended that pupils wishing to study Design and Technology at AS or A2 Level have either a Grade A*, A or B in GCSE Technology and Design.

Other Information:

Universities offer degree courses in Design and Technology that lead to a wide range of careers from teaching to industrial or product design. This subject is an excellent starting point for most branches of engineering (including aeronautical and aerospace, chemical, civil, electrical and electronic, geological and mining, industrial, marine, mechanical, military and nuclear), industrial design, product design, architecture, for careers behind the scenes in broadcasting (TV, Radio, Satellite), careers involving computers or Information and Communication Technology, medical technology and many others.

Subject: Additional Studies – Sports Leader Award

Availability:

Available as part of the Additional Studies programme for pupils choosing to study 3 AS Levels in L6.

Content of Course:

This is a nationally recognised award that helps young people over the age of 14 develop their leadership skills. It offers an insight into the enjoyment one can gain through sports leadership.

The syllabus fosters generic skills, which can be applied to a variety of different sporting activities as well as contributing to the participants' personal and social education.

- Unit 1 Contribute to organising and delivering a sports activity session
- Unit 2 Establish and maintain a safe sporting activity
- Unit 3 Understand the structure of sport and recreation at local, regional and national level
- Unit 4 Understand and lead fitness sessions
- Unit 5 Demonstrate principles and practice in running sporting events and competitions
- Unit 6 Demonstrate principles and practice in adapting sports activities
- Unit 7 Plan a series of appropriate sporting activities
- Unit 8 Demonstrate leadership skills in the community

The course will help students:

- Display high personal standards and project a favourable image as leader and of the organisation/sport
- Respect the rights, dignity and worth of every human being.
- Ensure a safe working environment. One that participants find stimulating and which provides opportunities for enjoyment.
- Improve their personal competence
- Recognise that participants are at the centre of the process and that effort should be directed at ensuring that the participants experience safe, enjoyable and purposeful activity

It is intended through the Sports Leader course that the students will demonstrate the following values:

Attitude Confidence Commitment Tolerance Reliability
Responsibility Maturity Respect Enthusiasm Effort
Initiative Self Control

Assessment

Students are assessed on a continuous basis by their tutor, based on assessment criteria for each unit. In addition, attitude and approach to leading others will form part of the assessment. You will be assessed by:

- Observation of performance
- Performance of set tasks
- Questioning
- Prior achievement

Subject: Additional Studies - European Computer Driving Licence (ECDL)

What is ECDL?

The European Computer Driving Licence® (ECDL) is an internationally recognised qualification, which enables people to demonstrate their competence in computer skills. It is managed in the UK by the British Computer Society (BCS).

Why do ECDL?

It is fast becoming the most widely recognized qualification in the field of work-related computer use. Its key benefits are that it:

- 1. raises the level of competency in ICT & computer skills
- 2. improves productivity at home & work
- 3. requires **no** prior knowledge of ICT or computer skills (those doing ICT as a subject at sixth form should **not** choose this as an option)
- 4. provides an industry recognized qualification (equivalent to 2 GCSE's if all 8 modules are successfully completed)

Major employers such as the NHS, HSBC and Sainsbury's have adopted ECDL as the benchmark ICT qualification.

The **eight** modules that make up the ECDL are:

- 1. Basic concepts of IT
- 2. Using the computer and managing files
- 3. Word processing
- 4. Spreadsheets
- 5. Database
- 6. Presentation
- 7. Information and Communication
- 8. Overview- revision of all 7 modules

Time required:

- You will complete all eight modules in Lower Sixth (two periods in school per week and independent study at home/ during free time)
- At the end of each month a different module will be tested. (Modules 1,2 & 7 tested before Christmas to obtain a Level 1 qualification)

You must be organised, independent, dedicated and prepared to do an examination at the end of each month!

Find out more at www.ecdl.co.uk

Subject: Additional Studies – Sage @ School and Personal Finance

Availability:

Available as part of the Additional Studies programme for pupils choosing 3 AS Levels in L6.

What is Sage @ School?

Sage @ School provides an opportunity to receive a Sage certified user award and gain experience in Ireland's leading accounts software. The completion of this course will enhance your CVs with valuable experience and certification in Sage Software, which many employers require from applicants.

The course will comprise of the completion of 2 manuals and then an on-line exam.

By the end of the course you will:

- Know how to set up & install the program including basic configuration, account coding structures and layout of accounts
- Gain an overview of the three integrated ledger systems- Nominal, Sales and Purchases
- Know how to enter opening balances for nominal, customer and supplier accounts
- Know how to operate the Nominal Ledger and the Bank
- Understand how to record supplier invoices and credit notes, and make supplier payments
- Understand how to record sales invoices and credit notes and post customer receipts
- Know how to identify and correct errors
- Be able to plan and create stock records and how to produce product invoices
- Know how to perform a bank reconciliation
- Be able to manage credit control, including statements and overdue letters
- Understand how to produce financial reports, including the Profit & Loss report and Balance Sheet
- Know how to complete a VAT return and make VAT payments
- Know how to prepare for, and run the Year End routine

Other aspects to this enrichment course will relate to your own personal finance management and include activities and guest speakers. This will include:

- Understanding your money
- Setting up and managing bank accounts (on-line)
- Managing your different types of accounts
- Budgeting tools
- Being safe & secure with your money

Time required:

You will complete the Sage @ School Award and Personal Finance Modules in Lower Sixth (two periods per week and independent study at home).

Subject: Additional Studies - Young Enterprise

Availability:

Available as part of the Additional Studies programme for pupils choosing to study 3 AS Levels in L6.

Content of Course:

Young Enterprise is all about learning by doing. It allows you the opportunity to set up and run your own company selling the products you decide to manufacture, in an effort to make money for your shareholders (and yourself).

The qualification aims to:

- Develop critical understanding of the enterprise environment through practical experiences
- Develop critical understanding of the factors affecting the success of a business
- Develop an understanding of the economic concepts and the ability to apply them in business situations
- Develop and understanding of the influence of the individual in contributing to business performance

You will gain experience of working in a team, solving real problems and improving your communication/presentational skills by working as a Director of the Company. Directors are responsible for all areas of the business including Sales, Personnel, Marketing, Finance, Information Technology, Production and Administration.

You will receive advice from a local Business Advisor and have the opportunity to attend Trade Fairs where you sell your product and compete with other Young Enterprise companies at local, national or European levels.

Assessment Arrangements:

There is one 2 hour examination which is usually taken in May of the L6 year. The examination is based on a Case Study and pupils have an opportunity to read and discuss the Case Study before the examination is taken.

On successful completion you will be awarded a Level 2 Certificate for Young Enterprise. This is equivalent to one GCSE.

Subject Specific Requirements:

None

Other Information:

Many large employers recognise the importance of The Young Enterprise Programme and examination. It provides useful practical experience and skills which can be highlighted on application forms and CVs when applying for jobs or to University (UCAS). Selecting this subject requires lunchtime and after school commitment to manufacture and sell your product.





St. Mary's
Grammar School, Magherafelt.













Foreword

It is with great pleasure that we, as the five Post Primary Principals in Magherafelt, present to you, our Year 12 pupils, these additional A Level choices for you to consider with commencement in September 2011.

The five schools, along with the Northern Regional College, have been operating this collaborative initiative since 2009 and we would commend the possibilities that are now being presented to you for 2011/12.

We would ask you to consider the subjects that are detailed in the following pages and if you feel <u>one</u> of the subjects may be of real interest to you, in addition to your own school choices, then please indicate this on your own school's 'subject choices' sheet.

The Magherafelt Learning Community, comprising the five Post Primary Schools, the NRC and Kilronan Special School are fully committed to making the educational experience of all our students something that is second to none. We believe that our collaborative efforts will add richly, both in terms of choice and quality of provision, to this experience.

Your Principals are convinced that collaboration will undoubtedly be of great benefit to the pupils of Magherafelt for years to come. We hope that you will find new doors of opportunity opening as you consider the following information.

We wish you well on your own personal journey.

The Magherafelt Principals

The following subjects are available:

Subject Title:

GCE Health and Social Care (CCEA)

Government & Politics (CCEA) Moving Image Arts (CCEA)

Travel and Tourism (AQA)

Accounting (AQA)

National Award in Engineering

Teaching Location:

St Pius X College

Magherafelt High School

Sperrin Integrated College

Sperrin Integrated College

NRC (Magherafelt)

NRC (Magherafelt)

Subject Title:Applied Health & Social Care (CCEA)Teaching Location:St Pius X CollegeAvailability:This subject is available at AS and A2 LevelHead of Department:Mrs E McNeill

Content of Course

This course is aimed at students who would like to learn something about the vocational area of health and social care. To gain an award you will have to complete three or six units which cover a range of aspects of health and social care.

You will follow a core programme of compulsory units, designed to provide a broad introduction to the nature of health, social care and early years service. Alongside the organisation and funding of services, you will investigate the care values, skills and knowledge required to work within the wide-ranging health and social care field. You can then choose from a range of optional units which allows you to specialise in an area of your choice.

This course will appeal to students who:

- Are interested in a Career in the caring field.
- Have an interest in people of different ages children through to the elderly.
- Are reasonably competent in Biology.

Assessment Arrangements

AS Level

•	Promoting Positive Care	(Internally Assessed - 1	5.66%)
•	Communicating in Care Settings	(Internally Assessed - 10	6.66%)
•	Health and Well Being	(Externally Assessed - 10	6.66%)

A2 Level

•	Supporting the Family*	(Internally Assessed	-	16.66%)
•	Applied Research*	(Internally Assessed	-	16.66%)
•	Providing Services	(Externally Assessed	-	16.66%)

Subject Specific Entry Requirements

GCSE Health & Social Care is not a requirement for GCE Health & Social Care, although it is advantageous. Pupils must have GCSE English and Mathematics at Grade C or above and have a good record of attendance.

Other Information

Students studying Applied GCE in Health and Social Care have access to a wide variety of health related courses in Universities. However, the qualification can be used, in conjunction with other subjects, to support applications to non-health related courses. Students can also go directly to work in health and social services.

*Optional Units - Subject to Change

<u>Subject Title:</u> Government & Politics (CCEA) <u>Teaching Location:</u> Magherafelt High School

Availability: This subject is available at AS and A2 Level **Head of Department:** Mr S Fleming

Mr D Charles

Content of Course

The study of Government & Politics encourages young people to develop knowledge and understanding of the political systems in which they live. It also actively encourages students to become involved as citizens and enables them to develop critical thinking and other essential academic skills. Study of the subject at GCE Level helps prepare students for careers in many areas including law, business, finance, government services and, of course, politics itself.

AS Module 1 – The Government and Politics of Northern Ireland

AS Module 2 – The British Political Process

A2 Module 1 – Comparative Government of Britain and America

A2 Module 2 – Political Power and Political Ideas

Assessment Arrangements

AS: Module 1

40% of AS & 20% of A Level 1 hour 15 minutes

AS 2: Module 2

60% of AS & 30% of A Level 1 hour 45 minutes

A2 1: Module 1

30% of A Level 2 hours 15 minutes

A2 2: Module 2

20% of A Level 1 hour 15 minutes

There is no coursework element for this subject.

Subject Specific Entry Requirements

It is recommended that pupils have obtained the necessary requirements for entry into Lower Sixth. It is not necessary to have taken this subject at GCSE Level, however, a good understanding of current affairs would be beneficial.

Other Information

The study of Politics helps prepare students for careers in law, business, education and government services.

<u>Subject Title:</u> Moving Image Arts (CCEA) <u>Teaching Location:</u> Sperrin Integrated College

Availability: This subject is available at AS and A2 Level **Head of Department:** Mrs B Boorman

Content of Course

This new qualification offers students the opportunity to work with innovative software including Final Cut Express, Flash, iMovie, iStopMotion, Photoshop and specialist technology within our specially designed iMac Suite. Moving Image Arts is the first step in preparing students for a career in the creative industries. Students will create their own films or animations influenced by film theory and research.

The aims of the course are to develop the following:

- Intellectual, imaginative, creative and intuitive powers.
- Investigative, analytical, experimental, practical, technical and expressive skills, aesthetic understanding and critical judgement.
- Understanding of the inter-relationships between the Moving Image and other art forms, disciplines and practices.
- Knowledge and understanding of the place of the Moving Image in contemporary society and an awareness of the context in which moving image production and reception takes place.

Assessment Arrangements

AS 1: Creative Production (70% of AS / 35% of A Level)

Foundation Portfolio (compulsory coursework) includes the following:

- A written statement of intentions (800 1200 words).
- Written and illustrated pre-production materials to include: production notes, a screenplay and storyboard or illustrated shooting script, evidence of management, organisation and planning of time and resources.
- One Production Exercise (Film) approximately 1 minute in length.
- One finished Product (Film) approximately 5 minutes in length.
- Written evaluation (800 1200 words)

AS 2: Critical Response (30% of AS / 15% of A Level)

1 hour 30 minutes

Compulsory external online examination with previously unseen moving image clips.

A2 1: Creative Production and Research (35% of A2)

Advanced Portfolio (compulsory coursework) includes the following:

- An illustrated essay (1500 to 2000 words).
- Written and illustrated pre-production materials to include: production notes, a screenplay and storyboard or illustrated shooting script.
- Evidence of management, organisation and planning of time and resources.
- One Visual Style Production Exercise (Film) approximately 1 minute in length.
- One Technique Based Production Exercise (Film) approximately 1 minute in length.
- One finished Product (Film) approximately 5-7 minutes in length.
- A written Evaluation (800 1200 words).

A2 2: Critical Response and Specialisation (15% of A2)

2 hours 15 minutes

Compulsory external online examination with unseen moving image clips and optional art form specialisation with pre-set moving image clips.

Subject Specific Entry Requirements

This course would be best suited to students who demonstrate a high level of creative ability. It would be desirable that students have completed one or more of the following GCSE or equivalent courses in a creative and expressive subject eg Art and Design, Drama, Music and English Literature. ICT competency and an interest in Film Studies would also be beneficial.

<u>Subject Title</u>: Travel and Tourism (AQA) <u>Teaching Location</u>: Sperrin Integrated College

Availability: This subject is available at AS and A2 Level **Head of Department:** Mr B Carron

Content of Course:

AS Course content

Module 1 - Inside Travel and Tourism

Module 2 - Travel and Tourism – a People Industry. (Customer Service)

Module 3 - Travel Destinations. (the attraction of different areas for tourism)

A2 Course content

Module 8 – Travel and Tourism Project

Module 9 – Travel and Tourism. People and Quality.

Module 10 – Current Issues in Travel and Tourism.

Assessment Arrangements

AS Assessment details

Unit 1 has a 2 hour written paper worth $33^{1}/_{3}$ % of the AS. Units 2 and 3 are assessed by coursework portfolios relating to each topic and are worth $33^{1}/_{3}$ %

A2 Assessment details

Unit 9 is assessed by a 6 hour written paper based over four 1hour 30 minutes. Units 8 and 10 are assessed by coursework portfolios.

Subject Specific Entry Requirements

GCSE Maths and English are essential to enter the course. All portfolio sections are marked according to the use of English by the candidate.

Availability 12 to 15 places

Travel and Tourism offers students the opportunity to investigate and develop an understanding of travel and tourism, the world's fastest growing industry. The course will lead to the acquisition of a number of valuable skills such as research, evaluation and problem solving skills, the ability to plan, prioritise and the ability to meet deadlines.

Careers

A wide range of employment opportunities will be available to you after your College course or your progression to university. Many people go on to business related activities as this course develops the skills required by employers such as developing customer relations and communication.

Other Information

The Applied AS/A2 in Travel and Tourism will provide you with the transferable skills that you can apply not only to the travel industry but also to the retail, business, sales and service related sectors.

Subject Title: Accounting (AQA)

Teaching Location: NRC (Magherafelt)

Availability: This subject is available at AS and A2 Level **Head of Department**: Mr T Madden

Content of Course

At AS level students learn the fundamentals of record keeping, accounting principles, concepts and techniques. Financial accounting forms a major part of the AS course, but students will also gain an introduction to the ways in which accounting information can be used as a management tool – helping companies to measure, monitor and plan successful business operations.

At A2 equal emphasis is placed on Financial accounting and Management accounting. Students will learn how to produce a set of final accounts for partnerships, and limited companies; in addition accounts will also be prepared from incomplete records. They will study costing, capital investment appraisal, budgeting and sources of finance as well as considering social accounting issues.

Assessment Arrangements

Each unit has an Examination Assessment: Written paper 1 hr 30 mins. Each paper 25% of total marks.

AS Level

Unit 1 (50% of AS Level / 25% of A Level)

Introduction to Accounting

Purposes of accounting

Accounting records: subsidiary books and ledger accounts

Verification of accounting records

Profit Statements and Balance Sheet

Unit 2 (50% of AS Level / 25% of A Level)

Financial and Management Accounting

Types of business organisation

Accounting concepts

Further aspects of preparation of Profit Statements and Balance Sheet

Internal accounts of limited companies

Ratio analysis and the assessment of business performance

Introduction to budgeting and budgetary control

The impact of ICT in accounting

Unit 3 (25% of A Level)

Further Aspects of Financial Accounting

Sources of finance

Incomplete records

Partnership accounts

Published accounts of limited companies

Accounting standards

Stock Valuation

Unit 4 (25% of A Level)

Further Aspects of Management Accounting

Manufacturing accounts

Marginal, absorption and activity based costing

Standard costing and variance analysis

Capital investment appraisal

Budgeting: further considerations

Other factors affecting decision making: social accounting

Subject Specific Entry Requirements

There are no prior learning requirements. It is not necessary for candidates to have studied GCSE Accounting before commencing work on this specification and no prior knowledge of accounting is necessary. A strong mathematical ability would be an advantage.

Other Information

The world of finance attracts many top graduates and is generally associated with high salaries.

Large accounting firms offer a wide range of career opportunities to suit all interests including traditional auditing and assurance work, management consulting, corporate finance, IT consulting, tax planning, human resources (HR) and insolvency.

After gaining their professional qualifications, many accountants move into senior management positions in large firms. Locally we have many accountants who hold the position of CEO.

Every organisation requires personnel with financial knowledge and skills

Subject Title: National Subsidiary Diploma in Engineering (Edexcel) Teaching Location: NRC (Magherafelt)

Availability: This subject is available at AS and A2 Level **Head of Department:** Dr B Hill

Content of Course

Edexcel's BTEC Level 3 National Subsidiary Diploma in Engineering give learners the knowledge, understanding and skills that they need to prepare them for employment or University in disciplines including Manufacturing Engineering, Electronics Engineering etc.

According to the Engineering Council UK, engineers on average enjoy better remuneration than accountants or solicitors. There are huge opportunities and many skills gaps within this diverse and rapidly developing sector, both in the UK and abroad.

The University of Ulster and Queens University now recognise the combination of a single National Subsidiary Diploma with two traditional A Levels as a legitimate alternative to three traditional A Levels. For students who are reasonably certain that they want a career within Engineering, the further advantage of undertaking the National Subsidiary Diploma is that when they arrive at University they already understand the fundamentals of what they will be studying, which will ultimately give them a massive head start over their peers.

AS Level

Unit 01: Health and Safety in the Engineering Workplace

On completion of this unit a learner should:

- 1. Understand the key features of health and safety legislation and regulations
- 2. Know how to identify and control hazards in the workplace
- 3. Be able to carry out a risk assessment, identifying control measures
- 4. Understand the methods used when reporting and recording accidents and incidents.

PLUS

Any TWO from the following three units: - Unit 04, Unit 06 and Unit 16

Unit 04 Mathematics for Engineering Technicians

- 1. Be able to use algebraic methods
- 2. Be able to use trigonometric methods and standard formula to determine areas
- 3. Be able to use statistical methods to display data
- 4. Be able to use elementary calculus techniques.

Unit 06: Electrical and Electronic Principles

On completion of this unit a learner should:

- 1. Be able to use circuit theory to determine voltage, current and resistance in direct current (DC) circuits
- 2. Understand the concepts of capacitance and determine capacitance values in DC circuits
- 3. Understand the principles and properties of magnetism
- 4. Understand single-phase alternating current (AC) theory.

Unit 16: Engineering Drawing for Technicians

On completion of this unit a learner should:

- 1. Know how the design process operates when dealing with customers
- 2. Understand the impact of legislation, standards and environmental and manufacturing constraints on the design function
- 3. Be able to prepare design proposals that meet the requirements of a product design specification
- 4. Be able to produce and present a final design solution.

A2 Level

Unit 05: Mechanical Principles and Applications

On completion of this unit a learner should:

- 1. Be able to determine the effects of loading in static engineering systems
- 2. Be able to determine work, power and energy transfer in dynamic engineering systems
- 3. Be able to determine the parameters of fluid systems
- 4. Be able to determine the effects of energy transfer in thermodynamic systems.

Unit 25: Selection and Applications of Programmable Logic Controllers

On completion of this unit a learner should:

- 1. Understand the selection, hardware and software requirements of a programmable controller
- 2. Be able to use programming techniques to produce a program for a modern programmable controller
- 3. Understand complex programmable controller applications
- 4. Understand data communications media and networks used with modern programmable controllers.

EITHER

Unit 22: Fabrication Processes and Technology

On completion of this unit a learner should:

- 1. Know about health and safety legislation, regulations and safe working practices in the fabrication industry
- 2. Know the processes used to mark out and prepare materials to produce fabricated structures
- 3. Know how materials are formed and assembled to produce fabricated structures
- 4. Be able to interpret the specification of a fabricated structure and plan and carry out its manufacture.

OR

Unit 35: Principles and Applications of Electronic Devices and Circuits

On completion of this unit a learner should:

- 1. Understand the function and operation of diodes, transistors and logic gates
- 2. Be able to build and test operational amplifier-based analogue circuits
- 3. Be able to build and test combinational and sequential logic circuits
- 4. Be able to use computer-based simulation software packages to construct and test the operation of analogue and digital circuits.

Assessment Arrangements

All units are continually assessed over the period of two years. This course is particularly suited to those students who achieve high grades in course work and assignment work.

The course content is supported by a comprehensive set of course materials provided on the NRC VLE.

Subject Specific Entry Requirements

Entrants should possess at least 4 GCSE's at Grade C or above or other relevant qualifications. GCSE's must include Maths and two science related subjects.