

CULTS ACADEMY

Course Information S4



Qualifications for the Senior Phase

2019/20





CONTENTS

	ENGLISH AND LITERACY	7	
	MATHEMATICS & NUMERACY	8	
EXPRESSIVE ARTS			
	ART & DESIGN	9	
	MUSIC	11	
	DRAMA	14	
HEALTH AND WELLBEING		15	
	HEALTH & FOOD TECHNOLOGY	15	
	PHYSICAL EDUCATION	16	
	WORK EXPERIENCE	17	
MODERN LANGUAGES		18	
	FRENCH/SPANISH	18	
SCIENCES		20	
	BIOLOGY	20	
	CHEMISTRY	21	
	PHYSICS	23	
SOCIAL SUBJECTS		25	
	GEOGRAPHY	25	
	HISTORY	26	
	MODERN STUDIES	27	
TECHNOLOGIES		29	
	ACCOUNTING	29	
	COMPUTING SCIENCE	31	
	DESIGN & MANUFACTURE	32	
	ENGINEERING SCIENCE	33	



INTRODUCTION

Senior Phase Qualifications

The National, Higher and Advanced Higher qualifications are designed to help young people progress smoothly from a broad based secondary school education to the more specialised demands of college, university or employment.

S4

Most S4 pupils will study courses at National 4 or 5 levels. In exceptional circumstances it may be possible for pupils who have performed at a very high level by the end of S3 to enter a Higher level course in S4. The option to take on a Higher must be discussed with your Pupil Support Pastoral Teacher and the Principal Teacher of Faculty.

S5

A fifth year offers many new challenges and responsibilities and can be a very rewarding year. If you do come back for a fifth year it will be your hardest year at school and the study required for Higher is quite intense. As a fifth year student you will be given much greater responsibility for your education than before.

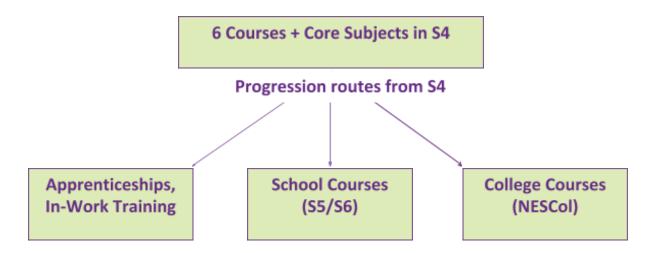
S6

Those pupils who have displayed a commitment to education in their fifth year are welcome to return for a sixth year. This can be an excellent preparation for future academic study and also gives an opportunity to prepare for the world beyond school.

All pupils will be provided with opportunities to enhance and further develop their academic qualifications and involve themselves in the wider life of the school. We encourage pupils to become involved with other activities such as music groups, school shows, sports teams, Duke of Edinburgh and other events as long as these do not affect their studies. All pupils who return to S6 will be encouraged to become S6 Leaders and will be expected to carry out certain whole school duties, become ambassadors for the school and act as positive role models to more junior year groups.



Progression routes from S4



How will the courses be assessed?

National 4 Assessments

National 4 courses are assessed by teachers through coursework assessment. There is **no** 'examination' set by the SQA. Teachers use guidance and support materials from SQA to assess pupils - National 4 courses are divided into a number of units each with an assessment. The SQA will verify the assessment of each school to ensure there is a consistency in the standard across Scotland. National 4 is not be graded but assessed overall as PASS or FAIL.

National 5 and Higher Assessment

Each of the qualifications at National 5 and Higher will be assessed by a question paper (exam) and coursework assessment.

The coursework assessment will be appropriate to the nature of the subject and will be one or more of the following:

- * Question Paper/Exam.

Courses at National 5, and Higher will be graded A to D or 'No Award'.



Alternative Assessment Arrangements

For pupils with learning needs, Alternative Assessment Arrangements (AAAs) may be considered. The purpose is to provide candidates with an equal opportunity to demonstrate their attainment without compromising the integrity of the assessment. Pupils' needs are diverse and their specific assessment arrangements are discussed individually when considering the most appropriate AAAs. Parents will be consulted during this process. The SQA requires the school to gather evidence throughout the year and to review arrangements to ensure the system is rigorous and fair.



ENGLISH AND LITERACY

National 4

English at National 4 level gives pupils the opportunity to build on the skills developed in covering the Level 3 outcomes and experiences. Pupils will have the opportunity to develop their analysis and evaluation skills through studying a variety of texts. They will also have the opportunity to write in a number of different genres. National 4 candidates will also prepare and perform a detailed talk comparing two different texts as a compulsory element of the course.

National 5

English at National 5 level gives pupils the opportunity to build on the skills developed in covering the Level 4 experiences and outcomes across the key areas of reading, writing and talking / listening. During the course, learners will analyse and evaluate a range of texts from a variety of genres, including a text by a Scottish writer. They will create and produce a range of texts including creative and discursive writing. Learners will also develop an understanding of the complexities of language through the study of a range of texts and develop their analytical thinking and understanding of the impact of language. Learners will be assessed on two exam papers: Reading for Understanding, Analysis and Evaluation (30 %) and Critical Reading (40%). A portfolio submitted by learners will be externally assessed (30%) and their talking skills will be assessed internally on a pass/fail basis in a compulsory Spoken Language assessment.

Literacy

Pupils taking National 5 will be presented for an Additional Literacy Unit in S4. This comprises internal assessments on the four outcomes: reading, writing, talking and listening.

Higher

Higher English gives pupils the opportunity to build on the skills developed in the junior phase and the National 5 course. Pupils will develop their skills across the areas of reading, writing, talking and listening. Pupils will study complex texts across a range of genres. They will enhance their appreciation of the Scottish literary tradition by studying a Scottish text. Through detailed engagement with texts across a range of genres, they will develop the skills of understanding, analysis and evaluation. They will develop their ability to structure their thoughts and create coherent arguments through critical essay writing. Pupils will also have the opportunity to produce their own pieces of writing, both creative and discursive, which will be submitted as a portfolio. A spoken language assessment is also a compulsory element of the course.

Progression

Pupils who perform well in National 4 English may progress to National 5 English. Pupils who perform well at National 5 English may progress to Higher English.



MATHEMATICS & NUMERACY

National

The National 4 and National 5 Mathematics Courses enable learners to select and apply mathematical techniques in a variety of mathematical and real-life situations. Entry is dependent on the pupil's previous level of study, experiences and ability.

National 4 Maths consists of the following units:

Expressions and Formulae Relationships Numeracy

There is also an Added Value Unit. The general aim of this Unit is to enable the learner to provide evidence of added value for the National 4 Mathematics Course through the successful completion of a test which will allow the learner to demonstrate breadth and challenge. The added value assessment has two papers, one of which is sat without the aid of a calculator. These are internally assessed.

Progression

Successful candidates at National 4 Maths may progress to National 5 Maths.

National 5 Maths consists of the following units:

Expressions and Formulae Relationships Applications

National 5 Maths is externally assessed. There are two papers, one of which is sat without the aid of a calculator.

Numeracy

Pupils taking National 5 will be presented for an Additional stand alone Numeracy Unit in S4.

Progression

Candidates who perform well at National 5 Mathematics may progress to Higher Mathematics.

Higher

This course is suitable for learners who have achieved grade A - C in National 5 Mathematics or wish to repeat the Higher course from last session.

Learners will acquire and apply operational skills necessary for exploring mathematical ideas through symbolic representation and diagrams. In addition, learners will develop mathematical reasoning skills and will gain experience in making informed decisions.

Higher Maths consists of the following units:

Expressions and functions Relationships and Calculus Applications

Higher Maths is externally assessed. There are two papers, one of which is sat without the aid of a calculator.

Progression

Candidates who perform well at Higher Mathematics may progress to Advanced Higher Mathematics.



EXPRESSIVE ARTS

ART & DESIGN

Art and Design features in many aspects of our everyday lives, from the advertising posters we see on our streets to the special effects we see in films. Almost everything we see or touch has been designed to be visually attractive including mobile phones, clothes, cars, buildings and websites.

The skills that you develop in Art and Design are useful in many different careers, such as architecture, interior design, fashion and textiles, graphics, web design, photography and engineering.

National

The National 4 and 5 Art and Design courses are practical and experiential. The key focus is creativity. The course combines developing knowledge and understanding of artists and designers and their work, with practical learning experiences.

The course encourages learners to experiment with using art and design materials, be imaginative, creative, think critically, and apply practical skills in response to art and design activities. It will also develop learners' understanding of artistic and cultural values, identities and ideas.

The course allows learners to broaden and deepen their skills base, to widen their horizons regarding a range of vocations and careers and to develop attributes and capabilities of the four capacities. Throughout the course, learners will develop creativity, perseverance, independence and resilience.

Course Content

The course units for Nat 4 are: **Expressive Activity** and **Design Activity** plus the Art and Design **Practical Activity** Value Added unit.

For Nat 5, the course comprises two areas of study: Expressive Activity and Design Activity.

Assessment

At Nat 4, units are assessed internally by your teacher in accordance with SQA guidelines.

At Nat 5, the course assessment has three components. The two practical portfolios are sent to the SQA for external assessment. In addition there is a theory exam.

Progression

From National 4 to 5 to Higher.



Higher

The Higher course has an integrated approach to learning, and includes a mix of practical learning and analysis of art and design practice.

The course enables learners to communicate personal thoughts, feelings and ideas through the creative use of art and design materials, techniques and/or technology.

Learners analyse a range of art and design practice and critically reflect on the impact of external factors on artists, designers and their work. They plan, develop, produce and present creative art and design work, develop personal creativity, and use problem solving, critical thinking and reflective practice skills.

Course Content

The course comprises two areas of study: Expressive Activity and Design Activity.

Assessment

The course assessment has three components. The practical portfolios are sent to the SQA for external assessment. In addition there is a theory exam.

Progression

From Higher to Advanced Higher.



MUSIC

Learners studying Music are well placed to develop skills for life, learning and work. In addition to developing general musicianship skills, you will develop in the following areas: working individually; self-discipline; time management skills; understanding the value of perseverance; teamwork; creative thinking and problem solving; listening skills; self-expression; cultural understanding; social skills; target setting and reflective thinking.

National

This course is intended for pupils who wish to develop overall musicianship as performers, composers and listeners. This aim is served by three elements: Performing, Composing and Listening. Through these activities pupils will develop their vocal and instrumental skills, explore sounds and musical concepts, and use their imagination and skills to create musical ideas and compositions.

Pupils can further develop their understanding and capacity to enjoy music through listening to musical performances and commenting on them. Pupils will use ICT to realise or enhance their composition and performance and to promote their understanding of how music works.

Learners will develop performing skills in solo and/or group settings on two selected instruments or one instrument and voice. The minimum standard of piece to be performed is ABRSM Grade 2 (or equivalent) for National 4 and ABRSM Grade 3 (or equivalent) for National 5. Added Value is by means of a live performance.

Course Content

The course consists of three elements.

Performing Skills

Learners develop performing skills on two selected instruments or one instrument and voice.

Composing Skills

Learners will experiment with and use compositional methods and music concepts in imaginative ways when creating their own music.

Understanding Music

Through listening, learners will develop their knowledge and understanding of a range of music concepts and music literacy.

Assessment

At National 5 level external assessment consists of a final Listening exam (35%), in which students will be asked to identify specific features and answer questions focusing on music literacy. They must also give a live performance to a Visiting Examiner during February/March. Students will perform on their chosen 2 instruments or instrument/voice for 8 minutes (a minimum of 2 minutes on any one instrument). The performance may be either solo and/or in a group and is worth 50% of the overall final grade in Music. An original Composition will be sent to SQA for external marking. This is worth 15% of the overall final grade.

Progression

From National 4 to 5 and Higher.

Higher

This course allows you to develop and consolidate practical skills in performing and creating music, while developing a detailed understanding of a range of music styles and concepts.

You will get the opportunity to perform a variety of challenging music in solo and/or group settings, using your own voice or your selected instrument (s). You will develop detailed knowledge and understanding of



music concepts and musical literacy. You will recognise and distinguish between a wide range of music signs, symbol and music concepts as you perform, create and listen to music.

The skills you learn on this course not only make a valuable contribution to your general education and personal development but also allow you to develop the skills and knowledge required to proceed to further study and/or follow a career in music.

Recommended entry

Pupils would normally be expected to have passed National 5 music or relevant component Units. It is recommended that any pupil who has no experience of music in the Junior Phase and/or does *not* have National 5, to be proficient on **two** instruments, *or* **one** instrument **and** voice, at Grade 4 level or above in order to be able to perform a programme of 12mins in length.

Course Content

The course consists of three elements.

Performing Skills

Learners develop performing skills on two selected instruments or one instrument and voice.

Composing Skills

Learners will experiment with, and creatively use complex compositional methods and music concepts at Higher level to realise their intentions when creating original music.

Understanding Music

Through listening, learners will develop detailed knowledge and understanding of a range of complex music concepts and music literacy.

Assessment

At Higher level external assessment consists of a final Listening exam (35%), in which students will be asked to identify specific features and answer questions focusing on music literacy. They must also give a live performance to a Visiting Examiner during February/March. Students will perform on their chosen 2 instruments or instrument/voice for **12 minutes**. The performance may be either solo and/or in a group and is worth 50% of the overall final grade in Music.

An original Composition will be sent to SQA for external marking; this is worth 15% of the overall final grade.

MUSIC TECHNOLOGY

National

The purpose of the National 5 Music Technology course is to enable candidates to develop their knowledge and understanding of music technology and music concepts, particularly those relevant to 20th and 21st century music. Candidates develop technical and creative skills through practical learning. The course provides opportunities for candidates to develop their interest in music technology and to develop skills and knowledge relevant to the needs of the music industry.

The course aims to enable candidates to:

- develop skills in the analysis of music in the context of a range of 20th and 21st century musical styles and genres
- develop an understanding of aspects of the music industry, including a basic awareness of implications of intellectual property rights



- develop skills in the use of music technology hardware and software to capture and manipulate audio
- · use music technology creatively in sound production in a range of contexts
- critically reflect on their own work and that of others

Course Content:

Music Technology Contexts

Candidates gain experience in using music technology skills to capture and manipulate audio and sequenced data, and mix down to an audio master in appropriate file format in a range of contexts such as live performance, radio broadcast, composing and/or sound design for film, audiobooks and computer gaming.

Developing Music Technology Skills

Pupils will learn how to use hardware and software to capture audio from a range of sources by exploring different recording techniques. Pupils will also learn how to manipulate audio by experimenting with and applying effects.

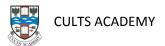
Developing the Understanding of 20th and 21st Century Music

Pupils will learn about the technological advancements in 20th and 21st century music by gaining knowledge and understanding of music concepts, styles and genres. Pupils will also develop their listening skills in order to identify particular genres and their attributes.

Assessment

There are two externally assessed components:

- · Practical Assignment (worth 70% of the overall grade)
- · Listening Question Paper (worth 30% of the overall grade.)



DRAMA

Drama is a predominantly practical subject which develops your creativity, imagination and ability to work as part of a group. It is particularly suitable for those who want to deepen their understanding of the world around them and communicate their ideas to an audience.

The skills gained in Drama are highly transferable and would be beneficial to a career in a variety of sectors including: communications and media, theatre, film, radio, costume design, business production, writing and teaching.

National

In the National course you will develop drama and production skills to create performances in a variety of forms and styles. In addition, you will work as part of a group to realise scripted dramas; developing your voice and movement skills and application of production skills.

Assessment

- Written Exam: 40%
- Performance assessed by a visiting SQA assessor: 60%

Higher

The Higher Drama Course develops skills in creating and presenting drama. You will develop and use complex drama skills and production skills to present drama.

You will analyse scripts and live performance with consideration of the social, political and cultural influences on theatre.

Course Content

The Course Units for both levels are: Drama Skills and Production Skills.

Assessment

- · Written Exam: 40%
- Practical Performance Exam assessment by a visiting SQA assessor: 60%

This Course provides opportunities for progression to Advanced Higher and to other SQA qualifications in Drama and related fields.



HEALTH AND WELLBEING

HEALTH & FOOD TECHNOLOGY

National

Health and Food Technology provides an opportunity to study the relationships between health, nutrition, the functional properties of food, lifestyle choices and consumer issues. This course develops an awareness of informed food and dietary choices that can have a positive effect on the health of the learners and enable them to advise others. Learners also develop a range of skills and applications of food preparation techniques, although it is more academic than practical.

This course will attract learners who have an interest in health, food and consumer issues. It will also appeal to learners who enjoy learning through practical activity and have an ability to link theory to practice. The flexible context and breadth of learning experiences offered should be attractive to a variety of learners.

Learners will acquire a breadth and depth of knowledge on the completion of this course including: the relationship between food, health and nutrition, dietary needs for individuals and groups at various stages of life, current dietary advice, factors which may affect food choices, contemporary food issues, food labelling, stages involved in developing food products and, through a problem-solving approach, produce a food product to meet specified needs.

The knowledge and skills developed in the course prepare learners for decisions required in learning, life and work. Learners develop practical skills that are transferable to a range of contexts including employment in a variety of sectors such as the health and food industries.

The course assessment has two components.

Component	Mark Allocation %
Component 1: Question Paper	50%
Component 2: Assignment	50%

Progression Routes

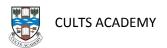
Higher Health and Food Technology

Further education in this area e.g. Life Sciences

A career in teaching, dietetics, food product development, food technologist, nutritionist, nursing or sports coaching

PHYSICAL EDUCATION

National



The Course will enable learners to develop the skills, knowledge and understanding required to perform effectively in a range of physical activities, and will enhance their physical well being. Learners will work both independently and co-operatively to develop thinking and interpersonal skills. This is an ideal platform for learners to develop confidence, resilience, responsibility and the ability to work effectively with others. Learners will be expected to take ownership of their learning and progress within the course and will have the opportunity to use technology throughout. Pupils will have the opportunity to work independently and with others in activities of their choice.

Learners will have the opportunity to develop and demonstrate movement and performance skills in a range of physical activities, such as, athletics, basketball, football, swimming, gymnastics and badminton. By engaging in practical activities, learners can demonstrate initiative, decision-making and problem-solving and develop a positive attitude towards a healthy lifestyle.

Learners will develop the ability to perform a comprehensive range of movement and performance skills whilst developing their understanding of the factors that impact on personal performance in physical activities. They will have the opportunity to build on their existing capacity to perform effectively and to develop approaches that will allow them to enhance their personal performance. Learners will establish any areas of development within their performance and then create their own plan for improving performance. Learners will have the opportunity to establish a greater level of performance and understanding in their chosen activities and may, at times, work out with the direct supervision of the class teacher in order to have the opportunity to achieve this. Monitoring, recording and evaluating performance development will be a key part of the course and this allows learners to develop their analysing and evaluating skills.

Progression Route:

Higher Physical Education

HIGHER

Course Content

The Higher Physical Education Course allows learners to develop and demonstrate a broad and comprehensive range of complex movement and performance skills in challenging contexts. Learners also analyse a performance, understand what is required to develop it, and apply this knowledge to their own performance. Learners will have to develop the ability to consistently respond to and meet the demands of performance, and to make appropriate decisions for effective outcomes.

Learners will evaluate and analyse their personal performance and implement approaches to address factors that impact on that performance. Learners will evaluate their choice of methods and approaches used to develop performance. They will justify decisions made and relate these to future development needs.

Learners will have the opportunity to establish an improved level of performance and a greater understanding in activities of their choice and may, at times, work out with the direct supervision of the class teacher in order to have the opportunity to achieve this.



WORK EXPERIENCE

As part of the suite of SQA Wider Achievement qualifications, the Employability Award is an introduction to the world of work for those who are unsure about how to gain and sustain employment.

The course focuses on generic employability skills, to enable a successful move into the job market. Pupils will develop skills and attitudes which will be applicable across all areas of employment.

Pupils will also have the opportunity to gain additional certification for stand alone units accredited by the SQA such as Personal Development: Self & Work/Self Awareness and the Work Placement unit at Higher level.

Pupils will complete a block of theoretical study over a period of approximately 12 weeks and will then have the opportunity to undertake an extended work placement during timetabled classes/school hours.

As part of the work placement, pupils will be required to reflect on their experience and complete an on-line log book detailing their progress towards achieving their targets.

The course would be suitable for any S4-S6 pupil seeking to improve their employability skills.



MODERN LANGUAGES

FRENCH/SPANISH

The ability to use language lies at the heart of communication and the study of a Modern Language has a unique contribution to make to the enhancement of a young person's literacy. In addition, learning a new language enables learners to play a fuller part as global citizens and make connections with different people and their cultures, gaining greater insights into other ways of thinking and other views of the world. The ability to use a foreign language is increasingly seen as a valuable set of additional skills and is nowadays often studied as a combined degree with many university courses (e.g. law, business, accountancy etc), making students more employable and better equipped for the world of tomorrow.

Through their language studies, pupils will also enjoy the opportunity to

- Enhance their communication skills
- Develop their literacy skills and their knowledge of the structure of the foreign language and how it relates to their own
- Raise their awareness of other cultures and international citizenship
- Develop generic skills such as working with others, research skills in presenting information and IT skills

National

As part of their studies at National level, pupils will continue to develop their linguistic skills in Reading and Listening (*Understanding Language*) as well as Talking and Writing (*Using Language*), while covering the broad contexts of **Society**, **Culture**, **Learning** and **Employability** (topics detailed below).

1. Society	2. Culture	3. Learning	4 Employability
Healthy Lifestyles	Travelling	Education	Jobs & future
Media	Spanish/French films	Current and	plans
Relationships	Literature, traditions	future studies	Work & CV

Assessment

At National 5, there will be an external course assessment covering the various elements of Reading, Listening, Talking and Writing. The course assessment in Reading, Listening and Writing will consist of a question paper while the format of the Speaking assessment will be an oral presentation on a chosen topic within the prescribed themes (see above), as well as a follow-up discussion. In addition, a written assignment will be completed during class time and submitted to SQA thereafter.

Progression Routes

Pupils who gain an award at National 4 level, can then move on to National 5 should they wish to pursue their language studies. Alternatively, they can take up a new National course (National 4 or National 5) in a new language.



Higher

The Higher Modern Languages course will focus on developing the students' ability to read, listen, talk and write in a Modern Language, in other words to understand and use a Modern Language, while studying in greater depth the contexts of **Society**, **Learning**, **Employability** and **Culture**. Learners will also develop the language skills of translation, and apply their grammatical knowledge and understanding in their use of the language.

The Higher Modern Languages course is made up of two mandatory Units:

Modern Languages: Understanding Language (Higher)

The purpose of this Unit is to develop and extend reading and listening skills in the Modern Language, and to develop their knowledge and understanding of detailed and complex language.

Modern Languages: Using Language (Higher)

The purpose of this Unit is to develop and extend talking and writing skills in the Modern Language, and to develop their knowledge and understanding of detailed and complex language.

Assessment

At Higher, there will be an external course assessment covering the various elements of Reading & Translation, Listening, Talking and Writing. The course assessment will consist of 2 question papers (Paper 1: Reading, Translation and Directed Writing) (Paper 2: Listening) and the format of the Speaking assessment will be a teacher-pupil conversation, in the foreign language, on the topics chosen by the pupil within the prescribed themes. In addition, a written assignment will be completed during class time and submitted to SQA thereafter.

For entry to this course, students are expected to have achieved an A or B pass at National 5 or equivalent.



SCIENCES

BIOLOGY

National

Through a range of experimental and research activities you will develop your skills of scientific inquiry, investigation and analytical thinking, along with knowledge and understanding in the context. You will explore the role of biology in scientific issues and relevant applications of biology in society and the environment. You will enhance your proficiency in scientific literacy.

The course is divided into three units.

1. Cell Biology

Cell Structure
Transport across cell membranes
DNA and the production of proteins
Proteins
Genetic engineering
Respiration

2. Multicellular Organisms and cell division

Producing new cells
Control and communication
Reproduction
Variation and inheritance
Transport systems
Absorption of materials

3. Life on Earth

Ecosystems
Distribution of organisms
Photosynthesis
Energy in ecosystems
Food production
Evolution of species

Assessment at National level 5

The course is assessed externally through a question paper and submission of an assignment.

Further information can be found at: http://www.sqa.org.uk/sqa/47427.html

Progression

This Course may provide progression to other National Courses, Higher Biology or Higher Human Biology or related areas, further study, employment or training.



Higher

Course Content:

This course comprises of three mandatory units.

DNA and the Genome
Metabolism and Survival
Sustainability and Interdependence

The course aims to stimulate interest and enthusiasm for biology in a range of contexts. Learners will develop their skills of scientific inquiry through investigating the applications of modern biology and study the most relevant and current applications of biological science in today's society. Due to the interdisciplinary nature of the sciences, learners may benefit from studying Higher Biology along with other science subjects, as this may enhance their skills, knowledge and understanding.

Learners will undertake in a research project. Information will be collected from different sources by the learner and they will be expected to plan and carry out a practical investigation. Learners will analyse their results and formulate a personal report of their findings.

Assessment

The course is assessed externally through a question paper and submission of an assignment.

Further information can be found at: http://www.sga.org.uk/sga/47912.html

CHEMISTRY

National

Through a range of experimental and research activities you will develop your skills of scientific inquiry, investigation and analytical thinking, along with knowledge and understanding in the context. You will explore the role of chemistry in scientific issues and relevant applications of chemistry in society and the environment. You will enhance your proficiency in scientific literacy.

The course is divided into three key areas of Chemistry.

1. Chemical Changes and Structure

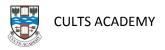
Rates of reaction
Atomic structure and bonding
Formula and reacting quantities
Acids and bases

2. Nature's Chemistry

Homologous series Everyday consumer products Energy from fuels

3. Chemistry in Society

Metals
Plastics
Fertilisers
Nuclear chemistry
Chemical analysis



Assessment at National 5

The course is assessed externally through a question paper and submission of an assignment.

Further information can be found at: http://www.sqa.org.uk/sqa/47428.html

Progression

This Course or its Units may provide progression to other Science National Courses, Higher Chemistry or related areas, further study, employment or training.

HIGHER

Course Content:

This course comprises of four mandatory units.

Chemical Changes and Structure Researching Chemistry Nature's Chemistry Chemistry in Society

The course aims to develop the learner's curiosity, interest and enthusiasm for chemistry in a range of contexts. The relevance of chemistry will be highlighted by the study of the applications of chemistry in everyday contexts and learners will develop an appreciation of the impact of chemistry on their everyday lives.

Offering a broad, versatile and adaptable skills set which is valued in the workplace, chemistry higher forms the basis for progress onto study of chemistry at a higher level, while also providing a knowledge base useful in the study of all of the sciences.

Learners will undertake in a research project. Information will be collected from different sources by the learner and they will be expected to plan and carry out a practical investigation. Learners will analyse their results and formulate a personal report of their findings.

Assessment

The course is assessed externally through a question paper and submission of an assignment.

Further information can be found at: http://www.sqa.org.uk/sqa/47913.html



PHYSICS

National

Through a range of experimental and research activities you will develop your skills of scientific inquiry, investigation and analytical thinking, along with knowledge and understanding in the context. You will explore the role of physics in scientific issues and relevant applications of physics in society and the environment. You will enhance your proficiency in scientific literacy.

The course is divided into three units.

1. Dynamics and Space

Vectors and scalars Velocity-time graphs Acceleration Newton's laws Energy

Projectile motion Space exploration

Cosmology

2. Electricity

Electrical charge carriers Potential difference (voltage) Ohm's law

Practical electrical and electronic circuits

Electricity

Electrical power

3. Properties of matter

Specific heat capacity Specific latent heat

Gas laws and the kinetic model

4. Waves

Wave parameters and behaviours Electromagnetic spectrum Refraction of light

5. Radiation

Nuclear radiation

Units, prefixes and scientific notation

Assessment at National 5

The course is assessed externally through a question paper and submission of an assignment.

Further information can be found at: http://www.sqa.org.uk/sqa/47430.html

Progression

This Course or its Units may provide progression to other Science National Courses, Higher Physics or related areas, further study, employment or training.



Higher

Course Content:

This course comprises of four mandatory units:

Our Dynamic Universe Particles and Waves Electricity Researching Physics

Learners will develop their skills of analytical thinking, expand upon their knowledge and understanding of the key areas and apply these skills to consider the contemporary implications on our society and environment. Learners will research issues, apply scientific skills and communicate information related to their findings, which will develop skills of scientific literacy.

Learners will undertake in a research project. Information will be collected from different sources by the learner and they will be expected to plan and carry out a practical investigation. Learners will analyse their results and formulate a personal report of their findings.

Assessment

The course is assessed externally through a question paper and submission of an assignment. Further information can be found at : http://www.sqa.org.uk/sqa/47916.html



SOCIAL SUBJECTS

GEOGRAPHY

National

Course Content

The focus of the course will be on the development of geographic skills and techniques in the context of physical and human environments and global issues Pupils will develop knowledge and understanding of the processes and interactions in these contexts.

Physical Environments unit

Key topics will include: location of landscape type; formation of key landscape features; land use management and sustainability; and weather. Pupils will study a selection of landscape types from contexts within Scotland and/or the UK. Landscape types will be chosen from: glaciated upland and coastlines of erosion and deposition; or rivers and their valleys and upland limestone;

Human Environments unit

Pupils will study and compare developed and developing countries drawn from a global context. Key topics will include: contrasts in development; world population distribution and change; and issues in changing urban and rural landscapes.

Global Issues unit

The focus will be on the use of numerical and graphical information in the context of global issues. Pupils will develop knowledge and understanding of significant global geographical issues. Key topics will include; environmental hazards and development and health. Pupils will study major global issues and the strategies adopted to manage these.

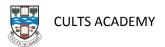
Progression Routes

This course will provide progression to other National Courses in Social Subjects and to Higher Geography.

Assessment

The course assessment has two components:

- Question paper (80 marks)
- Assignment (20 marks)



Higher

Course Content:

This course aims to help you develop a range of important transferable skills including: using, interpreting, evaluating and analysing a wide range of geographical information; interpreting and explaining complex geographical phenomena; using a wide range of maps and other data to process and communicate complex geographical information; and researching skills, including fieldwork.

The course consists of three compulsory units and the course assessment unit

- Physical Environments
- Human Environments
- Global Issues

Assessment

The course assessment has two component:

- Question paper 1 (100 marks)
- Question paper 2 (60 marks)
- Assignment (30 marks)

HISTORY

National

Course Content:

The National 4 and 5 History course will consist of three units of study which will develop their knowledge, understanding and skills gained in the junior phase. The three unit areas are:

Scottish - The Era of the Great War, 1910-1928.

This unit will study the experiences of Scots in the Great War and its impact on life in Scotland.

British- Changing Britain, 1760-1900.

This unit will cover the reasons for and the impact of industrialisation on life in Britain.

European and World- Hitler and Nazi Germany, 1919-1939.

This unit will study the attempts to establish democracy in Weimar Germany, the reasons for its collapse and the nature of the Nazi state which developed.

In addition to these units of study pupils will also develop skills in evaluating historical sources, analysing key events and how to draw conclusions.



Progression Route

This Route will provide progression to other National Courses in Social Subjects and to Higher History.

Assessment

The course assessment has two component:

- Question paper (80 marks)
- Assignment (20 marks)

Higher

Course Content:

In this course you will study Scottish, British, European and world contexts in a variety of time periods, which will include elements of political, social, economic and cultural history. You will develop important skills on this course such as: researching and investigating themes and events; synthesising information from a wide range of sources to produce detailed and reasoned lines of argument; and drawing well-reasoned conclusions supported by evidence.

The course consists of **three** compulsory units and the course assessment unit.

- Scottish: Migration and Empire
- British: Political Reform(Liberal government 1906-14, Labour government 1945-51 and Women getting the vote)
- European and World: Growth of German Nationalism and Bismark's Role

Assessment

The course assessment has two components

- Question paper 1 (44 marks)
- Question paper 2 (36 marks)
- Assignment (30 marks)

MODERN STUDIES

National

Course Content:

Democracy in Scotland and the United Kingdom

Our area of study is the United Kingdom political system. We study the main UK political institutions, how we are informed about our political system and how we can participate in and influence our political system.

Social Issues in the United Kingdom

Crime and Law: This unit looks at the Causes and consequences of crime as well as the court, police and prison system. It also investigate the issues of age and gender.



International Issues

International Terrorism and other threats faced in the world today. This unit focuses on causes, consequences and the resolution of Terrorism. It considers the role of NATO, national government and the United Nations.

In addition to these units of study pupils will also develop skills in decision making, selectivity and how to draw conclusions.

Progression Route

This course will provide progression to other National Courses in social subjects and to Higher Modern Studies.

The course assessment has two components

- A question paper (80 marks)
- An assignment (20 marks)

Higher

Course Content:

This course aims to develop your knowledge and understanding of contemporary political and social issues in local, Scottish, United Kingdom and international contexts, you will develop an awareness of the social and political issues you will meet in your life. You will develop investigating, evaluating and analysing skills in order to understand and explain political, social and international issues.

The course consists of three compulsory units and the course assessment unit

- Democracy in Scotland and the UK. The UK constitutional arrangement, representative democracy, electoral systems and voting behaviour and The ways in which citizens are informed about, participate in, and influence the political process
- Social Issues in the UK. Social Inequality in relation to health and wealth, theories behind it and government responses to tackling poverty and ill health
- International Issues. The USA as a World power: The US political system, social and economic issues and its wider international role and influence.

In addition to these units of study pupils will also develop skills in decision making, selectivity and how to draw conclusions.

Assessment

The course assessment has two components:

- Question paper 1 (52 marks)
- Question paper 2 (28 marks)
- Assignment (30 marks)



TECHNOLOGIES

ACCOUNTING

National

Content of the course

The National Accounting Course enables learners to understand and use financial information, so that they can prepare accounting statements and analyse, interpret and report on a sole trader organisation's financial performance. The Course develops learners' accuracy in preparing, presenting and interpreting complex accounting information, and enables them to apply complex accounting concepts and techniques when preparing financial information.

The course is organised into two units of study:

- Financial Accounting (sole trader)
- Management Accounting

The Course combines practical and theoretical aspects of learning related to accounting. Accounting relates to many aspects of everyday life, and therefore gives learners experiences which are topical and which develop skills for learning, life and work. The Course encourages learners to think logically and to apply accounting principles in their everyday lives, thereby supporting their personal financial awareness.

Assessment

There is an assignment and exam. The assignment will require learners to combine the accounting knowledge and skills from across the course in a practical context.

Progression Route

Upon completion of National 5 Accounting, studies can be continued at Higher level.

BUSINESS MANAGEMENT

National

Content of the course

Business plays an important role in our modern society. Business creates wealth, prosperity, jobs and other choices for our citizens. The main purpose of studying Business Management is to give students an awareness of the ways businesses are organised, the activities carried out within a business, the impact on society of different businesses and the vital role played by managers of a business. Other aspects tackled by the course will be financial awareness in business contexts and an understanding of how external influences can impact on business organisations.

One of the main aims of the course is to allow students to develop and express their enterprising and entrepreneurial skills which are becoming increasingly important in gaining employment. The course aims to inspire, motivate and challenge not only the business leaders of the future but all young people who will be in some way affected by business organisations and their activities.

At National 5 the course is organised into the following three main areas of study:

- Understanding Business
- Management of People and Finance
- Management of Marketing and Operations



At National 4 the course is organised into the following three units of study:

- Business In Action
- Influences on Business
- Business Assignment

Progression Route

Upon completion of National 5 Business Management, studies can be continued at Higher level.

Assessment

There is an assignment and exam.

Higher

Content of the course

The aims of the course are to enable learners to develop and extend:

- knowledge and understanding of the ways in which the needs of society can be satisfied by business
- understanding of how businesses use resources to achieve maximum efficiency
- understanding of the steps taken by business to improve overall performance and effectiveness
- knowledge and understanding of the main effects that external influences, such as economic impact and sustainability, have on organisations

The course is organised into three main areas of study:

- Understanding Business
- Management of People and Finance
- Management of Marketing and Operations

Assessment

There is an assignment and exam.

Recommended Entry

Learners would normally be expected to have the skills, knowledge and understanding attained by having studied National 5 Business Management

Pupils with no previous experience of Business Management can achieve success in this subject provided they have good extended writing skills and will undertake a substantial amount of background reading.



COMPUTING SCIENCE

Content of the courses

Computing Science is increasingly important in everyday life. Social networking, applications (apps), mobile connectivity and other devices are embedded in the world around us and it is important for all of us to understand more about how the computer related devices work and can impact our lives.

The main aims of the course are to allow students to develop and express their computational thinking skills across a range of contemporary contexts and to develop and apply skills in analysis, design, implementation and informed evaluation of digital solutions to everyday problems. The course is a blend of both technical and social aspects of computing in general and should provide students with a range of transferable skills, essential for gaining employment.

National

At National 5 the course is organised into the following four units of study:

- Software Design & Development
- Computer Systems

- Database Design & Development
- Web Design & Development

At National 4 the course is organised into the following two units of study:

- Software Design & Development
- Information System Design & Development

Assessment

There is an assignment and exam.

Progression Route

Upon completion of National 5 Computing Science, studies can be continued at Higher level.

Higher

The course is organised into the following four units of study, developing knowledge, understanding and skills gained at National level to a deeper level:

- Software Design & Development
- Computer Systems

- Database Design & Development
- Web Design & Development

Assessment

There is an assignment and exam.

Recommended Entry

Learners would normally be expected to have the skills, knowledge and understanding attained by having studied National 5 Computing Science.



DESIGN & MANUFACTURE

National

Content of the course

The course provides a broad introduction to design, materials and manufacturing processes. It provides opportunities for students to gain skills in both designing and in communicating design proposals. Students will explore the properties and uses of different materials and produce models and prototypes of products.

The course is practical in nature and combines elements of creativity and designing for aesthetic or visual impact with a requirement to consider a product's function and performance. The course helps students appreciate the links between factors such as aesthetics, function, economics and the environment.

Aims of the course are to help students develop:

- skills in design and manufacturing models, prototypes and products
- knowledge and understanding of manufacturing processes and materials
- an understanding of the impact of design and manufacturing technologies on our environment and our society.

The course is organised into two main areas of study:

- Design
- Materials and Manufacturing

Assessment

There is an assignment and exam.

Progression Route

Upon completion of National 5 Design & Manufacture, studies can be continued at Higher level.

Higher

Content of the course

The course adds depth to the skills learned in the National course, enabling learners to:

- design and refine design proposals
- plan and develop models and prototypes
- thoroughly evaluate and research proposals
- gain a deeper knowledge and understanding of manufacturing processes and materials
- enlarge their understanding of the impact of design and manufacturing technologies on our environment and society

The course is organised into two main areas of study:

- Design
- Materials and Manufacturing

Assessment

There is an assignment and exam.



Recommended Entry

Learners would normally be expected to have the skills, knowledge and understanding attained by having studied National 5 Design & Manufacture

ENGINEERING SCIENCE

National

Content of the course

Engineering shapes the world in which we live and its future. Engineers play key roles in meeting the needs of society in fields which include climate change, medicine, IT and transport.

The Course enables learners to develop knowledge and understanding of key engineering concepts and processes, and the ability to apply these to a variety of problems; and an awareness of the impact of engineering on society and the environment.

These skills, knowledge and awareness are developed through a range of contexts within the broad discipline of engineering, including mechanical, pneumatic, structural and electronic systems.

The course is organised into three main areas of study:

- Engineering Contexts and Challenges
- Electronics and Control
- Mechanisms and Structures

Assessment

There is an assignment and exam.

Progression Route

Upon completion of National 5 Engineering Science, studies can be continued at Higher level.

Higher

Content of the course

The course enables learners to continue to develop and extend a range of technological skills, including analysis and problem solving, design, the use of equipment and materials, and evaluating products and systems that they have gained in a range of Engineering contexts during the National course.

A combination of this course and a pure science course will provide a very strong foundation for further study in engineering or the sciences.

The course is organised into three main areas of study:

- Engineering Contexts and Challenges
- Electronics and Control
- Mechanisms and Structures

Assessment

There is an assignment and exam.

Recommended Entry

Learners would normally be expected to have the skills, knowledge and understanding attained by having studied National 5 Engineering Science, Higher Physics or Maths.

