# Guidelines for Parents and Pupils

# **Selecting learning pathways in S4**

# Loudoun Academy 2024/25

## Index

## Introduction

The purpose of this booklet is to provide you with some information about the variety of learning pathways available as it applies to our new S4 pupils at Loudoun Academy.

In S1 to S3 pupils followed a Broad General Education. During this period pupils followed a curriculum that delivered education in all eight of the Curricular Areas:

- Expressive Arts
- Health & Wellbeing
- Languages
- Mathematics
- Religious and Moral Education
- Sciences
- Social Studies
- Technologies

In S3, pupils specialised in some of these areas. In S4, pupils select the 7 subjects that they would continue to study for qualifications in at the end of S4.

## S4 to S6 – The Senior Phase

The Senior Phase of our young people's education follows on from their Broad General Education. The Senior Phase can be characterised as the education which takes place in the final stages of compulsory education and beyond, normally around ages 15 to 18. This will cover the years S4 to S6 at our school.

The learning pathways in S4 are designed with the key principles of curricular innovation in mind.
Specifically these are:

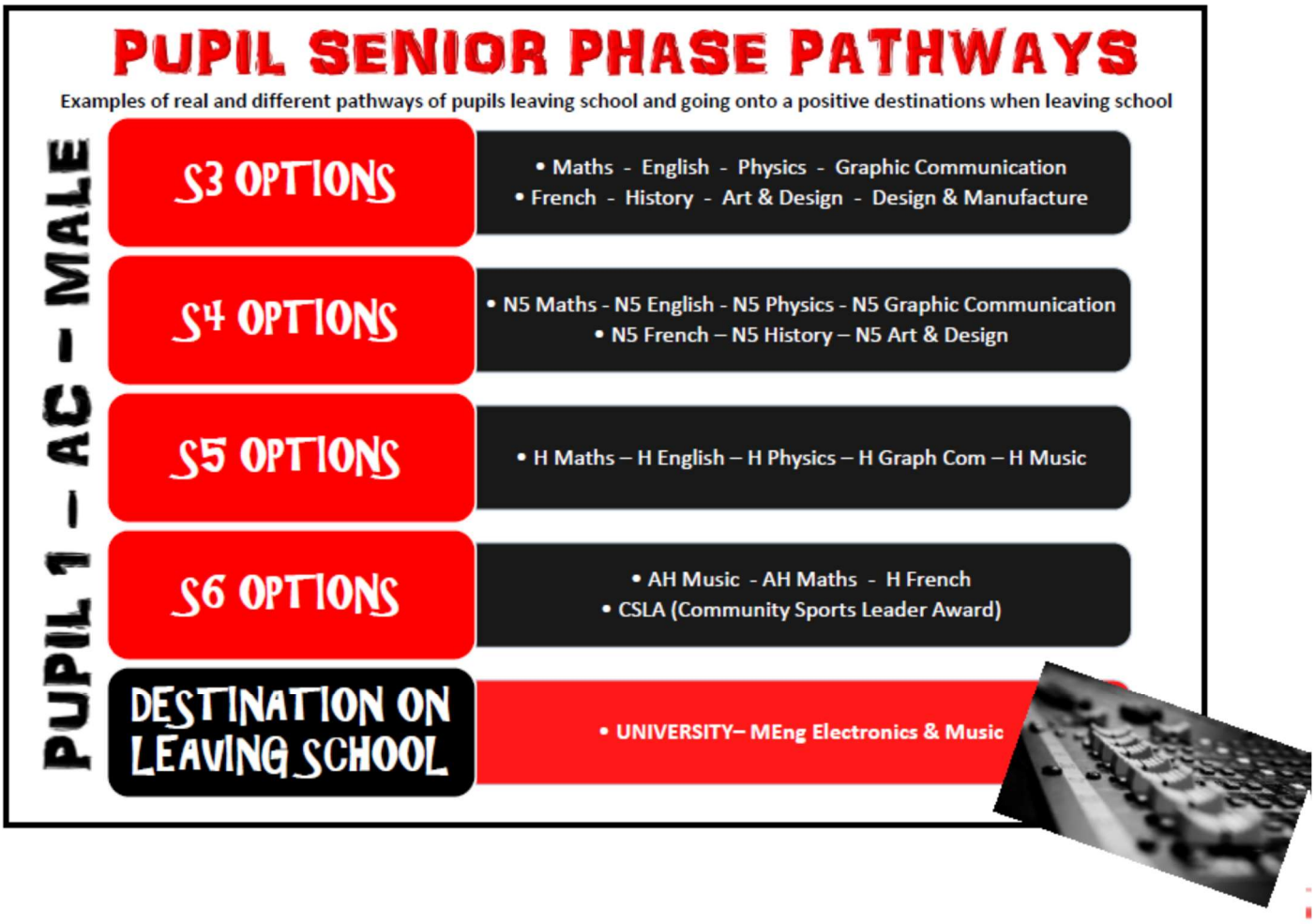
- a curriculum which is coherent;
- the opportunity to obtain qualifications as well as to continue to develop the attributes and capabilities of the four capacities;
- opportunities to continue to develop skills for learning, skills for life and skills for work with a continuous focus on literacy, numeracy and health and wellbeing;
- personal support to enable them to gain as much as possible from the opportunities that Curriculum for Excellence can provide; and
- support in moving into positive and sustained destinations beyond school.

The Senior Phase of young people's education builds firmly on the Broad General Education studied during S1 to S3 at Loudoun Academy. The values, purposes and principles of Curriculum for Excellence will follow through from earlier phases of education and continue to be delivered for young people at this particular point in their educational journey.

The Senior Phase offers young people the opportunity to extend and deepen their education as they build their portfolio of qualifications, which recognises their learning, enables them to continue to develop skills and offers pathways to the next stage – whether that is further or higher education, training or employment.

At Loudoun Academy the vast majority of pupils will be presented for 7 subjects in S4 and 5 subjects in S5 thereafter. Examples of different pupils senior phase pathways are on the following pages.

**Pupil Pathway Examples**



# PUPIL SENIOR PHASE PATHWAYS

Examples of real and different pathways of pupils leaving school and going onto a positive destinations when leaving school

**PUPIL 2 – NB – FEMALE**

| | |
|---|---|
| S3 OPTIONS | • Maths - English - History - Hospitality<br>• Geography - Biology - Admin & IT - Physical Education |
| S4 OPTIONS | • N5 Maths - N5 English - N5 History - N5 Hospitality<br>• N5 Biology – N5 Geography – N5 Admin & IT |
| S5 OPTIONS | • H Maths – H English – H Geography<br>• H Biology - H Admin & IT |
| S6 OPTIONS | • H Psychology - AH Maths - H Business Management<br>• YASS – Understanding the Autistic Spectrum |
| DESTINATION ON LEAVING SCHOOL | • UNIVERSITY– Psychology |

# PUPIL SENIOR PHASE PATHWAYS

Examples of real and different pathways of pupils leaving school and going onto a positive destinations when leaving school

**PUPIL 3 – CH – MALE**

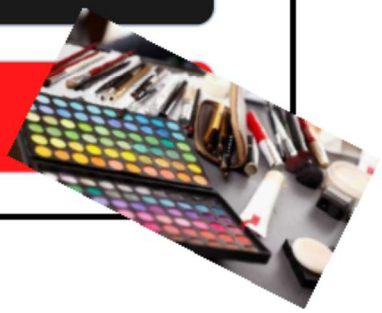
| | |
|---|---|
| S3 OPTIONS | • Maths - English - Physics - Music<br>• French - History - Chemistry - Design & Manufacture |
| S4 OPTIONS | • N5 Maths - N5 English - N5 Physics - N5 Music<br>• N5 Chemistry – N5 History – N5 Design & Manufacture |
| S5 OPTIONS | • H Maths – H English – H Chemistry – H History – H Music |
| S6 OPTIONS | • AH History - AH Music - H Physical Education<br>• CSLA (Community Sports Leader Award) |
| DESTINATION ON LEAVING SCHOOL | • UNIVERSITY– History |

# PUPIL SENIOR PHASE PATHWAYS

Examples of real and different pathways of pupils leaving school and going onto a positive destinations when leaving school

## PUPIL 4 – AH – FEMALE

| | |
|---|---|
| S3 OPTIONS | • Maths - English - History- Home Economics<br>• Art & Design - French - Science - Physical Education |
| S4 OPTIONS | • N4 Maths – N4 English - N5 Travel & Tourism - N5 History<br>• N4 Art & Design – N4 French – N4 Physical Education |
| S5 OPTIONS | • N5 English – N5 Maths - N5 Health Sector<br>• COLLEGE– Beauty with Hair<br>• WORK PLACEMENT - Hairdresser |
| S6 OPTIONS | • LEFT SCHOOL |
| DESTINATION ON LEAVING SCHOOL | • COLLEGE– Beauty |

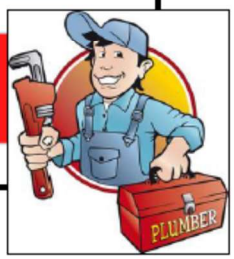


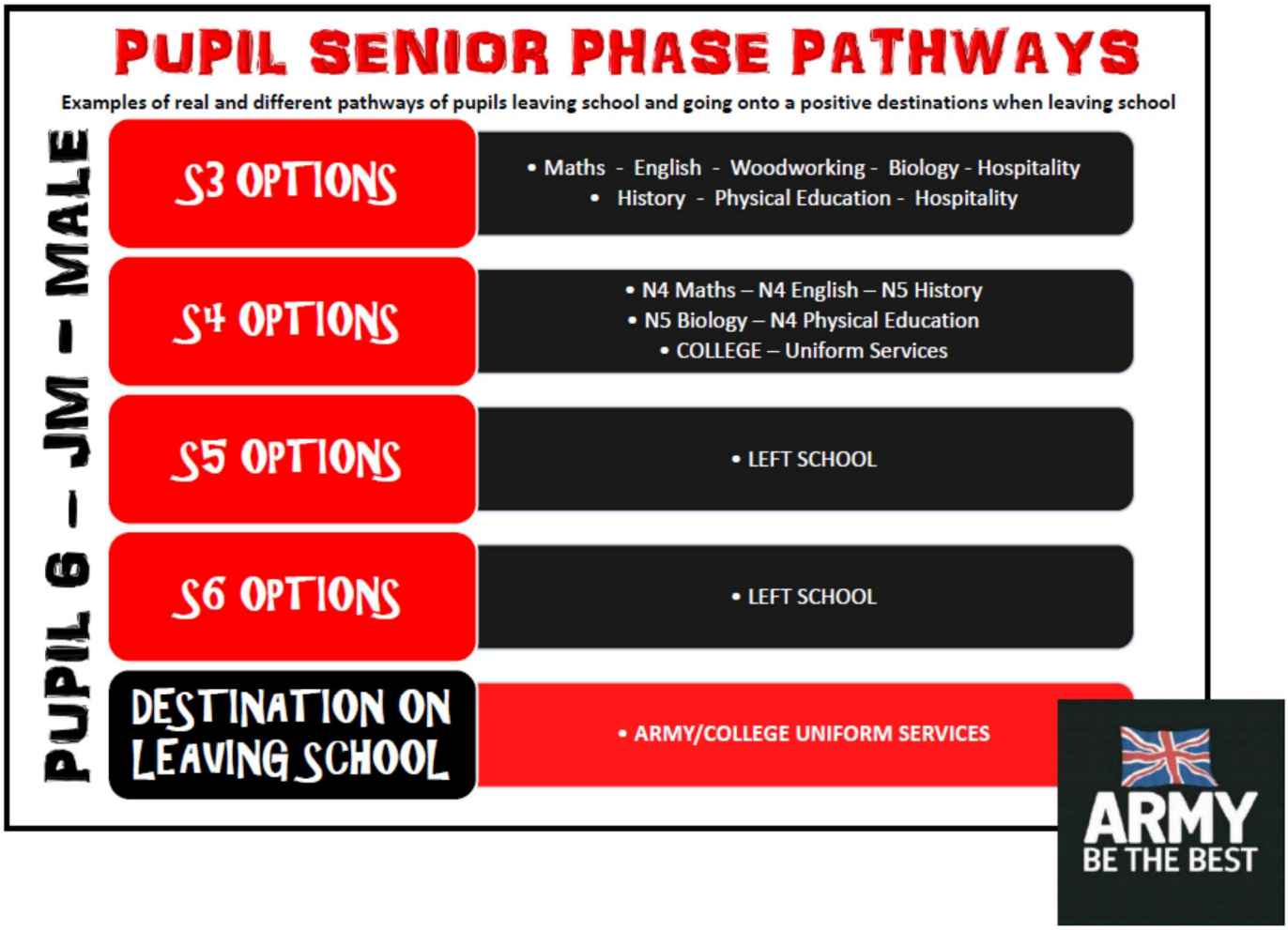
# PUPIL SENIOR PHASE PATHWAYS

Examples of real and different pathways of pupils leaving school and going onto a positive destinations when leaving school

## PUPIL 5 – SMC – MALE

| | |
|---|---|
| S3 OPTIONS | • Maths - English - Design & Manufacture - Biology<br>• History - Geography - Hospitality |
| S4 OPTIONS | • N4 Maths - N5 English - N5 Geography – N4 History<br>• N5 Hospitality – N5 Design & Manufacture<br>• COLLEGE - Construction |
| S5 OPTIONS | • N5 Maths – H English – Personal Finance<br>• CSLA (Community Sports Leader Award)<br>• WORK EXPERIENCE – Plumbing Company |
| S6 OPTIONS | • LEFT SCHOOL |
| DESTINATION ON LEAVING SCHOOL | • EMPLOYMENT – Apprentice Plumber |






## Changes to Assessment for National 5 Qualifications

The Scottish Qualifications Authority, following guidance from the Scottish Government, has removed the mandatory requirement for Unit assessment at National 5, Higher and Advanced Higher and is replacing this formal assessment component with enhanced external course assessment. In many courses this will include a strengthened final examination and coursework to ensure course coverage and that assessment requirements at each level of course are fully met.

The changes are implemented in a phased manner as follows:

| Course | Implementation of change |
|---|---|
| National 5 | 2017-2018 |
| Higher | 2018-2019 |
| Advanced Higher | 2019-2020 |

This means that since 2017-2018 , pupils undertaking National 5 courses do not be required to undertake Unit assessments as they progress through course content. They will however be undertaking assessments set and marked by school staff to ensure there is a clear understanding of the progress that is being made and what future attainment targets may require to be set.

In S4, pupils will start studying all courses at the Level recommended bny their S3 teacher on the options choice form. Over the course of S4 pupils progress will be closely monitoring to ensure pupils are aware of their progress and goals will be developed to ensure success. In some instances, dialogue will take place between departmental staff and senior staff with parents and young people about appropriate presentation levels and agree the necessary adjustment at key points in the academic year. Such decisions will be made on an individual basis in consultation with students and parents will be informed.

**More Information is available**

Further information about the new qualifications can be found at:

*www.scotland.gov.uk/Topics/Education/Schools/curriculum/qualifications*

**Notable dates**

The structure around the selection of learning pathways to support parents and pupils will be as follows:-

| Event | Date |
|---|---|
| S3 Option Process starts | Thursday 25th January 2024 |
| S3 to S4 Option Presentation | Thursday 25th January at 18.30pm |
| S3 Option Choice deadline | Wednesday 7st February 2024 |

The S3 to S4 option presentation will allow parents and carers to hear from key senior staff about the S4 curriculum, it will cover:-

- What pupils can expect as they move through S4, S5 and S6;
- The options process for selecting subjects as pupils progress through the senior phase;
- Further information on Ayrshire College courses

The School College Information evening is organised and delivered by Ayrshire College and is an opportunity for pupils and parents to discover the range of courses available to senior phase pupils as part of their school curriculum. There will be a presentation from 5.30 to 6pm followed by a chance to speak to curriculum specialists to further explore career pathways and progression routes. Pupils will be made aware of registration details nearer the time.

**Information from Departments**

The following pages provide information from each department on the purpose and aims of each course, skills, knowledge and understanding developed, assessment arrangements and progression routes. You should use this as a reference for the subjects your son or daughter is studying. It may also be helpful as part of the decision making process as most pupils in S4 will take subjects at SCQF Level 4 or 5 and then continue their studies in these subjects into S5 and S6.

If there is anything you would like to discuss or if you want to find out more about Curriculum for Excellence or the new qualifications please feel free to contact the school. You can contact your child's Pupil Support Teacher or Mrs Egerton, Year Head on 01563 820061.

## Administration and IT

**Purpose and aims of the course**
The course helps pupils to develop administrative and IT skills, and an understanding of related theory, enabling them to effectively contribute to and support organisations.
It enables pupils to:

- develop an understanding of administration theory in the workplace
- develop IT skills and use them to perform administrative tasks
- acquire organisational skills in the context of organising and supporting events

**Skills, knowledge and understanding for the course**
The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- skills in using spreadsheets, databases, word-processing, desktop publishing and presentations
- skills in using technology for electronic communication and investigation
- skills in organising and supporting events
- problem-solving skills in administrative contexts
- theory of the tasks (duties) and knowledge associated with the administrative support function in an organisation

**National 4 Added Value assessment**
Organise and support a small-scale event to a given brief, making use of current or emerging equivalent technologies, by:

- Preparing for a small-scale event, making use of appropriate technologies where necessary
- Preparing simple documents to support the event, using standard templates and utilising functions of IT applications
- Communicating using electronic methods, showing a basic awareness of the communication's context, audience and purpose
- Carrying out straightforward follow-up tasks, making use of appropriate technologies where necessary

**National 5 Course Assessment**
**Assignment: 70 Marks (58% of overall grade)**
Candidates work through a series of planning, support and follow-up tasks related to an event or business.
**Question paper: 50 Marks (42% of overall grade)**
The question paper gives pupils the opportunity to demonstrate:

- using IT functions in spreadsheet and database applications to produce and process information
- problem-solving
- administration theory

**Progression routes to S5/6**
Pupils can move from National 4 to National 5 or National 5 to Higher in S5/6.

## Art and Design

**Purpose and aims of the course**

The course helps pupils to develop Art and Design skills gained in S3, and enable them to build confidence when creating pieces of drawing, painting and design. IT is used to support written work.

It enables pupils to:

- develop the ability to think and choose solutions to design problems.
- develop initiative when creating original work through personal choice.
- organise written discussions and extended writing pieces relating to their own and the work of others.

**Skills, knowledge and understanding for the course**

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- producing analytical drawings and related investigative studies in response to stimuli
- using visual elements expressively, showing a clear understanding of the subject matter
- producing focused investigative visual and market research for a design activity
- skills in using a range of art and design materials, techniques and/or technology creatively
- developing and refining a variety of creative ideas for art and design work in 2D and/or 3D formats
- describing how artists and designers use materials, techniques and/or technology in their work
- analysing the impact of social, cultural and other influences on artists' and designers' work and practice
- using problem-solving, planning and self-evaluation skills within the creative process

**National 4 Added Value assessment**

Organise and compile 2 folios of work, 1 for Art, 1 for Design. Present the best drawings, development ideas, photographs, material samples and finished work onto mounted sheets.

- Final Design Solution – The design solution should show a finished concept. The design solution is an important part of the Added Value assessment which needs to be completed to achieve the course award.
- Final Expressive Solution – Learners refine and present their best expressive work to achieve a course award.
- Show written evidence of comments and opinions on the work of at least 1 artist and 1 designer.

**National 5 Course Assessment**

**Question paper: 50 Marks (20% of overall grade) 1 Hour 30 Mins. 2 sections.**

The question paper gives candidates the opportunity to:

- discuss and analyse the work of artists and designers they have been studying throughout the session
- respond with judgements and opinions to previously unseen questions and images

**Portfolio: 200 Marks (80% of overall grade) 2 separate sections.**

Expressive activity with integrated Critical Studies. 100 marks (40% of overall grade)

- learners choose a personal theme and a focus for still life, portraiture, landscape etc.

- learners select an idea for further development and refinement from a group of earlier studies, through to a finished artwork
- critical studies involves compiling extended writing pieces about the work of at least 2 famous artists

Design activity with integrated Critical Studies. 100 marks (40% of overall grade)

- learners produce a Design Brief of their own choice from a menu, e.g. hats, chairs, jewellery, lamps.
- learners use thinking skills to consider how they will solve their design ideas.
- ideas are created in response to the design brief in 3 three stages: initial ideas, selection of best ideas and development and refinement to a final solution
- Critical studies involves compiling extended writing pieces about the work of at least 2 designers

**Progression routes to S5/6**

Pupils can move from National 4 to National 5 or National 5 to Higher in S5/6. Higher to Advanced Higher.

**Other relevant information**

The work of senior folios can be used as a basis for presentation and interview for FE / college / university placements. Guidance on folio presentation is part of the course. Art and Design is often required for those choosing Architecture as a career destination.

# Biology

## Purpose and aims of the course

The purpose of the National 5 Biology course is to develop pupils' curiosity, interest, and enthusiasm for Biology in a range of contexts. The skills of scientific inquiry and investigation are integrated and developed throughout the course by investigating the applications of Biology. This enables candidates to become scientifically literate citizens, who can review the science-based claims they meet.

It enables pupils to:

- Develop an understanding of Biology's role in scientific issues and relevant applications of Biology, including the impact these could make on society and the environment.
- Develop scientific inquiry and investigative skills.
- Develop scientific analytical thinking skills in a Biology context.

## Skills, knowledge and understanding for the course

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- Applying knowledge of Biology to new situations, interpreting information, and solving problems.
- Planning, designing and safely carrying out experimental investigations to test given hypotheses or to illustrate particular effects.
- Selecting, presenting, and processing information (using calculations and units, where appropriate).
- Drawing valid conclusions and giving explanations supported by evidence/justification.

## National 4 Course Assessment

As part of the National 4 qualification, pupils will be given questions designed to generate evidence that they can make accurate statements about all the key areas of knowledge and use a range of skills to solve problems. Pupils will also be given end of topic and unit assessments developed by SQA and the department throughout the course, to address experimental design, key knowledge, and data handling.

National 4 Added Value Assessment (Assignment) and Outcome 1 (Practical Report)
Pupils will draw on and apply the skills and knowledge they have learned during the course. They will carry out an in-depth investigation into an unfamiliar and/or integrated context. This will be assessed through an assignment and practical report.

Pupils will be asked to:

- Choose, with support, a relevant topic in Biology and devise an appropriate aim.
- Give an account of Biology relevant to the aim and plan and carry out experimental work to generate data relevant to the aim.
- Process and present the experimental data and compare data/information from internet/literature research with the experimental data.
- Draw a conclusion, evaluate the experimental procedure, and communicate the findings in a report.

## National 5 Course Assessment
**Assignment: 20 Marks (20% of overall grade)**

The purpose of the assignment is to assess the application of skills of scientific inquiry and related Biology knowledge and understanding.

Pupils will be asked to:

- Choose, with support, a relevant topic in Biology and devise an appropriate aim.
- Give an account of Biology relevant to the aim and plan and carry out experimental work to generate data relevant to the aim.
- Process and present the experimental data and compare data/information from internet/literature research with the experimental data.
- Draw a conclusion, evaluate the experimental procedure and communicate the findings in a report.

**Question paper: 100 Marks (80% of overall grade)**

The question paper assesses:

- The application or extension of knowledge and/or skills in unfamiliar situations, practical and theoretical contexts.

- Scientific inquiry skills, analytical thinking skills, problem-solving skills, and the impact of applications of Biology on society and the environment.

**Progression routes to S5/6**
Pupils can move from National 4 to National 5 or National 5 to Higher level.

## Business Management

**Purpose and aims of the course**
The course highlights ways in which organisations operate and the steps they take to achieve their goals. It enables pupils to understand and make use of business information to interpret and report on overall business performance, in a range of contexts.

It enables pupils to develop:
- knowledge and understanding of the ways in which society relies on business to satisfy needs and wants
- an insight into the systems organisations use to ensure customers' needs are met
- enterprising skills and attributes
- financial awareness, in a business context
- an insight into how organisations organise their resources for maximum efficiency and to improve their overall performance
- an awareness of how external influences impact on organisations

**Skills, knowledge and understanding for the course**
The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:
- knowledge and understanding of the impact of business activities on society, in contexts which have some complex features
- decision-making — by applying the ideas of ethical and effective business decisions to solve straightforward business-related problems
- communicating straightforward business ideas, opinions and information relating to the effects of internal and external factors on business activity
- knowledge and understanding of how enterprising skills can help in business development
- understanding how to enhance employability skills
- knowledge and understanding of the contribution of staff to business success
- interpreting and evaluating straightforward business financial data to ensure effective financial management
- analysing the effectiveness of a limited range of marketing activities, and understanding how they can be used to enhance customer satisfaction
- evaluating a range of production techniques used to maximise the quality of goods/services
- basic knowledge of using existing and emerging technologies in current business practice

**National 4 Added Value Assessment**
Pupils will choose a local business and research specific information about that business. They will present their findings in a report and a presentation. Pupils are given direction with the business they may wish to look at and what specific area.

**National 5 Course Assessment**
**Question paper 90 marks (75% of overall grade)**
The question paper gives candidates the opportunity to demonstrate:
- applying knowledge and understanding of business concepts, some of which may be relatively complex
- using data handling techniques to interpret straightforward business information
- interpreting and analysing straightforward business information
- evaluating straightforward business information to draw conclusions

**Assignment 30 marks (25% of overall grade)**
The assignment gives candidates the opportunity to demonstrate their ability to:

- select an appropriate business topic
- research and gather suitable business data/information/evidence relating to the context of the topic, from a range of sources
- apply knowledge and understanding of business concepts to explain and analyse the key features of the topic
- draw valid conclusions and/or recommendations to make informed business judgements and/or decisions
- produce an appropriately formatted business report suitable for the purpose, intended audience and context of the assignment

**Progression routes to S5/6**
Pupils can move from National 4 to National 5 or from National 5 to Higher in S5/6. Higher to Advanced Higher in S6.

## Chemistry

**Purpose and aims of the course**

The purpose of the National 5 Chemistry course is to develop pupils' curiosity, interest, and enthusiasm for Chemistry in a range of contexts. The skills of scientific inquiry and investigation are integrated and developed throughout the course by investigating the applications of Chemistry. This enables candidates to become scientifically literate citizens, who can review the science-based claims they meet.

It enables pupils to:

- Develop an understanding of Chemistry's role in scientific issues and relevant applications of Chemistry, including the impact these could make on society and the environment.
- Develop scientific inquiry and investigative skills.
- Develop scientific analytical thinking skills in a Chemistry context.

**Skills, knowledge and understanding for the course**

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- Applying knowledge of Chemistry to new situations, interpreting information, and solving problems.
- Planning, designing and safely carrying out experimental investigations to test given hypotheses or to illustrate particular effects.
- Selecting, presenting, and processing information (using calculations and units, where appropriate).
- Drawing valid conclusions and giving explanations supported by evidence/justification.

**National 4 Course Assessment**

As part of the National 4 qualification, pupils will be given questions designed to generate evidence that they can make accurate statements about all the key areas of knowledge and use a range of skills to solve problems. Pupils will also be given end of topic and unit assessments developed by SQA and the department throughout the course, to address experimental design, key knowledge, and data handling.

National 4 Added Value Assessment (Assignment) and Outcome 1 (Practical Report)

Pupils will draw on and apply the skills and knowledge they have learned during the course. They will carry out an in-depth investigation into an unfamiliar and/or integrated context. This will be assessed through an assignment and practical report.

- Pupils will be asked to:
- Choose, with support, a relevant topic in Chemistry and devise an appropriate aim.
- Give an account of Chemistry relevant to the aim and plan and carry out experimental work to generate data relevant to the aim.
- Process and present the experimental data and compare data/information from internet/literature research with the experimental data.
- Draw a conclusion, evaluate the experimental procedure, and communicate the findings in a report.

**National 5 Course Assessment**

**Assignment: 20 Marks (20% of overall grade)**
The purpose of the assignment is to assess the application of skills of scientific inquiry and related Chemistry knowledge and understanding.
Pupils will be asked to:

- Choose, with support, a relevant topic in Chemistry and devise an appropriate aim.
- Give an account of Chemistry relevant to the aim and plan and carry out experimental work to generate data relevant to the aim.
- Process and present the experimental data and compare data/information from internet/literature research with the experimental data.
- Draw a conclusion, evaluate the experimental procedure and communicate the findings in a report.

**Question paper: 100 Marks (80% of overall grade)**
The question paper assesses:

- The application or extension of knowledge and/or skills in unfamiliar situations, practical and theoretical contexts.
- Scientific inquiry skills, analytical thinking skills, problem-solving skills and the impact of applications of Chemistry on society and the environment.

**Progression routes to S5/6**
Pupils can move from National 4 to National 5 or National 5 to Higher level.

## Computing Science

**Purpose and aims of the course**

The course helps candidates to understand computational processes and thinking. It covers a number of unifying themes that are used to explore a variety of specialist areas, through practical and investigative tasks. The course highlights how computing professionals are problem-solvers and designers, and the far-reaching impact of information technology on our environment and society. It enables candidates to:

- apply computational-thinking skills across a range of contemporary contexts
- apply knowledge and understanding of key concepts and processes in computing science
- apply skills and knowledge in analysis, design, implementation, testing and evaluation to a range of digital solutions
- communicate computing concepts and explain computational behaviour clearly and concisely using appropriate terminology
- develop an understanding of the role and impact of computing science in changing and influencing our environment and society

**Skills, knowledge and understanding for the course**

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- applying aspects of computational thinking across a range of contexts
- analysing problems within computing science across a range of contemporary contexts
- designing, implementing, testing and evaluating digital solutions (including computer programs) to problems across a range of contemporary contexts
- developing skills in computer programming and the ability to communicate how a program works, by being able to read and interpret code
- communicating understanding of key concepts related to computing science, clearly and concisely, using appropriate terminology
- understanding of legal implications and environmental impact of contemporary technologies
- applying computing science concepts and techniques to create solutions across a range of contexts

**National 4 Added Value assessment**

The assignment will be a meaningful and appropriately challenging task, which will clearly demonstrate application of knowledge and skills, at an appropriate level, from both the Software Design and Development Unit and the Information System Design and Development Unit.

**National 5 Course Assessment**

**Question Paper: 80 Marks (69% of overall grade)**

The question paper gives candidates an opportunity to demonstrate the following skills, knowledge and understanding:

- applying aspects of computational thinking, across a range of contexts
- analysing problems within computing science, across a range of contemporary contexts
- designing, implementing, testing and evaluating digital solutions (including computer programs) to problems, across a range of contemporary contexts

- communicating how a program works
- communicating key concepts related to computing science clearly and concisely, using appropriate terminology
- understanding the legal implications and environmental impact of contemporary technologies
- applying computing science concepts and techniques to create solutions, across a range of contexts

A proportion of marks are available for more challenging questions and may require integration, detailed descriptions or explanations, and/or analysis, comparisons, and evaluations.

**Assignment: 40 marks (31% of overall grade)**

The assignment is made up of three distinct tasks. Marks are distributed across three areas of study covered by the assignment as follows:

- Software design and development (25 marks)
- Database design and development (15 marks)

**Progression Routes to S5/6**

Pupils can move from National 4 to National 5 or Cyber Security Level 4/5 in S5/6. Pupils can move from National 5 to Higher Computing Science in S5/6. Higher to Advanced Higher in S6.

## Cyber Security - National Progression Award (NPA) (levels 4/5)

**Purpose and aims of the course**

We live in an increasingly networked world, from personal banking to government infrastructure. Protecting those networks is no longer optional. Cyber risk is now firmly at the top of the international agenda as high-profile breaches raise fears that hack attacks and other security failures could endanger the global economy. Cybercrime costs the global economy over US$400 billion per year.

The NPAs in Cyber Security at SCQF levels 4 and 5 provide foundation knowledge and skills in data security, digital forensics and ethical hacking — and provide a skills pipeline into the cyber security industry.

Ethics and the law are fundamental aspects of these awards. Ethical considerations are included in every component Unit, and legislative considerations are included in all appropriate Units. The aim of the awards is to produce knowledgeable and skilled individuals who are aware of the potential misuses of, and unauthorised access to, computer systems but who use these competences for legal and ethical purposes.

**Skills, knowledge and understanding**

These awards are designed to raise awareness of cyber security and fill the current skills gap in this field. They will encourage learners to improve their cyber hygiene and enable them to identify security weakness safely, legally and ethically. They will also help learners to contribute more safely to virtual communities.

They are the first school-based national qualifications in cyber security to be developed and will prepare learners for further studies and future employment in this area.

**Course Assessment**

Assessment of this award will be a combination of practical and knowledge assessments under closed and open book assessment conditions.

Note: There is no end of course written exam in this course.

**Progression routes to S5/6**

This qualification is available at three levels in a hierarchical structure and learners may progress to the next level if they wish to continue their studies. Pupils can move from Level 4 to Level 5 or Level 5 to Level 6 Cyber Security in S5/6.

## Design & Manufacture

**Purpose and aims of the course**

Candidates develop creative and practical skills by designing and making solutions to real problems. In addition, they gain an understanding of the impact of design and manufacture on everyday life.

The course encourages candidates to take a broad view of design and manufacture, through making decisions and taking responsibility for their own actions, generating and developing ideas, applying knowledge, and justifying decisions. These transferrable skills place candidates in a strong position regardless of the career path they choose.

**Skills, knowledge and understanding for the course**

The main purpose of the course is to allow candidates to develop the skills and knowledge associated with designing and manufacturing.

The course enables pupils to develop:

- skills in designing 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 society

**National 4 Added Value Assessment: 60 Marks (graded pass or fail)**

The added value unit assessment challenges pupils to respond to a given design brief or problem. The assessment is split into two parts:

- Design Folio which will be marked internally by centres and subject to visiting verification by SQA and is worth 30 marks.
- Practical model which will be marked internally by centres and subject to visiting verification by SQA and is worth 30 marks.

**National 5 Course Assessment: 100 Marks (55% of overall grade)**

The course assessment challenges pupils to respond to a given design brief or problem. The assessment is split into two assignments:

- Assignment 1 (Design), which will be externally assessed by SQA and is worth 55 marks.
- Assignment 2 (Manufacture), which will be marked internally by centres and subject to visiting verification by SQA and is worth 45 marks.

**Question paper: 80 Marks (45% of overall grade)**

The question paper gives candidates the opportunity to demonstrate their knowledge of:

- Design issues and Design theory
- Workshop processes and commonly used materials
- Commercial manufacturing techniques
- The impact on society of Design & Manufacture

**Progression routes to S5/6**

Pupils can move from National 5 to Higher in S5/6. Potentially Higher to Advanced Higher in S6.

**Other relevant information**

This subject allows pupils to develop knowledge and skills with are directly relevant to a range of career paths including design, manufacturing industries, engineering disciplines and construction.

## Engineering Skills: Skills for Work

**Purpose and aims of the course**
The overall purpose of the course is to ensure that candidates start to develop the generic and practical skills, knowledge and understanding, and employability skills needed within an engineering sector.
This course focuses on the broad areas of Mechanical, Fabrication, Electrical, Electronic, Maintenance, Manufacture, and an element of Design.

**Skills, knowledge and understanding for the course**
The course is split into 4 units of work as detailed below. All the Engineering Skills Units, while focusing on specific skill areas, also address generic skills related to:

- engineering communications
- engineering materials
- measurement and marking
- working to tolerances
- core skills in Literacy, Numeracy and Health & Well-being
- employability skills that employers value.

**Unit 1: Engineering Skills: Mechanical and Fabrication**
In this Unit pupils will learn to select and use the correct tools, equipment, and materials required to manufacture an artefact. During the manufacture, pupils will read simple engineering drawings, measure and mark, select appropriate materials, and work to specified tolerances. Pupils will also develop and use basic engineering skills of cutting, shaping, drilling, tapping, forming, and joining.

**Unit 2: Engineering Skills: Electrical and Electronic**
In this Unit pupils will select the correct tools and components required to construct a basic functional extra low voltage electrical circuit and an electronic circuit from a given diagram and specification. The Unit is suitable for pupils with no previous electrical, electronic, or employment experience.

**Unit 3: Engineering Skills: Maintenance**
In this Unit pupils will select the correct tools, materials and equipment required to test, disassemble, repair, and assemble an engineering part.

**Unit 4: Engineering Skills: Design and Manufacture**
In this Unit pupils will develop Computer Aided Draughting (CAD) skills and select and use the correct tools and materials required to design, manufacture/construct, test, evaluate, and report their findings on the manufacture/construction of a project.

**National 4/5 Course Assessment:**
There is no formal examination on this subject, instead assessment is ongoing throughout the course and all units are graded on a pass or fail basis. In order to achieve the full group award at National 4/5 pupils must complete all of the mandatory units. Pupils will be required to keep a body of evidence which demonstrates their ability to meet the outcomes for each of the units above.

**Progression routes to S5/6**
Pupils can move from this course onto a Foundation Apprenticeship in Engineering, over S5 and S6, which incorporates both Performing Engineering Operations at level 5 (covered in

S5) and NC level 6 Engineering (covered in S6). These courses are delivered in partnership with Ayrshire College.

**Other relevant information**

This subject allows pupils to develop knowledge and skills with are directly relevant to a range of career paths including a wide range of engineering, manufacturing and construction disciplines.

# English

**Purpose and aims of the course**

The main purpose of this course is to provide pupils with the opportunity to develop the skills of reading, writing, talking and listening in order to understand and to use language which is detailed in content.

The course offers pupils opportunities to develop and extend a wide range of skills. In particular, the course aims to enable pupils to develop the ability to:

- read, write, talk and listen, as appropriate to purpose, audience and context
- understand, analyse and evaluate texts, including Scottish texts, in the contexts of literature, language and/or the media
- create and produce texts, as appropriate to purpose, audience and context, through the application of their knowledge and understanding of language

As pupils develop their language skills, they will be able to process ideas and information more readily, apply knowledge of language in practical and relevant contexts, and gain confidence to use detailed language with clarity and purpose. Pupils develop analytical thinking and an understanding of the impact of language through the study of a wide range of texts.

**Skills, knowledge and understanding for the course**

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- the development of key communication and literacy skills in reading, writing, talking and listening
- understanding, analysis and evaluation of detailed texts in the contexts of literature, language and media, including Scottish literature
- the production of detailed texts in a range of contexts
- knowledge and understanding of language

**Added Value assessment**

This project will take place in May/June. The learner will apply language skills to investigate a chosen topic by:

- reading straightforward texts
- selecting relevant information from the texts
- evaluating the texts, using some appropriate critical terminology
- presenting their findings
- responding to questions

**National 4 Literacy Unit**

These assessments are similar to those for National 4, and are used if pupils might fail to pass National 5 English and to add another qualification for pupils sitting N4 English.

N5 Literacy unit: These assessments are similar to those for N4 and are used for pupils who might fail to pass the N5 English exam, and as an extra qualification for pupils sitting N4 English.

**Course Assessment**

There is a new course work component - a mandatory spoken language (combined speaking and listening). To maximize flexibility, this component will be internally achieved or not achieved and will be based on existing standards. Pupils will need to achieve the minimum requirements of this component to gain the course award.

**Portfolio: 30 marks (30%)**
The purpose of this portfolio–writing is to provide evidence of pupils' skills in writing for two different purposes: one broadly creative, and one broadly discursive.

**Question paper 1: 30 marks (30%)**
The purpose of this question paper is to assess candidates' application of their reading skills in the challenging context of unseen material and a limited time. Pupils are required to read and understand one unseen non-fiction text. A series of questions will focus on their understanding, analysis and evaluation skills.

**Question paper 2: 40 marks (40%)**
The purpose of this question paper is to assess the application of pupils' critical reading skills and their knowledge and understanding of previously-studied literary, media or language texts, including the work of at least one Scottish writer from the prescribed list.

**Progression routes to S5/6**
Pupils can move from N4 to N5 and then from N5 to Higher in S5/6 and from Higher to Advanced Higher.

## Fashion and Textile Technology

**Purpose and aims of the course**
The purpose of the course is to develop the practical skills, construction techniques and knowledge and understanding which support fashion/textile-related activities. The knowledge, understanding and skills that pupils acquire by successfully completing the course will be valuable for learning, for life and for the world of work.
This course is practical and experiential. Pupils will demonstrate relevant knowledge and understanding, and apply this to planning, making and evaluating fashion/textile items.

**Skills, knowledge and understanding**
The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- detailed understanding of textile characteristics, properties and technologies
- applying a detailed range of textile construction techniques
- explaining factors that affect fashion/textile choices
- explaining fashion/textile trends
- planning and making detailed fashion/textile items to an appropriate standard of quality
- demonstrating appropriate selection, set up, adjusting and use of tools and equipment, safely and correctly
- detailed evaluation of fashion/textile items
- detailed investigation and presentation skills

**National 4 Added Value Assessment**
Pupils will draw on and extend their range of practical techniques and skills in a practical activity to produce an effective overall response to a given brief. The brief will be sufficiently open and flexible to allow for personalisation and choice.

**National 5 Course Assessment**

**Assignment: 50 marks (35% of overall grade)**
**Practical activity: 50 marks (35% overall grade)**
The assignment and practical activity are worth 100 marks. The marks contribute 70% of the overall marks for the course assessment.
Pupils will carry out one task — planning, making and evaluating a fashion/textile item — which will provide evidence for both components.

**Question Paper: 30 marks (30% of overall grade)**
The other component is a question paper worth 30 marks, which contributes 30% of the overall mark for the course assessment.

**Progression routes to S5/6**
Pupils can move from National 4 to National 5 or National 5 to Higher in S5/6.

# Geography

**Purpose and aims of the course**

The study of geography introduces pupils to our changing world, its human interactions and physical processes. Pupils develop the knowledge and skills to enable them to contribute to their local communities and wider society. The study of geography fosters positive life-long attitudes of environmental stewardship, sustainability and global citizenship. Practical activities, including fieldwork, provide opportunities for pupils to interact with their environment. The contexts for study are local, national, international and global.

Pupils develop:

- a range of geographical skills and techniques
- detailed understanding of the ways in which people and the environment interact in response to physical processes and human interactions at local, national, international and global levels
- detailed understanding of spatial relationships and of the changing world in a balanced, critical and sympathetic way
- a geographical perspective on environmental and social issues
- -an interest in and concern for the environment, leading to sustainable development
-

**Skills, knowledge and understanding for the course**

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- developing and applying skills and detailed knowledge and understanding in geographical contexts
- with guidance, researching and using information collected from a range of sources about geographical issues which are mainly familiar
- using a range of mapping skills, including the use of Ordnance Survey maps
- using a range of research skills, including fieldwork skills
- using and interpreting a range of numerical and graphical information
- demonstrating knowledge and understanding of the physical environment of Scotland and/or the United Kingdom by giving detailed descriptions which are mainly factual with some theoretical content, and giving detailed explanations
- demonstrating knowledge and understanding of the human environment in a global context by giving detailed descriptions which are mainly factual with some theoretical content, and giving detailed explanations
- demonstrating knowledge and understanding of selected global issues by giving detailed descriptions which are mainly factual with some theoretical content, and giving detailed explanations

**National 4 Assessment**

- 3 internal unit assessments must be passed. Assessment will be undertaken in class and will be of an "open book" nature.
- Pupils must also pass an "added value unit" which is a self-researched presentation based on pupil's chosen topic related to Geography.

**National 5 Course Assessment**

**Assignment-20 marks (20% of overall grade)-**usually pupils will undertake a piece of fieldwork. An assignment report is written up during class time under exam conditions. Duration of 1Hr. This is externally marked by SQA

**Question paper: 80 marks (80% of overall grade)-**Exam duration of 2 hours 20 minutes. Externally marked by SQA.

There will also be regular assessments and timed practice throughout the year to monitor pupil progress

**Progression routes to S5/6**
Pupils can move from National 4 to National 5 or National 5 to Higher in S5/6.
N5 Travel and Tourism is also an option in S5/6.

## Graphic Communication

**Purpose and aims of the course**

The course allows pupils to develop an awareness of graphic communication as an international language and an understanding of how graphic communication technologies impact on society and the environment.

Pupils initiate, develop and communicate ideas graphically, and develop spatial awareness and visual literacy through graphic experiences. They interpret graphic communications initiated by others, and use graphic communication equipment, software and materials effectively.

**Skills, knowledge and understanding for the course**

The course provides opportunities for candidates to gain skills in reading, interpreting and creating graphic communications. They also learn to apply knowledge and understanding of graphic communication standards, protocols and conventions. The course also provides opportunities to build self-confidence and enhance skills in numeracy, ICT, planning and organising work tasks, and in working independently and in collaboration with others. Pupils develop skills in critical thinking, decision-making and communication.

The course is practical, exploratory and experiential in nature and combines elements of recognised professional standards for graphic communication, partnered with graphic design creativity and visual impact.

Pupils develop:

- skills in graphic communication techniques, including the use of equipment, graphics materials and software
- the ability to extend and apply knowledge and understanding of graphic communication standards, protocols and conventions
- an understanding of the impact of graphic communication technologies on our environment and society

**National 4 Added Value Assessment**

The added value unit assessment challenges pupils to respond to a given design brief or problem. The assignment is split into several key components which require pupils to conduct research, create preliminary, promotional and production graphics and evaluate their designs in response to the given brief.

**National 5 Course Assessment: 40 Marks (33% of overall grade)**

The course assessment challenges pupils to respond to a given design brief or problem.

The assessment is conducted in school within a strict time limit and is split into 3 tasks.

- Task 1 (14 marks) - producing production drawings for a given product
- Task 2 (14 marks) – producing promotional and preliminary graphics for a given product using specific software
- Task 3 (12 marks) - producing manual preliminary and promotional graphics for a related product

All tasks will be externally marked by the SQA.

**Question paper: 80 Marks (67% of overall grade)**

The question paper gives pupils the opportunity to demonstrate their knowledge of:

- Manual and Computer-aided graphic types and techniques
- Drawing standards, protocols and conventions
- Geometric shapes and forms and everyday objects
- Graphic views and techniques

- Computer-aided design (CAD)
- Desktop publishing
- Layout elements and principles, colour theory and informational graphics
- Graphic communication technology: impact on society and the environment

**Progression routes to S5/6**
Pupils can move from National 5 or National 5 to Higher in S5/6. Potentially Higher to Advanced Higher in S6.

**Other relevant information**
This subject allows pupils to develop knowledge and skills with are directly relevant to a range of career paths including design, manufacturing industries, engineering disciplines, CAD technologies, Architecture and construction.

# History

**Purpose and aims of the course**

The study of History helps pupils to make sense of our modern world. History teaches knowledge and transferable skills that pupils will use every day. History strongly promotes understanding of the rights and responsibilities of citizenship. The study of History also plays a major role in developing pupils' literacy.

**Skills, knowledge and understanding for the course**

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- skills in evaluating sources of evidence to work out its importance, purpose and content.
- skills in developing their extended writing and use of language.
- skills in organising information and supporting answers with evidence from relevant sources or recalled knowledge.
- skills in using relevant knowledge in the correct context and within certain question types.

**National 4 Added Value Assessment**

- 3 internal unit assessments must be passed. These are completed during class time and internally marked and verified.
- Assignment (project) based on pupil's chosen topic covering themes studied in S3/4.

**National 5 Course Assessment**

**Assignment-20 marks (20% of overall grade)**

- Regular assessments and assignment based on pupil's topic chosen from their S3/4 work.
- Essay researched and drafted, then written up in 1 hour with use of a 200 word planning, resource, sheet (1 A4 page) under exam conditions. This is externally assessed by SQA.

**Question paper: 80 Marks (80% of overall grade)**

- Duration of 2hr20min. Externally marked by SQA. Questions are based on the skills developed over the course of the year
- There will also be Regular assessments and timed question practice within class to monitor pupil progress.

N4/N5 Units of Study

1. British unit (The Atlantic slave trade 1770 – 1807)

In this thought-provoking topic, pupils will study the human and economic impact of the Slave Trade. They will look at the Triangular Trade to develop their knowledge and understanding of the economic reasons for slavery and its social impact on people. They will also investigate the harrowing slave experience and the difficulties of slave resistance. Pupils will explore the various motives behind the abolition campaign and the eventual end of the Slave Trade.

2. Scottish unit (The era of the Great War 1910-28)

This interesting topic is a study of the First World War and how it affects the ordinary people of Scotland- those fighting in the trenches and those at home. Pupils study topics such as the experience of Scots on the Western front. They also study the impact on Scottish people on the home front such as the changing role of women, the controversy about conscription

and conscientious objectors. They will also look at industrial and political unrest on Red Clydeside during and after the war.

3. European and world unit (Germany 1919-1939)
This popular topic will see the pupils study the rise of the Nazis and how life changes for the German people once they are in power. Pupils study the reasons for the failure of democracy in Germany after WW1. They will develop their knowledge and understanding of how this and other factors help to explain the rise of Hitler and the Nazis. Pupils then explore how the Nazis transformed Germany into a brutal dictatorship and the harsh methods they used to control the German population.

**Progression routes to S5/6**
Pupils can move from National 4 to National 5 or National 5 to Higher in S5/6. Higher to Advanced Higher in S6.

## Hospitality: Skills for Work/L5 Foundation Apprenticeship

**Purpose and aims of the course**

The course provides an introduction to the different sectors of the hospitality industry, the provision of hospitality locally, nationally and internationally and also which sectors can be described as 'commercial' and 'non-commercial'. Pupils will learn about the organisational aims of hospitality establishments and the products and services they provide. Learners will also have the opportunity to prepare for and take part in a job interview. The course will also develop vocational skills and knowledge and the focus is on experiencing the areas of the professional kitchen, food and drink service, customer care skills, reception skills and hospitality events. Learners will be involved in menu planning and have practical experience of preparing, cooking and presenting a range food and drinks, undertaking reception duties and planning, organising and running a small hospitality event. Learners will be working as a member of a team, communicating appropriately, undertaking aspects of problem solving and numeracy, and may also use information technology. The course places emphasis throughout all units on the employability skills and attitudes which will help to prepare learners for the workplace.

**Skills, knowledge and understanding**

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- Develop team-work and communication skills
- Develop customer care skills
- Develop food preparation, cooking and presentation skills
- Develop food and drink service skills
- Apply relevant health and safety and food hygiene procedures
- Develop personal presentation skills
- Develop a positive and responsible attitude to work

The course contains a significant practical component, which involves experiential learning, and is supported by related theory. It uses real-life hospitality contexts, which makes it relevant to the world of work. Its contribution to vocational education is important because it allows progression to a range of careers in the hospitality industry.

**National 5 Course Assessment**

The course is made up of 4 units. All units are assessed internally over the course of the academic year.

- Hospitality: Developing Skills for Working in Hospitality
- Hospitality: Developing Skills for Working in the Professional Kitchen
- Hospitality: Front of House Operations
- Hospitality Events

**Progression routes to S5/6**

In S5/6 pupils can study a level 6 Foundation Apprenticeship in Food and Drink Technologies.

# Practical Cookery

**Purpose and aims of the course**
This course aims to further develop pupil's life skills and enhance their personal effectiveness in terms of cookery and to provide a set of skills for those who wish to progress to further study in the hospitality context. In preparing pupils for life, the course anticipates their future needs and enables them to learn how to plan, prepare and cook food for themselves and others. It also develops organisational skills, which have an application in a wide variety of contexts.

**Skills, knowledge and understanding**
The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- proficiently use a range of cookery skills, food preparation techniques and cookery processes when following recipes
- select and use ingredients to produce and garnish or decorate dishes
- develop an understanding of the characteristics of ingredients and an awareness of their sustainability
- develop an understanding of current dietary advice relating to the use of ingredients
- plan and produce meals and present them appropriately
- work safely and hygienically

The course contains a significant practical component, which involves experiential learning, and is supported by related theory. It uses real-life hospitality contexts, which makes it relevant to the world of work. Its contribution to vocational education is important because it allows progression to a range of careers in the hospitality industry. Organisational skills, which have application in a wide variety of contexts, are developed. The course also supports the wider curriculum through developing pupils understanding of the importance of sustainable ingredients.

**National 4 Added Value Assessment**
This assessment aims to enable learners to draw on the knowledge, understanding and skills developed throughout the course. Learners will carry out a practical activity which will require them to prepare, cook and present a two-course meal to a given specification within a given timescale. It will require learners to demonstrate their ability to follow safe and hygienic practices throughout.

**National 5 Course Assessment**
The assignment and practical activity are together worth 100 marks. The marks contribute 75% of the overall marks for the course assessment. The other component is a question paper worth 30 marks, which contributes 25% of the overall mark for the course assessment.

**Assignment and Practical Activity: 100 marks (75% overall grade)**
The assignment and practical activity are worth 100 marks. The marks contribute 75% of the overall marks for the course assessment. The assignment and practical activity are inter-related and are assessed using one activity. Candidates carry out one task — planning and producing a meal — which provides evidence for both components.
**Question Paper: 30 marks (25% of overall grade)**
The other component is a question paper worth 30 marks, which contributes to 25% of the overall mark for the course assessment.

# Mathematics

**Purpose and aims of the course**

The course develops important mathematical techniques which are critical to successful progression beyond National 5 in Mathematics and many other curriculum areas. The skills, knowledge and understanding in the course also support learning in technology, health and wellbeing, science, and social studies. Using mathematics enables us to model real-life situations and make connections and informed predictions. It equips us with the skills we need to interpret and analyse information, simplify and solve problems, assess risk and make informed decisions.

The course aims to:

- develop skills in manipulation of abstract terms to generalise and to solve problems
- allow pupils to interpret, communicate and manage information in mathematical form: skills which are vital to scientific and technological research and development
- develop pupils' skills in using mathematical language and in exploring mathematical ideas
- develop skills relevant to learning, life and work in an engaging and enjoyable way

**Skills, knowledge and understanding for the course**

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- understand and use mathematical concepts and relationships
- select and apply numerical skills
- select and apply skills in algebra, geometry, trigonometry and statistics
- use mathematical models
- use mathematical reasoning skills to interpret information, to select a strategy to solve a problem, and to communicate solutions

**National 4 Added Value Assessment**

The assessment will be done through a test and include the use of numerical, algebraic, geometric, trigonometric, statistical and reasoning skills.

In preparation for the added value test, it is suggested that learners are the given the opportunity to:

- analyse a range of real-life problems and situations involving mathematics
- select appropriate mathematical skills
- apply mathematical skills with and without the aid of a calculator
- determine solutions
- explain solutions and/or relate them to context

**National 5 Course Assessment**

**Question paper: 90 Marks (100% of overall grade)**

**Component 1: Question Paper 1 (non-calculator) - 40 marks**

The purpose of this question paper is to allow candidates to demonstrate the application of mathematical skills, knowledge and understanding from across the course. A calculator cannot be used. This question paper gives pupils an opportunity to apply numerical, algebraic, geometric, trigonometric, statistical and reasoning skills. They involve the ability to use numerical skills within mathematical contexts in cases where a calculator may compromise the assessment of this understanding. Pupils are required to demonstrate an understanding of the underlying processes through short-answer and extended-response questions

**Component 2: Question Paper 2 - 50 marks**

The purpose of this question paper is to assess mathematical skills. A calculator may be used. This question paper gives pupils an opportunity to apply numerical, algebraic, geometric, trigonometric, statistical and reasoning skills. These skills may be facilitated by the use of a calculator, allowing more opportunity for application. This question paper is 60 marks out of a total of 110 marks and also consists of short-answer and extended-response questions.

## Applications of Mathematics (National 4)

**Purpose and aims of the course**

Using mathematics enables us to model real-life situations and make connections and informed predictions. It equips us with the skills we need to interpret and analyse information, simplify and solve problems, assess risk and make informed decisions.

The course aims to:

- motivate and challenge pupils by enabling them to select and apply mathematical techniques in a variety of mathematical and real-life situations
- develop skills in manipulation of abstract terms to generalise and to solve problems
- allow pupils to interpret, communicate and manage information in mathematical form: skills which are vital to scientific and technological research and development
- develop pupils' skills in using mathematical language and in exploring mathematical ideas
- develop skills relevant to learning, life and work in an engaging and enjoyable way

**Skills, knowledge and understanding for the course**

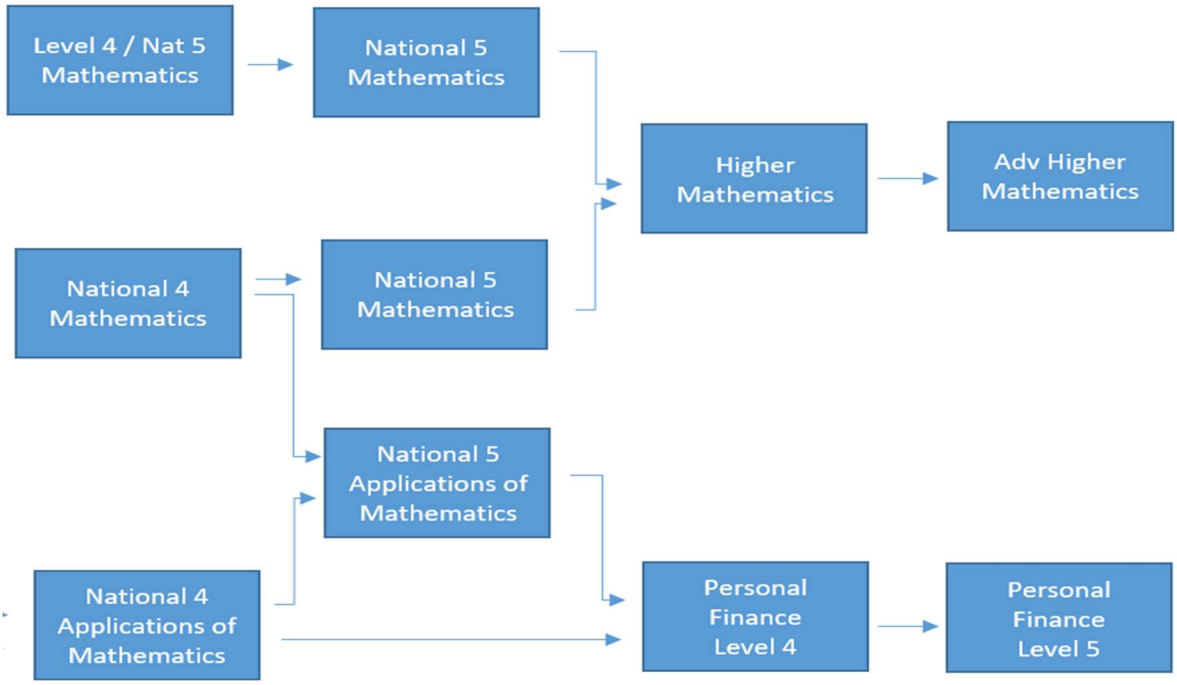
This course will develop learners' ability to:

- interpret straightforward real-life situations and problems involving mathematics
- identify appropriate mathematical operational skills to tackle straightforward real-life situations or problems
- use mathematical operational skills to an appropriate degree of accuracy
- use mathematical reasoning skills to assess risk, draw conclusions or explain decisions
- communicate mathematical information in an appropriate way

**National 4 Added Value assessment**

The learner will draw on and apply the skills they have learned during the course. This will be assessed through a test, which will offer opportunities to demonstrate the breadth of knowledge and skills acquired from across the component units of the course in new real-life situations. As an aid to meeting these aims, skills in using a calculator will be developed and a calculator will be permitted in part of the test.

**Progression routes for Mathematics in Senior Phase**




**Other relevant information**

There will be departmental assessment at the following key points in the courses:

- May of S3 (approximate completion of Block 1 for some classes)
- October of S4 (completion of Block 2/2A)
- January of S4 (prelim 1)
- March of S4 (prelim 2)

These will provide important information regarding progress and understanding of the coursework and provide opportunities to identify the strengths and areas for development. Candidates will be provided with opportunities to address these gaps with further home practice.

Associated homework, unit assessment preparation and exam revision will be provided by the teacher. Teachers will advise students on appropriate additional resources. Students should ensure that they fully understand each topic as it has been delivered as many topics tie in with other topics throughout the course. This can be done by checking through notes and worked examples to ensure that the understanding is in place. Thereafter, routine and regular practice of the types of question that are expected to feature in the final exam is the key to success. Scholar resources can also be accessed online at home.

## Applications of Mathematics (National 5)

**Purpose and aims of the course**

The National 5 Applications of Mathematics course explores the applications of mathematical techniques and skills in everyday situations, including financial matters, statistics, and measurement. The skills, knowledge and understanding in the course also

support learning in other curriculum areas, such as technology, health and wellbeing, science, and social studies.

Applications of Mathematics enables us to model real-life situations and make connections and informed predictions. It equips us with the skills we need to interpret and analyse information, simplify and solve problems, assess risk and make informed decisions.

**The course aims to:**
- analyse real-life situations and problems involving mathematics
- identify valid mathematical operational skills to tackle real-life situations or problems
- select and apply numeracy skills
- select and apply skills in finance, statistics, measurement, geometry, graphical data and probability
- use mathematical reasoning skills to draw conclusions or justify decisions
- communicate mathematical information in an appropriate way

**Skills, knowledge and understanding for the course**

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

· motivate and challenge candidates by enabling them to select and apply mathematical techniques in a variety of real-life situations
· develop the ability to analyse real-life problems or situations with some complex features involving mathematics
· develop confidence in the subject and a positive attitude towards the use of mathematics in real-life situations
· develop the ability to select, apply, combine and adapt mathematical operational skills to new and unfamiliar situations in life and work to an appropriate degree of accuracy
· develop the ability to use mathematical reasoning skills to generalise, build arguments, draw logical conclusions, assess risk, and make informed decisions
· develop the ability to use a range of mathematical skills to analyse, interpret and present a range of information
· develop the ability to communicate mathematical information in a variety of forms
· develop the ability to think creatively and in abstract ways

**National 5 Course Assessment**

Question paper: 90* Marks (100% of overall grade)

Component 1: Question Paper 1 (non-calculator) – 35 marks

The purpose of this question paper is to allow candidates to demonstrate the application of mathematical skills, knowledge and understanding from across the course. A calculator cannot be used. This question paper gives candidates an opportunity to demonstrate an understanding of a range of mathematical skills and to select, apply and combine them to perform calculations. Candidates also have opportunities to demonstrate skills in interpreting and presenting information. This question paper has 45 marks out of a

total of 110 marks. It consists of short-answer and extended-response questions, most of which are in context.

Component 2: Question Paper 2 – 55 marks

The purpose of this question paper is to allow candidates to demonstrate the application of mathematical skills, knowledge and understanding from across the course. A calculator may be used. This question paper gives candidates an opportunity to interpret and analyse real-life problems or

situations, select appropriate strategies, carry out calculations and draw valid conclusions or justify decisions. This question paper has 65 marks out of a total of 110 marks. It consists of short-answer questions, extended-response questions and case studies, most of which are in context.

**Progression routes**

- Higher Applications of Maths

- Other qualifications in mathematics or related areas, eg Skills for Work courses, National Progression Awards, National Certificate Group Awards.

- Further study, employment or training

## Modern Languages - French

**Purpose and aims of the course**

The main purpose of the course is to enable candidates to develop the skills of reading, listening, talking and writing in order to understand and use French. The course offers candidates opportunities to develop and extend a wide range of skills. In particular, the course aims to enable candidates to develop the ability to:

- read, listen, talk and write in a modern language
- apply knowledge and understanding of a modern language

**Skills, knowledge and understanding for the course**

The course contributes towards the development of literacy skills by providing candidates with opportunities to read, listen, talk and write in a modern language, and to reflect on how this relates to their use of English and other languages.

**National 4 Added Value Assessment**

All pupils who choose French in S4 will complete the National 4 Added Value Unit. This is about your ability to read and listen to the language while researching a topic and then write and talk about the topic in a presentation. All assessments will be carried out in class and the talk will be recorded.

**National 5 Course Assessment**

**Written Assignment: 20 Marks (12.5% of overall grade)**

Pupils create one piece of writing which will be marked externally by the SQA.

**Talking Performance: 30 Marks (25% of overall grade)**

Pupils produce a presentation in French on a topic of their choice that is followed by a conversation with their teacher. This is recorded and could be verified externally by the SQA.

**Question paper 1: 50 Marks (37.5% of overall grade)**

This question paper is in two parts – Reading (30 marks/ 25%) and Writing (20 marks/ 12.5%)
The reading section tests pupil's ability to understand detailed texts in French and answer questions in English on these texts to show understanding.
In the writing paper, pupils have to write an email in French of 120-150 words to apply for a job in France. There are 6 bullet points to address and the first four are always the same.

**Question paper 2: 20 Marks (25% of overall grade)**

Paper 2 is a listening exam. Candidates listen to a monologue (8 marks) followed by a dialogue (12 marks) and answer questions in English.

**Progression routes to S5/6**

Pupils can move from National 4 to National 5 or National 5 to Higher in S5/6.

**Other relevant information**

A large chunk of the course requires you to learn prepared material for Talking and Writing so you must be committed to spending the time at home on this. Regular learning of vocabulary is also essential.

## Modern Studies

**Purpose and aims of the course**

The study of Modern Studies helps pupils to develop knowledge of contemporary political and social issues. Modern Studies teaches knowledge and transferable skills that pupils will use every day in a social and political context. Modern Studies strongly promotes understanding of the rights and responsibilities of citizenship within their own community, society and wider world. The study of modern studies also plays a major role in developing pupils' literacy.

**Skills, knowledge and understanding for the course**

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- evaluating sources of evidence to work out its importance, purpose and content.
- developing their extended writing and use of language.
- organising information and supporting answers with evidence from relevant sources or recalled knowledge.
- using relevant knowledge in the correct context and within certain question types.

**National 4 Course Assessment**

- 3 internal unit assessments must be passed based on topics below. These will be carried out during class time and will be of an "open book" nature
- Assignment (project) based on pupils' choice of a Modern Studies topic

**National 5 Course Assessment**

**Assignment 20 marks (20% of overall grade)**

Based on pupil's chosen topic covering themes studied in S3/4. Assignment drafted then written up in 1 hour with use of research notes under exam conditions. Externally assessed by SQA.

**Question paper: 80 marks (80% of overall grade)**

Exam duration 2hr 20 minutes. Externally marked by SQA. Questions are based on the skills developed over the course of the year and the following topics.

1. Democracy in Scotland and the United Kingdom

Pupils will learn about the UK political system including Scotland's place within this. They will look at participation and representation as well as how people can influence the political system e.g. through Trade Unions. They will study the main institutions and organisations which make up political life in the UK e.g. The House of Commons. They will also develop an understanding of their rights and responsibilities within our society. They will gain skills in using sources of information in order to detect and explain examples of exaggeration and selectivity in the use of facts.

2. Social Issues in the United Kingdom (Crime and Law)

In this course learners will develop knowledge and understanding of the different types of crime, causes of crime e.g. poverty, greed and social exclusion, the impact of crime on individuals and society and the role of individuals, the police, the legal system and the state in tackling crime. They will also develop skills in using sources of information to make and give detailed justifications of decisions.

3. International Issues (World Power)

Pupils will study a significant world power, focusing on current social and economic issues such as wealth, health, inequalities, immigration and crime, as well as the main institutions of their political system. They will learn about the rights and responsibilities of those living there as well as the ways in which it is a Global Influence on other countries. They will also

develop skills by using sources of information in order to draw conclusions and give detailed support for them.

**Progression routes to S5/6**

Pupils can move from National 4 to National 5 or National 5 to Higher in S5/6. Potentially Higher to Advanced Higher.

## Music Performing

**Purpose and aims of the course**

The purpose of the National 5 Music course is to provide candidates with a broad practical experience of performing, creating and understanding music. The course enables pupils to work independently or in collaboration with others, and can help them to plan and organise, to make decisions and to take responsibility for their own learning.

The course aims to enable pupils to:

- broaden their knowledge and understanding of music and musical literacy by listening to music and identifying level-specific music concepts, signs and symbols
- create original music using compositional methods
- perform music

**Skills, knowledge and understanding for the course**

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- skills in listening to music to promote aural perception and discrimination
- knowledge and understanding of music styles, concepts, notation signs and symbols
- skills in creating original music using compositional methods
- reviewing the creative process and evaluating own composing
- skills in performing music on two contrasting instruments in contrasting styles
- self-reflection and review of rehearsal and practice skills

**National 4 Added Value assessment**

Pupils must perform and record a full programme (8 minutes) of music in February. This must be recorded in a live performance, in one sitting. They music also show evidence of self-reflection through a written report of the performance or a recorded interview following the performance.

**National 5 Course Assessment**

**Performing** (50% of overall mark)

Pupils will give an 8 minute performance on two instruments to a visiting assessor in February/March.

**Composing** (15% of overall mark)

A wide variety of compositional tools are explored and connections are made between styles and writing techniques of a variety of composers.

Pupils will submit final composition (minimum of 1 minute) for marking to the SQA. Evidence will include:

- an audio recording
- a score or performance plan
- a composing review

**Understanding Music** (35% of overall mark)

Pupils explore many musical styles and listen to a wide range of music while considering the historical context of the music to enhance their understanding. They will complete a written exam on this in May.

**Progression routes to S5/6**

Pupils can move from National 4 to National 5, National 5 to Higher, Higher to Advanced Higher. The same units are explored at each level of a music course, but in more depth and with greater demands.

**Other relevant information**

The following websites are great resources for studying understanding music course content: http://www.ataea.co.uk/ and www.mymusiconline.co.uk

# Physical Education

**Purpose and aims of the course**

The purpose of the course is to enable pupils to demonstrate and develop movement and performance skills in physical activities. By engaging in practical activities, candidates can demonstrate initiative, decision-making and problem-solving.

The course encourages candidates to develop a positive attitude towards a healthy lifestyle. It also supports the way that individual attitudes, values and behaviours are formed.

The course aims to enable pupils to:

- develop the ability to safely perform a comprehensive range of movement and performance skills
- understand factors that impact on personal performance in physical activities
- build capacity to perform effectively
- develop approaches to enhance personal performance
- monitor, record and evaluate performance development

**Skills, knowledge and understanding for the course**

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- demonstrating a comprehensive range of movement and performance skills safely
- understanding factors that impact on performance
- planning, developing and implementing approaches to enhance personal performance
- monitoring, recording and evaluating performance development
- decision-making and problem-solving

**National 4 Added Value assessment**

The National 4 AVU is completed through a Triathlon in June, once the timetable has changed. Pupils will prepare for the performance by completing various training sessions prior to the event and then complete a Triathlon which involves Swimming, Cycling and Running.

**National 4 Course Assessment**

Pupils are required to complete the Factors Impacting on Performance (FIP) unit and Performance Skills Unit.

The FIP unit will be completed and assessed internally as will the Performance Skills unit.

**National 5 Course Assessment**

The National 5 Course Assessment is split into two sections:

**Performance – 60 marks (50% of overall mark)**

Pupils chose two activities through which they complete their two one performances through. For national 5. Each performance is worth 30 marks and pupils are marked on their skill repertoire, control and fluency, decision making, ability to follow rules and etiquette.

**Portfolio – 60 marks (50% of overall mark)**

The portfolio is completed during class time and involves pupils following the cycle of analysis. This involves pupils gathering information; identify strengths and development needs and applying approaches to improve performance. Pupils complete the portfolio in class time and it is typed up prior to being sent to the SQA.

**Progression Routes to S5/6**

Pupils can move from National 4 to National 5. National 5 to Higher (dependent upon their grade at National 5, their English level and also their performance level). Higher to Advanced Higher.

National 5 Sport and Recreation is also an alternative option for pupils in S5/6.

**Other relevant information**

A large proportion of our National 5 course is completed within the pool. Pupils are expected to swim for an 8 week block and throughout this time they complete the data gathering process which allows them to complete their portfolio. Therefore it is essential that pupils are willing to swim.

# Physics

## Purpose and aims of the course

The purpose of the National 5 Physics course is to develop pupils' curiosity, interest, and enthusiasm for Physics in a range of contexts. The skills of scientific inquiry and investigation are integrated and developed throughout the course by investigating the applications of Physics. This enables pupils to become scientifically literate citizens, who can review the science-based claims they meet.

It enables pupils to:

- develop an understanding of Physics' role in scientific issues and relevant applications of Physics, including the impact these could make on society and the environment.
- develop scientific inquiry and investigative skills.
- develop scientific analytical thinking skills in a Physics context.

**Skills, knowledge and understanding for the course**

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- Applying knowledge of Physics to new situations, interpreting information, and solving problems.
- Planning, designing and safely carrying out experimental investigations to test given hypotheses or to illustrate particular effects.
- Selecting, presenting, and processing information (using calculations and units, where appropriate).
- Drawing valid conclusions and giving explanations supported by evidence/justification.

**National 4 Course Assessment**

As part of the National 4 qualification, pupils will be given questions designed to generate evidence that they can make accurate statements about all the key areas of knowledge and use a range of skills to solve problems. Pupils will also be given end of topic and unit assessments developed by SQA and the department throughout the course, to address experimental design, key knowledge, and data handling.

National 4 Added Value Assessment (Assignment) and Outcome 1 (Practical Report)

Pupils will draw on and apply the skills and knowledge they have learned during the course. They will carry out an in-depth investigation into an unfamiliar and/or integrated context. This will be assessed through an assignment and practical report.

Pupils will be asked to:

- Choose, with support, a relevant topic in Physics and devise an appropriate aim.
- Give an account of Physics relevant to the aim and plan and carry out experimental work to generate data relevant to the aim.
- Process and present the experimental data and compare data/information from internet/literature research with the experimental data.
- Draw a conclusion, evaluate the experimental procedure, and communicate the findings in a report.

**National 5 Course Assessment**
**Assignment: 20 Marks (20% of overall grade)**

The purpose of the assignment is to assess the application of skills of scientific inquiry and related Physics knowledge and understanding.
Pupils will be asked to:

- Choose, with support, a relevant topic in Physics and devise an appropriate aim.
- Give an account of Physics relevant to the aim and plan and carry out experimental work to generate data relevant to the aim.
- Process and present the experimental data and compare data/information from internet/literature research with the experimental data.
- Draw a conclusion, evaluate the experimental procedure and communicate the findings in a report.

**Question paper: 135 Marks (80% of overall grade)**

The question paper assesses:

- The application or extension of knowledge and/or skills in unfamiliar situations, practical and theoretical contexts.
- Scientific inquiry skills, analytical thinking skills, problem-solving skills and the impact of applications of Physics on society and the environment.

**Progression routes to S5/6**

Pupils can move from National 4 to National 5 or National 5 to Higher level.

# Practical Woodwork

**Purpose and aims of the course**
The National 5 Practical Woodworking course provides a broad introduction to practical woodworking. It is largely workshop-based, combining elements of theory and practical woodworking techniques. Pupils develop practical psychomotor skills (manual dexterity and control) in a universally popular practical craft. They are introduced to safe working practices and become proactive in matters of health and safety. They learn how to use a range of tools, equipment and materials safely and correctly.

**Skills, knowledge and understanding for the course**
Pupils develop skills in reading drawings and diagrams, measuring and marking out, cutting, shaping and finishing materials. They learn how to work effectively alongside others in a shared workshop environment. Course activities also provide opportunities to build self-confidence and to enhance skills in numeracy, thinking, planning, organising and communicating — these are all valuable skills for learning, for life and for work. Through this, they develop skills, knowledge and understanding of:

- woodworking techniques
- measuring and marking out timber sections and sheet materials
- safe working practices in workshop environments
- practical creativity and problem-solving skills
- sustainability issues in a practical woodworking context

**National 5 Course Assessment: 70 Marks (70% of overall grade)**
The course assessment is split into two tasks. Both of which are internally marked and externally verified by the SQA.

- Task 1: construct a woodwork object to the dimensions and tolerances specified
- Task 2: complete a short log book which allows pupils to demonstrate their understanding of workshop process and health and safety

**Question paper: 60 Marks (30% of overall grade)**
The question paper gives pupils the opportunity to demonstrate their knowledge of:

- Measuring and marking out
- Reading and interpreting drawings and documents
- Materials
- Assembly and construction techniques
- Flat fame and carcase construction techniques
- Surface preparation and finishing techniques
- Safe working practices including the use of power tools

**Progression routes to S5/6**
Pupils can move from this course to progress onto further practical courses offered at level 5 including Practical Metalwork.

**Other relevant information**
This subject allows pupils to develop knowledge and skills with are directly relevant to a range of career paths including engineering, construction trades and traditional crafts.

# Science

**Purpose and aims of the course**

The purpose of the National 4 Science course is to develop pupils' curiosity, interest and enthusiasm for Science in a range of contexts. The skills of scientific inquiry and investigation are integrated and developed, throughout the course by investigating the applications of Science. This enables pupils to become scientifically literate citizens, who are able to review the science-based claims they meet.

It enables pupils to:

- Develop an understanding of Science's role in scientific issues and relevant applications of Science, including the impact these could make on society and the environment.
- Develop scientific inquiry and investigative skills.
- Develop scientific analytical thinking skills in a Science context.

**Skills, knowledge and understanding for the course**

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- Applying knowledge of Science to new situations, interpreting information and solving problems.
- Planning, designing and safely carrying out experimental investigations to test given hypotheses or to illustrate particular effects.
- Selecting, presenting and processing information (using calculations and units, where appropriate).
- Drawing valid conclusions and giving explanations supported by evidence/justification.

**National 4 Course Assessment**

As part of the National 4 qualification, pupils will be given questions designed to generate evidence that they can make accurate statements about all the key areas of knowledge and use a range of skills to solve problems. Pupils will also be given end of topic and unit assessments developed by SQA and the department throughout the course to address experimental design, key knowledge and data handling.

**National 4 Added Value Assessment (Assignment)**

As part of the National 4 qualification, pupils will draw on and apply the skills and knowledge they have learned during the course. They will carry out an in-depth investigation on an unfamiliar and/or integrated context. This will be assessed through an assignment.

Pupils will be asked to:

- Choose, with support, a relevant topic in Science and devise an appropriate aim.
- Give an account of Science relevant to the aim and plan and carry out experimental work to generate data relevant to the aim.
- Process and present the experimental data and compare data/information from internet/literature research with the experimental data.
- Draw a conclusion, evaluate the experimental procedure and communicate the findings in a report.

**Progression routes to S5/6**

Pupils achieving National 4 can progress to National 5 discrete science subjects.

## Courses at Ayrshire College: Tuesday and Thursday afternoons: 2PM to 4PM

| Course Name | Delivery Location | Delivery Days | Delivery Times | Delivery Model | SCQF Level |
|---|---|---|---|---|---|
| **Business and Computing** | | | | | |
| NPA Software Development Level 4 | Kilmarnock Campus | Tues / Thurs | 2.00 - 4.00 | On campus | 4 |
| **Construction** | | | | | |
| Introduction to the Construction Industry | Kilmarnock Campus | Tues / Thurs | 2.00 - 4.00 | On campus | 4 |
| **Early Education** | | | | | |
| Skills for Work Early Education & Childcare Level 4 | Kilmarnock Campus | Tues / Thurs | 2.00 - 4.00 | On campus | 4 |
| **Engineering & Science** | | | | | |
| SVQ 1 Performing Engineering Operations x2 | Kilmarnock Campus | Tues / Thurs | 2.00 - 4.00 | On campus | 4 |
| **Hair & Beauty** | | | | | |
| Steps to Work Hair & Beauty x2 | Kilmarnock Campus | Tues / Thurs | 2.00 - 4.00 | On campus | 4 |
| **Hospitality** | | | | | |
| NPA Professional Cookery | Kilmarnock Campus | Tues / Thurs | 2.00 - 5.00 (Tue) Remote (Thu) | Campus Tue / Remote Thu | 4 |
| **Motor Vehicle** | | | | | |
| Skills for Work: Automotive Skills National 4 | Kilmarnock Campus | Tues / Thurs | 2.00 - 4.00 | On campus | 4 |
| **Sport** | | | | | |
| Skills for Work: Uniformed Services | Kilmarnock Campus | Tues / Thurs | 2.00 - 4.00 | On campus | 4 |

| Course title | SCQF level | Venue | Days of Delivery | Times |
|---|---|---|---|---|
| NPA Software Development(level 4) | Level 4 | Kilmarnock Campus | Tuesday and Thursday | 2:00 – 4:00 |

**Who is the course for?**

This course will interest you if you enjoy working with computers, coding or enjoy solving problems. The NPA in Software Development is suitable for a wide range of candidates with basic computing ability who wish to develop the fundamental knowledge and skills required to solve problems by developing computer programs in a high-level language.

**What is the course about?**

The NPA in Software Development at SCQF Level 4 is intended to prepare you for progression to further study in a variety of computing disciplines.

During the award you will learn all about the basic programming concepts and how to write short programs using a software development language and environment. After the basics are covered you will develop further programming skills and eventually the knowledge and understanding required to devise a solution to a problem in software development. By the end of this course, you will have developed practical skills in software development using a high-level language.

These courses will give you the opportunity to develop:

- Understanding of the principles of software development, software development languages and environments
- Entry level skills using a high-level programming language
- Industry-standard software and principles
- Core Skills in problem solving in relation to software development.
- Analytical and other transferable skills.

The Course includes the following Units:

- Computing: Programming in a High-level Language: Fundamentals SCQF level 4
- Software Development SCQF level 5
- Problem Solving SCQF level 4

**What are the entry requirements?**

You need to have a basic level of IT skills e.g., Microsoft Word and understand the general operation/navigation of a Windows based PC. You must possess an interest in at least one of the following: computer science, art, programming, audio, or design. It would be good if you have played different games and consoles/platforms but not essential as we will discuss a variety of examples throughout. Some previous experience of coding using platforms like Scratch and AppInventor would be good though not essential.

**How will I be assessed?**

You will be expected to create a portfolio of your work. The portfolio may be paper or electronic (digital) and should be completed over the period of the course, with you contributing material to the portfolio on an ongoing basis. This will be a mix of practical and knowledge-based assessments.

**What should I expect?**

Classes are on a Tuesday and Thursday afternoon at Kilmarnock Campus from 2-4pm. You will study 3 subjects, which are mainly practical, with some theory and written assessments.

- Programming in a High-Level Language using Python
- Software Development extends your knowledge of programming later in the year. This also teaches you about the software development lifecycle – design, implement and test
- Problem Solving is combined with these units

By the end of the course you will have produced some small software applications.

**Next Steps?**

Successful completion of the Level 4 course may allow you to progress to:

- NPA Software Development level 6
- NC Computing at level 5
- NC Games and Software Development level 6

| Course title | SCQF level | Venue | Days of Delivery | Times |
|---|---|---|---|---|
| Introduction to Construction Industry (Level 4) | Level 4 | Kilmarnock Campus | Tuesday and Thursday | 2:00 – 4:00 |

**Who is the course for?**

This course is suitable for all young people interested in a career within the construction industry. This entrance level course will enable you to develop good basic hand skills whilst gaining an insight into what our industry has to offer. Taking this course could be the start of a career which may allow you to become a Modern Apprentice which is a paid job with the pay increasing whilst you train.

Students joining this course will attend college two afternoons each week for one year. During the course, opportunities and information will be provided by the lead industry bodies advising you on how to become an employed Modern Apprentice. If you can give a commitment to attend and give your best this course is achievable and will support progression to multiple opportunities within industry or college. Have a look at these websites:
http://www.citb.co.uk/citb-apprenticeships/
http://www.becomeaplumber.com/

**What is the course about?**

The course gives you the opportunity to gain skills in a variety of trades-specific areas such as Electrical, Carpentry & Joinery, Painting & Decorating and Plumbing. In addition, you will develop awareness of health and safety and attitudes that enhance employability within the construction / engineering industry, or other sectors. You will undertake a SQA Steps to Work Group Award and College devised units at SCQF Level 4, this includes Carpentry & Joinery, Electrical, Painting & Decorating and Plumbing.

**What are the entry requirements?**

There are no formal entrance requirements, but you will be required to attend a course interview.

**How will I be assessed?**

Whilst in the workshop you will build practical models which are assessed. Lecturers will always provide guidance and support.

**What should I expect?**

This is practical course which takes place in trade related workshops, the student's carpentry & joinery activities includes the manufacture of timber frames to a pre-determined size, these frames are then utilised for the student's electrical activities such as the wiring of switches and sockets, the plumbing activities include the fitting of a radiator and guttering. The students painting & decorating activities includes the surface preparation for painting techniques and stencilling.

**Next Steps?**

There are a variety of possible progression routes at the end of this course:

- Full time Pre-Apprenticeship College course in a chosen construction trade at SCQF Level 4.
- Modern Apprenticeship in a chosen trade.

| Course title | SCQF level | Venue | Days of Delivery | Times |
|---|---|---|---|---|
| Skills for Work Automotive (Level 4) | Level 4 | Kilmarnock Campus | Tuesday and Thursday | 2:00 – 4:00 |

**Who is the course for?**

If you want to know about working in the automotive industry, the occupations within it and the skills and knowledge required, can problem solve and enjoy hands-on practical tasks, this course ticks the boxes for you. Assessment across the units in this Course will mostly test your practical skills but will also test the wider knowledge and understanding you need to work in automotive job roles including knowledge and understanding of tools and equipment, and awareness of Health & Safety legislation.

**What is the course about?**

The Course provides a broad introduction to the automotive industry and will introduce you to basic vocational skills, knowledge and understanding. Practical experiences of carrying out basic vehicle checks are included as well as the specific skills involved in removal and replacement of components and mechanisms.

The overall purpose of the Course is to make sure that you develop practical skills, knowledge and understanding needed within this industry as well as developing the skills employers are looking for. For example, team working, following instructions and good customer service. The course may offer a route into a Modern Apprenticeship or continuing motor vehicle studies on a full-time basis.

Course Units:

- Automotive Skills: The Garage
- Automotive Skills: The Technician
- Automotive Skills: The Car
- Automotive Skills: The Vehicle Modification Project

**What are the entry requirements?**

There are no formal entrance requirements.

**How will I be assessed?**

Assessment across the units in this Course will mostly test practical skills (which will involve some physical work) but will also address the wider knowledge and understanding associated with working in automotive job roles including knowledge and understanding of tools and equipment, and awareness of health and safety legislation.

**What should I expect?**

To be able to undertake approximately 75% practical and 25% theory coursework. The practical element will involve working on the ground, working on, inside, around and under vehicles. You will learn about the various systems on the vehicle and tools which are utilised, you will be asked to recall the function of these components and tools. You will be expected to use tools and equipment to undertake practical tasks such as jacking and supporting vehicles on axle stands, removing/refitting road wheels, removing/refitting brake pads and utilising vehicle ramps. There will be some work on engines both on vehicles and on stands. You may find yourself getting dirty as there is an element of working on the ground and on some of the general vehicle systems.

**Next Steps**

This Course fills an identified need in the automotive sector for an introductory course for school candidates and supports progression into appropriate further education or work based learning. Successful completion of this Course may provide you with opportunities to progress to:

- Scottish Vocational Qualifications (SVQs) and Modern Apprenticeships in Automotive areas
- Full time National Certificate Courses
- Full time Institute of the Motor Industry courses at Ayrshire College
- Training/employment

| Course title | SCQF level | Venue | Days of Delivery | Times | Local Authority area |
|---|---|---|---|---|---|
| Skills for Work - Rural Skills (Level 4) | Level 4 | Ayr Campus | Monday and Wednesday | 2:00 – 4:00 | South Ayrshire<br>North Ayrshire<br>East Ayrshire |

**Who is the course for?**

This course is designed as an introductory course for students who enjoy being outdoors and wish to explore career options in the rural industries

**What is the course about?**

This course is about learning rural skills, It introduces students to using hand tools safely. Meeting standards whilst working with plants and gardening.
You will learn about
**estate maintenance, to** include path and fence repair, border maintenance, repairs to water pipes, tool identification
**soft landscaping**, to include **pruning** shrubs, weeding, digging, planting bulbs, trees etc, propagation.
**crop production**, to include growing a crop from seed, care of the crop, watering and feeding and harvesting.
**land based industries**, to include investigation into the nature of a range of land-based industries, Identify job opportunities available in a range of land-based industries.
**employability skills for the land-based industries, to** include developing work practices and knowledge and understanding of safe working practices

You will also develop your communication skills, team working and critical thinking skills

**What are the entry requirements?**

There are no formal entry requirements for this course. However, an ability to be able to work in all weathers and interest in the natural environment is a positive advantage

**How will I be assessed?**

Assessment of this course is through a series of theoretical and practical assessments or tasks. Some assessments will be carried out under supervised open-book conditions, others under supervised closed-book conditions

**What should I expect**

**Next Steps?**

Successful completion of this course will give you the entry requirements for the Level 4 Garden and Horticulture course. This can lead to either level 5 garden and landscaping course or level 5 woodland skills course which could lead to the level 6 tree surgery course

| Course title | SCQF level | Venue | Days of Delivery | Times |
|---|---|---|---|---|
| SFW Intro to Renewable Energy (Level 5) | Level 5 | Ayr and Kilwinning | Tuesday and Thursday | 2:00 – 4:00 |

**Who is the course for?**

This qualification is suitable for pupils from mainstream schools or other education establishments who wish to learn more about renewable energy and progress into a related trade area or a career in the energy sector.
The primary target group for this course is senior phase pupils.

For example: If you want to become a Plumber, Electrician, building services engineer, work on wind turbines or hydro electricity schemes, then this course will help you get a foot on the ladder of this career route. Maybe you want to go on to study sustainability or renewable energy at College or at University; this is the ideal place to get a start on your learning journey.

Energy has an impact on every aspect of modern living. You can enjoy exciting career opportunities in lots of different sectors, including construction and maintenance of buildings and transport and infrastructure.
Right now, there are many opportunities for employment in these industries in a fast-changing world as we move to net zero. People with green skills are in high demand, therefore the Skills for Work Energy at Ayrshire College is an ideal course choice from which to build your cv.

**What is the course about?**

You will explore the various UK-based energy industries and develop practical skills by building a small-scale solar hot water system and wind turbine. You will also develop your employability skills and review your strengths and weaknesses, which are then used to help suggest the most appropriate career for you within the energy sector.

The course will-

- Provide you with a broad introduction to the energy sector.
- Develop an awareness of the role of conventional and renewable energy systems in the UK.
- Develop skills relevant to the energy sector that are related to employment e.g., Solar hot water and wind turbines.
- Encourage you to evaluate the impact of energy generation on the environment.
- Encourage you to foster a good work ethic, including timekeeping, a positive attitude and other relevant employability skills.
- Encourage you to take charge of your own learning and development.
- Facilitate progression to further education and/or training.
- Develop an awareness of what opportunities there may be within the sector in terms of the types and range of career options.
- Encourage you to consider a career in the energy sector.
- Provide opportunities for the personal development of skills and attitudes that will improve your employment potential within the energy sector.

At SCQF level 5, you will work alone or with others on straightforward tasks with support.

You will also get to visit to an energy generation facility as part of your learning experience.
This might be to a hydro scheme or windfarm where you will get a feel for the environment, equipment, and staff working with energy generation systems.

**What are the entry requirements?**

A positive attitude
A willingness to learn
An interest in gaining a recognised qualification to pursue a career in the energy sector.

**How will I be assessed?**

The course comprises the following units-

- J12W 75 Energy: An Introduction 6 SCQF credit points
- J12Y 75 Energy: Domestic Wind Turbine Systems 6 SCQF credit points
- J130 75 Energy: Domestic Solar Hot Water Systems 6 SCQF credit points
- J12X 75 Energy: Employability and Careers 3 SCQF credit points
- J131 75 Energy and the Individual 3 SCQF credit points

To achieve the course award, the learner must successfully achieve all the units.

You will be assessed through a variety of means: individual practical exercises, teamwork, practical exercises and presentations.

**Next Steps?**

This course, or its units, may provide progression to -

- A National Certificate programme in Further Education
- Further Training or Employment

Specific courses at Ayrshire College may be -

- Pre-Apprenticeship Plumbing at SCQF Level 4 or 5
- Pre-Apprenticeship in Plumbing with Renewables at SCQF Level 5
- Pre-Apprenticeship in Electrical Engineering and Renewables at SCQF Level 5

| Course title | SCQF level | Venue | Days of Delivery | Times |
|---|---|---|---|---|
| Steps to Work – Hair and Beauty (Level 4) | Level 4 | Kilmarnock Campus | Tuesday & Thursday | 2:00 – 4:00 |

**Who is the course for?**

This course will interest you if you enjoy using your creative ideas in a practical way. You should also like working with other people and discussing how best to produce the looks you want to achieve. You should be prepared to participate as a model for fellow students which will require you to remove your own make-up before class

**What is the course about?**

The aim of this course is to give you the experience of a salon environment and the opportunity to learn about different roles and responsibilities in Beauty Therapy and Hairdressing. You will gain practical experience of general salon duties including assisting with customer care.
Beauty specific skills include facials and nail finishes.
Hairdressing specific skills include shampooing, conditioning, and drying hair.
Throughout the course emphasis is on the development of employability skills and attitudes valued by employers. You will study 2 SQA credits in total each semester; 1 credit from work related units and remainder from person centred units.

**Work Related**
Cosmetology: Beauty Practical Skills F0FE 10 - 1 credit
Cosmetology: Hairdressing Practical Skills F0FA 10 - 1 credit

**Person Centred**
Practical Abilities H18W
Self in Community H18N

**What are the entry requirements?**

There are no formal entrance requirements, to get the best out of this course you should enjoy working in a creative environment and have a real interest in the Beauty and Hair industry. You should also relish the challenge of getting to know new people and you must be able to commit to consistent, full attendance throughout the course.

**How will I be assessed?**

You will be assessed on a range of practical activities carried out in a salon environment. You will also research and write up a project on a relevant topic related to hairdressing and beauty.

**What should I expect?**

Your hairdressing unit is 90% practical work in a salon either working on each other in class or a tuition head and you will complete client consultation cards. The beauty unit is the same, 90% practical work and in addition you will complete client consultations cards. You will reflect on your practical skills and record where you think you could improve. You will be involved in planning an event/project along with your lecturer which will include working with a community group.

**Next Steps?**

Course may provide you with opportunities to progress to:
- A Level 4 or 5 Beauty or Hairdressing course.

| Course title | SCQF level | Venue | Days of Delivery | Times |
|---|---|---|---|---|
| Skills for Work Early Learning and Childcare (Level 4) | Level 4 | Kilmarnock Campus | Tuesday and Thursday | 2:00 – 4:00 |

**Who is the course for?**

SCQF level 4 Skills for Work: Early Learning and Childcare is an introductory qualification that will help you to understand some of the demands and responsibilities of working in the early learning and childcare sector. This is a great course if you enjoy the practical skills required to understand and care for young children but there is an element of theory-based learning too.

**What is the course about?**

At SCQF level 4, you will cover basic issues in each area and begin to develop relevant skills such as team working skills, helping to plan play experiences and develop transferable employability skills, including:

- an understanding of the workplace and the employee's responsibilities (e.g., time-keeping, appearance)
- self-evaluation skills
- positive attitude to learning
- flexible approaches to solving problems
- adaptability and positive attitude to change
- confidence to set goals, reflect and learn from experience
- skills to become effective jobseekers and employees

At SCQF level 4, you work alone or with others on straightforward tasks with support.
Units studied:

- Child Development
- Working in Early Learning and Childcare
- Play in Early Learning and Childcare
- Maintenance of a Safe Environment

To achieve the Course award, you must successfully achieve all the Units which make up the Course.

**What are the entry requirements?**

You should have achieved or be working towards National 4 English and have a real interest in Early Learning and Childcare and in learning new skills, you should also be committed to consistent and full attendance throughout the course.
Selection for a place on this course is based on pupils meeting the above requirements and completing a Microsoft Forms task which will be emailed to you; your personal statement and task content will be used to assess your suitability for this course. A face-to-face interview and task may also be used in some campuses.

**How will I be assessed?**

The assessments used in this Course will allow you to show that you understand the ideas and theories and practical skills that you need to go further in the early education and childcare sector.
Assessment approaches will include closed book tests and project-based activities.

**What should I expect?**

You should expect to take part in a range of individual and group activities whilst learning about Early Learning and Childcare. You will learn about some of the skills and knowledge needed to support young children's development and their learning. You will carry out written tasks in booklets as well as demonstrating the practical skills needed in the education and care of you children.

**Next Steps?**

Successful completion of this course will provide a good foundation for progression into SCQF level 5 programmes in Early Learning & Childcare, Health Care and Social Care.

| Course title | SCQF level | Venue | Days of Delivery | Times | Local Authority area |
|---|---|---|---|---|---|
| NPA Professional Cookery (Level 4) | Level 4 | Kilmarnock Campus | Tuesday Thursday | 2:00-5:00 1 hr remote | East Ayrshire |

**Who is the course for?**

If you are interested in cookery (or think you might be) and want to learn from the professionals, then this is the course for you.

**What is the Course About?**

This course will help you develop skills in cookery and teach you about working in a professional kitchen.
You'll increase your knowledge of food products; you will learn a variety of food preparation techniques and cookery processes ranging from home baking to preparing healthy dishes. This course also includes cake decoration where you will learn, for example, coating, piping, and modelling.
You are required to wear appropriate clothing to meet current food safety laws when in the kitchen. You will need to bring this with you for every class or you will not be allowed to participate in the class. These will be provided to you, but you will need to wash these ready for the next class

**What do I Need?**

There are no formal entrance requirements, but to get the best out of this course you should enjoy working in a practical environment, have a real interest in the hospitality industry and not be afraid to stand for periods of time! You should also enjoy the challenge of getting to know new people. You also need to wear a protective uniform in the kitchen and bring something to take the food you make home.
You should also enjoy the challenge of getting to know new people. You need to be committed to attending all the classes.

**How will I be assessed?**

Most of the assessment will be practical, and some will take place in the classroom.

**What should I expect?**

You will be in the kitchen for most of your course, there is some theory involved which needs to be completed alongside your practical work. You will make a variety of dishes including Lasagne, Chilli Con Carne, Burgers, Biscuits and Cakes

**Next Steps?**

On successful completion of this course you will have the opportunity to apply for: Introduction to Professional Cookery and Hospitality Level 4.

| Course title | SCQF level | Venue | Days of Delivery | Times | Local Authority area |
|---|---|---|---|---|---|
| SVQ 1 - Performing Engineering Operations (Level 4) | Level 4 | Kilmarnock Campus | Tuesday and Thursday | 2:00 – 4:00 | East Ayrshire |

**Who is the course for?**

This course is for anyone who has an interest in Engineering, enjoys practical hands-on work in a workshop environment, can problem solve and wishes to gain relevant practical experience within this industry to possibly gain an apprenticeship. You will populate and develop a portfolio which can be used to show employers during interviews. You need to be able to work safely and be responsible for yours and others about Health & Safety.

**What is the course about?**

This course provides a basic introduction to practical Engineering. Students will learn vocational skills in Engineering including:

- Making Components Using Hand Tools and Fitting Techniques
- Sheet Metal Working
- Complying With Statutory Regulations and Organisational Safety Requirements
- Working Efficiently and Effectively in Engineering
- Using and Communicating Technical Information

**What are the entry requirements?**

There are no formal entrance requirements but if you want to take engineering further you should be studying Maths and Physics is helpful too. You will be asked to complete an aptitude test at interview or online.

**How will I be assessed?**

Assessments are practical and focus on the attainment of new skills as and when you acquire them. You will be required to complete paperwork to support your practical learning.

**What should I expect?**

The course will be split with one afternoon of theory/computer-based work and another of practical activities. There will be some paperwork associated with the practical activities as well.

**Next Steps?**

Successful completion of this Course may provide you with opportunities to progress to a full time or Schools Level 5 PEO Engineering College course. If you want to study Engineering, the PEO is a great addition to your National Qualifications evidencing your practical experience. Many local engineering companies are now asking for prospective candidates to have or be working towards a PEO Level 5.

| Course Title | SCQF level | Venue | Days of Delivery | Times |
|---|---|---|---|---|
| SFW Uniformed and Emergency Services (Level 4) | Level 4 | Kilmarnock Campus | Tuesday and Thursday | 2:00 – 4:00 |

**Who is the course for?**

The course will be of interest to you if you want to work in the Army, Navy, Air Force or Emergency services (Police, Fire, Ambulance). The course will also be great for someone looking for a career that involves physical activity, teamwork, sport, community development and fitness.

**What is the course about?**

This course is designed to introduce and develop the key skills needed to work with the Army, Merchant Navy, Royal Air Force, Royal Navy and Royal Marines and the Ambulance Service, Coastguard, Fire and Rescue and Police. You will develop a high level of physical fitness through various activities, and this is an important part of this course. The course will involve practical activities and will develop physical health, teamwork and community development.

SQA Course Units

- Uniformed and Emergency Services: An Introduction
- Uniformed and Emergency Services: Health, Safety, Fitness and Wellbeing
- Uniformed and Emergency Services: Engaging with the Community
- Uniformed and Emergency Services: Working in Teams

These units will allow you focus your project work on your chosen uniformed service – allowing you to develop your understanding of carrying out that role.

**What are the entry requirements?**

No formal entry requirements. You will be selected for the course using your personal statement and feedback from your school. An interview may be required. You will need to demonstrate a commitment to team working and willingness to engage in physical activity/sport, ability to work in the community, have a real interest in the area and be committed to consistent and full attendance throughout the course.

**How will I be assessed?**

Assessments are a mixture of practical and written work and focus on the ideas and theories learned during class time.

**What should I expect?**

Much of the course is classroom based however group work and problem-solving activities are used alongside project work. You will regularly take part in practical activities to cover all the requirements of your units. This may involve organisational/vocational activities.
Currently our learners are taking part in physical fitness activities for 25% of their college time.

**Next Steps?**

There are a variety of possible progression routes at the end of this course:

- Successful completion of this course will provide a good foundation for those who want to study at SCQF Level 5 in Health, Sport and Fitness or Social Science.
- Learners may also be able to progress to our full time NQ Uniformed Services course at SCQF Level 5
- A career in the uniformed or emergency services.

**DYW Developing the Young Work Force: School based courses**

**Bike Maintenance:**

**Who is this course for?**
If you have an interest in pedal bikes and how they work. This course will run over the year within Loudoun Academy.

**What is this course about?**
The general aim of this unit is to enable the learner to develop the skills and knowledge to identify both routine and non-routine maintenance/repair tasks required on a cycle. The learner will be required to develop and use a systematic method of checking the cycle to assist in the identification of faults. The learner will develop a maintenance and lubrication schedule designed to keep the cycle in optimum condition. This approach is designed to encourage a proactive rather than a reactive approach to cycle maintenance. The learner will also carry out a range of both routine and non-routine maintenance/ repair tasks to ensure the cycle is well maintained and safe to use. This will include disassembly and reassembly and the correct setting up of various sub systems of the cycle.

Learners who complete this Unit will be able to:

1. Carry out a safety cycle check and identify faults.
2. Develop and make use of a regular maintenance and lubrication schedule for a cycle.
3. Carry out a range of less frequent and specialised repair and maintenance tasks.

The pupils training will allow them to develop the 6 C's core skills of confidence, Communications, Commitment, Customer Service, Customer Care and Courtesy

Awards available in this course:

- SQA qualifications in Literacy at National 4, Personal Development Level 4 Events
- Cycle Maintenance (SCQF level 4)
- Achieve Units at level 4 or 5

**What do I need to do?**
A place on the course will be subject to a practical interview where pupils need to demonstrate aptitude in maintenance/ practical skills, a desire to learn new skills and show commitment to consistent attendance.

**How will I be assessed?**
Assessment across units with a mixture of theory and practical class. This will be done during class time.

**DYW Developing the Young Work Force: School based courses**

**Barista:**

**Who is this course for?**
If you have an interest in the hospitality sector and how they work. This course will run over the year within Loudoun Academy.

**What is this course about?**
This unit is designed to enable learners to develop basic knowledge, understanding and technical skills required for the role of a barista. The unit covers how to operate specialist equipment to prepare and serve coffee and a variety of other drinks. This unit is suitable for learners with no previous experience who wish to obtain a basic knowledge of barista skills.
The pupils training will allow them to develop the 6 C's core skills of confidence, Communications, Commitment, Customer Service, Customer Care and Courtesy.
Awards available in this course:

- Barista Skills (City & Guilds level 2)
- Non-Alcoholic Beverages (SQA Level 5 Unit)
- World Host Qualification (industry Recognised Qualification)
- Events Unit (SQA Level 4 & 5)
- Customer Service Unit

**What do I need to do?**
A place on the course will be subject to a practical interview where pupils need to demonstrate aptitude in customer service skills, a desire to learn new skills and show commitment to consistent attendance.

**How will I be assessed?**
Assessment across units with a mixture of theory and practical class. This will be done during class time.