

MADANI BOYS SCHOOL

KS4 CURRICULUM CHOICES / INFORMATION 2024 - 2



WELCOME TO OPTIONS 2024 - 26

EBACC

You may have heard about the EBACC (English Baccalaureate). In order for the UK to be compared to the world's best education, the Government introduced the EBACC.

The EBACC consists of:

- English Language
- Maths
- Science including Computer
 Science
- Modern Foreign Languages
- History or Geography

As English Language, Maths and Science are compulsory, to be able to achieve the EBACC you also need to select either History, Geography and Modern Foreign Language.

These subjects will form a strong foundation for the future and have become recognised by both further and higher education establishments including 6th form providers, colleges and the Russell Group Universities.

AAWRWB DEAR STUDENT

Welcome to a significant moment in your education. The options process is a time of great opportunity, tough decisions and reflection. This booklet is designed to support you with your decision making about which subjects you will be studying over the next two years.

Contributing to society positively, acquiring knowledge, embarking on a career and contributing to the economy and even being happy, are all a major part of our H.E.A.R.T. values and we therefore ask that you carefully consider your choices that you make and how this will benefit both you and the wider community.

Choosing your options for Key Stage 4 is the beginning of this process and therefore it is important that you make an informed choice about what you are going to study. Some of these choices may determine what you are intending to study at Post 16 when you leave Madani and so it is important that you speak with your teachers, the careers advisor, your form tutor, subject leaders, teachers as well as your Head of House who will all support you in the process.

There are two components in your programme of study in Year 10 and 11:

Core Curriculum - This will be studied by ALL pupils and includes: English Language, English Literature, Mathematics, Science, Religious Education, Life Skills (no examination) and Physical Education (no examination).

Option Courses – This is the opportunity to choose three supplementary subjects that you would like to focus on in key stage 4 and are listed within this booklet.

Remember you are the most important person in this process therefore take your time, think carefully, reflect and make sensible decisions.

CRCaher Mr R. Laher Executive Headteacher

GCSE REFORMS

The guidance below has been referenced from the website of the Office of Qualifications and Examinations Regulation (Ofqual):



KEY INFORMATION

INTRODUCTION

New GCSEs in English Language, English Literature and Maths have been taught in schools in England from September 2015, with the first results issued in August 2017. Further subjects have since seen new GCSEs introduced over the subsequent years - these are reflected in this options booklet.

9 - 1 GCSES

The main features of the GCSEs are:

- 1. A grading scale of 9 to 1 is currently employed, with 9 being the top grade. This allows greater differentiation between students and will help distinguish the new GCSEs from previous versions.
- 2. Assessment will be mainly by exam, with other types of assessment used only where they are needed to test essential skills.
- 3. Content is more demanding, which has been developed by the government and the exam boards.
- 4. Courses will be designed for two years of study they will no longer be divided into different modules and students will take all their exams in one period at the end of their course.

COMPARISON

This diagram outlines the comparison between the previous GCSE (A* - G) grade set and the revised (9 - 1) grade set:

Previous GCSE grade set		<u>Revised</u> GCSE grade set
A*		9
		8
A		7
В		6
		5
С	_	4
D		3
E		2
F		1
G		
U		U



WHICH GCSE SUBJECTS ARE COMPULSORY?

For the core curriculum all pupils study GCSE's:

English Language, English Literature, Mathematics, Religious Education, Combined Science (in which the three components (Biology, Chemistry and Physics) are studied, leading to a dual award of two GCSEs in Science)

Pupils also study two non GCSE subjects: Heart for Life (No examination) Physical Education (No examination).

GCSE OPTIONS

WHO CAN I ASK FOR INFORMATION AND GUIDANCE?

Some of you already have a clear idea of your chosen career path and therefore of the subjects you must choose for GCSE and so your choices will therefore complement each other.

However, many of you have not yet decided on a career path and for you the choice can be bewildering. Many of you will select subjects you are good at or what you think your peers will choose. It is imperative that you make an informed choice that is based on what YOU want from your remaining time at Madani Boys School and in life beyond Madani embarking into further education or employment.

You can find details of the content and assessment procedures of all courses including those that are compulsory in this booklet and during options evening. The evening will provide an opportunity to speak to your teachers and Heads of Department about your forthcoming choices and you should consult as widely as possible before making any decision.

WHAT GCSE SUBJECTS AND ALTERNATIVES OPTIONS ARE AVAILABLE?

Madani Boys School offers you a further choice of subjects at GCSE, of which you will receive one from each block totalling three as shown below.

Y9 KS4 OPTIONS			
BLOCK A	BLOCK B	BLOCK C	
FRENCH	FRENCH	GEOGRAPHY	
GEOGRAPHY	HISTORY	ART/ GRAPHICS*	
COMPUTING	TRIPLE SCIENCE	DTE**	
ARABIC	SPORTS STUDIES	BUSINESS	
URDU	CITIZENSHIP	FOOD & NUTRITION	
ACHIEVE/ ANSAAR (APPROVED BY ML SA ONLY)			

Students moving into KS4 will study an array of GCSE subjects; some students based on their individual needs, may be advised to follow alternative provision route if advised by the Senior Leadership Team.

For the purpose of timetabling, the option subjects have been arranged into three blocks which are given an equal time allocation of 3 periods per week. Lessons for subjects in each block are taught simultaneously therefore only ONE subject may be selected in each vertical block.

* Students will specialise in either Fine Art or Graphics during the course

** Students will specialise in either Design Technology or Engineering during the course

DEADLINE

FORMS MUST BE SUBMITTED ONLINE BY:

4PM ON WEDNESDAY 28TH FEBRUARY 2024



GCSE OPTIONS

KEY DATES

Thursday 8th February 2024

- Year 9 Options Assembly
- Year 9 Options Evening,
- Options booklet published, online form submission window opens

Wednesday 28th February 2024

4pm online form submission window closes

Half Term 6

- During Half term 6, students are likely to be transferred to a new timetable reflecting final options choices. Up until this point it is important that all students continue to work hard in all of their subjects.
- During this this Half Term you will be provided with information, knowledge and preparation for your programme of study for the next two years in year 10 and 11.

HOW WILL DECISIONS BE MADE?

Your choice of GCSE subjects will be determined by the following important factors in no specific order and at the discretion of the School:

- Your current progress
- Your ability and / or aptitude for the subjects
- Cognitive Ability Tests and Progress Tests
- Your interest and enthusiasm for your chosen subjects
- Your recorded plans and aspirations for further education/ career
- Successful completion of your signed form submitted by the deadline.
- Viability of subject

Once you have made a preliminary choice about your GCSE subjects, the Leadership Team will carefully check through your academic programme to ensure that you have made an appropriate selection conducive to your future plans, have chosen subjects which are appropriate to your strengths and using the criteria set above. If you wish to change your option choices at a later date, the application of change must be made in writing formally by your parents via your tutor who will initiate full discussions between specific Heads of Department, Assistant Head Teachers and SLT. Please note a letter of application does not guarantee any amendments and decisions will remain at the discretion of the School.

We endeavour to offer all pupils at Madani Boys School the widest array of options possible and ensure most pupils receive as many of their priority selections given the inevitable constraints found in any School. We cannot thus guarantee you will receive all of your first choices though promise that the School will make every effort to do so and ensure a careful decision is made for every candidate. The school reserves the right to make any changes

- The most common letter in English is "e".
- The word "uncopyrightable" is the longest English word in normal use that contains no letter more than once.



ENGLISH ANGUAGE

ASSESSMENT

GCSE English Language (9-1) Edexcel

Following a course in GCSE English Language should inspire learners as a result of them following a broad, coherent, satisfying and worthwhile course of study. It prepares learners to make informed decisions about further learning opportunities and career choices.

EXTERNAL ASSESSMENT 40% (1hr 45mins) Component 1: Fiction and Imaginative Writing

Section A – Reading: questions on an unseen 19th-century fiction extract. Section B – Writing: a choice of two writing tasks (the tasks are linked by theme to the reading extract).

EXTERNAL ASSESSMENT 60% (2hrs) Component 2: Non-fiction and

Transactional Writing Section A – Reading: questions on two thematically linked, unseen

non-fiction extracts. Section B – Writing: a choice of two writing extracts (the tasks are linked by theme to the reading extracts).

COURSE OVERVIEW

English Language is vital for communicating with others both in school and in the wider world, and is fundamental to learning in all other curriculum subjects. By studying English, pupils develop skills in speaking, listening, reading and writing which they will need to participate in society. Pupils learn to express themselves creatively and imaginatively and to communicate with others confidently and effectively.

WHO IS IT FOR?

You will further your interest in the spoken and written word and how ideas are communicated (English Language is compulsory but the level of commitment that you bring to it will determine whether you secure a place at college to study this subject).

It is vital if you want a career of any kind! Being skilled in English will enable you to perform effectively in any job where appropriate communication (verbal or written) is required.

A strong grounding in GCSE English Language will be important should you wish to study English at A-Level or beyond or want a career in one of the 'professions' such as the law or teaching.

CAREER LINKS / PROGRESSION

The skills of reading, writing, speaking and listening are of vital importance in many areas and they are essential in many careers, they also underpin successful study at all levels, and a proficiency in them can also add immeasurably to an individual's general quality of life.



Shakespeare invented lots of expressions that we still use today...

'Heart of gold' (Henry V) 'Wild-goose chase' (Romeo and Juliet) 'Faint-hearted' (Henry IV part I) 'Brave new world' (The Tempest)



ENGLISH LITERATURE

ASSESSMENT

GCSE English Literature (9-1) with Eduqas

Following a course in GCSE English Literature should encourage learners to be inspired, moved and changed by following a broad, coherent, satisfying and worthwhile course of study.

EXTERNAL ASSESSMENT 40% (2hrs)

Component 1: Shakespeare & Poetry

Section A – Shakespeare ('Romeo and Juliet'): a two-part question with the first task focused on an extract and the second task being focused on a theme reflected in the extract and elsewhere in the play.

Section B – Poetry from 1789 to the present day.

Two questions based on poems from the WJEC Eduqas Poetry Anthology, one of which involves comparison.

EXTERNAL ASSESSMENT 60% (2hrs 30mins) Component 2: 19th-century Novel and Poetry since 1789

Section A - Post-1914 Prose/Drama An Inspector Calls (Priestley) Section B - 19th Century Prose A Christmas Carol (Dickens);

One source-based question on a 19th century prose text from the above prescribed list. Learners are not permitted to take copies of the set texts into the examination.

Section C - Unseen Poetry from the 20th/21st Century Two questions on unseen poems, one of which involves comparison.

COURSE OVERVIEW

English Literature encourages learners to develop knowledge and skills in reading, writing and critical thinking. It provides learners with opportunities to read widely for pleasure across a range of high quality texts in the genres of prose, poetry and drama and to develop an understanding of how literature is both culturally rich and influential.

WHO IS IT FOR?

Your will gain the opportunity to develop your interest in reading high-quality fiction and how the human condition has changed and been recorded through time will naturally grow (English Literature is compulsory – it sits alongside English Language – but the level of commitment that you bring to it will determine whether you secure a place at college to study this subject). It will be of great interest to you if you are interested in the 'big questions' that life throws up... Can you ever love someone too much? ('Romeo and Juliet') How far are we responsible for our fellow human beings in society? ('An Inspector Calls') Is violence ever justified? (War Poetry)

Should you wish to study English Literature at A-Level or beyond or want a career in one of the 'professions' such as the law or teaching, a GCSE in English Literature is extremely valuable.

CAREER LINKS / PROGRESSION

The skills of reading, writing, speaking and listening are of vital importance in many areas and they are essential in many careers, they also underpin successful study at all levels, and a proficiency in them can also add immeasurably to an individual's general quality of life.



- Language graduates are more employable than science, business studies or ICT graduates.
- Over 20% of employers say that they need employees who are
- more competent in languages.
 The business world is in need of people who are multi-lingual because of the global economy.
- You will be an asset to any business with more than one language at your disposal. Many employers will even pay you more for this asset.



MFL | ARABIC

ASSESSMENT

AQA (9-1) Foundation & Higher Tiers

Listening

Understand and respond to different types of spoken language

- Written exam:
- 35 Minutes (Foundation Tier),
- 45 Minutes (Higher Tier)
- 25% of GCSE

Speaking

Communication and interacting effectively in speech for a variety of purposes

Non-Exam assessment

- Foundation Tier: 7 9 Minutes,
- Higher Tier: 10 12 Minutes +
- Preparation Time
- 25% of GCSE

Reading

Understanding and responding to different types of written language Written exam:

- 45 Minutes (Foundation Tier),
- 60 Minutes (Higher Tier)
- 25% of GCSE

Writing

Communicating effectively in writing for a variety of purposes

Written exam:

- 1 Hour (Foundation Tier),
- 1 hour 15 Minutes (Higher Tier)
- 25% of GCSE

COURSE OVERVIEW

Students in years 10 and 11 can study an Arabic course which leads to a GCSE entry at Foundation or Higher Tier.

You will be assessed in all four skills: listening, speaking, reading and writing.

Throughout the course, students will be required to:

- Listen and respond to different kinds of language
- Communicate in speech for a variety of purposes
- Read and respond to different types of written language
- Communicate in writing
- Use and understand a variety of vocabulary and structures
- Understand and apply the grammar of the language

Through the following themes:

- Identity and culture
 - Local area, holiday, and travel
 - School
 - Future aspirations, study and work
 - International and global dimensions

WHO IS IT FOR?

You should choose this course if you enjoy communicating with others and it is definitely an option for you if you are interested in languages. If you enjoy reading and learning different ways to put your ideas across, Arabic GCSE offers you the opportunity to read authentic Arabic literature and texts so that you are able to communicate in different styles. If you are interested in travelling, languages are your passport to the world. Arabic is obviously spoken in Saudi Arabia, but did you know it is also spoken as an official language in Egypt, Dubai, Oman, Syria, Libya, Algeria, Morocco, Tunisia and many African countries. You should give this course serious consideration if you are interested in a wide range of careers (see below!). Employers like candidates who have wide skill sets and can work across a range of contexts.



GCSE Arabic is a highly regarded qualification for most university courses, and for any profession, which requires clear communication and precision. It can prove helpful for careers in medicine, science, engineering or business Careers using Languages include Law, Hotel Management, Travel and Tourism, Translating Interpreting, Journalism Teaching, Sales and Marketing, Banking, Public Relations, Personal Assistant, Exporting/Importing



- Language graduates are more employable than science,
- business studies or ICT graduates. Over 20% of employers say that they need employees who are more competent in languages.
- The business world is in need of people who are multi-lingual because of the global economy. You will be an asset to any business with more than one language at your disposal. Many employers will even pay you more for this asset.



FRFN

ASSESSMENT

AQA (9-1) **Foundation & Higher Tiers**

Paper 1 Listening

Understanding and responding to spoken extracts comprising the defined vocabulary and grammar for each tier / Dictation of short, spoken extracts

- Written exam:
- 35 Minutes (Foundation Tier),
- 45 Minutes (Higher Tier)
- 25% of GCSE

Paper 2 Speaking

Speaking using clear and comprehensible language to understake a role-play / Carry out a reading aloud task / Talk about a visual stimuli

- Non-Exam assessment
- 15 Mins. supervised prep • Foundation Tier: 7 - 9 Mins. 15mins
- supervised Prep,
- Higher Tier: 10 12 Minutes
- 25% of GCSE

Reading

Understanding and responding to written texts which focus predominantly on the vocabulary and grammar at each tier

- Written exam:
- 45 Minutes (Foundation Tier),
 60 Minutes (Higher Tier)
- 25% of GCSE

Writing

Writing text in the language in a lexically and grammatically acurate way in response to simple and familiar stimuli / Translating from English into the target language

- Written exam:
- 1 Hour 10 Mins. (Foundation Tier),
- 1 hour 15 Mins. (Higher Tier)
- 25% of GCSE

COURSE OVERVIEW

Students in years 10 and 11 can study a French course which leads to a GCSE entry at Foundation or Higher Tier. You will be assessed in all four skills: listening, speaking, reading and writing.

Throughout the course, students will be required to:

- Listen and respond to different kinds of language
- Communicate in speech for a variety of purposes
- Read and respond to different types of written language
- Communicate in writing
- Use and understand a variety of vocabulary and structures
- Understand and apply the grammar of the language

Through the following themes:

- Identity and culture
 - Local, national, international and global areas of interest
 - Current and future study and employment

WHO IS IT FOR?

You should choose this course if you enjoy communicating with others and it is definitely an option for you if you are interested in languages.

If you enjoy reading and learning different ways to put your ideas across, French GCSE offers you the opportunity to read authentic French literature and texts so that you are able to communicate in different styles.

If you are interested in travelling, languages are your passport to the world. French is obviously spoken in France, but did you know it is also spoken as an official language in Belgium, Burkina Faso, Cameroon, Canada, Madagascar, Ivory Coast, Monaco, Haiti, the Seychelles and many more.

You should give this course serious consideration if you are interested in a wide range of careers (see below!). Employers like candidates who have wide skill sets and can work across a range of contexts.



CAREER LINKS / PROGRESSION

- Language graduates are more employable than science, business studies or ICT graduates.
- Over 20% of employers say that they need employees who are more competent in languages.
- The business world is in need of people who are multi-lingual because of the global economy.
- You will be an asset to any business with more than one language at your disposal. Many employers will even pay you more for this asset.



MFL URDU

ASSESSMENT

AQA (9-1) Foundation & Higher Tiers

Listening

Understand and respond to different types of spoken language Written exam:

- 35 Minutes (Foundation Tier),
- 45 Minutes (Higher Tier)
- 25% of GCSE

Speaking

Communication and interacting effectively in speech for a variety of purposes

- Non-Exam assessment
- Foundation Tier: 7 9 Minutes,
- Higher Tier: 10 12 Minutes + Preparation Time
- 25% of GCSE

Reading

Understanding and responding to different types of written language Written exam:

- 45 Minutes (Foundation Tier),
- 60 Minutes (Higher Tier)
- 25% of GCSE

Writing

Communicating effectively in writing for a variety of purposes

Written exam:

- 1 Hour (Foundation Tier),
- 1 hour 15 Minutes (Higher Tier)
- 25% of GCSE

COURSE OVERVIEW

Students in years 10 and 11 can study an Urdu course which leads to a GCSE entry at Foundation or Higher Tier. You will be assessed in all four skills: listening, speaking, reading and writing.

Throughout the course, students will be required to:

- Listen and respond to different kinds of language
- Communicate in speech for a variety of purposes
- Read and respond to different types of written language
- Communicate in writing
- Use and understand a variety of vocabulary and structures
- Understand and apply the grammar of the language

Through the following themes:

- Identity and culture
 - Local area, holiday, and travel
- School
- Future aspirations, study and work
- International and global dimensions

WHO IS IT FOR?

Urdu is a living language which, according to estimates, is spoken by close to 100 million people around the world. It is the official language of Pakistan, a status which it shares with English. It is also spoken and understood in parts of India, Bangladesh, Nepal, the Middle East, and many other countries around the world where Pakistani communities have settled.

For those who enjoy reading; Urdu contains a rich history in its literature. By developing the skill of Urdu speaking, you can know about the culture and history of South Asia in general.

If you enjoy Art; Urdu is a beautiful language; the language is written in many artistic styles, some of them imported from Arabic writing styles.

For those interested in linguistics Urdu is a delicate and sophisticated language and many of its words are used to show respect and civility

CAREER LINKS / PROGRESSION

s a language spoken by many people in England, there are many opportunities available for those who wish to ork in translation and interpreting. As a skill, speaking Urdu can also support working in other fields such as



ther afield, Pakistan is a developing economy where businesses are booming and demand for products is risi learning Urdu will give you direct access to the business community and inside market knowledge as well.

• There is enough DNA in an average person's body to stretch from the sun to Pluto and back — 17 times



COMBINED SCIENCE

ASSESSMENT

OCR Gateway - Combined Science A (9-1) - J250

Students will be awarded with 2 GCSE's in Science, (Grades 9-1)

They will sit 6 written papers and an average mark will be used to formulate 2 GCSE grades.

Regular internal topic tests will be taken to inform pupils of their progress leading upto the final exams at the end of 2 years.

Students may be entered for Foundation or Higher Tier.

COURSE OVERVIEW

There are 18 teaching topics in total, six for each of Physics, Chemistry and Biology, plus a practical skills topic

This course will help learners to develop scientific knowledge and conceptual understanding through the specific disciplines of Biology, Chemistry and Physics. Develop an understanding of the nature, processes and methods of science, through different types of scientific enquiries that help them to answer scientific questions about the world around them. Develop and learn to apply observational, practical, modelling, enquiry and problem-solving skills, both in the laboratory and from other settings. Develop their ability to evaluate claims based on science through critical analysis of the methodology, evidence and conclusions, both qualitatively and quantitatively. Hence, mathematical skills will also be used and applied within the topics.

WHO IS IT FOR?

This course is for all pupils that do not opt for triple science.

This course will allow you to pursue courses at a higher level in Science for example, A-levels.

CAREER LINKS / PROGRESSION

Medicine / Optometrist / Pharmacist / Most pupils also develop their understanding and skills in ways that provide the basis for further studies in science and related areas.



 An individual blood cell takes about 60 seconds to make a complete circuit of the body



SCIENCE TRIPLE AWARD

ASSESSMENT

Students will have a chance to be awarded with 3 separate GCSEs in Science (Grades 9 - 1) in :

- Biology
- Chemistry
- Physics

They will sit 2 papers for each separate science.

Students may be entered for Foundation or Higher Tier.

OCR Gateway Science Biology A (9-1) -J247

OCR Gateway Science Chemistry A (9-1) - J248

OCR Gateway Science Physics (9-1) - J249

COURSE OVERVIEW

There are 20 teaching topics in total, 8 for Physics, 6 for Chemistry and 6 for Biology, plus a practical skills topic.

This course will help learners to develop scientific knowledge and conceptual understanding through the specific disciplines of Biology, Chemistry and Physics. Develop an understanding of the nature, processes and methods of science, through different types of scientific enquiries that help them to answer scientific questions about the world around them. Develop and learn to apply observational, practical, modelling, enquiry and problem-solving skills, both in the laboratory and from other settings. Develop their ability to evaluate claims based on science through critical analysis of the methodology, evidence and conclusions. Mathematical skills will also be used and applied within the topics

In addition to covering the same topics as the Combined Science course the triple award goes further in breadth and gives pupils an opportunity to apply scientific ideas to more diverse contexts. For example, Space Science is studied in Physics; Industrial processes are studied in Chemistry and Genomic research is studied in Biology.

WHO IS IT FOR?

Students who are very keen to understand complex scientific ideas and study where they can be applied in the world. Students must have the ability to study independently and complete extensive written tasks. They must also be willing to read further into topics and practice applying the content learnt to different scenarios. Pupils will be expected to have high level of competency in mathematical skills.

CAREER LINKS / PROGRESSION

A-Level maths / Mathematician / Requirement for Medicine and Dentistry / Statistician / Accounting Economics, Business and e-commerce / Engineering / Self-employment / Actuary / Management



Core PE lessons will offer the opportunity to continue to develop skills in the sports and activities covered in Key Stage 3, as well as taking part in some new sports. There will also be a programme of extracurricular activities for students to take part in. These will include recreational activities and competitive opportunities to develop skills, fitness and to compete against other schools.



EDUCATION

COURSE OVERVIEW

All students in Years 10 and 11 follow a programme of Physical Education in line with National Curriculum Statutory requirements. All students in Years 10 and 11 follow a course of study that will build on the skills and techniques covered at Key Stage 3. Each student will have one lesson of Core PE a week. During Key Stage 4, students tackle complex and demanding activities and apply their knowledge of skills, techniques and effective performance.

They will be involved in physical activity and sport that enables them to focus on competitions, promotion of health and wellbeing, and developing personal fitness levels. They will take on the role of performer, coach and official. Within games, pupils will be taught to play competitive games using advanced techniques and skills specific to the game played and respond effectively to changing situations within the game.

All students will gain a knowledge and understanding of fitness and health. They will be taught how preparation, training and fitness relate to and affect performance. They will also be shown how to design and carry out training programmes that have specific purposes and the importance of exercise to personal, social and mental health and wellbeing.

Students will develop the confidence and interest to continue to be involved in sport and/or physical activity into their adult lives and to understand the long term benefits of exercise.

WHO IS IT FOR?

As a core subject, PE is a subject for all. Students will be assessed following each unit module.

CAREER LINKS / PROGRESSION

The course develops the transferable skills and key skills that employers are looking for and can lead to a wide varie contemployment opportunities: Recreational management / leisure / coaching, / fitness / armed forces / Civil Service athletics / sportsman / coach / personal trainer / health and fitness advisor / PE teacher / physiotherapist / sport scientist.

Sport Studies students are given the opportunity to go into local Primary Schools, as part of the Leadership module, to deliver PE lessons

OCR

CAMBRIDGE

NATIONALS



SPORTS STUDIES

ASSESSMENT

OCR Cambridge Nationals

Through a combination of an external exam and internally assessed coursework covering 4 units.

Unit R184: Contemporary Issues in Sport.

Unit R185: Performance and Leadership in Sports Activities Sports Leadership

Unit R186: Sport and the Media

COURSE OVERVIEW

Sport, health related fitness and exercise is a fast evolving industry that is creating lots of opportunities in a variety of different roles. Sport Studies can be chosen in addition to core Physical Education and is designed to encourage personal participation and performance in a range of sport activities. Not only will students have the opportunity to develop performance skills, but also their communication, problem solving, planning and team-working skills. The course provides a good foundation for both post-16 progression or employment.

With a strong emphasis on scenario based learning, students are given the opportunity to display their knowledge and understanding in practical but realistic activities that challenge and extend their learning and prepares them for further studies or employment.

WHO IS IT FOR?

You should give this course serious consideration if:

- You have an enjoyment of and an interest in sport
- You have a good understanding of English written skills
- You regularly participate in sport and P.E. lessons
- You are thinking of a career in the sport or leisure industry
- You have a desire to inspire and lead others to be fit and active
- You want to achieve excellence in your own sporting performance.
- You have an interest in the wider issues around sport and how sport is reported in the Media

CAREER LINKS / PROGRESSION

By obtaining a Cambridge National Certificate in Sport Studies you can progress on to level 3 related vocationa qualifications such as the Level 3 Cambridge Technical Extended Certificate in Sport and Physical Activity. The course develops the transferable skills and key skills that employers are looking for and can lead to a wide variety of employment opportunities. This can include training in such areas as recreational management, physiotherapy, leisure activities teaching, coaching, officiating, sports development, the fitness industry and the armed forces



"So many of the world's current issues – at a global scale and locally - boil down to geography, and need the geographers of the future to help us understand them."

Michael Palin



GEOGRAPHY

ASSESSMENT

Madani Schools plan to follow the AQA specification which involves the study of three main sections which will be assessed at the end of Year 11 through 3 exams.

Living with the physical environment

- Written exam 1 hour 30 minutes – 35% of the GCSE grade
- This section includes three sections, the challenges of natural hazards, physical landscapes in the UK and the living world (biomes)

Challenges in the human environment

- Written exam 1 hour 30 minutes – 35% of the GCSE grade
- This section includes three main topics, urban issues and challenges, the changing economic world and the challenges of resource management

Geographical applications • Written exam – 1 hour 15 minutes – 30% of the GCSE grade

This sections involves a field study to collect data. This will then be assessed in a final examination at the end of the course. It also involves an assessment of geographical skills

COURSE OVERVIEW

The study of geography inspires an interest in and a sense of wonder about places, people and the environment. It helps young people make sense of a complex and constantly changing world and how society, the economy and environment combine to bring about change. It explains where places are, how places and landscapes are formed, how people and their environment interact, and how a diverse range of economies, societies and environments are interconnected, and examines natural resources and their sustainable use.

WHO IS IT FOR?

You should choose this course if you are interested in the world around you and how what we do as individuals and society has an impact on the earth and those who live on it. It also for you if you enjoy interpreting data and getting practical experience on field trips.

You should give this course serious consideration if you want to pursue a career in which skills such as numeracy, being a good team worker and the ability to think analytically and critically about environmental and social issues would be an asset.

It is definitely an option for you if you want a deeper understanding of issues such as global warming, migration, the distribution of wealth and why some areas of the world are more economically advantaged than others, how where we live affects how we live and how and why hazards such as storms, flooding, earthquakes and volcanoes occur and how we adapt to them.

CAREER LINKS / PROGRESSION

Oceanographer, geologist, environmental scientist, surveyor, travel agent, holiday representative, teacher, town planner, tourist guide, coastguard officer, countryside/forest/park_ranger, warehouse operator, landscape architect, recycling officer



Did you know...Anita Roddick founder of famous store Body Shop, supermarket entrepreneur Lord Sainsbury and former chairman of Manchester United Sir Roland Smith were all historians? Also Obama's Defence Secretary, UN Ambassador, and Attorney General are all historians?



HISTORY

ASSESSMENT

Madani Schools follow the AQA history specification which involves the study of:

- One study of a period of time of at least 50 years - Russia from 1894-1945
- One study of a theme over time – "Migration and Empires"
- One British Depth study Elizabethan England
- One wider world depth study which explores conflict and tension in Europe – 1918 - 1939

The course will be assessed through two exams each making up 50% of the final mark of the course.

Paper A: Assesses the period study (Russia) and the wider world depth study Written exam: 1 hour 45 minutes (50% of final GCSE grade)

Paper B: Assesses the study of a theme over time (Migration) and the British Depth Study Written exam: 1 hour 45 minutes (50% of final GCSE grade)

COURSE OVERVIEW

The skills students develop in history give them the power not just to identify problems, but to understand and solve them. As we study history, we engage with the challenges and dilemmas of the past in order to explore the themes that connect people and places across time periods. This allows us to determine how significant events, individuals and ideas have shaped our world today. The critical thinking skills necessary to understand these complex relationships help students understand and ask questions about what is happening in the world today and the part they play in local and world events. Through exploring how our place in the world has changed at local, national and international levels, history helps us understand who we are as individuals and as a society.

WHO IS IT FOR?

You should choose this course if you enjoy getting below the surface of ideas, issues and events to explore how and why events happen. Historians are always asking the questions how and why.

You should give this course serious consideration if you think skills like analysis and making links between factors will be important in your future career.

It is definitely an option for you if you enjoy debate and putting together an argument or piecing together puzzles and solving problems. The enquiries pursued in history help you develop your critical thinking skills. You will need to analyse sources and conduct research and then put together your ideas to communicate effectively. You will develop the ability to manage and organise information well.

CAREER LINKS / PROGRESSION

Historians develop skills of enquiry, debate and presentation and go into jobs like journalism, business, law, politics and the media. History is also works well in combination with sciences and business courses. Historical skills such as analysis, investigation, identifying and solving problems develop your skills across the curriculum and history is valued as a worthwhile subject by good Universities, whatever subject you are applying for!



Heart For Life subjects are:

- real: actually affect people's lives;
- topical: current today;
- sometimes sensitive: can affect people at a personal level, especially when family or friends are involved;
- often controversial: people disagree and hold strong opinions about them;
- ultimately moral: relate to what people think is right or wrong, good or bad, important or unimportant in society



HEART FOR LIFE

ASSESSMENT

At KS4, students explore topics including:

- HEART Values
- Staying healthy
- Positive relationships
- Substance misuse
- Budgeting
- Personal development
- Democracy, the rule of law, tolerance, honesty.
- Mental Health and wellbeing
- Stress Management
- Interview techniques
- Revision strategies
- Oracy
- Careers
- Preparation for life beyond school

In Heart For Life, teachers create an environment where students feel safe to explore and reflect on personal issues. Lessons are active and participatory, much of our work is discussion based.

COURSE OVERVIEW

Heart For Life is a planned programme of lessons and experiences that help children and young people grow and develop as individuals and as members of families.

Heart For Life deals with the real life issues young people face as they grow up and it equips them with the knowledge, understanding, attitudes and practical skills to live healthy, safe, productive, fulfilled, capable and responsible lives. It encourages them to be enterprising and supports them in making effective transitions from primary to secondary school and beyond. It also enables children and young people to think about their own values and attitudes including British Values so that they will grow into confident individuals and members of society.

RSE is embedded throughout the Heart for Life curriculum and is designed to be accessible to all as is it is taught at an age-appropriate level and it is underpinned by our school's vision, ethos, Islamic principles and the law so that every student knows more, remembers more and understands more. As a result of this, they will become more healthy, confident, independent and responsible members of society who are confident in dealing with moral, social and cultural issues that are a part of growing up.

CORE

WHO IS IT FOR?

As a core subject, Heart For Life is for all students

CAREER LINKS / PROGRESSION

Politician / Police Officer / Magistrate / Lawyer / Journalist / Civil Servant / Teacher

The course content is divided into five themes:

- A: Living together in the UK
- B: Democracy at work in the UK
- C: Law and justice
- D: Power and influence
- E: Taking citizenship action



CITIZENSHIP

ASSESSMENT

Edexcel GCSE Citizenship is about how people take an active part on democratic politics and work together for a better society, locally, nationally and globally.

Citizenship consists of **two externally examined papers** and the opportunity to complete a campaign through a citizenship action project.

Assessment:

Paper 1: Written examination1 hour and 45 minutes50% of the qualification80 marks.Paper 2: Written examination1 hour and 45 minutes50% of the qualification80 marks

COURSE OVERVIEW

Students will learn about power, democracy, the operation of government and the legal system, and the role of the UK in the wider world. They will explore and learn about different controversial and topical issues with political, social, ethical, economic and environmental dimensions in local to global contexts. They will experience taking citizenship action and learn from trying to make a difference themselves.

Students are introduced to the idea that the UK is a diverse society of many different communities and groups who live together. They explore the nature of identity and multiple identities as well as how and why communities are changing. They consider the democratic rights, freedoms and values that we share, including human rights and the challenge of balancing competing rights. Opportunities for developing citizenship skills include: to debate and explore identities, rights, values and democracy, and to gain a practical understanding of being an active citizen through contributing to local democracy and taking citizenship action to resolve problems, tackle inequality and improve justice

WHO IS IT FOR?

Citizenship is for all students with an active interest in modern life in Britain, politics and participation, rights and responsibilities.

CAREER LINKS / PROGRESSION

Politician / Police Officer / Magistrate / Lawyer / Journalist / Civil Servant / Teacher



The main advantage of GCSE Religious Studies is that it prepares you for life and gives you the knowledge and skills you will need to undertake duties and make the decisions every adult faces in the context of faith. It will provide the perfect

progression route for those who wish to continue their study of Islamic Theology and associated sciences in more depth, such as the 'Alimiyyah Course.



RELIGIOUS EDUCATION

ASSESSMENT

Madani School has chosen to follow the Edexcel GCSE course. There have been a lot of changes to the RE curriculum in the past couple of years and we now study not only Islam but Christianity as well. The course is divided so that 75% of course time is spent studying Islam and 25% studying Christianity and is divided in the following way:

Study of Islam

- This section includes the following main topics: Beliefs and teachings, Practices, Sources of Wisdom & Authority and Forms of expression and ways of Life
- Assessment Exam 1 hour 45 mins: 50% of GCSE grade

Study of Christianity

- This sections includes the following main topics: Beliefs and teachings, Practices
- Assessment Exam 50mins: 25% of GCSE grade

The final 25% of the grade will be made up of a further study of Islam through Philosophy and Ethics

- Existence of God, Marriage and the family
- Assessment Exam 50mins

COURSE OVERVIEW

RE is an important subject both because of what it teachers us about the practice of religion, and because it also makes a unique contribution to our spiritual, moral, social and cultural development. Studying RE helps you build relationships and understanding within your own religious community as well as with those of other faiths. The UK has a rich heritage of diversity and religion and with the changes in the GCSE RE course, you will be able to gain a strong understanding of the school's designated faith - Islam, Christianity, different faiths and no faith.

Religious education is particularly important as for many people, religion and belief forms a crucial part of their culture and identity. You will have noticed that religious issues are often given extensive media coverage and studying religious education at KS4 will help you make sense of the religious debates which continue to raise religious, moral and social questions in our society.

WHO IS IT FOR?

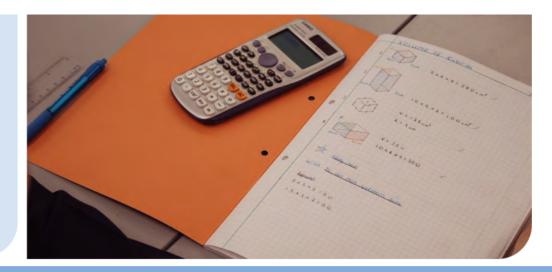
This course is compulsory for all students. It is an important part of GCSE studies for all students at Madani as it affirms aspects of the school's designated faith - Islam and also provides an opportunity to gain a deeper understanding of Christianity which has had a great impact on the history and character of Britain in the past and today..

CAREER LINKS / PROGRESSION

RE is also an excellent preparation for A Level Social Sciences (Law, Sociology and Psychology) as well as A Leve Religious Studies, History, English etc. In addition, many jobs appreciate the skills GCSE Religious Studies will give you, for example medicine, the police, the armed forces and the caring professions (social work, nursing probation service).



- The name zero is derived from the Arabic word 'sifr'
- Mathematics comes from a Greek translation which means learning, study, science.
- Video games such as FIFA require complex mathematical formulae and the use of algorithms



MATHEMATICS

ASSESSMENT

Pupils will sit three papers in June 2026 and are inclusive of the following:

Higher tier:Grades 4–9Foundation tier:Grades 1–5

Students must take three question papers at the same tier. All question papers must be taken:

Paper 1: (1 hour 30 minutes)

80 marks non-calculator
33% of the GCSE Maths assessment

Paper 2: (1 hour 30 minutes)

- 80 marks calculator allowed
- 33% of the GCSE Maths assessment

Paper 3: (1 hour 30 minutes)

- 80 marks calculator allowed
- 33% of the GCSE Maths

There will be various tests as follows:

- End of topic
- Termly
- Mock exams.

COURSE OVERVIEW

Mathematical thinking is important for all members of a modern society as a habit of mind for its use in the workplace, business and finance, and for personal decision-making. Mathematics is fundamental to national prosperity in providing tools for understanding science, engineering, technology and economics. It is essential in public decision-making and for participation in the knowledge economy. Mathematics equips pupils with uniquely powerful ways to describe, analyse and change the world.

The Maths curriculum is designed to reflect its usage in every aspect of life. This means an increased focus on applying mathematics in context, problem solving, reasoning and functional application of mathematics.

The new curriculum aims to harness pupil's non-calculator skills and ensure that taught mathematics is applicable in everyday contexts. Pupils will be provided the opportunity to demonstrate understanding of real life mathematics by working on functional maths questions.

Additionally, there are now rich and investigatory tasks embedded into the curriculum.

WHO IS IT FOR?

As a core subject, Mathematics is a subject for all

CAREER LINKS / PROGRESSION

A-Level maths / Mathematician / Requirement for Medicine and Dentistry / Statistician / Accounting Economics, Business and e-commerce / Engineering / Self-employment / Actuary / Management



- If Wal-Mart was classified as a country, it would be the 24th most productive country in the world
- More Monopoly money is printed yearly than real money throughout the world



BUSINESS

ASSESSMENT

OCR GCSE Business (9-1)

Unit 01 - Business activity, marketing and people Written paper

1h 30m – 80 marks - 50% of GCSE

This component is split into two sections and assesses content from business activity, marketing and human resources. Section A contains multiple choice questions. This section of the component is worth 15 marks. Section B includes short, medium and extended response style questions which use stimulus material that draws on real business contexts. This section of the component is worth 65 marks.

Unit 02 - Operations, finance and influences on business

Written paper

1h 30m – 80 marks - 50% of GCSE

This component is split into two sections and assesses content from operations, finance and influences on business. This component assumes knowledge of business activity, marketing and human resources. Section A contains multiple choice questions. This section of the component is worth 15 marks. Section B includes short, medium and extended response style questions which use stimulus material that draws on real business contexts. This section of the component is worth 65 marks. Synoptic questions are included in section B.

COURSE OVERVIEW

The GCSE Business course encourages students to be inspired, moved and changed by studying a broad, coherent, satisfying and worthwhile course of study.

As part of the course, you will learn about business concepts, business terminology and study:

- Business activity which includes business enterprise and planning, business ownership structures, business aims and objectives, stakeholders and business growth
- Marketing concepts and the role that marketing plays in business activity
- The role of HR (Human Resources)
- business operations including production processes, quality of goods and services, the sales process and customer services, consumer law, location and suppliers
- business finance
- influences on business

You will develop your analytical skills to analyse and construct balanced and structured arguments using a critical approach leading to informed judgements

You will develop your understanding of business issues relating to a variety of different business types

WHO IS IT FOR?

You should choose this course if: you have strong literacy skills and are able to think critically and logically. There is an aspect of finance, so a strong understanding of Key Stage 3 Maths will be helpful.

You should give this course serious consideration if: you want to study/practice business in the future

CAREER LINKS / PROGRESSION

AS/A Level GCE Business Studies/Economics / AS/A Level Accountancy / Business and Communication Systems / Business, Administration and Finance / Preparing for a Business Venture/ Self-employment



- Computer Science job openings are projected to multiply in the coming years
- 40-55% of all Wikipedia vandalism is caught by a single computer program with 90% accuracy
- A computer as powerful as the human brain would be able to perform about 38 thousand trillion



COMPUTER SCIENCE

ASSESSMENT

GCSE Computer Science (OCR)

The GCSE has 2 units: 2 Exam papers worth 100% of the marks that will be externally assessed

Unit J277/01: Computer Systems Written paper (1.5 hours, 80

marks, 50% of the qualification). This paper consists of multiple choice questions, short response questions and extended response questions.

This component will introduce you to the Central Processing Unit (CPU), computer memory and storage, computer networks / connections / protocols, network security, system software,

ethical/legal/cultural/environmental impacts of digital technology

Unit J277/02: Computational thinking, algorithms and programming

Written paper (1.5 hours, 80 marks, 50% of the qualification). Students answer a question paper that includes a mixture of short and long answer questions, some of which will require you to write code. This component will assess: Algorithms, Programming fundamentals, Producing robust programs, Boolean logic, Programming languages and Integrated, Development Environments

During the course of study, students will develop their understanding of a high-level language (e.g. Python) and will have the opportunity to apply their practical programming skills to a range of tasks (to meet the requirements set by OCR).

COURSE OVERVIEW

This is a course that has real relevance in our modern world. While you will no doubt already have some knowledge of computers and related areas, this course will give you an in-depth understanding of how computer technology works and a look at what goes on behind the scenes, a fun and interesting way to develop critical thinking, analysis and problem solving skills which can be applied to everyday life. As part of this, you will:

- understand and apply the fundamental principles and concepts of Computer Science, including abstraction, decomposition, logic, algorithms, and data representation
- analyse problems in computational terms through practical experience of solving such problems, including designing, writing and debugging programs
- understand the components that make up digital systems, and how they communicate with one another and with other systems
- understand the impacts of digital technology to the individual and to wider society and apply mathematical skills relevant to Computer Science

WHO IS IT FOR?

You should choose this course if: you are strong in Mathematics and you wish to gain further knowledge of the way a computer system functions, enjoy using analytical / problem solving skills and have an eye for detail.

You should give this course serious consideration if: you want to develop your critical thinking and problem solving skills and wish to pursue a career in a computer science related field.

CAREER LINKS / PROGRESSION

AS/A Level / University / Animators, Computer Software Engineer, Programmer/Developer, Computer Forensic Scientist, Games Designer, Cryptographer, Software Architecture Designer, Security Specialist



- "Design is intelligence made visible." Alina Wheeler
- "You can't use up creativity. The more you use, the more you have."-- Maya Angelou, author, poet, civil rights activist
- The creative industries contribute £84.1 billion to the UK economy (Gov 2016)



ASSESSMENT

AQA (9-1)

Pupils will study 5 short pre GCSE units to develop skills and identify proficiency in each discipline.

- Graphic Design / Branding & Marketing
- Fine Art / Technical Skills
- 3D Art & Design / Architecture &
- Environment Design • Photography / Digital Art - Adobe suite
- Textiles / Print, Clothing & Surface

Pupils will then select specialisms and follow a path studying 2 GCSE components:

Unit 1 - Portfolio (60%)

Graphic Design

Based on a chosen theme (e.g. 'Branding for new start up') pupils are expected to produce a major project within one or more of the strands of Art and Design from the available specialisms, **this major project is then complimented by a selection of minor projects demonstrating abilities across different starting points.**

Controlled assessment for 45 hours

Unit 2 - Set Task (40%)

Pupils are given a preparatory period to work towards their own personally selected outcome.

Externally assessed for 10 hours

COURSE OVERVIEW

Art - Graphic Design, makes a unique contribution to the development of pupils by preparing them to participate in, think about and intervene creatively to improve tomorrows' rapidly changing world.

Through analysis, creative thought, innovation, idea generation, designing and digital prototyping, pupils acquire knowledge and understanding leading to high quality outcomes across a range of specialisms underpinned by industry standard techniques and live briefs, using software employed by industry professionals.

Pupils reflect critically on their own and the work of others, evaluating quality, value and function. They learn to analyse, examine, reflect, problem solve and respond, to think and act as Graphic Designers and entrepreneurs working creatively and intelligently.

WHO IS IT FOR?

You should choose this course if you have a passion for creativity, ideas and want to make others think. You will learn to critically analyse, become a problem solver a communicator and be able to formulate innovative ideas using a variety of methods including digital techniques across a variety of specialisms that will make others reflect upon the world in which we live.

Thinking outside of the box you will become a creative thinker, developing innovative concepts and gaining highly valuable transferrable skills required in all industries inside and outside of Graphic Design.

You will be given the option to Specialise in 'Art - Graphic Design' during your course

CAREER LINKS / PROGRESSION

Graphic Designer / Interface Design / Architect / Branding, Marketing & Advertising / Fine Artist / Sculptor / Fashion Designer / Illustrator / Interior Designer / Art Director / Photograper/ App developer / Games Designer / Animator / Teacher ... Creative thinking is amongst the key attributes required by leading industries



- Imam al-Ghazali RA said "A person who appreciates Art will be able to appreciate his Lord more."
- Studying Art improves performance in other subjects
 –UCLA school of Education
- The creative industries contribute £84.1 billion to the UK economy (Gov 2016)



FINE ART

ASSESSMENT

AQA (9-1)

Pupils will study 5 short pre GCSE units to develop skills and identify proficiency in each specialism.

- Graphic Design / Branding & Marketing
- Fine Art / Technical Skills
- 3D Art & Design / Architecture &
- Environment Design • Photography / Digital Art - Adobe suite
- Textiles / Print, Clothing & Surface

Pupils will then select specialisms and follow a path studying 2 GCSE components:

Unit 1 - Portfolio (60%) Fine Art

Based on a chosen theme (e.g. 'Islamic Architecure') pupils are expected to produce a major project within one or more of the strands of Art and Design from the available specialisms, this major project is then complimented by a selection of minor projects demonstrating abilities across different starting points. Controlled assessment for 45 hours

Unit 2 - Set Task (40%)

Pupils are given a preparatory period to work towards their own personally selected outcome.

Externally assessed for 10 hours

COURSE OVERVIEW

Art makes a unique contribution to the development of pupils by preparing them to participate in, think about and intervene creatively to improve tomorrows' rapidly changing world.

Pupils reflect critically on their own and other people 's Art, Design, Graphics and Architecture, judging quality, value and meaning. They learn to analyse, examine, reflect, problem solve and respond, to think and act as artists, designers and crafts people working creatively and intelligently.

Through examination, exploration, refinement designing and making, pupils acquire knowledge and understanding leading to high quality outcomes across a range of specialisms including Fine Art and illustration, 3D Art and Design, Photography, Digital Manipulation, and Textiles Design.

WHO IS IT FOR?

You should choose this course if you have a passion for creativity, ideas and want to make others think. You will learn to critically analyse, become a problem solver a communicator and be able to formulate innovative ideas using a variety of methods including digital art & design across a variety of specialisms that will make others reflect upon the world in which we live.

Thinking outside of the box you will become a creative thinker, developing creative concepts and gaining highly valuable transferrable skills required in all industries inside and outside of Fine Art

You will be given the option to Specialise in 'Art - Fine Art' during your course

CAREER LINKS / PROGRESSION

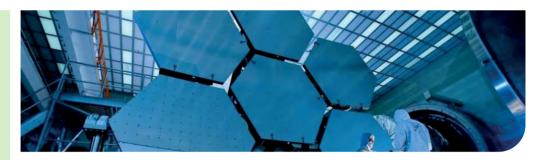
Graphic Designer / Interface Design / Architect / Branding, Marketing & Advertising / Fine Artist / Sculptor / Fashion Designer / Illustrator / Interior Designer / Art Director / Photograper/ App developer / Games Designer / Animator / Teacher ... Creative thinking is amongst the key attributes required by leading



STEM related careers are some of the highest paid in the world on average earning around £60,000

72% of all UK businesses rely on people with STEM skills and qualifications

40,000 STEM related jobs go unfilled every year



jobs go STEM

ASSESSMENT

STEM Education within our schools not only intends to develop the subject knowledge of students within STEM subjects but also a range of skill-sets including: adaptability, creative problem solving, problem finding, systems thinking, visualising and improving. These are vital skills for students to develop as they are required for many careers. The STEM subjects have many natural overlaps and therefore much of the subject knowledge is enhanced and consolidated further across the individual subjects.

SUMMARY

This year we have introduced STEM Education within our schools and have already been recognised for the provision we are providing by STEM Learning. At Madani Schools Federation we are committed to ensuring all students have the best possible experience across STEM subjects, inspiring them to develop high levels of skills in Science, Design Technology, Engineering and Maths enabling them to contribute towards the prosperity, stability and growth of the UK's economy in the future.

WHO IS IT FOR?

STEM helps to bridge the ethnic and gender gaps sometimes found in many Science, Engineering and Maths related fields. STEM subjects and knowledge are for all those who are interested in STEM related careers, want to make a positive contribution towards society, the economy and develop a wide range of skills and qualities that are required in the ever advancing technological world we live in. If you like to make things work, make things better, question your surroundings, verify what is known, turn abstract into products, make patterns and links, apply techniques from one area to another, reflect and make changes then the STEM subjects are for you.

CAREER LINKS / PROGRESSION

A Few STEM Careers and Average Salaries / Petroleum Engineer- £73,000-£126,000 / Actuarial Mathematics- £43,000-£85,000 / Nuclear Engineering- £48,000-£85,000 / Chemical Engineering-£48,000-£84,000 / Electronics Engineering- £46,000- £81,000 / Computer Engineer- £48,000- £80,000 Aerospace Engineer- £47,000- £78,000 / Electrical Engineer- £46,000- £76,000 / Materials Engineering-£46,000- £79,000 / Physicists- £41,000- £75,000 / Mechanical Engineer- £44,000- £73,000 / Software Engineer- £44,000- £71,000 / Construction Management- £39,000- £64,000 / Industrial Designer-£34,000- £62,000 / Mechanical Technology- £40,000-£61,000 / Food Scientist- £33,000- £57,000 / Project Manager- £38,000- £58,000

Without Product Design the important daily products we use, from the kettle and phone to cars would not exist, neither would we have chairs to sit on. The Design and Engineering industries were worth over £550 billion last year alone, being the biggest sector.



billion last year alone, being the biggest sector. DESIGN TECHNOLOGY

ASSESSMENT

AQA Product Design (9-1)

This course is assessed in 2 units by AQA in the following way:

Unit 1: Written Paper

- 50% of the GCSE course
- 2 hours
- 100 Marks

Assessment Topics:

- Core Technical Principles (20)
- Specialist Technical Principles (30)
- Designing and Making Principles (50)

Unit 2: Non Exam Assessment

- 50% of the GCSE course
- Approximately 35 hours
- 100 Marks

Assessment Topics:

- Identifying and Investigating
 Design Possibilities
- Design Brief and Specification
- Generating, Developing and Realising Design Ideas
- Analysing and Evaluating

COURSE OVERVIEW

GCSE Design and Technology will prepare students to participate confidently and successfully in an increasingly technological world. Students will gain awareness and learn from wider influences on Design and Technology including historical, social, cultural, environmental and economic factors. Students will get the opportunity to work creatively when designing and making and apply technical and practical expertise. You will do this by using industry standard 3D CAD (Computer Aided Design) software (Solidworks) and CAM (Computer Aided Manufacture) machinery (CNC (computer numerical control) Routing and Cutting).

The course combines theoretical, technological and practical skills to design and make products that meet human needs. It is outlined by the DfE that students must apply relevant knowledge, skills and understanding from KS3 and 4 in the sciences and maths. These include, but are not limited to the following areas of Maths: arithmetic and numerical computation, handling data, graphs, geometry and trigonometry. Science: Use of scientific vocabulary, terminology, definitions, life cycles, recycling and using materials.

Design and Technology has direct links to STEM (Science, Technology, Engineering and Maths) and consists of a wide range of Computer Aided Design and Manufacturing with a wide range of transferrable skills including problem solving.

WHO IS IT FOR?

You should choose this course if: You enjoy researching, designing, making, problem solving to improve the quality life of others.

It is definitely an option for you if: You are considering going into careers such as Product Design, Engineering, Architecture and Catering. Design and Technology is also definitely an option if you enjoy putting into practice and applying the knowledge and skills gained from Maths, Science and a wide range of other subjects in an authentic way.

You should give this course serious consideration if: You are interested in how technology is rapidly advancing and how it is being used to mass produce, 3D Model, Market and Render products that are used as a one off and on a daily basis to make life better.

CAREER LINKS / PROGRESSION

Engineering- Electronic / Automotive / Civil / Optical / Aeronautical / Mechanical and Computer Aided Engineering / Product Design / Marketing / 3D Design / Manufacturing / Product and Furniture Design / Architecture / Buildings / Bridges ... as well as a wide range of other civil sectors



- 1 in 8 jobs in Britain are food related.
- Not only will this subject prepare you for a variety of job roles but it is also an important life skill.



FOOD NUTRITION

ASSESSMENT

AQA exam board- 50% exam 50% controlled assessment

There will be a 1 hour 45 minute written exam which will assess pupils theoretical knowledge of food preparation and nutrition. This exam will account for 50% of the final grade.

There will be 2 controlled assessment tasks making up 50% of the final grade

Task 1: Food investigation

Students' understanding of the working characteristics, functional and chemical properties of ingredients.

Task 2: Food preparation assessment

Students' knowledge, skills and understanding in relation to the planning, preparation, cooking, presentation of food and application of nutrition related to the chosen task. Students will prepare, cook and present a final menu of three dishes within a single period of no more than three hours, planning in advance how this will be achieved.

COURSE OVERVIEW

This new GCSE Food Preparation and Nutrition is an exciting and creative course which focuses on practical cooking skills to ensure students develop a thorough understanding of nutrition, food provenance and the working characteristics of food materials. At its heart, this qualification focuses on nurturing students' practical cookery skills to give them a strong understanding of nutrition.

Food preparation skills are integrated into five core topics:

- Food, nutrition and health
- Food science
- Food safety
- Food choice
- Food provenance.

WHO IS IT FOR?

You should choose this course if you are interested in; Understanding effective and safe cooking skills by planning, preparing and cooking using a variety of food commodities, cooking techniques and equipment

- Developing knowledge and understanding of the functional properties and chemical processes as well as the nutritional content of food and drinks
- Understanding the relationship between diet, nutrition and health, including the physiological and psychological effects of poor diet and health
- Understanding the economic, environmental, ethical, and socio-cultural influences on food availability, production processes, and diet and health choices
- Developing knowledge and understanding of functional and nutritional properties, sensory qualities and microbiological food safety considerations when preparing, processing, storing, cooking and serving food
- Understanding and exploring a range of ingredients and processes from different culinary traditions (traditional British and international), to inspire new ideas or modify existing recipes.

CAREER LINKS / PROGRESSION

Chef / Nursery worker / Doctor / Nutritionist / Dietician / Physical therapist / Psychologist



Engineering has been a fundamental part of human development and progress for centuries. From the ancient Egyptians building pyramids to the latest advancements in technology, engineering has played a vital role in shaping the world we live in. Engineering has a key role in driving economic growth and productivity, generating. 21.4% (£1.2 trillion) of the UK's £5.7 trillion turnover



ENGINEERING

ASSESSMENT

AQA Engineering (9-1)

This course is assessed in 2 units by AQA in the following way:

Unit 1: Written Paper

- 60% of the GCSE course
- 2 hours
- 120 Marks

Assessment Topics:

- Engineering Materials
- Engineering Manufacturing
 Process
- Systems
- Testing and Investigation
- The Impact of Modern Technologies
- Practical Engineeing Skills

Unit 2: Non Exam Assessment: Practical Engineering

- 40% of the GCSE course
- An engineering project based on a set brief by the exam board
- 80Marks

Assessment Topics:

- Problem Solving
- Drawings and Conventions
- Production Planning
- Engineering Skills
- Applying Systems Technology
- Testing and Evaluating

COURSE OVERVIEW

The AQA GCSE Engineering course covers various aspects of engineering, including materials, processes, and systems. Students learn about design, manufacturing, and the impact of technology on society. Topics include engineering materials, fabrication techniques, electronics, and control systems. Practical skills are developed through hands-on projects, and students gain an understanding of engineering principles and applications. The course also emphasises problem-solving and encourages creativity in design. Assessment includes a written exam and a non-exam assessment where students showcase their practical skills and understanding of engineering processes.

The AQA GCSE Engineering course provides several benefits for students: Practical Skills / Problem-Solving / Creativity / Understanding Technology / Real-World Applications / Broad Skill Development

Preparation for Further Education: The GCSE in Engineering can serve as a foundation for further education and careers in engineering, product design, architecture and other related fields.

Career Pathways: The course opens up pathways to careers in engineering, manufacturing, technology, and other related industries, providing a solid foundation for future specialisms.

WHO IS IT FOR?

The AQA GCSE Engineering course is suitable for students who have an interest in and enthusiasm for engineering, technology, and design. Specifically, it may be a good fit for:

Future Engineers: Students who are considering a career in engineering, manufacturing, or related fields. Creative Thinkers, Practical Learners, Technology Enthusiasts, Analytical Minds and Future Innovators: Individuals who aspire to contribute to technological advancements and are excited about exploring new ideas in design and engineering.

It's important for students to consider their personal interests, strengths, and future career aspirations when choosing GCSE subjects, and if engineering aligns with these factors, then the AQA GCSE Engineering course would be a valuable choice.

CAREER LINKS / PROGRESSION

FE: A-levels in Engineering or Product Design. BTEC Level 3 in Engineering / vocational qualification. Apprenticeship programs in engineering, manufacturing, or related fields. / HE: Bachelor's degree in Engineering, Mechanical Engineering, Electrical Engineering, or other related disciplines.Career Paths: Engineering routes in Mechanical, Electrical, Civil, Aerospace, Automotive, Manufacturing, Design, Electronics, Robotics and Automation, Sustainable, Renewable Energy, Biomedical Engineering and many more, Entrepreneurship &





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