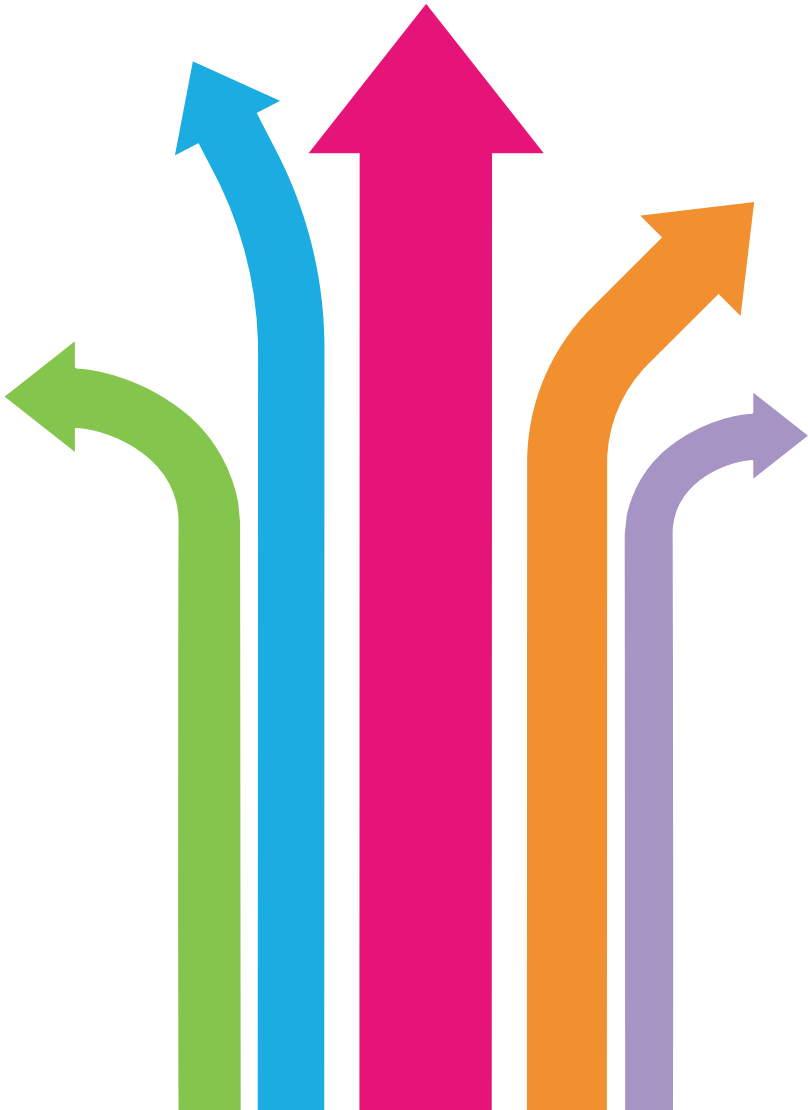


ACADEMIC  
**Pathways**





# Contents

---

INTRODUCTION	2
PROGRAMME OF STUDY	3
ARCHITECTURE	4
COMPUTER SCIENCE	5
ENGINEERING	6
FINANCE	7
FINE ART	8
HUMANITIES	9
JOURNALISM	10
LAW	11
LINGUISTICS	12
MATHEMATICS	13
MEDICINE	14
NATURAL SCIENCES	15
PHYSICS	16
PHYSIOLOGY	17
POLITICS	18
PRIMARY TEACHING	19
PSYCHOLOGY	20
RENEWABLE ENERGY	21
APPLYING TO COMPETITIVE UNIVERSITIES	22

# ACADEMIC Pathways

---

Hereford Sixth Form College has the widest choice of academic courses in the region, with more than 40 A Levels and Level 3 Vocational Courses. Students can create their own individual programme of study (see the Programme of Study page).

This booklet is designed to inform potential students and their parents/carers on academic based pathways, for those wishing to follow an A Level only Programme of Study. This approach is important for students who are academically gifted and/or with a future career aim or university course in mind.

Several careers are outlined within the booklet, along with information on potential Higher Education choices and career prospects. The College has extensive experience of supporting students to obtain university offers for highly competitive universities and courses. A recommended Programme of Study is provided which will enable our students to compete with others at the top academic level.

Our experienced Careers Team are available at our Open Events, for those wishing to discuss their options in greater detail. We also hold talks for potential applicants who may apply for Competitive Universities, including those applying for Medicine, Dentistry and Veterinary Medicine. These talks expand on this booklet and give further information on the excellent support students receive as part of our Reach Programme and Academic Masterclasses.

# Programme of Study

<b>A Level</b>			
<b>BTEC National Extended Diploma</b>			
<b>BTEC National Diploma</b>			
<b>BTEC National Extended Certificate</b>			
<b>BTEC National Foundation Diploma</b>			
<b>Cambridge Technical Diploma</b>			
<b>WJEC Level 3 Diploma</b>			
<b>Extension Programmes</b>			

<b>UCAS TARIFF POINTS</b>
<b>A Level</b>
A* = 56 points
A = 48 points
B = 40 points
C = 32 points
D = 24 points
E = 16 points

## ENTRY REQUIREMENTS

To gain a place on a Level 3 course, you will need at least five GCSEs at grades 4 - 9 or A\* - C including English Language. If you have not achieved grade 4 or above in English Language or Mathematics, you will be expected to study these subjects at Hereford Sixth Form College until the minimum requirement grade has been achieved.

## CREATING YOUR OWN PROGRAMME OF STUDY

The Level 3 Programme of Study consists of three options. Some students may choose to take on four options. A Levels take up one option; vocational courses can take up one, two or three options, as shown in the guide to the left.

You can combine these different elements to create your own individual programme of study. Options are incredibly flexible, with 99% of combinations possible. It is important that you choose what you enjoy as well as what will qualify you for any future career aim.

The aim of the booklet is to give you an idea of the different course combinations that can lead to certain career paths.

The Level 3 Programme of Study is supplemented with the Tutorial Programme, Impact, the Extended Project Qualification and Certificate in Mathematical Studies.

# Architecture

---

Universities will want a portfolio of work, and will want you to learn about architecture in your spare time. An EPQ focussing on architecture may really help.

## NEXT STEPS

This pathway could lead to:

- » **BA Architecture** at Cardiff Metropolitan University
- » **BSc Architecture** at University College London
- » **BA Architecture** at the University of Cambridge

## CAREER PROSPECTS

Newly qualified Architect can earn from £31-38k, with a senior partner earning much more.

Careers could include:

- » Chartered Architectural Technologist
- » Social Sciences Researcher
- » Town Planners and Surveyor

## PROGRAMME OF STUDY

A LEVEL  
**Mathematics**

A LEVEL  
**Art & Design: Fine Art**

**Any other A Level**

## ENRICHMENT

EXTENSION PROGRAMME  
**EPQ**

**Virtual College**

## WHY NOT ADD...

**Work Experience**

# Computer Science

---

Some highly selective universities prefer Mathematics and Further Mathematics, and you do not need to have done Computer Science. (See the Mathematics page for more information on 'recommended' subjects).

## NEXT STEPS

This pathway could lead to:

- » **BSc Computer Science** at the University of Warwick
- » **BEng Computing** at Imperial College London
- » **BSc Computer Science** at the University of South Wales

## CAREER PROSPECTS

A Senior Software Engineer, can earn anywhere between £39,000 and £77,000. A Deep Learning Engineer could earn up to £88,000.

This can lead to careers in:

- » Cyber Security
- » Machine Learning
- » Data Analysis
- » Systems Analysis
- » Game Designer
- » Software Developer

## PROGRAMME OF STUDY

A LEVEL  
**Fast Track Mathematics**

A LEVEL  
**Computer Science**

CONSIDER ONE FROM THE OPTIONS BELOW

A LEVEL  
**Physics**                      **Any other A Level**

## ENRICHMENT

EXTENSION PROGRAMME  
**EPQ**

## WHY NOT ADD...

**Virtual College**

# Engineering

---

Some highly selective universities such as Cambridge, Oxford and Imperial will want applicants to have studied Further Mathematics. (See the Mathematics page for more information on 'recommended' subjects).

## NEXT STEPS

This pathway could lead to:

- » **Mechanical Engineering** at Birmingham City University
- » **Engineering with Aerospace Engineering specialism** at University of Oxford
- » **Chemical Engineering with Environmental Engineering** at the University of Nottingham

## CAREER PROSPECTS

The average salary for jobs in Engineering in the UK is £39,000, but can rise to much higher. Biomedical Engineers earn an average of £35,000 and Data Engineer have an average salary of £56,000.

This pathway can lead to careers in:

- » Manufacturing
- » Investment Advisor
- » Quality Control Engineer
- » Engineering-specific professions

## PROGRAMME OF STUDY

A LEVEL  
**Physics**

A LEVEL  
**Fast Track Mathematics**

**Any other A Level**

## ENRICHMENT

EXTENSION PROGRAMME  
**EPQ**

**Virtual College**

## WHY NOT ADD...

**Work Experience**



# Finance

---

Work experience in any sector may help you with this, as every workplace has a finance person or department!

## NEXT STEPS

This pathway could lead to:

- » **BA Accounting and Finance** at the University of South Wales
- » **BSc Accounting and Finance** at the Queen Mary University of London
- » **BSc Accounting and Finance with Placement Year** at the University of Warwick

## CAREER PROSPECTS

The average salary for a Financial Accountant is £48,000 or a Chartered Accountant £84,500.

This pathway can lead to careers such as:

- » Financial Controller
- » Chief Financial Operator
- » Auditor
- » Stockbroker

## PROGRAMME OF STUDY

A LEVEL  
**Mathematics**

A LEVEL  
**Economics**

**Any other A Level**

## ENRICHMENT

EXTENSION PROGRAMME  
**EPQ**

**Virtual College**

## WHY NOT ADD...

**Work Experience**

# Fine Art

---

If you want to be an artist, Art and Photography go well together, but students must be good with deadlines.

## NEXT STEPS

This pathway could lead to:

- » **BA Fine Art** at the University of the Arts, London
- » **BA Fine Art** at the University of the West of England, Bristol
- » **BA Fine Art with Placement Year** at Loughborough University

## CAREER PROSPECTS

You can expect to increase your prices with experience. The increase could vary between 10 and 20% with every major achievement, such as a sell-out show or winning an award. Within five to ten years of graduating, you could have your own studio, gallery representation and regular shows.

This pathway can lead to careers as a:

- » Curator
- » Critic
- » Teacher
- » Graphic Designer
- » Concept Artist
- » Fine Art Restoration

## PROGRAMME OF STUDY

CONSIDER TWO FROM THE OPTIONS BELOW

A LEVEL

History

A LEVEL

English Literature

A LEVEL

Art & Design: Photography

A LEVEL

Art & Design: Fine Art

## ENRICHMENT

EXTENSION PROGRAMME

EPQ

College Annual Art Showcase

## WHY NOT ADD...

College Competitions

# Humanities

---

Think about the combination of your A Levels and if these open doors to big, broad courses.

## NEXT STEPS

This pathway could lead to:

- » **BA Liberal Arts** at the University of Bristol
- » **BSc Social Policy, Sociology, and Crime** at the University of Leeds
- » **BA History and Politics** at the University of York

## CAREER PROSPECTS

The average salary for a Policy Analyst is £36,000. A Communications Manager starting salary is around £25,000, but can rise to £61,000. Teaching salaries start at £26,000 to £32,000.

Careers could include:

- » Marketing Executive
- » Content Writer
- » Data Analyst
- » Copywriter
- » Senior Account Manager
- » Communications Officer
- » Political Analyst

## PROGRAMME OF STUDY

A LEVEL  
**History**

A LEVEL  
**English Literature**

### CONSIDER ONE FROM THE OPTIONS BELOW

A LEVEL

**Law**

A LEVEL

**Art & Design: Fine Art**

A LEVEL

**Sociology**

A LEVEL

**Media Studies**

## ENRICHMENT

**Student Voice**

EXTENSION PROGRAMME  
**EPQ**

## WHY NOT ADD...

**Work Experience**

# Journalism

Take part in the Student Voice. Start a blog or get voluntary work, and write about your experience.

## NEXT STEPS

This pathway could lead to:

- » **BA Journalism and Communications** at Cardiff University
- » **MSc Global Media and Communications** at the London School of Economics and Political Science
- » **BA English Language and Literature** at the University of Oxford
- » You can study a broad first degree, such as **BA Sociology** at University of Birmingham, and specialise after graduating

## CAREER PROSPECTS

Typical salary for BBC journalist is around £40,000 a year, but some are paid six figures.

Careers in journalism and media could lead to:

- » Travel Writing
- » Law and the Media
- » Data Journalism
- » Public Affairs
- » Media Production
- » Print Production

## PROGRAMME OF STUDY

CONSIDER ONE FROM THE OPTIONS BELOW

A LEVEL                      A LEVEL  
English Literature      English Language

A LEVEL  
Media Studies

Any other A Level

## ENRICHMENT

Student Voice

EXTENSION PROGRAMME  
EPQ

## WHY NOT ADD...

Work Experience

# Law

Some universities will want three A Levels, and one or two traditional subjects (see page 22)

## NEXT STEPS

This pathway could lead to:

- » **LLB Law** at the University of Law
- » **BA Jurisprudence (Law)** at the University of Oxford
- » You can take another broad subject for your degree, and then do a one year Law conversion course, such as the **PGDL** at Cardiff University.

## CAREER PROSPECTS

A junior barrister may earn £42,000 a year, rising to one of the most highly paid professionals.

You could build a career as a:

- » Solicitor
- » Lawyer
- » Consumer Rights Advisor
- » Legal Professional for a company or organisation

## PROGRAMME OF STUDY

CONSIDER AT LEAST ONE FROM BELOW

A LEVEL

**History: Medieval/  
Early Modern**

A LEVEL

**History: Modern  
World**

A LEVEL

**English Literature**

A LEVEL

**Law**

**Any other A Level**

## ENRICHMENT

**Law Society**

EXTENSION PROGRAMME  
**EPQ**

## WHY NOT ADD...

**Short Courses**

in Sign Language, HeartStart, and Risk Assessment

# Linguistics

You could do a broad degree first, and specialise later, if you prefer!

## NEXT STEPS

This pathway could lead to:

- » **BA Linguistics** at the University of Manchester
- » **BSc Applied Linguistics and English Language** at Swansea University,
- » **BA Translation** at London Metropolitan University

## CAREER PROSPECTS

The salary for a Public Relations Executive average at £31,000. Teachers abroad working in Japan can earn £2000-4500 a month. Translators have a starting salary of £28,000.

Careers this can lead to are:

- » Lexicographer
- » Speech and Language Therapist
- » Marketing Executive
- » Social Researcher

## PROGRAMME OF STUDY

### CONSIDER ONE FROM THE OPTIONS BELOW

A LEVEL

**French**

A LEVEL

**Spanish**

A LEVEL

**German**

### CONSIDER ONE FROM THE OPTIONS BELOW

A LEVEL

**English Literature**

A LEVEL

**English Language**

**Any other A Level**

## ENRICHMENT

**Student Voice**

EXTENSION PROGRAMME

**EPQ**

## WHY NOT ADD...

**Virtual College**

# Mathematics

---

If a university course 'recommends' Further Mathematics, and your school does not have specialist staff to teach it, your application will be considered. However, Hereford Sixth Form College has a reputation for outstanding Mathematics teaching and a strong Further Mathematics department, so universities will expect you to have studied it.

## NEXT STEPS

This pathway could lead to:

- » **BSc Mathematics** at Imperial College London
- » **BSc Mathematics** at the University of Cambridge
- » **BSc Mathematics and Computer Science** at the University of Bristol.

## CAREER PROSPECTS

The average salary for a Finance Investment Analyst is £66,000 but can be much higher.

This pathway can lead to careers in:

- » Insurance
- » Banking
- » Accountancy
- » Data Analysis
- » Engineering

## PROGRAMME OF STUDY

### A LEVEL Fast Track/Further Mathematics

#### CONSIDER ONE OR TWO FROM BELOW

A LEVEL <b>Physics</b>	A LEVEL <b>Computer Science</b>
A LEVEL <b>Chemistry</b>	A LEVEL <b>Biology</b>

### Any other A Level

## ENRICHMENT

### AEA Extension Award

### Mathematical Olympiads

## WHY NOT ADD...

### Virtual College

# Medicine

---

You will need voluntary work for the competitive medical professions. This can be virtual, but getting experience at your local care home, GP surgery, dentist/vet centre or pharmacy will help.

## NEXT STEPS

This pathway could lead to:

- » **Veterinary Medicine** at the University of Cambridge
- » **MB ChB Medicine** at University of Bristol
- » **BDS Dentistry** at Queen's University Belfast

## CAREER PROSPECTS

Dentists earn a basic salary of between £43,019 and £92,013, but Consultants can earn more. A Doctor with a speciality can have a basic salary of £50,373 to £78,759. Average salary for a Vet is £47,000, but can rise considerably if you set up a practice.

## PROGRAMME OF STUDY

A LEVEL  
**Biology**

A LEVEL  
**Chemistry**

**Any Traditional A Level**

EXTENSION PROGRAMMES  
**Certificate in Mathematical Studies**

## ENRICHMENT

**Medicine Society**

**Short Courses**  
in Sign Language, HeartStart, and Emergency First Aid

## WHY NOT ADD...

**Volunteering**



# Natural Sciences

If you like a broad range of sciences and you don't want to specialise straight away, this could be the pathway for you.

## NEXT STEPS

This pathway could lead to:

- » **BSc Natural Sciences** at University College London
- » **BSc Natural Sciences** at the University of Cambridge
- » **BSc Biological Sciences** at the University of Cardiff.

## CAREER PROSPECTS

Starting salaries as a Biomedical Scientist in the NHS range from £25,000 to £31,000 but Senior Consultant Biomedical Scientists can earn far higher.

This pathway can lead to careers in:

- Research and Development
- Conservation
- Scientific Research
- Medical or Scientific Publishing
- Agro-industry
- Product Development
- Investment Banking
- Management Consultancy

## PROGRAMME OF STUDY

### CONSIDER ONE FROM THE OPTIONS BELOW

A LEVEL

**Mathematics**

A LEVEL

**Further Mathematics**

### CONSIDER TWO FROM THE OPTIONS BELOW

A LEVEL

**Biology**

A LEVEL

**Chemistry**

A LEVEL

**Physics**

## ENRICHMENT

EXTENSION PROGRAMME

**EPQ**

### Short Courses

in Sign Language, HeartStart, and Emergency First Aid

## WHY NOT ADD...

**Virtual College**

# Physics

Some highly selective universities such as Cambridge, Oxford and Imperial will want applicants to have studied Further Mathematics. (See the Mathematics page for more information on 'recommended' subjects).

Many Physics degrees allow you to specialise as the years go on: look at the second and third year info!

## NEXT STEPS

This pathway could lead to:

- » **MPhys Physics with a Year Abroad** at the University of Edinburgh
- » **BSc Astrophysics** at Aberystwyth University
- » **BSc Physics** at University of Portsmouth

## CAREER PROSPECTS

A Geophysicist can earn £80,000, or a Research Scientist can reach a salary of up to £100,000.

This pathway can lead to careers in

- » Clinical Scientist
- » Nanotechnologist
- » Radiation Protection Practitioner
- » Engineer in a range of fields

## PROGRAMME OF STUDY

A LEVEL  
**Physics**

A LEVEL  
**Fast Track Mathematics**

CONSIDER ONE FROM THE OPTIONS BELOW

A LEVEL  
**Geology**

A LEVEL  
**Geography**

## ENRICHMENT

EXTENSION PROGRAMME  
**EPQ**

## WHY NOT ADD...

**Short Courses**  
in Sign Language, HeartStart, and Emergency First Aid

**Additional resources from**  
**isaacphysics.org**

# Physiotherapy

---

Work experience or voluntary work would be invaluable to support your application.

## NEXT STEPS

This pathway could lead to:

- » **BSc Physiotherapy** at the University of Birmingham
- » **BSc Physiotherapy** at the University of Plymouth
- » **BSc Physiotherapy** at the University of Worcester

## CAREER PROSPECTS

Salaries for Advanced Practice, Extended Scope or Clinical Lead Physiotherapists are around £45,000, and can rise to £62,000 for Consultant level roles within the NHS. Private clinicians may earn more.

This pathway can lead to careers such as:

- » Sports Therapist,
- » Exercise Physiologist,
- » Osteopath,
- » Personal Trainer,
- » Health Service Manager

## PROGRAMME OF STUDY

A LEVEL  
**Biology**

A LEVEL  
**Physical Education**

CONSIDER ONE FROM THE OPTIONS BELOW

A LEVEL  
**Psychology**

A LEVEL  
**Chemistry**

EXTENSION PROGRAMMES  
**Certificate in Mathematical Studies**

## ENRICHMENT

EXTENSION PROGRAMME  
**EPQ**

**Short Courses**  
in Sign Language, HeartStart, and Emergency First Aid

## WHY NOT ADD...

**Sports Academy**

# Politics

Look at the degree in detail as courses may begin as broad subjects and then offer you the potential to specialise in your second and third year. Some universities may prefer applicants with one or two Traditional A Levels.

## NEXT STEPS

This pathway could lead to:

- » **BSc Politics and International Relations** at the University of Bristol
- » **BA History with Politics** at the University of Worcester
- » **BA Human Social and Political Science** at University of Cambridge.

## CAREER PROSPECTS

Civil Service Fast Stream starting salary £27,000, rising to 45-55k on completion of training.

Graduates may go on to work in fields as varied as:

- » Media
- » Law
- » International Organisations and NGOs
- » Politics
- » Management
- » Research
- » Teaching

## PROGRAMME OF STUDY

A LEVEL  
**Politics**

A LEVEL  
**Mathematics**

### CONSIDER ONE FROM THE OPTIONS BELOW

A LEVEL  
**Economics**

A LEVEL  
**Law**

A LEVEL  
**Philosophy & Ethics**

A LEVEL  
**History**

## ENRICHMENT

**Debate Society**

EXTENSION PROGRAMME  
**EPQ**

## WHY NOT ADD...

**Work Experience**

# Primary Teaching

Philosophy and Ethics could help with RE.

## NEXT STEPS

This pathway could lead to:

- » **Primary Education** at the University of the West of England, Bristol
- » **Primary Education (Early Years)** at the University of Worcester
- » You could first study a broad degree and then complete a PGCE in Education for 1 year, such as **PGCE in Primary Education** at Roehampton, London.

## CAREER PROSPECTS

The average wage for a Primary Teacher is £34,000, but can be higher in management.

This pathway can lead to

- » Management
- » Speech and Language Therapy
- » Office Administration
- » Private Tutoring

## PROGRAMME OF STUDY

CONSIDER AT LEAST ONE NATIONAL CURRICULUM SUBJECT

A LEVEL <b>English Literature</b>	A LEVEL <b>English Language</b>
A LEVEL <b>Mathematics</b>	A LEVEL <b>Physics</b>
A LEVEL <b>Biology</b>	A LEVEL <b>Chemistry</b>
A LEVEL <b>Philosophy &amp; Ethics</b>	

Any other A Level

Any other A Level

## ENRICHMENT

EXTENSION PROGRAMME  
**EPQ**

**Short Courses**  
in Sign Language, HeartStart, and Emergency First Aid

## WHY NOT ADD...

Work Experience

# Psychology

---

Some universities like A Level Mathematics or another pure science. Core Mathematics may help your application.

## NEXT STEPS

This pathway could lead to:

- » **BSc Psychology** at the University of St Andrews
- » **BA Education with Psychology** at the University of Bath
- » **BSc Neuroscience and Psychology** at King's College London

## CAREER PROSPECTS

The average salary for an Educational Psychologist is £45,000, but can rise to much more. Consultant-level Clinical Psychologists salaries typically range from £65,000 to £90,000.

This pathway could lead to careers as:

- » Criminal Psychologist
- » Psychological Wellbeing Practitioner
- » Sports and Exercise Psychologist
- » Human Resources Officer

## PROGRAMME OF STUDY

A LEVEL  
**Psychology**

A LEVEL  
**Biology**

**Any other A Level**

EXTENSION PROGRAMMES  
**Certificate in Mathematical Studies**

## ENRICHMENT

EXTENSION PROGRAMME  
**EPQ**

**Debate Society**

## WHY NOT ADD...

**Virtual College**

# Renewable Energy

---

Other combinations that may help are Geography, Geology or Environmental Science. This is one of the fastest growing sectors for jobs in the world!

## NEXT STEPS

This pathway could lead to:

- » **BSc Earth Sciences** at University of Oxford
- » **BSc Geology** at Durham University
- » **BSc Renewable Energy** at University of Exeter

## CAREER PROSPECTS

Geologist for global renewable energy mining company: starting salary £52,000. Project Engineer for renewable power: £35,000 or Business development manager from £70,000.

This pathway can lead to careers in:

- » Engineering
- » Mining
- » IT
- » Chemical Engineering
- » Geology
- » Materials Engineering

## PROGRAMME OF STUDY

A LEVEL  
**Chemistry**

A LEVEL  
**Mathematics**

### CONSIDER ONE FROM THE OPTIONS BELOW

A LEVEL  
**Geography**

A LEVEL  
**Geology**

A LEVEL  
**Environmental Science**

## ENRICHMENT

EXTENSION PROGRAMME  
**EPQ**

**Environmental Group**

## WHY NOT ADD...

**Student Voice**

# APPLYING TO Competitive Universities

---

If you are academic and are aiming for high very GCSE grades, you may want to consider applying to top universities in the future. Higher Tier universities, which include Oxford, Cambridge, Imperial, and Russell Group universities, are very selective. These are some of the most competitive courses and universities in the world, so you need to choose subjects that help you compete with others at the top academic level.

Higher Tier universities may want you to have studied two **traditional A Levels** (once known as facilitating subjects), and another A Level. Take a look at the list of traditional A Levels Hereford Sixth Form College offers to see what would work for you.

Competitive universities have complex application processes. Research what you need to do to apply to the university of your choice, such as admissions tests, or extra work to apply. You may need to apply early to university for these places and courses.

## TRADITIONAL A LEVELS

A LEVEL  
**Biology**

A LEVEL  
**Chemistry**

A LEVEL  
**Computer Science\***

A LEVEL  
**English Literature**

A LEVEL  
**French**

A LEVEL  
**Geography**

A LEVEL  
**German**

A LEVEL  
**History**

A LEVEL  
**Mathematics**

A LEVEL  
**Further Mathematics**

A LEVEL  
**Music\***

A LEVEL  
**Philosophy & Ethics**

A LEVEL  
**Physics**

A LEVEL  
**Politics**

A LEVEL  
**Spanish**

\*Only considered a traditional A Level if applying to study the same subject at university.



## OTHER A LEVELS

A LEVEL  
**Art & Design: Fine Art**

A LEVEL  
**Art & Design: Photography**

A LEVEL  
**Business**

A LEVEL  
**Classical Civilisations**

A LEVEL  
**Drama & Theatre**

A LEVEL  
**Economics**

A LEVEL  
**English Language**

A LEVEL  
**Environmental Science**

A LEVEL  
**Geology**

A LEVEL  
**Law**

A LEVEL  
**Media Studies**

A LEVEL  
**Psychology**

A LEVEL  
**Sociology**

A LEVEL  
**Statistics**



**Hereford Sixth Form College**  
Folly Lane, Hereford, HR1 1LU  
T: 01432355166 E: [sixth-form@hereford.ac.uk](mailto:sixth-form@hereford.ac.uk)