









# ...TO SPACE STATION

Taking learning to a whole new level www.ikbacademy.org.uk

- Science & Medicine
- Technology
- Engineering
- Maths
- Architecture & the Built Environment



## **WELCOME**

I am delighted to introduce IKB Academy offering an exciting and innovative approach to education that will equip you with the highest quality qualifications, skills and experiences you need to succeed and thrive in the ever changing world of university, apprenticeships and ultimately work.

#### • IKB is an academy where:

Exceptional teaching and guidance, excellent facilities and an inspiring and motivating curriculum

#### • Develop within students a:

Love of Science, Technology, Engineering and Maths, a love of learning, respect, kindness and a sense of responsibility

#### • Resulting in:

Resilient and confident young adults with exceptional qualifications, unrivalled experiences and skills



individual needs of all of our students with an intentionally small intake, where professional relationships can really make a difference to nurture as well as challenge.

We value the contribution made by all of our students and seek to create an atmosphere of trust and positivity where we can all enjoy and achieve great things together.

IKB is an exciting option for students in years 10 to 13, but it is not an easy option and on entering IKB we will raise your aspirations, so, on leaving, you will realise these aspirations competing against the best for university places, apprenticeships, work or training in your chosen field.

different additional subjects through our partnership with Wellsway School.

To apply please complete the application form on our website or contact us to arrange a meeting and we will be happy to discuss your options with you.

I look forward to welcoming you to IKB.

#### Mr Headeach

Headteacher

## WHAT DOES IKB OFFER?

We recognise that students need more than a "one size fits all" traditional education to compete and succeed in today's world. We combine expert staff, outstanding facilities, industry connections and student support to drive innovation in education.

In doing so we offer students more and in turn students from IKB offer the national and global economy more. On graduating from IKB students have gained the high quality qualifications, skills and experiences that mean they are highly sought after for the most competitive places at university, apprenticeships and jobs in sectors that currently show local and national skills shortages.

## IKB Academy specialises in STEM - Science, Technology, Engineering and Maths.

This specialism is driven by both local and national demand for qualified, skilled and experienced young people in these areas. As part of the Wellsway Multi Academy Trust and having our campus located on the Wellsway site means we can also offer students a wide range of GCSEs, A levels and BTEC qualifications alongside the STEM subjects offered at IKB.



# WHAT ARE THE KEY DIFFERENCES BETWEEN IKB ACADEMY AND A TRADITIONAL SCHOOL OR COLLEGE?

**To unlock potential** students are supported by coaches who inspire, support and develop their enquiring minds, enabling students to take risks, meet challenges and achieve their potential in national qualifications

**To encourage innovation** in education our classes are smaller. Small numbers in our school also allows our delivery to be personal, individual and supportive

**To immerse our students** in STEM our teachers are experienced specialist teachers of Science, Technology, Engineering and Maths and our new building is a state of the art STEM learning environment

**To develop the skills and experience** they will need to compete for higher education and apprenticeships, all our students take part in high-quality work placements

**To foster teamwork** and have fun we organise a varied enrichment programme that develops other interests and allows students and staff to work and enjoy activities together outside the classroom

**To develop the attributes** they will need for the next stage of their education, we work through a framework of study and employability skills which is monitored and assessed through the coaching programme

Quality of teaching, learning and assessment Rated 'Good'

OFSTED 2018

## WHY CHOOSE STEM AT IKB?

Pupils are choosing to study STEM subjects because of the successes

**OFSTED 2018** 

## Leading to high quality STEM careers, for example mechanical engineer

- Mechanical engineers undertake research, design, manufacture and management/maintenance of mechanical systems, including engines, machinery and vehicles
- They develop solutions to practical problems to an agreed cost
- Median pay for this job is £40K (UK median £22K)
- It is one of the worst affected jobs in terms of skills shortage
  - At IKB study GCSEs and then progress to A level Maths, A level Physics and Further Maths or Core Maths and double Engineering to enter this profession

## Scientific knowledge is our speciality

20% of people in the UK workforce need scientific knowledge and training to do their current jobs – Royal Society

#### National shortage

Engineering companies are projected to need 265,000 people each year with Engineering skills each year until 2024

## Earn more with a STEM qualification

Those with STEM A levels earn 8.5% more than similarly qualified workers without STEM A levels (Institute for Fiscal Studies)



## More women needed in STEM careers

Still only 22% of the STEM workforce are women – the nation needs more women working in STEM careers

#### Student destinations

The majority of our students successfully secure places at their first choice university or apprenticeship

## Year 10 parent feedback

"My child settled in quickly thanks to well organised and supportive staff"



IKB can give me an advantage in the future compared to other students

Jake, Year 10

IKB offers me everything I need to achieve my ambitions sam, Year 10

#### There are an increasing number of STEM apprenticeships

- 78,480 people started engineering apprenticeships in 2015-16
- New STEM roles are expected to double in the next ten years, with the biggest growth area in higher and degree apprenticeships



Girls are welcomed into the school and feel valued \*\*\* OFSTED 2018

Keep all your doors open and study STEM subjects



#### YFAR 10 AND 11

Mathematics, English and Science are the foundation for all STEM subjects and therefore all IKB students study the following core subjects.

#### Students choose between:

- GCSE English Language
- GCSE English Literature
- GCSF Mathematics
- · GCSE Biology. Chemistry and Physics (Triple Science)

All students will attend a three week programme of work placements and STEM related enrichment activities. Typically two weeks placement, one week enrichment.

All students have access to the lunchtime and after school sports clubs that run on the Wellsway site and in addition we provide a STEM enrichment programme.

#### Students choose three option subjects. At IKB we deliver:

- GCSE Computing
- GCSE Product Design
- BTEC Level 2 Engineering
- BTFC Level 2 Construction.
- BTEC Level 2 IT/Digital Media



As one of their choices, students can choose a Wellsway taught subject where they fit in the block system; these include:

- GCSE History
- GCSE Geography
- GCSF French
- GCSE German
- GCSF Art
- GCSF PF

And many others (availability can be discussed on request).

When students have made their subject choices we will organise the teaching blocks to maximise the availability of student choices.

Subject details can be found on the IKB website.

## AS AN IKB STUDENT YOU GET ...

Fantastic qualifications taught by passionate teachers in excellent facilities

Two weeks in a work placement designed for you

A programme to develop your skills of communication and teamwork

**A curriculum designed to meet your future aspirations** and set you up for a successful transition into IKB Sixth Form

**An adult coach** who will meet with you regularly to support you and help with your attendance, progress, skills and work placement

A week of enrichment activities in science, technology, engineering and maths

**Membership of a small school** where we know you as an individual and work with you and your parents to maximise your potential

Outcomes for pupils Rated 'Good'

OFSTED 2018



We offer an exciting range of courses. Students can choose up to four options from:

#### A levels

- Maths
- Further Maths
- Physics
- Chemistry
- Biology
- Product Design
- Computer Science
- Fine Art
- Textiles
- Photography
- Drama and Theatre
- PE
- Music
- French
- German
- Business Studies
- Economics
- English Language

- English Literature
- English Lit and Lang
- Media Studies
- Geography
- History
- Religious Studies
- Psychology
- Sociology

#### Vocational/other

- Core Maths
- BTEC Science
- BTEC Engineering
- BTEC Business
- BTEC Health and Social Care
- BTEC Music
- BTEC Public Services
- CTEC Sport
- Extended Personal Qualification (EPQ)

Other courses may be available upon request.

When students have made their subject choices we will organise the teaching blocks to maximise availability.

It is expected that all courses will run for two years with students completing the full A level or BTEC course

Entry requirements and subject details can be found on our website.



## AS AN IKB SIXTH FORM STUDENT YOU GET...

Subject-specific trips and visits in the following areas:

Physics/Maths - theme park trip to develop kinematics and mechanics

**Physics/Engineering** – residential trip to Cern in Geneva, Switzerland, to develop understanding of particle physics and cutting-edge engineering

Biology - residential field trip to develop ecology techniques

Chemistry - a university residential with industry visits

Product Design – a trip to London to visit the Design Museum, local trips to areas of design interest

Engineering - industry visits to experience production and manufacturing processes across sectors

An additional summer enrichment trip abroad with your peers including outdoor activities

Pupils are prepared well academically for the transitions post-16 and post-18

OFSTED 2018



#### CAREER PATHWAY EXAMPLES



## Architecture & the Built Environment



#### Key Subjects:

Maths, Science & Technology



Core/A level Maths and a mix of BTEC & A levels



University, Higher Apprenticeship or Employment



Opening up your career as an architect, civil engineer, surveyor and more.



#### Design Engineering



#### Key Subjects:

Maths, Science & Technology



Core/A level Maths and a mix of BTEC & A levels



University, Higher Apprenticeship or Employment



Opening up your career as a CAD engineer, IT developer, robotics engineer and more.



#### Digital Engineering



#### Key Subjects:

Maths, Science & Technology



Core/A level Maths and a mix of BTEC & A levels



University, Higher Apprenticeship or Employment



Opening up your career as an interactive designer, network designer, systems engineer and more



## Science & Medicine



### **Key Subjects:** Science. Maths.

English



Core/A level Maths & A levels



University or Medical School



Opening up careers as a chemical/ biological engineer, dentist, doctor, physiotherapist, research scientist, vet and more.

### EMPLOYER ENGAGEMENT

An impressive array of employers are working in partnership with IKB Academy contributing their own unique skills and knowledge to the life of our students.

Partnerships with employers resonates through the ethos and atmosphere of the school which fosters a culture of aspiration and

opportunity.

and national husinesses within the Science, Technology and Engineering sectors. These links influence enrichment opportunities, employability and study skills. These provide a strong basis for future study at university or higher apprenticeships.

In addition, our Employer Engagement team work with students to develop CV writing, UCAS applications, job applications and vital communication skills for

Having the engagement from the IKB students is a really powerful opportunity that should not be missed >>

> Clive Johnson Ministry of Defence





#### **EMPLOYER PARTNERS**

We are proud to be working in partnership with the following organisations:

- AHR Architects
- Arup
- Atkins
- Avon Valley Railway
- Bath and North East Somerset Council
- Bath University
- BBA Architects
- BMT Defence Services
- Bristol Panel Formers
- Bristol Rugby Community Foundation
- Buro Happold
- Campbell Reith

- CH2M
- Complete Telecom Solutions
- Dorothea Restoration
- Dribuild
- DS Machining
- Enlightened Lighting
- Intertek
- Jaguar
- Keymac
- Kier Construction
- Land Rover
- Lionbridge
- McBraida
- Mercedes-Benz

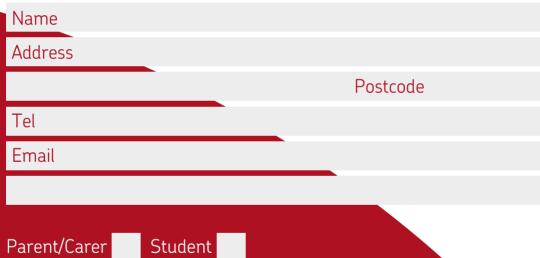
If you have a strong link within industry and have the capacity to offer a work placement to one of our students, please contact: cbarclay@ikbacademy.org.uk

- Ministry of Defence
- Motaparts Downend
- Network Rail
- Robbin Engineering
- Sir Robert McAlpine
- Sitec
- Sustrans
- Trust Ford
- Underfall Boat Yard
- Waitrose





If you would like to know more about the upcoming Information Evenings please fill in your details.





WE CAN'T WAIT TO MEET YOU...

Affix stamp here

### **IKB Academy**

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## TAKING LEARNING TO A WHOLE NEW LEVEL

