



## **Key Facts**

Location:

St. Hilda's College

Course fees: £3,195 per week

For ages: 15-17

Class Size: 12

Hours per week: 23 hours

Minimum Duration: 2 weeks

Start Dates: 30 June or 14 July 2026

#### **Contact Details**

#### Admissions:

Mrs Rhian Jenkins Head of Marketing & Admissions

#### Website:

www.bucksmore.com/

Tel: +44 (0)20 3334 9300

#### Email:

info@bucksmore.com

### Apply:

www.bucksmore.com/apply-to-bucksmore

# **Course Details**

Upper Intermediate (B2) English level required.

Fees include: subject tuition, full boarding, all meals, activities and excursions, complimentary airport transfers and insurance.

## **Course Certificates**

Personalised report card, Bucksmore Certification & Bucksmore Letter of Recommendation\* \*(available on request)

# **Architecture**

Subjects

Architecture

**Design & Technology** 

**Engineering** 

Sustainability

#### Experience Being Taught at First-Year Undergraduate Level in Oxford

This programme prepares students to excel in their chosen subjects within the highly competitive higher education environment. Students will be taught at a first-year undergraduate level within a prestigious Oxford University.

The Pre-University Architecture, Engineering, and the Built Environment course at Bucksmore prepares students for university-level studies in these fields. Through a combination of theory, practical workshops, and creative projects, students develop essential skills in drawing, model-making, and critical design analysis. The programme mirrors the expectations of architecture courses at UK universities, emphasising creativity, sustainability, and the social role of architecture. Students live on campus and take part in excursions around Oxford and top UK destinations, ensuring a well-rounded learning experience that blends academic study with real-world applications.

For more information on this programme, please follow this link to our dedicated course page: <a href="www.bucksmore.com/summer-courses/pre-university-summer-courses/architecture-engineering-built-environment/">www.bucksmore.com/summer-courses/pre-university-summer-courses/architecture-engineering-built-environment/</a>

## **Course Features**

This pre-university summer course offers students an engaging mix of theoretical insights and practical experiences. Participants will deepen their understanding of design principles and engineering concepts while honing their problem-solving and critical thinking skills. The course fosters communication and teamwork through interactive workshops and projects, preparing students for further studies in the UK. Our course aims to explore the following:

- Foundations of Design Thinking: Explore the elements and principles of design, creativity, and sustainability, supported by hands-on 2D and 3D exercises
- Spatial Awareness and Architectural Principles: Develop skills in spatial reasoning, form, and function, with practice in architectural drawing and model-making
- Visual Communication: Learn key techniques such as orthographic, axonometric, and perspective drawing, alongside methods of critique and presentation
- Architecture in Context: Investigate how architecture responds to cultural, social, and environmental challenges, with case studies of iconic buildings
- Technology and Innovation: Gain awareness of digital tools and interdisciplinary approaches, including introductions to CAD, BIM, and parametric design concepts

## Accommodation & Facilities





## **Key Facts**

Location:

St. Hilda's College

Course fees: £3,195 per week

For ages: 15-17

Class Size: 12

Hours per week: 23 hours

Minimum Duration: 2 weeks

Start Dates: 30 June or 14 July 2026

#### **Contact Details**

#### Admissions:

Mrs Rhian Jenkins Head of Marketing & Admissions

#### Website:

www.bucksmore.com/

Tel: +44 (0)20 3334 9300

#### Fmail:

info@bucksmore.com

### Apply:

www.bucksmore.com/apply-to-bucksmore

# **Course Details**

Upper Intermediate (B2) English level required.

Fees include: subject tuition, full boarding, all meals, activities and excursions, complimentary airport transfers and insurance.

### **Course Certificates**

Personalised report card, Bucksmore Certification & Bucksmore Letter of Recommendation\* \*(available on request)

# **Creative Writing**

Subjects

**Creative Writing** 

Story-telling

Poetry

Journalism

#### Experience Being Taught at First-Year Undergraduate Level in Oxford

Students will be taught this subject at a first-year undergraduate level within a prestigious Oxford University setting. The Pre-University Creative Writing course at Bucksmore introduces students to the art and craft of writing across a variety of genres.

Students develop their imagination, voice, and storytelling skills while learning how to translate ideas and experiences into compelling narratives, poetry, scripts, or journalistic work. The course combines theory and practice, preparing students for university-level creative studies.

Students live on campus and take part in excursions around Oxford and top UK destinations, ensuring a well-rounded learning experience that blends academic study with real-world applications.

For more information on this programme, please follow this link to our dedicated course page: <a href="www.bucksmore.com/summer-courses/pre-university-summer-courses/advanced-studies-oxford-creative-writing/">www.bucksmore.com/summer-courses/pre-university-summer-courses/advanced-studies-oxford-creative-writing/</a>

#### **Course Features**

This programme blends workshops, discussions, and hands-on projects to immerse students in the creative process. Participants explore the techniques, forms, and structures of storytelling, while refining observation, analytical, and critical thinking skills. The course mirrors first-year university study, combining academic insight with practical exercises to build confidence and discipline in writing. Students are encouraged to experiment with style, perspective, and medium, learning how to shape words into stories that communicate meaning and emotion. Our course aims to explore the following:

- Narrative & Storytelling: Developing plot, character, dialogue, and pacing across different genres
- Poetry & Experimental Writing: Exploring rhythm, imagery, and inventive forms to express ideas
- Creative Non-Fiction & Journalism: Translating observation into essays, articles, and feature writing
- Scriptwriting & Media Writing: Writing for stage, screen, or interactive media.
- Critical Analysis & Editing: Developing skills to critique and refine writing, understand audience, and improve clarity and style
- Creative Process & Imagination: Techniques for generating ideas, overcoming writer's block, and fostering originality

#### Accommodation & Facilities





**Key Facts** 

Location:

St. Hilda's College

Course fees: £3,195 per week

For ages: 15-17

Class Size: 12

Hours per week: 23 hours

Minimum Duration: 2 weeks

Start Dates: 30 June or 14 July 2026

#### **Contact Details**

#### Admissions:

Mrs Rhian Jenkins Head of Marketing & Admissions

#### Website:

www.bucksmore.com/

Tel: +44 (0)20 3334 9300

#### Fmail:

info@bucksmore.com

# Apply:

www.bucksmore.com/apply-to-bucksmore

# **Course Details**

Upper Intermediate (B2) English level required.

Fees include: subject tuition, full boarding, all meals, activities and excursions, complimentary airport transfers and insurance.

### **Course Certificates**

Personalised report card, Bucksmore Certification & Bucksmore Letter of Recommendation\* \*(available on request)

# **Global Finance & Economics**

**Subjects** 

Finance

**Economics** 

Macro & Micro

**Analysis** 

#### Experience Being Taught at First-Year Undergraduate Level in Oxford

Students will be taught Business at a first-year undergraduate level within a prestigious Oxford University setting. The Pre-University Global Finance & Economics course at Bucksmore prepares students for university-level study in economics and finance.

Students explore core economic principles, international finance, and market behaviour while developing critical skills in analysis, problem-solving, and academic communication. The programme blends theoretical study with case studies and real-world examples, giving students a strong foundation for higher education.

Students live on campus and take part in excursions around Oxford and top UK destinations, ensuring a well-rounded learning experience that blends academic study with real-world applications.

For more information on this programme, please follow this link to our dedicated course page: <a href="www.bucksmore.com/summer-courses/pre-university-summer-courses/finance-and-economics-course/">www.bucksmore.com/summer-courses/pre-university-summer-courses/finance-and-economics-course/</a>

#### **Course Features**

This course introduces students to the theory and practice of economics and global finance, combining microeconomic and macroeconomic frameworks with real-world applications. Participants analyse historical and contemporary economic trends, study the works of key economists such as Smith, Marx, Keynes, and Friedman, and investigate how global markets, currencies, and financial institutions operate. Through lectures, workshops, and case studies, students gain a practical understanding of how economic theory informs business and policy decisions worldwide. Our course aims to explore the following:

- Economic Theory: Classical, Marxian, Keynesian, and Chicago school perspectives; different economic systems including market, command, and mixed economies
- Global Finance & Currencies: Currency regulation, Bretton Woods, cryptocurrencies, inflation, government bonds, and the role of central banks
- Stock Markets & Investment: Understanding global stock markets, financial risk, investment strategies, and the interplay between markets and economies
- Micro & Macroeconomics: Analysing individual, corporate, and national economic behaviour; GDP, trade, inflation, and global market interactions
- Policy & Globalisation: Examining international economic policies, austerity, inequality, and the effects of digitalisation on financial systems

#### Accommodation & Facilities





## **Key Facts**

Location:

St. Hilda's College

Course fees: £3,195 per week

**For ages: 15-17** 

Class Size: 12

Hours per week: 23 hours

Minimum Duration: 2 weeks

Start Dates: 30 June or 14 July 2026

#### **Contact Details**

#### Admissions:

Mrs Rhian Jenkins Head of Marketing & Admissions

#### Website:

www.bucksmore.com/

Tel: +44 (0)20 3334 9300

#### Email:

info@bucksmore.com

# Apply:

www.bucksmore.com/apply-to-bucksmore

# **Course Details**

Upper Intermediate (B2) English level required.

Fees include: subject tuition, full boarding, all meals, activities and excursions, complimentary airport transfers and insurance.

### **Course Certificates**

Personalised report card, Bucksmore Certification & Bucksmore Letter of Recommendation\* \*(available on request)

# **International Relations & Politics**

**Subjects** 

International Relations

**Politics** 

Law & Diplomacy

History

# Experience Being Taught at First-Year Undergraduate Level in Oxford

Students will be taught this subject at a first-year undergraduate level within a prestigious Cambridge University setting. The Pre-University International Relations & Politics course at Bucksmore introduces students to the theory and practice of politics in the modern world, exploring the role of power in international relations and how the global community operates through rules, interests, and institutions.

Students explore core concepts such as power, sovereignty, governance, and globalisation, while developing critical skills in debate, analysis, and comparative political thinking. The programme combines lectures, case studies, and debates of contemporary issues including international security, global governance, migration, and climate change.

Students live on campus and take part in excursions around Oxford and top UK destinations, ensuring a well-rounded learning experience that blends academic study with real-world applications.

For more information on this programme, please follow this link to our dedicated course page: <a href="https://www.bucksmore.com/summer-courses/pre-university-summer-courses/advanced-studies-oxford-international-relations-and-politics/">www.bucksmore.com/summer-courses/pre-university-summer-courses/pre-un

#### Course Features

This course provides a strong foundation in political theory, international relations, and global governance. Students analyse how states, organisations, and individuals interact in an interconnected world, and consider the challenges of diplomacy, conflict, and cooperation. The programme balances theory with real-world application, encouraging students to question power structures and evaluate responses to pressing international issues. Our course aims to explore the following:

- Political Theory and Ideologies: Explore key debates such as realism, liberalism, and Marxism, and their relevance to contemporary politics
- The State, Sovereignty, and Governance: Analyse how states are created and maintained, and the role of supranational organisations like the UN, EU, and WTO
- Globalisation and International Relations: Examine how globalisation shapes trade, culture, diplomacy, and inequality
- International Security and Conflict: Investigate the causes of war, civil unrest, terrorism, and peacebuilding efforts
- Human Rights and Global Challenges: Discuss migration, climate change, and humanitarian crises in a global context

### Accommodation & Facilities





**Key Facts** 

Location:

St. Hilda's College

Course fees: £3,195 per week

For ages: 15-17

Class Size: 12

Hours per week: 23 hours

Minimum Duration: 2 weeks

Start Dates: 30 June or 14 July 2026

#### **Contact Details**

#### Admissions:

Mrs Rhian Jenkins Head of Marketing & Admissions

#### Website:

www.bucksmore.com/

Tel: +44 (0)20 3334 9300

#### Fmail:

info@bucksmore.com

# Apply:

www.bucksmore.com/apply-to-bucksmore

# **Course Details**

Upper Intermediate (B2) English level required.

Fees include: subject tuition, full boarding, all meals, activities and excursions, complimentary airport transfers and insurance.

### **Course Certificates**

Personalised report card, Bucksmore Certification & Bucksmore Letter of Recommendation\* \*(available on request)

# Law

Subjects

Law

Legal Theory

Jurisprudence

**Criminal & International Law** 

#### Experience Being Taught at First-Year Undergraduate Level in Oxford

Students will be taught Law at a first-year undergraduate level within a prestigious Oxford University setting. Through workshops, research projects, and essay writing, you will develop critical thinking and analytical skills essential for success in higher education. The programme mirrors the depth, rigour and format of university law courses, providing a solid foundation for future studies.

You live on campus and take part in excursions around Oxford and top UK destinations, blending academic preparation with real-world experiences to create a comprehensive and immersive learning environment.

A law degree equips you with valuable skills for a range of industries. Delivered at a first-year undergraduate level, this course combines theory with practice—exploring criminal, domestic, and international law while developing key skills in debate, critical thinking, and legal analysis.

For more information on this programme, please follow this link to our dedicated course page: <a href="www.bucksmore.com/summer-courses/pre-university-summer-courses/pre-law-course/">www.bucksmore.com/summer-courses/pre-university-summer-courses/pre-law-course/</a>

#### **Course Features**

This course explores law as both a theoretical discipline and a practical profession. Students will examine the origins of justice, criminal liability, and international legal systems, before applying their knowledge in simulations such as debates, negotiations, and a mock trial. By combining jurisprudence, case studies, and interactive activities, the course mirrors the structure and rigour of university law programmes while encouraging students to think critically about fairness, ethics, and the role of law in a global society. Our course aims to explore the following:

- Exploring Criminal Law: Understanding the foundations of criminal law in England, examining how laws are created, amended, and applied in key cases. Critically analysing international criminal law in the context of English law
- Studying States and International Organisations: Investigating the formation and maintenance of nation-states from a legal perspective. Exploring the role of treaties and the influence of international organisations on both domestic and international law
- Examining International Law: Exploring international law from theory to practice, including its jurisdiction, limitations, and enforcement. Analysing how countries adopt or ignore international rulings and the challenges of maintaining a peaceful international order
- Understanding Legal Ethics: Investigating the moral and ethical responsibilities
  of legal professionals, using case studies to explore how ethics guide lawyers,
  judges, and prosecutors in their roles
- Applying Legal Knowledge: Participating in moot trial exercises and negotiations to apply legal principles, while gaining a global perspective on the interpretation of law across different cultures and time periods

### Accommodation & Facilities





# **Key Facts**

### Location:

St. Hilda's College

Course fees: £3,195 per week

For ages: 15-17

Class Size: 12

Hours per week: 23 hours

Minimum Duration: 2 weeks

Start Dates: 30 June or 14 July 2026

## **Contact Details**

#### Admissions:

Mrs Rhian Jenkins Head of Marketing & Admissions

#### Website:

www.bucksmore.com/

Tel: +44 (0)20 3334 9300

#### Email:

info@bucksmore.com

### Apply:

www.bucksmore.com/apply-to-bucksmore

# **Course Details**

Upper Intermediate (B2) English level required.

Fees include: subject tuition, full boarding, all meals, activities and excursions, complimentary airport transfers and insurance.

### **Course Certificates**

Personalised report card, Bucksmore Certification & Bucksmore Letter of Recommendation\* \*(available on request)

# Medicine

## Subjects

Medicine

**Biology** 

Patient Care

**Clinical Research** 

#### Experience Being Taught at First-Year Undergraduate Level in Oxford

This programme prepares students to excel in their chosen subjects within the highly competitive higher education environment. Students will be taught Medicine at a first-year undergraduate level within a prestigious Oxford University setting.

Combining theory, clinical context, and hands-on activities, it equips students with the scientific knowledge, critical thinking, and communication skills needed for future study in medicine and healthcare.

Students live on campus and take part in excursions around Oxford and top UK destinations, ensuring a well-rounded learning experience that blends academic study with real-world applications.

For more information on this programme, please follow this link to our dedicated course page: <a href="https://www.bucksmore.com/summer-courses/pre-university-summer-courses/medical/">www.bucksmore.com/summer-courses/pre-university-summer-courses/medical/</a>

## **Course Features**

Medicine is both a rigorous science and a human-centred practice. This course introduces students to the foundations of anatomy, physiology, genetics, and pathology, while also engaging them in debates on medical ethics and case-based learning.

Through workshops, laboratory-style activities, and clinical simulations, students will gain insight into how doctors diagnose, research, and treat disease. The programme mirrors the structure and intensity of UK pre-medical education, offering both breadth and depth across key medical topics. The course can feature the following:

- Foundations of Medicine & Anatomy: Exploring the structure of the human body, imaging techniques, and diagnostic tools
- Physiology & Homeostasis: Understanding cardiovascular, respiratory, renal, and nervous systems and how they function in health and disease
- Genetics & Disease: Investigating inheritance, genetic disorders, and the role of molecular biology in modern medicine
- Immunity & Infection: Studying bacteria, viruses, antibiotic resistance, and the global challenges of communicable diseases
- Cancer Biology & Research: Exploring the cellular basis of cancer, diagnostic technologies, and advances in personalised medicine
- Medical Ethics & Professionalism: Debating treatment decisions, patient consent, and the moral responsibilities of healthcare

## Accommodation & Facilities





# **Key Facts**

### Location:

St. Hilda's College

Course fees: £3,195 per week

**For ages: 15-17** 

Class Size: 12

Hours per week: 23 hours

Minimum Duration: 2 weeks

Start Dates: 30 June or 14 July 2026

#### **Contact Details**

#### Admissions:

Mrs Rhian Jenkins Head of Marketing & Admissions

#### Website:

www.bucksmore.com/

Tel: +44 (0)20 3334 9300

#### Email:

info@bucksmore.com

# Apply:

www.bucksmore.com/apply-to-bucksmore

# **Course Details**

Upper Intermediate (B2) English level required.

Fees include: subject tuition, full boarding, all meals, activities and excursions, complimentary airport transfers and insurance.

### **Course Certificates**

Personalised report card, Bucksmore Certification & Bucksmore Letter of Recommendation\* \*(available on request)

# **Psychology**

# Subjects

Psychology

**Treatments** 

**Therapies** 

**Ethics** 

#### Experience Being Taught at First-Year Undergraduate Level in Oxford

This programme prepares students to excel in their chosen subjects within the highly competitive higher education environment. Students will be taught Psychology at a first-year undergraduate level within a prestigious Oxford University setting.

The Pre-University Psychology course at Bucksmore introduces students to the scientific study of the mind and behaviour. It combines theory with practice, helping students to explore how psychologists analyse emotions, cognition, and social interaction.

Through workshops, discussions, and research projects, students develop skills in critical thinking, data analysis, and essay writing—ideal preparation for university-level psychology or related social sciences.

Students live on campus and take part in excursions around Oxford and top UK destinations, ensuring a well-rounded learning experience that blends academic study with real-world applications.

For more information on this programme, please follow this link to our dedicated course page: <a href="https://www.bucksmore.com/summer-courses/pre-university-summer-courses/psychology-course/">www.bucksmore.com/summer-courses/pre-university-summer-courses/psychology-course/</a>

#### **Course Features**

Psychology is both a scientific discipline and a powerful tool for understanding human behaviour. Over two weeks, students will explore core psychological perspectives, from cognitive and biological to behavioural, psychodynamic, and humanist approaches.

The course examines big questions—nature vs nurture, free will vs determinism, mind vs body—while also connecting psychology to real-world contexts such as mental health, social influence, and digital behaviour. Students will also practise the methods of psychologists, learning how to formulate research questions, analyse case studies, and evaluate evidence.

- Foundations of Psychology: Understanding the scope of psychology and its different schools of thought
- Core Debates: Exploring key questions such as nature vs nurture, free will vs determinism, and reductionism vs holism
- Cognitive & Social Psychology: Analysing models of memory, eyewitness testimony, conformity, obedience, and social influence
- Development & Attachment: Examining childhood development and attachment theory through classic and contemporary studies
- Psychopathology & Treatment: Defining mental disorders, studying clinical perspectives, and discussing therapeutic approaches
- Research Methods & Ethics: Learning how psychologists design studies, collect and analyse data, and address ethical challenges

# Accommodation & Facilities





**Key Facts** 

Location:

St. Hilda's College

Course fees: £3,195 per week

**For ages: 15-17** 

Class Size: 12

Hours per week: 23 hours

Minimum Duration: 2 weeks

Start Dates: 30 June or 14 July 2026

#### **Contact Details**

#### Admissions:

Mrs Rhian Jenkins Head of Marketing & Admissions

#### Website:

www.bucksmore.com/

Tel: +44 (0)20 3334 9300

#### Fmail:

info@bucksmore.com

# Apply:

www.bucksmore.com/apply-to-bucksmore

# **Course Details**

Upper Intermediate (B2) English level required.

Fees include: subject tuition, full boarding, all meals, activities and excursions, complimentary airport transfers and insurance.

### **Course Certificates**

Personalised report card, Bucksmore Certification & Bucksmore Letter of Recommendation\* \*(available on request)

# **Business Management**

Subjects

**Business** 

**Management** 

**Economics** 

Leadership

## Experience Being Taught at First-Year Undergraduate Level in Oxford

Students will be taught Business at a first-year undergraduate level within a prestigious Oxford University setting. Through workshops, research projects, and essay writing, you will develop critical thinking and analytical skills essential for success in higher education. The programme mirrors the depth, rigour and format of university law courses, providing a solid foundation for future studies.

This course introduces the core disciplines of marketing, finance, strategy, operations, and human resources, while building key skills in critical thinking, communication, teamwork, and digital literacy. Through lectures, case studies, and practical projects, students explore how organisations operate and how managers make decisions in a global business environment.

Students live on campus and take part in excursions around Oxford and top UK destinations, ensuring a well-rounded learning experience that blends academic study with real-world applications.

For more information on this programme, please follow this link to our dedicated course page: <a href="https://www.bucksmore.com/summer-courses/pre-university-summer-courses/advanced-studies-oxford-business-management/">www.bucksmore.com/summer-courses/pre-university-summer-courses/advanced-studies-oxford-business-management/</a>

### Course Features

This pre-university summer course provides an introduction to the essential concepts of business management, balancing theory with applied learning. Students will explore how companies operate, how managers develop and implement strategy, and how people, resources, and finances are organised to achieve business goals. Our course aims to explore the following:

- Business Operations and Strategy: Understanding how companies organise, plan, and adapt to achieve sustainable success
- Financial Management: Learning the basics of accounting, budgeting, interpreting financial statements, and making sound business decisions
- Marketing Essentials: Exploring branding, promotion, customer behaviour, and how businesses build and retain their audiences
- Human Resources and People Management: Analysing team management, organisational culture, motivation, and leadership in practice
- International Business and Globalisation: Investigating how global trade, multinational corporations, and cultural differences shape business strategy

#### Accommodation & Facilities





# **Key Facts**

### Location:

St. Hilda's College

Course fees: £3,195 per week

For ages: 15-17

Class Size: 12

Hours per week: 23 hours

Minimum Duration: 2 weeks

Start Dates: 30 June or 14 July 2026

#### **Contact Details**

#### Admissions:

Mrs Rhian Jenkins Head of Marketing & Admissions

#### Website:

www.bucksmore.com/

Tel: +44 (0)20 3334 9300

#### Fmail:

info@bucksmore.com

# Apply:

www.bucksmore.com/apply-to-bucksmore

## **Course Details**

Upper Intermediate (B2) English level required.

Fees include: subject tuition, full boarding, all meals, activities and excursions, complimentary airport transfers and insurance.

# **Course Certificates**

Personalised report card, Bucksmore Certification & Bucksmore Letter of Recommendation\* \*(available on request)

# AI & Computer Science

## Subjects

ΑI

**Computer Science** 

Coding

**Programming** 

## Experience Being Taught at First-Year Undergraduate Level in Oxford

The Pre-University AI & Computer Science course at Bucksmore prepares students for university-level computer science studies. Through hands-on coding challenges, robotics projects, and AI-focused workshops, students develop skills in Python programming, algorithm design, computer vision, and object-oriented programming. The course combines theoretical insights with practical applications, mirroring the expectations of computer science and engineering programmes at UK universities.

Students live on campus and take part in excursions around Oxford and top UK destinations, ensuring a well-rounded learning experience that blends academic study with real-world applications.

This course mirrors the demands of computer science courses at UK universities, ensuring students are well-prepared for further studies. Students live on campus and participate in excursions around Oxford, blending academic learning with cultural exploration and practical insights into the tech industry.

For more information on this programme, please follow this link to our dedicated course page: <a href="www.bucksmore.com/summer-courses/pre-university-summer-courses/computer-science/">www.bucksmore.com/summer-courses/pre-university-summer-courses/computer-science/</a>

### **Course Features**

This course provides an immersive introduction to computer science and AI, balancing theory with practical experimentation. Students begin by building foundations in algorithms, programming, and robotics before progressing to advanced topics such as vision-based AI, cybersecurity, and object-oriented programming.

Collaboration, critical thinking, and problem-solving are at the heart of the programme. Students apply their learning in a final robotics challenge, demonstrating creativity, technical proficiency, and teamwork. Our course aims to explore the following:

- Programming Foundations: Learn Python coding fundamentals, from variables and loops to conditionals and control structures
- Robotics & Hardware: Explore how hardware and software interact through projects using Raspberry Pi-powered autonomous cars
- Algorithms & Problem-Solving: Design and implement algorithms for tasks such as obstacle avoidance and maze navigation
- Computer Vision & AI Concepts: Use libraries like OpenCV to develop visionbased decision-making in robotics, and compare traditional rule-based logic to machine learning
- Object-Oriented Programming (OOP): Transition from procedural to modular programming by designing Python classes for scalable, maintainable code
- Cybersecurity & Networks: Investigate defensive programming, basic cybersecurity concepts, and how systems protect against hacks

#### Accommodation & Facilities