NUCLEAR ENGINEERING
Welcome

I AM PROUD TO INTRODUCE THE NUCLEAR ENGINEERING PROGRAMMES WE OFFER IN OUR SCHOOL.

If your mind is already settled on studying nuclear engineering, you have made an excellent choice: demand for well-qualified graduates in this field is increasing, and we see our students proceed onto stimulating and promising careers. If, on the other hand, you are still considering a range of disciplines, I hope this brochure will provide you with some inspiration, and encourage you to study this discipline at undergraduate level.

The programme is jointly taught by the School of Metallurgy and Materials and the School of Physics and Astronomy, both of which are ranked amongst the top five in the UK (Guardian League Tables 2020). These two Schools have a long history of collaboration through the multidisciplinary Birmingham Centre for Nuclear Education and Research as well as having over 60 years’ experience teaching nuclear-related courses. We will keep working hard over the coming years as we aspire to be the best place to study nuclear engineering in the country.

Above all, I hope this brochure will highlight some of the opportunities you will have as a student in our School. These include entry scholarships of up to £3,500, paid summer internships within one of our wide-ranging research groups, placements at partner industrial companies both in the UK and abroad, and the option to continue your studies at postgraduate level, such as via a fully funded PhD degree. Our aim is to recruit highly motivated and passionate students, and develop them to become the next generation of professional nuclear engineers and scientists, providing impetus for the UK economy through continuous innovation.

I look forward to meeting you at our Open Days or Applicant Visit Days.

Best wishes,
Professor Alison Davenport, OBE
Head of School
Programme Director – Nuclear Engineering

KEY FEATURES OF NUCLEAR ENGINEERING AT BIRMINGHAM:

- Exciting new programme structure, building on our experience of running nuclear-related courses for over 60 years
- University of Birmingham awarded a Gold rating in the 2016/17 UK Teaching Excellence Framework (TEF)
- The course is taught jointly by our School of Metallurgy and Materials which is ranked fifth in the UK and our School of Physics and Astronomy which is ranked fourth (The Guardian, 2020)
- Research-led teaching, embedded within one of the best centres for materials science and engineering research and physics research in the country (Materials ranked in the top ten in the UK Research Excellence Framework (REF 2014))
- Strong links with industrial partners, including paid placements and onward career opportunities
- MEng and BSc accredited degree by the Institute of Materials, Minerals and Mining (IOM3) with routes to Chartered Engineer status
- New £55 million sports centre provides some unique facilities, including a 50-metre swimming pool
- The Guild of Students (students’ union) is home to over 250 student groups, societies and associations

MORE THAN A DEGREE…

- The University is based within a campus only minutes away from the city centre by train
- Excellent transport links including train (the University has its own railway station) and cheap bus services
Introduction to Nuclear Engineering 4
Where will your degree take you? 6
Our programmes 8
Teaching, learning and assessment 11
What our graduates say 12
Life at Birmingham 14

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www.birmingham.ac.uk/materials
@eps Unblock
Introduction to Nuclear Engineering

One of the major challenges the UK faces is the reshaping of how electricity is generated, with the shifts away from fossil fuels toward low-carbon sources. The government are investing in the construction of a suite of new nuclear power stations to deliver 20–40% of the UK’s electricity, both to replace retiring plants and for increased capacity.

Our unique Nuclear Engineering course was designed in response to demand from industry for a programme at undergraduate level to equip students with the fundamental knowledge to build the nuclear power plants needed for our future energy requirements. This challenging and growing field offers a range of well-paid careers for graduates with strong technical and scientific skills.

The University has over 60 years of experience in teaching the physics of nuclear reactors and associated research and over 100 years of experience teaching materials science, brought together within the multidisciplinary Birmingham Centre for Nuclear Education and Research. We also have strong links with the nuclear industry who recruit extensively from our educational programmes.

The present course combines modules in physics, mathematics and computing together with materials science and engineering, so that you develop both engineering skills alongside fundamental science principles. The course is a joint programme delivered between the School of Metallurgy and Materials and the School of Physics and Astronomy.

By the end of the course, you will have a broad grasp of physics and engineering principles together with a detailed understanding of nuclear reactor physics, materials, nuclear science and nuclear radiation.

RELEVANCE OF NUCLEAR ENGINEERING TODAY AND IN THE FUTURE

- **Nuclear Energy**
  The UK government is committed to reduce carbon emissions by 80% by 2050. Nuclear energy plays a critical part in this by providing base load without reliance on energy storage, which is already a major challenge for wind/solar on both a capacity and cost basis. Nuclear currently contributes 21% of UK electricity capacity. However, almost half of this capacity is to be retired by 2025. This is necessitating a large replacement and expansion programme which is underway, for which the training of a new generation of highly skilled nuclear engineers is needed.

- **Nuclear Waste Decommissioning**
  With an ageing nuclear reactor fleet and one of the largest stockpiles of nuclear waste anywhere in the world, the UK has some unique decommissioning challenges. Ensuring the safe and complete clean up of these retired nuclear reactors and nuclear waste is one of the largest and most complex environmental remediation tasks in the world. Many of these tasks are too hazardous for humans to perform and must be done with robots. However, many of the robotic solutions for this have not been developed yet. The University recently secured £42 million to set up the National Centre for Nuclear Robotics (NCNR) with a focus on developing robotic solutions in these challenging environments.

- **Nuclear Fusion**
  Since the work of Einstein, nuclear fusion of hydrogen isotopes into helium to produce energy has offered the promise of large-scale power generation without long-lived nuclear waste. However, controlling a fusion plasma is a tremendous challenge. To address this challenge, significant nuclear engineering challenges must be overcome, both in terms of reactor design but also in the resilience of the materials employed.
'As the course is a joint programme between the Schools of Physics and Astronomy and Materials and Metallurgy, we are given the unique chance to study a wide range of modules, covering not only core nuclear physics, but the materials and engineering principles behind the construction of a nuclear plant.

'It is very exciting to study under lecturers who are at the forefront of their research and we are often given the chance to attend extra lectures covering their cutting-edge work. Their support and enthusiasm for the field make for a really positive experience.

‘What’s more, it is amazing to study at a university with such a rich history in nuclear physics, playing a key role in the development of reactors.'

EMILY LEWIS,
MENG NUCLEAR ENGINEERING
As a Nuclear Engineering graduate, the skills you develop at the University of Birmingham will equip you for employment both in the nuclear sector but also in many others. Our degree in Nuclear Engineering has been designed to unlock various careers, for example: nuclear power generation firms, such as Rolls-Royce, EDF energy and Culham Centre for Fusion Energy; waste management and decommissioning companies, such as the Nuclear Decommissioning Agency and Sellafield; engineering research and consultancy firms, such as National Nuclear Laboratory, Atkins and Frazer-Nash, as well as in the financial and consultancy sectors, such as PWC, Deloitte and KPMG. We have classified the skills developed into seven categories to highlight their importance, and asked our collaborators to explain how and why these skills are essential in their line of work.

**Where will your degree take you?**

**MEASUREMENT**
Graduates will be able to select and carry out appropriate measurements of the properties and characterise the structure of nuclear materials.

**DESIGN**
Graduates will be able to design new structures and materials, and exploit new developments in the fields of nuclear engineering, nuclear physics and materials science.

**FAILURE ANALYSIS**
Graduates will be able to investigate and understand why and how components have failed while in service, and how such failures may be avoided.

**MANUFACTURING**
Graduates will be able to determine an appropriate manufacturing method for a component to achieve the required performance across a range of materials.

**SELECTION**
Graduates will be able to select appropriate materials for a given application or component, and ensure that the material selected can be manufactured in the desired shape and withstand irradiation damage.
All our degree programmes are accredited by the Institute of Materials, Minerals and Mining (IOM3) on behalf of the engineering council.

‘Over the past five years, Rolls-Royce has set industry-relevant group projects for Birmingham undergraduate Nuclear Engineering students who tackle these projects with enthusiasm and professionalism, applying their technical knowledge, analytical thinking and communication skills effectively. The projects are successful due to the support and expertise of the academics in the materials department at Birmingham and their well-equipped laboratory facilities. Group projects represent an important opportunity to introduce undergraduates to the nuclear industry and are helping to develop nuclear engineers of the future.’

TED DERBY, CORPORATE SPECIALIST NUCLEAR MATERIALS, ROLLS-ROYCE PLC

ARTIST’S IMPRESSION OF A ROLLS-ROYCE SMALL MODULAR NUCLEAR REACTOR

‘UKAEA’s main aim is to develop nuclear fusion energy and the high-quality graduate and postgraduate level students that emerge from Birmingham nuclear courses are important to a range of jobs supporting this. UKAEA have longstanding links with Birmingham and many students have gone on to progress their professional careers in areas such as neutronics, nuclear instrumentation and diagnostics, materials R&D and tritium areas to name a few. UKAEA also offer a number of summer placements so that students can contribute to this research as part of their studies. Our needs are growing as fusion is now entering an exciting new phase, with the international ITER tokamak facility being constructed in France, due to begin operations around 2025, new UK experimental facilities such as the MAST-U tokamak and a nuclear materials research facility, and R&D activities for future fusion devices to provide power to the grid.’

LEE PACKER, NUCLEAR TECHNOLOGY GROUP LEADER, UK ATOMIC ENERGY AUTHORITY (UKAEA)

ANALYSIS AND CRITICAL REASONING
Graduates will be able to build links between the structure of materials, their properties and how these are affected by the chosen manufacturing route. Also, graduates have to be able to critically assess information and make decisions based on evidence.

COMPUTATION
Graduates will be able to use appropriate analytical and computational techniques to aid with their work.

EXAMPLE

EMPLOYERS

ROLLS-ROYCE
EDF ENERGY
NUCLEAR DECOMMISSIONING AGENCY
ATKINS AND FRAZER-NASH

NATIONAL NUCLEAR LABORATORY
PWC
CULHAM CENTRE FOR FUSION ENERGY
KPMG

90% EMPLOYABILITY*
DESTINATION OF LEAVERS FROM HIGHER EDUCATION 2016/17

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Graduates will be able to use appropriate analytical and computational techniques to aid with their work.
Our programmes

Our nuclear science and engineering programmes have been designed to ensure our graduates remain at the forefront of the discipline. We place a strong focus on developing the skills of our graduates in a way that they will be able to tackle the challenges they will face once they join the nuclear industry. Optional modules in Year 4 allow you to tailor your programme to suit your passion and interests. Individual and group projects provide our students with the opportunity to gain key transferable skills and explore topics at the forefront of the nuclear industry.

OUR PROGRAMMES
- BSc Nuclear Science and Materials (HB21)
- MEng Nuclear Engineering (HB22)

In Year 1, you will develop a grounding in both Physics and Materials Science. This will include linking the behaviour and properties of materials to fundamental knowledge of their atomic structure. You will learn why some materials deform while others do not, why some conduct electricity while others are insulators. You will study how the properties of materials arise from their structure at a variety of length-scales and start to understand how materials are designed and modified to improve their properties or tailor them to a specific application. You will develop knowledge in quantum mechanics, mechanics and relativity to provide you with the fundamental understanding required of a nuclear engineer. In addition, you will develop the required mathematical, computational and laboratory skills required to become both an effective scientist and engineer.

As you progress to Year 2, you will extend your understanding in both physics and materials science and begin to learn how this applies to nuclear power. This includes developing a more complete understanding of how materials may be modified and improved to meet specified requirements, and how materials are affected by environmental and complex loading conditions. You will further develop your knowledge in both quantum mechanics as well as mechanics and relativity while developing an understanding of the nuclear physics that underpin nuclear power and reactor operation. Throughout, you will be challenged to use your computational and analysis skills to solve complex problems both in nuclear physics and in the determination of materials performance in application and processing.

At the end of Year 2, you will make a final choice as to whether you would like to graduate with a BSc degree, or stay longer and obtain the MEng degree. Students are allowed to transfer or stay on the MEng programme provided they have a 55% weighted average at the end of Year 2. This is done to ensure successful completion of the MEng degree programme.

During Year 3, you will learn in depth the physics underpinning the production of electrical power by current fission reactors and proposed fusion reactors. You will also develop a detailed understanding of how high-performance materials have been designed to maximise their properties and how these materials may be affected by complex and challenging environments. During group projects, you will be challenged by our industrial partners to solve outstanding technical issues that are impeding further development of their products.

In Year 4, you will fully develop into a master of Nuclear Engineering, ready for a career in the nuclear industry. You will undertake an extensive individual Research Project, in which you will undertake cutting-edge work under the supervision of world-leading academic and industrial researchers. The project will help you develop the research and analytical skills needed to continue into academic research and solve industrial challenges. You will also apply the knowledge gathered in the previous three years to a variety of case studies. Alongside this, in taught modules, you will develop in-depth understanding of materials responses to irradiation damage, the nuclear fuel cycle and nuclear reactor design concepts. Optional modules will allow you to deepen your understanding of specialist topics that are of interest to you.
Module/years table:

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
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<tbody>
<tr>
<td>Design for Structural Applications</td>
<td>Fracture, Fatigue and Degradation</td>
<td>Advanced Failure Analysis and Characterisation</td>
<td>Irradiation Materials Science</td>
</tr>
<tr>
<td>Electromagnetism and Temperature and Matter</td>
<td>Nuclear Physics and Nuclear Power</td>
<td>Materials for Challenging Environments</td>
<td>Individual Research Project</td>
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<tr>
<td>Mathematics for Physicists</td>
<td>Nuclear Skills</td>
<td>Fission and Fusion</td>
<td>Thermal Hydraulics and Reactor Engineering</td>
</tr>
<tr>
<td>Physics Laboratory</td>
<td>Mathematics for Physicists</td>
<td>Nuclear Physics</td>
<td>Radiation Transport and Reactor Kinetics</td>
</tr>
<tr>
<td>Physics and Communication Skills</td>
<td>Physics Laboratory</td>
<td>Radiation Protection, Dosimetry and Shielding</td>
<td>Reactor Safety and Analysis</td>
</tr>
<tr>
<td>Classical Mechanics and Relativity</td>
<td>Classical Mechanics and Relativity</td>
<td>Nuclear Physics Laboratory for Nuclear Engineers</td>
<td>Particle Detectors and Electronics</td>
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<tr>
<td></td>
<td>Quantum Mechanics</td>
<td>Group Research Project</td>
<td>Choice of one optional module</td>
</tr>
<tr>
<td>Statistical Physics and Entropy</td>
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Sample Year 4 options:
- High Toughness Ceramics
- Biomaterials
- Advanced Electronic Materials
- Materials Modelling

Examples of Individual Research Projects:
- Brittle fracture in nuclear graphite
- Microstructural, mechanical and irradiation performance of additively manufactured 316L
- Impact toughness evaluation and ductile–brittle transitions in SA738B pressure vessel steel
- Micromechanisms of cleavage fracture in SA738B pressure vessel steel
- Structural integrity development of additively manufactured tungsten for fusion applications
- Oxyhydride materials for energy storage

INTERCALATED YEARS

Students on our programmes have a wide range of options for intercalated years, which offer our students an opportunity to develop further during their degree course. These options include an intercalated year abroad, an intercalated year in industry, and an intercalated year in computer science. These opportunities are usually taken between Years 2 and 3, but can also be taken between Years 3 and 4. It is also possible to do more than one intercalated year if you wish to do so.

For the intercalated year in industry, we have had students join Rolls-Royce Nuclear, EDF, AMG Mercedes, the European Space Agency and many other companies.
OLIVER SPEARING, MENG NUCLEAR ENGINEERING

‘I now work as a Graduate Engineer in the sonar department for Atlas Elektronik UK which delivers high-tech underwater systems to defence and civil industries. With the knowledge gained from the physics, materials science and engineering that made up my Nuclear Engineering degree, this cross-disciplinary approach has given me a unique set of problem-solving skills that I can apply to almost any industry of my choosing.’

NEAL PARKES, MENG NUCLEAR ENGINEERING

‘Coming back to education after more than a decade out in employment, I was unsure how I would fit in at University. But from day one I cannot fault the support and guidance that I have been given from tutors, academic staff and my peers. All lectures are thoroughly engaging, well planned and taught by staff who are leading experts in their fields with excellent subject pedagogy, and who are more than happy to give up their free time to explain ideas and concepts where you may need further support. Whilst studying, I have also been given the opportunity to complete summer internships in additive manufacturing and material characterisation. At the end of my third year, I was given the prestigious opportunity to travel to China for the Xiamen Clean Energy Science and Technology Summer School. A three-week summer placement that included visits to nuclear power stations, both operational and under construction, as well as a variety of lecture courses on energy solutions and Chinese energy policy. The education, practical skills and support that I have been given are second to none. In all honesty, if you are looking to study a course in Nuclear Engineering or Materials, there is no better university or department to do this at than the University of Birmingham. I cannot recommend it more highly.’
Teaching, learning and assessment

We constantly review our content to ensure it is kept up-to-date, ensuring that both fundamental knowledge and modern developments are covered within our programmes. We also ensure our delivery and assessment methods are diversified, in order to promote skills development amongst our students. The University was awarded TEF Gold at the most recent Teaching Excellence Framework, with the panel commending the University for the excellent student outcomes.

Throughout the programme, you will be exposed to a variety of teaching methods. Some of the content is delivered through traditional lectures. Most of these would be recorded, whenever possible, and the recording will be available to you through our interactive virtual learning environment (Canvas). There will be many opportunities for hands-on learning through laboratories and workshop sessions. You will also practise problem-solving and exercises through tutorial sessions and small classroom teaching. Some of the content may be delivered via a flipped classroom approach: you would receive content in video or other formats and contact time would be spent ensuring the concepts are understood, with a chance to practice applying these to real-world problems. Whenever appropriate, formative assessment opportunities will be provided. These would be a chance for you to submit coursework which is assessed for your benefit, without the mark counting towards your final degree.

**SAMPLE COURSEWORK ASSIGNMENTS**
- Problem sheets
- Literature review
- Lab reports
- Diagnostic quizzes and tests
- Group challenges
- Case studies

**ASSESSMENT**

<table>
<thead>
<tr>
<th>YEAR ONE</th>
<th>YEAR TWO</th>
<th>YEAR THREE</th>
<th>YEAR FOUR</th>
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<tbody>
<tr>
<td>65% exam</td>
<td>65% exam</td>
<td>55% exam</td>
<td>40% exam</td>
</tr>
<tr>
<td>35% coursework</td>
<td>35% coursework</td>
<td>45% coursework</td>
<td>60% coursework</td>
</tr>
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**OUTCOMES**

- **FIRSTS**
  - Year One: 38%
  - Year Two: 43%
  - Year Three: 19%
  - Year Four: 7%

- **2:2**
  - Year One: 22%
  - Year Two: 21%
  - Year Three: 21%
  - Year Four: 18%

- **THIRD**
  - Year One: 0%
  - Year Two: 0%
  - Year Three: 0%
  - Year Four: 0%

**REPUTATION IN TEACHING**
- Gold Award in the 2016/17 UK Teaching Excellence Framework (TEF)
- Ranked fifth in 2020 Guardian University League Table for Materials Science and Engineering
- Ranked fourth in 2020 Guardian University League Table for Physics
What our graduates say

SHAHNAZ HOQUE, MENG NUCLEAR ENGINEERING

‘After graduating, I moved to Bristol to work as an Engineer/Project Manager for Frazer-Nash Consultancy. After two years, I left to pursue a DPhil from the University of Oxford. At Oxford, I am researching the effects of irradiation on Iron–Chromium alloys for nuclear fusion reactors. ‘At Birmingham, I loved the breadth of subjects across several departments I was able to study on the course. It helped me greatly in being adaptable in my consultancy career. The industrial network associated with the course and graduate network currently, continues to open up many opportunities to explore different careers.’

JONATHAN YOUNG, MENG NUCLEAR ENGINEERING

‘I am in my second year as a Graduate Health Physicist working for a global engineering firm. My degree has given me all of the skills I need to shape my career as a Health Physicist in the nuclear industry; in particular, the focus on radiation protection and nuclear safety has been invaluable for my professional development. The nuclear engineering course has strong links with the nuclear industry, and I especially loved the range of relevant modules and the exciting range of projects that were available to me.’

ANGUS HOLLANDS, MENG NUCLEAR ENGINEERING

‘My application to Birmingham followed a visit to the University and its beautiful campus, where I felt that I could see myself studying and socialising for the next three years of my life. As a student of Nuclear Engineering, the multidisciplinary nature of the course enabled me to develop an understanding of the fundamental principles behind several fields of engineering, as well as those from a conventional Physics degree. The practical skills that I learned from project work, and laboratory sessions, have given me the confidence and experience required to undertake independent research. In a relatively small class, I found myself a member of a group of people who were uniquely supportive of one another throughout this time, and have made friends that I have taken with me as I move into the next chapter of my life.’

EMILY LEWIS, MENG NUCLEAR ENGINEERING

‘I work for the Science and Technology Facilities Council, the UK government agency for science and engineering research. I am a graduate in the Scientific Computing department where I use simulation codes to model the behaviour of experimental reactors and develop software tools for the use of instrument scientists. In practice, most of my time is spent programming and building computational models. ‘I found the Nuclear Engineering course varied in subject matter and I am able to leverage many of the different skills I learnt from university at work. It gave me a broad set of experiences to draw on and so I also had a flexible choice of industries during the job application process.’

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‘My application to Birmingham followed a visit to the University and its beautiful campus, where I felt that I could see myself studying and socialising for the next three years of my life. As a student of Nuclear Engineering, the multidisciplinary nature of the course enabled me to develop an understanding of the fundamental principles behind several fields of engineering, as well as those from a conventional Physics degree. The practical skills that I learned from project work, and laboratory sessions, have given me the confidence and experience required to undertake independent research. In a relatively small class, I found myself a member of a group of people who were uniquely supportive of one another throughout this time, and have made friends that I have taken with me as I move into the next chapter of my life.’

EMILY LEWIS, MENG NUCLEAR ENGINEERING

‘I work for the Science and Technology Facilities Council, the UK government agency for science and engineering research. I am a graduate in the Scientific Computing department where I use simulation codes to model the behaviour of experimental reactors and develop software tools for the use of instrument scientists. In practice, most of my time is spent programming and building computational models. ‘I found the Nuclear Engineering course varied in subject matter and I am able to leverage many of the different skills I learnt from university at work. It gave me a broad set of experiences to draw on and so I also had a flexible choice of industries during the job application process.’
‘Since graduating with an MEng in Nuclear Engineering, I have continued at Birmingham towards a PhD! Shifting slightly away from, but still keeping my love for nuclear science, I now look at electron interactions in magnetic systems. Finding a lot of translatable skills from the Nuclear Engineering course, I have been able to expand on those skills in a different area, while also being able to maintain my skills set with lab demonstrating and teaching responsibilities as a postgraduate. For me, one of the highlights of my undergraduate degree was the amount of lab time over the four years, as well as the experience of processing experimental results into real physical understanding – as someone who is now an experimentalist, this foundation knowledge has been incredibly important. Other highlights include the constant interaction with academics, helping to build a genuine understanding of the subject material and appreciation for the complexity of the problems faced in the nuclear industry.’

ROB ARNOLD, MENG NUCLEAR ENGINEERING
PHD IN RARE EARTH/TRANSITION METAL MAGNET SYSTEMS
Life at Birmingham

In Birmingham, our community is diverse and friendly, our people are genuine and as one of the original pioneering cities, Birmingham has developed into a melting pot for shopping, food and drink, nightlife, sport, culture and industry. With our very own railway station on campus, you’ll be minutes away from the city centre.

 RETAIL THERAPY
The city centre offers a first-class retail experience; from famous brands to independent stores, Birmingham has every shop you could ever need.

 AFTERT DARK
As a thriving city for students and young professionals, when the sun sets, Birmingham has a vibrant nightlife and a huge selection of pubs, bars and clubs. As a student-friendly city, there are set student nights for every day of the week in Birmingham; with something for everyone.

 FOOD
Digbeth Dining Club is the perfect place for foodies to try all the mouthwatering offerings of Birmingham. Check out Independent Birmingham (www.independent-birmingham.co.uk) for some Birmingham favourites and hidden gems. Birmingham is home to the famous Balti Triangle, a must-visit place for curry lovers.

 ART AND CULTURE
For the culture vultures out there, Birmingham has something to suit all tastes; whether it be Old Masters, contemporary artists or performing arts. The city regularly hosts a variety of music and cultural festivals including the annual German Market.
MUSIC
Birmingham is full of different beats to suit all tastes, from large arenas and big names in music to smaller more intimate venues, where you can hear everything from new artists to old favourites.

LOCAL FAVOURITES
There is more to Birmingham than its city centre. You’ll find plenty going on just a short walk from our Edgbaston campus. A student favourite, Harborne is home to a number of bars, restaurants and cafes. Nearby Moseley and Kings Heath are buzzing with bars and live music to discover.

ACTIVE BIRMINGHAM
Stay active during your time at Birmingham by getting involved in the huge variety of opportunities on offer. There are numerous park runs, local teams including hockey, tennis and rugby. Immerse yourself in sport in one of the iconic venues including Edgbaston Cricket Ground and Villa Park stadium.

LIFE ON CAMPUS
When you step onto campus, you are immersed in our historic red-brick buildings and glorious green spaces. You’ll find our Edgbaston campus both a peaceful and vibrant place to spend your time, whether it’s studying on one of the lawns, or enjoying a drink in one of the many cafés.

SPORTS CENTRE
Our recently opened sports centre encompasses an array of facilities including Birmingham’s first 50-metre swimming pool, a large multi-sports arena, six glass-backed squash courts, a 10-metre climbing wall and five activity studios.

NEW FACILITIES
We recently opened our Green Heart, a striking new parkland. Measuring over 12 acres, the Green Heart provides a unique space for performances, socialising, meeting and studying. The parkland also incorporates study spaces, a new cafe and grass auditorium. Find out more about our exciting campus developments here: www.birmingham.ac.uk/building

THE GUILD
The Guild of Students represents all of the students at the University. The Guild offers support and advice to all students, delivers fantastic student nights and entertainment, and has over 150 student groups and clubs for you to choose from.
This leaflet was written several months in advance of the start of the academic year. It is intended to provide prospective students with a general picture of the programmes and courses offered by this School. Please note that not all programmes or all courses are offered every year. Also, because our research is constantly exploring new areas and directions, some courses may be discontinued and new ones offered in their place.

Please note the information in this brochure is correct at time of publication but may be subject to change (June 2019).