Our Biomedical Engineering BEng course has been designed to train the next generation of biomedical engineers working in healthcare research and development. Upon completion you will go on to specialise in medical engineering, medical physics or apply for further study in Medicine.

Key benefits

- King's is recognised as one of the international leaders in Medical Engineering and Physics education.
- Our Biomedical Engineering Department is based in one of the UK’s centres of excellence for medical imaging in a clinical setting at St Thomas’ Hospital.
- Designed to prepare students to enter jobs in the evolving field of biomedical engineering, healthcare research or further study in medicine.
- Taught by a combination of academic and clinical researchers at the forefront of their field.
- The course is CEng accredited and fulfils the educational requirements for Chartered Engineer when presented with an accredited MSc. In addition, the course meets the educational requirements for registration as an Incorporated Engineer.

Course details

The practice of medicine is being transformed by the increasing role of engineering, physics, mathematics and computer science. Our three-year course will position you at the forefront of these developments.

Our Biomedical Engineering BEng degree will provide you with a foundation in mathematics, engineering and science, along with a biomedical engineering curriculum.
Teaching
You will be taught through a combination of lectures, tutorials and practical laboratory work. You are expected to spend approximately 10 hours work per credit for each module you attend in your degree, eg 150 hours work for a 15 credit module. These hours cover every aspect of the module.

Assessment
You are assessed through a combination of written examination, essays, practical examination, oral presentations, reports, class tests and projects. The nature of assessment varies by module.

Regulating body
King’s College London is regulated by the Office for Students.

Course structure
Courses are divided into modules. Each year you will normally take modules totalling 120 credits.

Year 1
Required modules
You are required to take:
- Computer Programming (15 credits)
- Physics for Biomedical Engineering (15 credits)
- Joint Honours Laboratory (15 credits)
- Computational Statistics (15 credits)
- Introduction to Human Anatomy & Physiology (15 credits)
- Electrical Engineering 1 (15 credits)
- Mathematics for Biomedical Engineering (15 credits)
- Mechanics for Biomedical Engineering (15 credits)

Year 2
Required modules
You are required to take:
- Electromagnetism (15 credits)
- Signals & Systems (15 credits)
- Signal and Image Processing (15 credits)
- Introduction to Medical Physics & Clinical Engineering (15 credits)
- Computational Methods (30 credits)
- Computational Applied Biomathematics (15 credits)
- Object-Oriented Programming (15 credits)
- Biomedical Engineering Professional Issues (0 credits)

Year 3
Required modules
You are required to take:
- BEng Research Project (30 credits)
- Medical Imaging (15 credits)
- Modelling Flow & Transport (15 credits)
- Advanced Mechanics (15 credits)
- Mechatronics (15 credits)

Optional modules
In addition, you are required to take two modules from a range of optional modules that may typically include:
- Synthetic Anatomy (15 credits)
- Molecular & Cell Biology for Biomedical Engineers (15 credits)
- Biomechanics & Neurorehabilitation (15 credits)
- Bioelectricity (15 credits)
- Machine Learning for Biomedical Applications (15 credits)

King’s College London reviews the modules offered on a regular basis to provide up-to-date, innovative and relevant programmes of study. Therefore, modules offered may change. We suggest you keep an eye on the course finder on our website for updates.

Location
Our course is primarily taught at the Strand Campus. Some teaching takes place at the King’s College London St Thomas’, Waterloo, Guy’s and Denmark Hill Campuses. The Department of Biomedical Engineering is based in a clinical setting at St Thomas’ Hospital.
Career prospects

Biomedical Engineering graduates can enter various industries, such as a medical hardware and software, or take a clinical engineering position in a hospital. Graduates may also choose to progress to a masters or doctoral degree specialising in medical engineering or medical physics, or progress to a medical degree.

Fees and funding

Full-time tuition fees – UK

The UK tuition fees for the 2019-20 academic year are available on the course web page.

Please note that the tuition fees for subsequent years of study may be subject to increases in line with King’s terms and conditions.

Full-time tuition fees – EU

Students starting their programme in 2019/20 (September 2019) who are eligible to pay EU fees will pay the same rate of tuition fees as UK students. This will apply for the duration of their programme but may be subject to change by the UK Government for subsequent cohorts from 2020/21.

The UK tuition fees for the 2019-20 academic year are available on the course web page.

Please note that the tuition fees for subsequent years of study may be subject to increases in line with King’s terms and conditions.

Full-time tuition fees – International

The International tuition fees for the 2019-20 academic year are available on the course web page.

Please note that the tuition fees for subsequent years of study may be subject to increases in line with King’s terms and conditions.

All International applicants to undergraduate courses are required to pay a deposit of £2,000 against their first year’s tuition fee. This deposit is payable when you firmly accept an unconditional offer to study with us, and will be offset against your tuition fees when you join King’s.

For further information, please visit the fees and funding section of our website: www.kcl.ac.uk/study/undergraduate/fees-and-funding/index.aspx

Additional costs

In addition to your tuition fees, you can also expect to pay for:

• books if you choose to buy your own copies
• clothing for optional course related events and competitions
• library fees and fines
• personal photocopies
• printing course handouts
• society membership fees
• stationery
• graduation costs
• travel costs around London and between campuses
• alternative venue examination fees

Disclaimer

Although this PDF was up-to-date at the time it was produced, please make sure you check our website www.kcl.ac.uk/study or contact us directly for the very latest information before you commit yourself to any of our courses.

Contact us

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