



South Bank Engineering UTC



Prospectus

design. engineer. innovate



“South Bank Academies Trust is privileged to be responsible for this distinctive college offering academically strong and employment-focused technical education and professional development opportunities for young people of South London. The college offers a unique project- and research-based curriculum with inputs from the University and leading employers.”

Professor Rao Bhamidimarri
Chief Executive, South Bank Academies Trust



“London South Bank University, a 120 year-old technological university with extensive links with employers, is delighted to sponsor South Bank Engineering UTC. This UTC with purpose-designed laboratories and engineering facilities offers outstanding learning opportunities for young people in Lambeth and beyond, preparing them for tomorrow’s advanced technology world.”

Professor Dave Phoenix, OBE
Vice Chancellor

“The partnership with London South Bank University was extremely important when I chose to enrol at the UTC.

I know that I have a pathway into a great, local university and that there will be continuity in my studies.”

Year 12 student



Welcome from the Principal

Welcome to South Bank Engineering UTC. We offer high academic standards within a technical learning environment, fresh thinking and amazing opportunities for your education and your future beyond.

We are so much more than a conventional school. We offer great teaching in traditional subjects with the powerful addition of high-quality technical courses in our specialisms of engineering for building and health, two sectors with a real shortage of skills and a wealth of jobs in the future. Our specialisms in engineering link to a proud heritage in London. Engineering is much more than building things: it is creative and practical, collaborative and future-focused and aims to make the world a better place.

Our state-of-the-art facilities house leading edge equipment for hands-on learning including advanced scientific, engineering, computing and digital tools.

We are privileged to be sponsored by London South Bank University and co-sponsored by world-leading employers such as Skanska, Guy’s and St Thomas’, and King’s College NHS Foundation Trusts. Our partners are fully engaged and will work with us to set our students real life projects where they will solve real world problems and learn hands-on and across a range of subject areas.

We focus on enabling our students to apply their own imagination, ideas and creativity in their learning in an engineering context. We incorporate the use of cutting-edge technology across the curriculum including the use of high-end computers, machinery and digital devices such as virtual reality, robotic exoskeletons and 3D printers.

Students who choose the UTC have access to pathways into university, higher-level apprenticeships or employment. They achieve excellent academic qualifications alongside technical skills, and are highly employable.



Our UTC is open to young people aged 14-19, with students joining us either in Year 10 or Year 12. We are innovative, future-focused and offer so much more than a traditional school.

One of our main areas of focus is to develop our students’ character and employability, to prepare them for successful, high-status careers in the rapidly changing 21st-century world.

Our students are exceptionally motivated young people with a thirst to be creative and to work in a practical environment. They are effective self-managers, work well in a team and are in tune with our business-like way of working, including business dress instead of a traditional uniform. In exchange, we offer so much more than a traditional school.

If this excites you, I look forward to welcoming you.

Dan Cundy, Principal
Principal

Apply online

www.southbank-utc.co.uk



Introducing South Bank Engineering UTC

A University Technical College is a secondary school led by a University sponsor and world-leading employer co-sponsors. There is a national network of UTCs, all offering learning in a practical context with support from leading national and international employers.

Our UTC is for 14-19 year-old students and provides an integrated curriculum where academic subjects relate to and reinforce the technical specialisms.

Our UTC offers each student a clear choice of progression routes into higher education, apprenticeships and employment.

Students benefit from innovative teaching complemented by support from our sponsors. By delivering the curriculum through employer-led projects, visits to industry, competitions, internships and masterclasses, we truly do offer an alternative to the traditional school setting.

We have high academic standards, with input from London South Bank University, and offer learning in a practical context with support from leading national and international employers.

The curriculum has a strong emphasis on digital technologies, meeting the emerging needs of industries in the building and health sectors.

South Bank University's sponsorship of the UTC means that our students have clear and accessible progression opportunities into higher education. This special relationship gives students access to a number of VIP privileges, including tutoring, preparation for university days, dedicated subject seminars and taster events.

Our co-sponsors offer quality apprenticeships and employment opportunities for students who choose to pursue them. The relationships with the sponsors are authentic and they are present with us on students' educational journeys, offering support in a number of ways. For example, Kings College NHS Trust have run a series of lectures with topics ranging from infection control to x-ray devices, and Skanska UK hosted a fantastically successful 'takeover day', where they ran the UTC for the day.

Students gain advanced knowledge and skills with an in-depth learning of the core curriculum, including English, Mathematics, Science, Computer Science and Engineering.

"The smaller class sizes mean that I get so much more out of my learning here at the UTC."

Year 10 student

Our Industry Co-sponsors



Guy's and St Thomas' NHS Foundation Trust

Guy's and St Thomas' is one of the largest hospital trusts in the country, with about 13,650 staff and an annual turnover of more than £1.3 billion.

With advanced technology equipment, their hospitals and facilities have a long and proud history, dating back almost 900 years, and have been at the forefront of medical progress and innovation in the world.

They also offer hospital infrastructure and engineering services including engineering for hospital buildings and medical equipment through subsidiary company Essentia, which offers a range of exciting career progression opportunities including higher apprenticeships.

www.essentia.uk.com
www.guysandstthomas.nhs.uk



King's College Hospital NHS Foundation Trust

King's College is a leader in specialist knowledge and expertise in medical engineering and supports the NHS hospitals and organisations across the country and overseas in this field.

King's College offers a range of career opportunities including apprenticeships and medical engineering degree courses to shape the future of medical engineering.

King's run a number of employer-led curriculum projects with students in Years 10 and 12 including the design of a wheelchair for children with respiratory illness.

www.kch.nhs.uk

"The projects were what really set the school apart. We have built bamboo bikes, designed lighting for children's hospital wards; we are learning the curriculum, whilst building our project management and teamwork skills."

Year 12 student

SKANSKA

Skanska

Skanska is one of the world's leading project development and construction companies – a business that actively seeks to make a positive contribution to society. At the heart of Skanska are its 57,000 employees. By combining its skills and experience in construction and infrastructure development, Skanska has become a UK leader in delivering construction and engineering projects in healthcare, education, defence, transportation and municipal services, creating numerous apprenticeships and employment opportunities for young people.

www.skanska.co.uk

Wider partnerships

We are proud to work with a wide range of partner organisations.

From global businesses to local startups, our students benefit from these links which bring with them employer-led projects, masterclasses, internships, work experience, professional qualifications, apprenticeships, competitions, site visits and more.

Our range of partners is growing constantly but includes Fujitsu, Cisco, Bamboo Bicycle Club, Squire & Partners, Brixton BID, Mace and Pi-Tops.

We work closely with our local community and stakeholders, for example welcoming local primary schools for STEM Fairs and sponsor takeover days.

We often host delegations of international educationalists, via the British Council, who wish to observe our unique and innovative systems of learning.



Students are developing technical and employability skills that employers value

Learning Environment

South Bank Engineering UTC moved into a purpose-designed, brand new building in Autumn 2017, with Phase 2 of the building due to be completed in October 2018, offering additional industrial engineering workshops.

We offer a real-world working environment, preparing students for successful careers.

Every aspect of the UTC reflects this, not least the way in which our ICT infrastructure supports cutting-edge approaches to working and learning in a high-technology environment.

Students define what they learn with the guidance of teachers and industry advisors; they work in teams as the real world professional environment demands.

One distinctive feature of South Bank Engineering UTC is that students are enabled to think, design and operate in a digital environment.

Our Vision and Mission

Students are working with world-class sponsors, studying an innovative specialist curriculum in an industry appropriate learning environment. They are developing outstanding knowledge and skills within our areas of technical specialism: engineering for building and engineering for health. We combine this with a broad and rich general curriculum.

Students experience new modes of learning through research and technical projects which enables all of their learning to be contextualised: projects are led by employers and sponsors.

Students combine 'hand and mind' to learn in practical ways, integrating academic and technical elements. Their academic studies benefit from their practical experiences.

Our graduates will be highly sought after by companies for employment or apprenticeships and will be well prepared for higher education and lifelong learning.

Learning and communication are not limited by time or place at the UTC. Our students are able to plan and manage their learning, in partnership with their teachers and coaches, taking advantage of private study sessions to enhance their learning and assignments.

Students experience cutting-edge computing and information technologies including robotics, virtual reality and 3D printing, not commonly found in schools. Students use advanced technologies to access information and to communicate, most successfully with computer-aided design using industry-standard technology and software in line with the 21st-century industrial environment.

"The UTC has teachers who are very knowledgeable about their subjects. I enjoy the group work and the opportunity to collaborate with my peers on projects and assignments."

Year 12 student

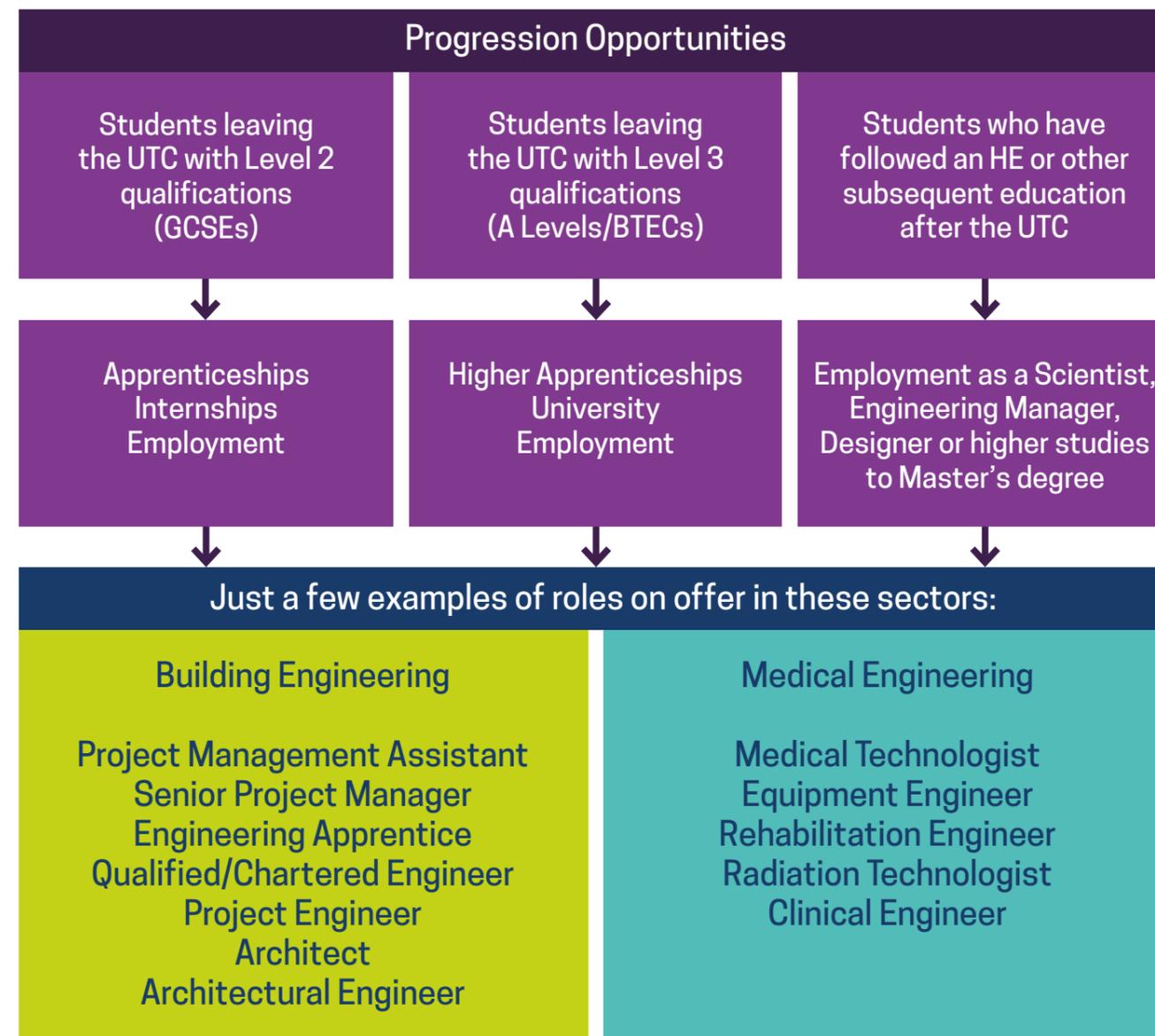
Progression Pathways

Our graduates will have a range of progression pathways available to them.

Their knowledge and skills will be wholly relevant to future-focused technological industries, meaning they will be sought after by employers as well as universities.

Our specialisms are distinct and there is a growing demand for people, notably in the London jobs market, with knowledge and skills in engineering relevant to medical and building sectors.

The following table summarises the progression opportunities:





Careers in building engineering are creative, well paid and can solve real-world challenges to help engineer a better world. With a huge focus on sustainability now and for the future, our students are well placed to provide the solutions.

Engineering for the Building Sector

Engineering for the building sector involves the study of topics such as materials, design, energy, heating, ventilation, building information modelling (BIM) and construction engineering to design and build energy-efficient and sustainable buildings. It places a premium on digital technologies.

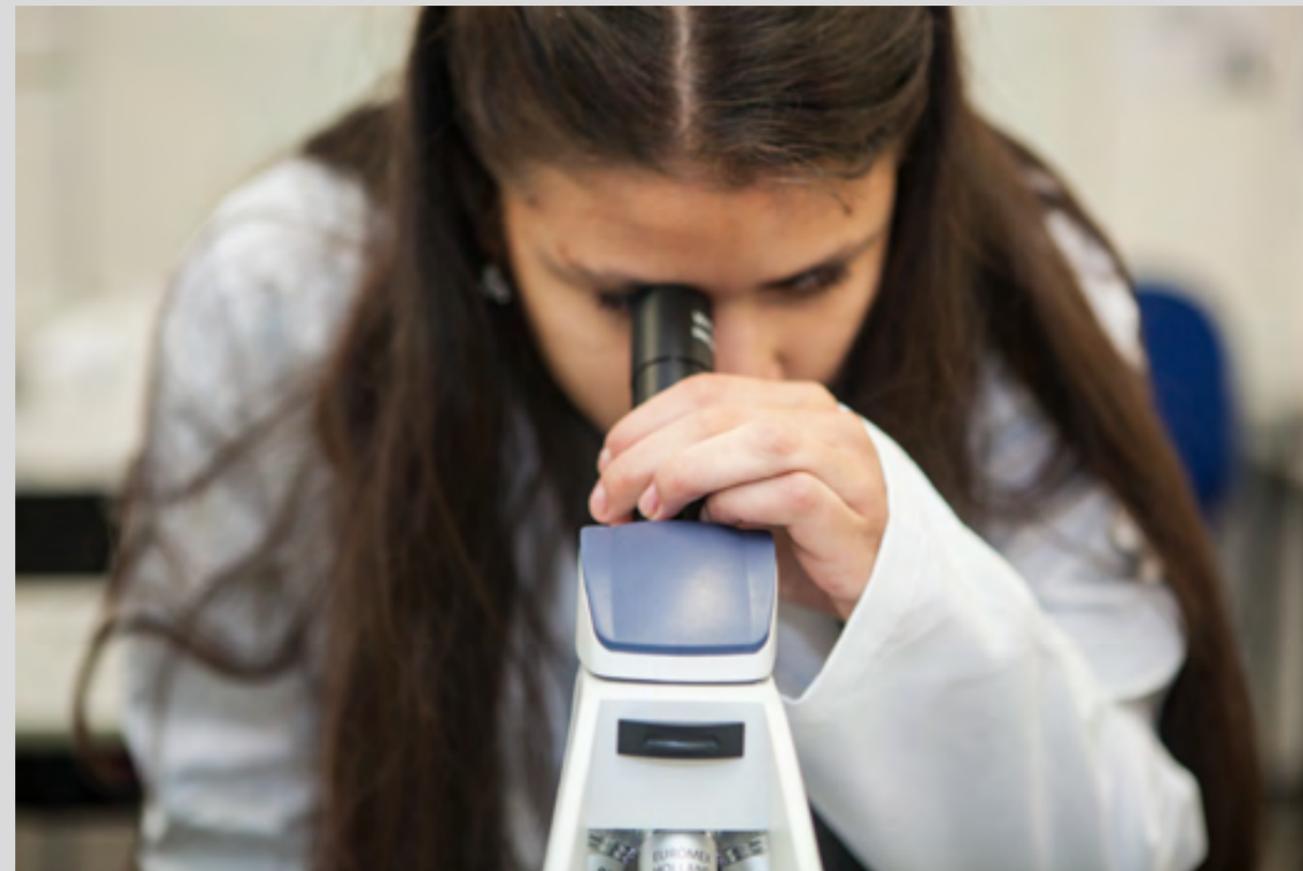
From The Shard to Battersea Power Station, taking in the regeneration of Elephant & Castle and Nine Elms, there are swathes of new developments that require a large number of building engineering professionals over the coming years.

These careers are rewarding, well paid and solve real-world challenges to help engineer a better world. With a huge focus on sustainability and environmentally friendly materials and resources, our students are well placed to provide the solutions.

A number of our students have completed work experience on a variety of construction projects, including Battersea Power Station.

“I came to the UTC because I was looking for a different style of teaching, a more business-like environment. I want to go into Civil Engineering in the future; this was definitely the right option for me.”

Year 12 student



Within this field, students work with scientists, engineers and healthcare professionals to develop new medical technologies and devices for the benefit of patients.

Engineering for the Health Sector

Engineering in the health sector is varied and embraces the very highest technology. For example, hospitals use a range of equipment to provide diagnosis and treatment to patients, with robotic surgery now taking place in London.

Medical engineering is a real growth area, with wearable devices, nano technology and exoskeletons aimed at monitoring and improving health.

Medical engineers also work to design and develop new technology and equipment. This could range from more effective prosthetic limbs to equipment for more accurate cancer screening.

There is a real shortage of suitably qualified entrants into the medical engineering sector, despite careers on offer from prestigious multinational companies such as Siemens and Hitachi.

Both King's and Guys & St Thomas' NHS Trusts are looking for young people to move into these careers in the future and we want our students to fill these gaps, setting themselves up with rewarding, well paid roles that can really make a difference in the health sector.

Medical engineers work to design and develop new technology from robotic devices to more accurately cancer screening. They use engineering to improve people's lives and have created groundbreaking inventions such as prosthetic limbs.



Key Stage 4 Curriculum

Year 10 and 11 students benefit from an enhanced curriculum offer, specialising in STEM subjects.

All students will sit at least eight core subjects including engineering and:

- English Language and Literature;
- Science Double Award;
- Mathematics;
- Computer Science.

They also participate in projects designed and led by our industry and university partners to develop their employability.

In addition to their core GCSEs, all students complete high quality technical courses, including Engineering Level 2 BTEC, in line with our specialisms of engineering for industries in the building and health sectors.

Students are also able to opt for additional courses normally reserved for adults in the workplace - these professional qualifications will enhance our students' CVs and include Autodesk, Adobe and Office.

High quality pastoral care is central to what we do - we offer personalised care and development pathways including mentoring and PSHE.

Projects involve working hands-on with digital engineering technology both at the UTC and off site and offer a strong creative element - our students are actively involved in design and project management.

Projects currently on offer include: designing, building and racing bamboo BMX bikes; designing earthquake-proof houses for Nepal; a robotic arm project for Guy's & St Thomas' Hospital; and the 'Ward of the Future' for Great Ormond Street Hospital.

Students completing our Key Stage 4 programme will be fully prepared for the challenges of life in the 6th Form, whether on a traditional A level programme, one of our technical pathways, or a combination of the two.



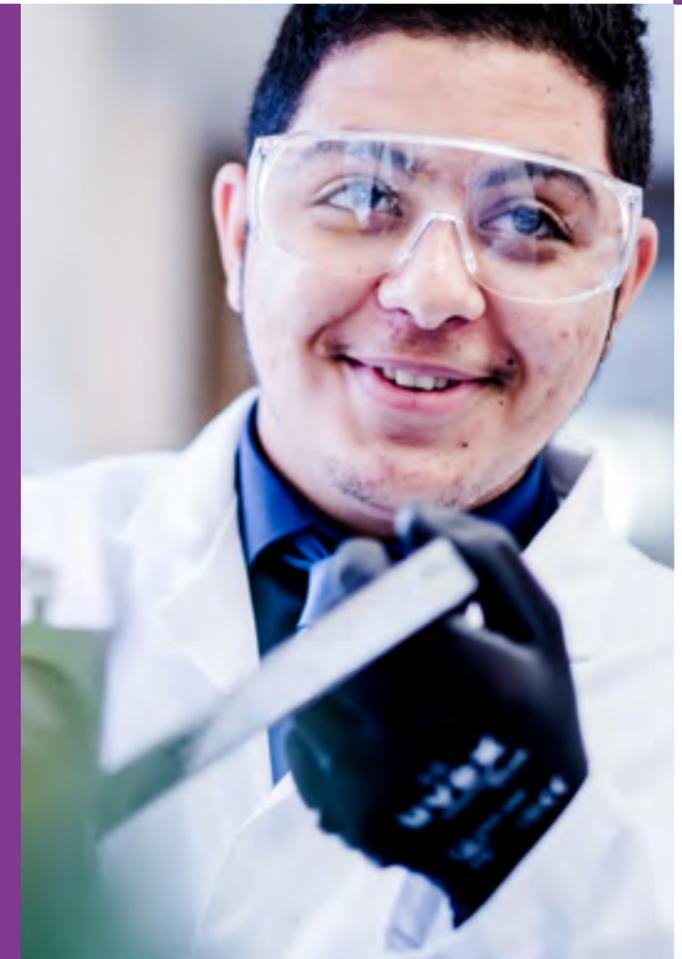
Woven through the curriculum are a wide range of exciting and innovative projects, challenges, master classes and experiences, all of which offer unique and powerful opportunities for UTC students.

Post-16 Curriculum

Sixth Formers benefit from a unique, high-value curriculum. They are able to follow a pathway in line with their own interests, ambitions and aptitudes.

A levels and Level 2/3 technical courses all specialise in science, technology, engineering and maths. Exciting project-based learning led by employers and university partners give students unique skills and opportunities.

The curriculum is enriched by outstanding opportunities led by our sponsors and partners.



Regardless of course choice, our students leave South Bank Engineering UTC at the end of their studies ready to progress to one of the following:

- A well-rewarded professional career; such a career may be with one of our industry partners.
- A Higher Apprenticeship, with many opportunities on offer from our partner organisations.
- University to study for a degree. Many of our students will progress to top universities; offers have been received from Russell Group universities such as Warwick, Leeds, Sheffield, Exeter and Manchester. Many also opt to apply for London South Bank University, having built a close relationship during their time at the UTC.



Projects include designing and building bamboo BMX bikes, earthquake-proof houses, customised wheelchairs, exoskeletons and the hospital 'Ward of the Future', all with university and industry partners.

All 6th Form courses incorporate the use of cutting-edge technology; students develop the technical and digital skills that 21st Century employers value.

Our employer partners set challenges enabling students to develop skills in teamwork, leadership, planning, organisation, evaluation and presentation.

Those students who opt to apply for university are supported by dedicated staff during the UCAS process. There are many opportunities for enrichment and leadership to ensure our students stand out from the crowd.

Entry requirements for our courses vary - do talk to us to discuss your future!



My Typical UTC Day

8.00am Arrive at the UTC

Arrive for a breakfast meeting with my project team to discuss our next steps in the latest Employer Challenge.

8.30am Coaching time

A chance to set out my day and reflect with my coach on my personal progression and areas for development over the coming weeks.

8.50 – 10.50am Engineering

Today we'll be video conferencing with one of our industry partners who is helping us to design and make an exoskeleton component to assist patients recovering from serious injury.

10.50 – 11.05am Break

I can use my tablet to conduct research online, as well as grabbing a snack.

11.05am – 1.05pm Computer Science

I am hoping to produce an app to monitor sleep patterns in collaboration with my work group. If I contribute well, my Company share price will increase.

A day in the life of a South Bank Engineering UTC student....

1.05 – 2.00pm Lunch

I will catch up with my friends and chat about the summer internships we can apply for. I will use OneNote to review my Computing teacher's lesson presentation.

2.00 – 4.45pm

It's different every day, but after English this afternoon I am visiting Skanska's head office in London to find out about their next Employer Challenge, that we are told is in the area of 'intelligent buildings'.

At the same time my friend is going to Great Ormond Street Hospital to receive more information on their project, "Hospital ward of the future".

Students Joining the UTC

Each year, we have two new cohorts joining us: one in Year 10; and another in Year 12.

South Bank Engineering UTC is so much more than a traditional school. Although we do offer a wide range of GCSEs, A levels and equivalents, we enhance these through additional projects in our specialisms of medical engineering and building engineering, all using digital technologies. These offer students the chance to work in a more practical and hands-on way than in traditional schools.

We also offer the benefit of working very closely with our world-leading employer partners on real-world projects, challenges, competitions and events to enhance students' learning and development.

We have access to excellent technology, enviable resources, leading-edge computing and specialist equipment.

Our small size means we are able to build and maintain close relationships and deliver an excellent quality of care.

The reasons to join us include:

- Unique, specialist employment-focused curriculum.
- Excellent teaching based on learning kinaesthetically.
- Access to cutting-edge facilities and resources.
- Opportunities to work in a practical, collaborative way.
- Close partnerships with high-calibre employers in the sector.
- Expertise, facilities and resources from London South Bank University.
- Education in line with the workplace and higher education requirements.



We have a longer day than traditional schools. Students wear business dress unless protective gear is needed.

We demand a great deal of self-motivation, drive, tenacity, self-discipline and, overall, a genuine interest in engineering.

We draw students from a wider catchment area than most schools, benefiting from our Brixton location with excellent transport links.

Because we are technically focused, with excellent employment and higher education prospects, there is a great demand for the limited number of places.

We are state funded, inclusive and inspected by Ofsted. We are specialist in engineering. We are smaller than most schools and non-selective. Year 12 entrants will have to meet our entry requirements.

How to Apply

Apply Online:

www.southbank-utc.co.uk
 Quick and easy form - we will contact you for an interview.

Check our website for open events:

www.southbank-utc.co.uk

Sign up for news and events:

info@southbank-utc.co.uk



UTC Priority Admissions Areas Map

The catchment areas are arranged in concentric circles, measured using a digital mapping system that will measure the straight line distance between an applicant's home address and South Bank Engineering UTC's main entrance gate with the postcode SW2 1QS.

Orange area:

Priority admissions area 1 - 3km circle from the UTC (postcode SW2 1QS) - 40% of places

Light green area:

Priority admissions area 2 - 3 to 10km circle from the UTC - 50% of places

Dark green area:

All remaining places (10% of places)

Admissions criteria

Where South Bank Engineering UTC receives more applications than it has places available, the criteria listed opposite will apply, after the admission of children with an Education Health & Care Plan, naming South Bank Engineering UTC.



The following over-subscription criteria will be applied in sequence:

- Looked-after children (LAC) and children who were previously Looked-after (Care leavers);
- 40% of the Published Admissions Number (PAN) (after Looked-after children and those with Special Educational Needs have been admitted) will be allocated to applicants whose home address is within a 3km radius around the UTC (postcode SW2 1QS) - this is Priority Admissions Area 1, the orange circle on the map on the opposite page;
- A further 50% of the PAN will be allocated to applicants whose home address is within 3 and 10km of the UTC (postcode SW2 1QS) - this is Priority Admissions Area 2, the light green circle on the map on the opposite page;
- The remaining places will be allocated to pupils living outside of Priority Admissions Areas 1 and 2.





**South Bank
Engineering UTC**

How to Find Us

South Bank Engineering UTC
56 Brixton Hill
(entrance on Horsford Road)
London SW2 1QS
tel 0207 738 6115
info@southbank-utc.co.uk
www.southbank-utc.co.uk



Nearest Tube Station: Brixton



Nearest Station: Brixton



Nearest Buses to Brixton Hill:
45, 109, 118, 133, 159, 250, 333

To Brixton Underground Station:
2, 3, 35, 37, 196, 355, 415, 43



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Employer sponsors

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