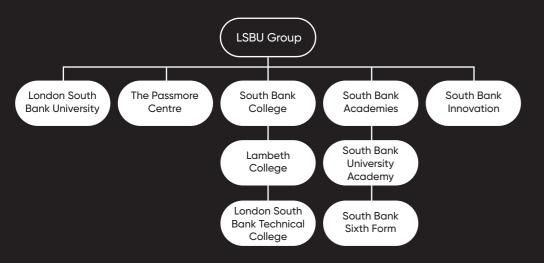
Fit for the future, ready for the real world.

Our goal is to help you succeed, no matter what your age, background, or educational experience. We provide career focussed pathways across all levels, from Entry to Level 8, providing high quality education and sector specific learning to prepare you for your life beyond education and qualifications.



Joining LSBU Group gives our students unrivalled access to educational opportunities, advice and guidance as well as sought-after apprenticeships and work placements. Our students are guaranteed progression to both LSBTC and LSBU*.

Whether your next destination is within LSBU Group or elsewhere, we are one of a handful of providers who offer students the opportunity to progress to one of our new Level 4 one-year courses. Successful completion of this enables our students to fast-track to year 2 of an LSBU degree, saving money as well as providing a standalone, qualification that employers recognise should you decide to leave your studies there.

*after successful completion of a Group qualification that has a progression route

Further information about careers in Engineering, can be found here:



Part of **LSBU** | GROUP

LAMBETH SB\COLLEGE

LONDON SOUTH BANK B\TECHNICAL COLLEGI

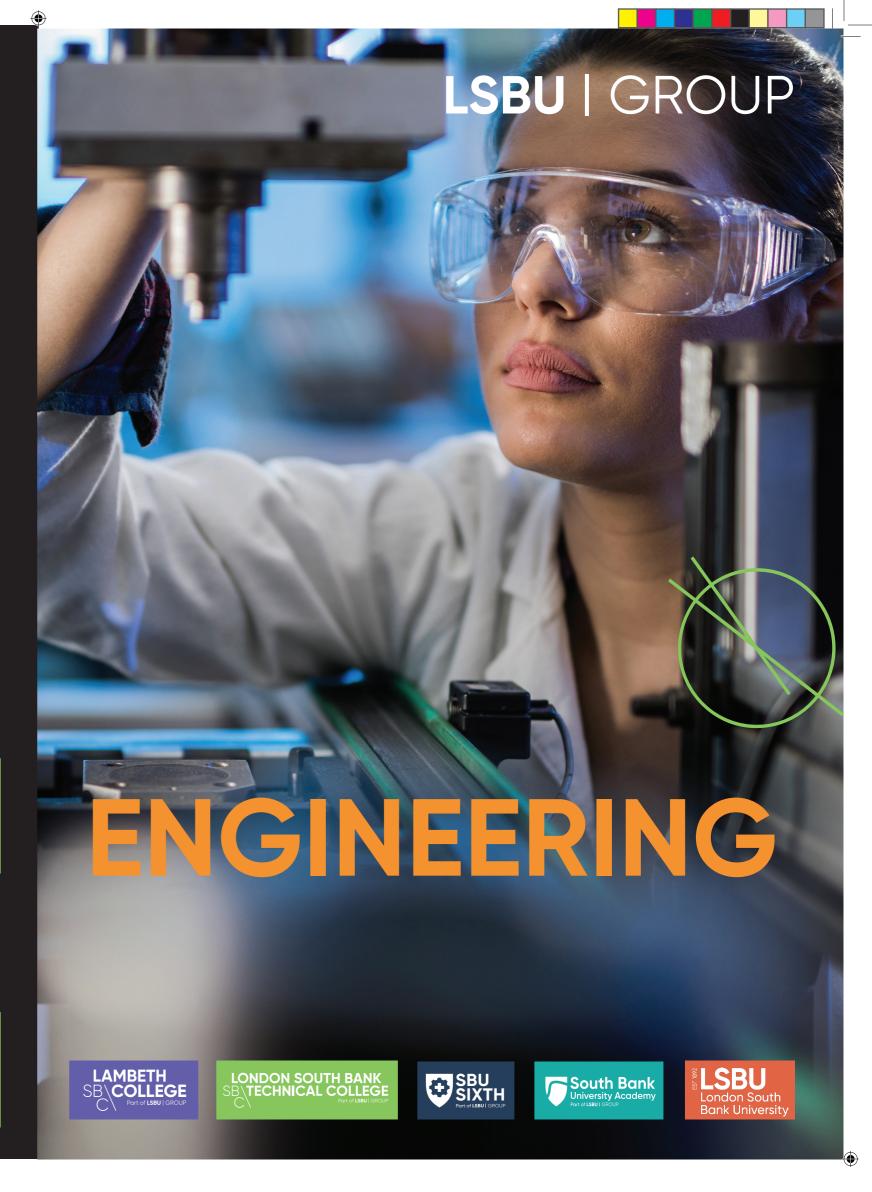
SBU SIXTH

Bank University

South Bank University Academy

Places on Engineering courses, at all levels, are highly sought-after every year. If you believe this is the career pathway for you, but you lack hands-on experience, then we advise you to seek a work experience placement prior to applying.

The following websites are a great place to start:



The Need for Engineering Roles

With Engineering shaping our entire physical world, it's no surprise that there are a huge number of careers open to you. No matter where your passion or interest lies, as long as you possess ambition and the right qualities, you're sure to find an Engineering role to perfectly suit you.

The UK has circa 730,000 engineering businesses

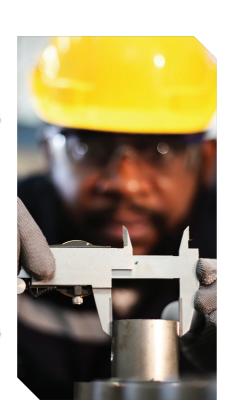
According to research by the Royal Academy of Engineering

265,000 engineers needed by 2024

Engineering **Economy Employs** 8.1m people

London - over 132,000 engineering businesses - 1.1m people in engineering roles

London-based **Engineering alone** generates more than £126bn GVA for the capital annually.



An Introduction to Engineering

Engineering is at the very heart of global industry; this fast-paced and innovative industry is behind everything you use, everything you see, and everywhere you go. Because of this, the world constantly needs an Engineering workforce that is qualified, well-trained, passionate and dedicated

Engineers shape the world around us by designing and creating objects, developing systems, and solving problems for the benefit of society. From the kettle you use to make your morning coffee, to the mobile phone in your pocket, to the car you use to drive to the shops, to the machines used to package the food you buy there; none of those things would exist without the skills and expertise of engineers.





Is Engineering the right Pathway for you?

Gaining the necessary qualifications, and undertaking relevant work experience, can teach you the knowledge and expertise you will need in this sector, but there are a number of personal qualities and transferrable skills that are essential for a successful career in Engineering.

You'll need excellent verbal and written communication skills; have a sound knowledge of engineering science, technology, and physics; possess good IT skills and be confident in the use of computer systems, hand-held devices and software packages; possess strong numeracy and maths skills; be thorough in your work and always pay attention to detail; have good design and analytical thinking skills; be good at working with your hands; be confident

in the use and maintenance of machinery and tools; possess complex problem solving skills; have the ability to work as both part of a team and under your own initiative; and have the ability to come up with new and innovative ways of doing things, and finding solutions to problems. solutions to problems.

Careers in Engineering

The UK's 'Engineering Economy' currently employs 8.1 million people – this is over a quarter of all UK workers (26%) - and Engineering in London alone has over 132,000 Engineering businesses and employs nearly 1.1 million people in Engineering

jobs. It's been forecast that the sector will need to recruit a minimum of 265,000 skilled entrants annually - in order to meet this huge demand for Engineering enterprises - by the end of 2024.

If you choose to apply your skills and attributes to meeting this need, then a highly-technical, highlyengaging, everchanging, hugely-interesting, and potentially lucrative career awaits.

Qualified Engineers and well-trained engineering Fitters, Technicians, Operatives and Machinists are required in just about every industry you can think of; some of the key engineering industries are Aeronautical, Agricultural, Automotive, Construction, Chemicals, Defence, Electronics, Energy, Fast-Moving Consumer Goods (FMCG), Highways, Marine, Materials and Metals, Pharmaceuticals, Rail, Telecoms, and Utilities (covering water, sewerage, energy and telecoms).

Just taking the Rail industry as an example, Mechanical Engineers are required to work on the trains and tracks; Electrical Engineers are needed for the power distribution to the stations, the tracks, and in the trains themselves; Electronic Engineers are needed to design, install and maintain the signalling systems; and Civil Engineers are responsibly for designing, building, maintaining and repairing the tracks, bridges and stations.

The average starting salary for a qualified engineer is

£48,000

That's 62% higher than the UK's national average!

Did you know?

LSBU Graduates are among the highest earning of all London Modern Universities (LEO 2022)

There are plenty of opportunities open to you. Here are just a few ideas:

Aerospace Engineer

Agricultural Engineer

Automotive Engineer

Building Services Engineer

CAD Technician

Chemical Engineer

Civil Engineer

CNC Machinist

Design and Development Engineer

Electrical Engineer

• Electronics Engineer

• Engineering Technician

Energy Engineer

We are developing

brand new engineering

courses in partnership with industry leaders"

Wayne Wright,

Principal LSBTC

• Heating and Ventilation Engineer

Maintenance Fitter

Manufacturing Engineer

Engineering Operative

Marine Engineer

Materials Technician

Mechanical Engineer

Motorsport Engineer

Robotics Engineer

Career Pathways - ENGINEERING.indd 1 08/02/2024 11:50

ENGINEERING



London South Bank Technical College



South Bank University **SBUSIXTH** Sixth From

SBUA South Bank University Academy

ENTRY LEVEL Award, Certificate (ELC), Diploma English for speakers of other languages (ESOL)

Essential skills Functional skills Skills for Life

ESOL English/ English for Maths Speakers of Other Languages

ESOL English for Speakers of Other Languages

Adult Basic Skills - Digital, Employability, Numeracy, Skills for Life, Literacy

Sector based Work Academy Programmes

Inclusive Learning - Preparation for Employment/ Independent Living Skills/Learning for the Community/Life and Work Skills, Practical Living Skills/ Progression to Life and Work/ Preparation for Work and Supported Internship

LEVEL

First Certificate, Award, Certificate, Diploma, ESOL

Essential skills Functional skills

NVQ

National vocational qualification (NVQ)

Electrical Installation Engineering

English/Maths

ESOL English for Speakers of Other Languages

Princes Trust Team Programme

Diploma in Vocational Studies

LEVEL

Intermediate Apprenticeship, Award, Certificate, Diploma, ESOL Essential skills Functional skills **GCSE**

Engineering Foundation Programme

Electrical Installation

ESOL English for Speakers of Other Languages

Princes Trust Team Programme

English/Maths

Engineering

Range of GCSE and BTEC options

LEVEL

Access to HE Diploma Advanced Apprenticeship A Level **Applied General** Award, Certificate, Diploma, ESOL NVQ

T Level

CertHE

DipHE

Advanced Manufacturing Engineering and Robotics

Engineering

Design and Development for Engineering and Manufacturing

Civil Engineering (Access)

Engineering (Access)

Electrical Installation (Building and Structures)

Requirements for **Electrical Installation** 18th Edition

Inspection and **Testing**

Product Design (Access)

Engineering

Range of A Levels

Physics

Maths

Product Design

LEVEL

Higher Apprenticeship Award, Certificate, Diploma NVQ

MEng Hons Mechanical Engineering

MEng Hons Chemical Engineering

BEng Hons Advanced Vehicle Engineering

BEng Electrical BEng Hons Electrical and Electronic Engineering Power r Engineering

BEng Hons Mechanical Engineering Hons Engineering Product Design BSc Product Design BSc Product Design and Development Engineer

BEng Hons Electronic and Computer Systems

Engineering

HNC Engineering (Mechanical)

Rail & Rail Systems

Engineering

Network Engineer HTQ

LEVEL

Foundation Degree HND Award, Certificate, Diploma NVQ

LEVEL

Degree Apprenticeship Degree (with or without Honours) Graduate Certificate / Diploma Award, Certificate, Diploma NVQ

6

Integrated Master's Degree Award, Certificate, Diploma, NVQ, Master's Degree Postgraduate Certificate / Diploma Postgraduate Certificate in Education

MEng Hons Chemical Engineering

MEng Hons Mechanical Engineering MSc Electrical and Electronic Engineering

MSc Mechanical Engineering

MRes General Engineering

LEVEL

LEVEL

Doctorate (PhD or DPhil) 8 Award, Certificate, Diploma

(PGCE)

PhD Chemical, Process and Energy Engineering

PhD Engineering

PhD General Engineering

PhD Mechanical Engineering

PhD Production and Manufacturing Engineering

Doctor of Science

T Level, includes 45-day industry placement

Direct yr2 entry on to LSBU degree programme on successful completion

APP Apprenticeship

F Foundation year available

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