

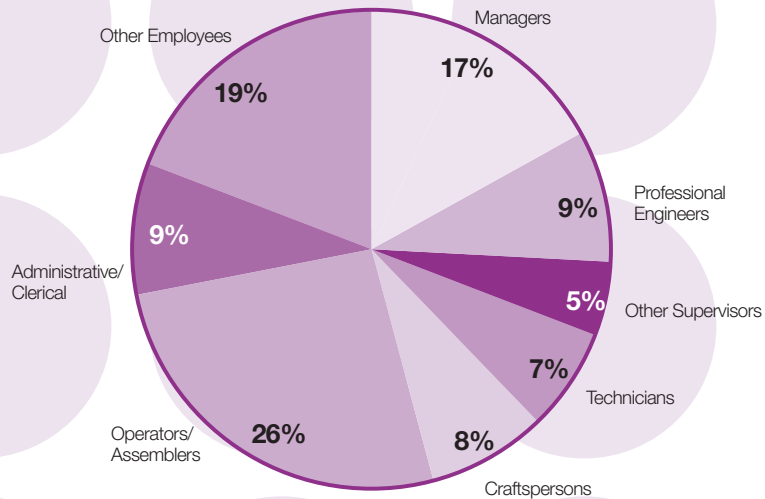


# Engineering

## What's happening?

- Despite decreasing employment levels over recent years engineering still remains important to Hertfordshire in terms of employment. This is mainly concentrated in Stevenage.
- The South East of England has approximately 11,500 engineering manufacturing companies. 41% of these employ five or fewer people.
- London is one of the smallest UK regions for engineering with only 5,220 engineering manufacturing companies. 36% of these employ five or fewer people. 40% of companies specialise in metal products.
- Industry trends of downsizing and outsourcing (contacts going to overseas companies) have resulted in a decrease in employment in the South East (3%) since 1998. However, employment in London-based engineering companies has increased by 1.5% since 1998 despite a decrease in the overall number of companies.
- The main skills gaps reported are:
  - London - basic metals and transport equipment.
  - South East – basic metals, aerospace and metal products.
- The impact of technological change will maintain a demand for professional and technical skills and a decline in craft and operator skills. Skill shortages remain across most engineering occupations.

## Who does what?



Source: Labour Force Survey 2006, © Crown Copyright. Figures are for England

## Numbers employed locally

Hertfordshire	6,100
London & South East	119,400
Great Britain	353,400

Source: Annual Business Inquiry, 2005, © Crown Copyright. Figures do not include the self-employed, people under 16 or trainees without a contract of employment. Figures are rounded to nearest hundred.

## How much will I get paid?

Remember – many jobs will demand minimum entry qualifications. Those earning high salaries are usually well qualified and experienced and will continue to learn throughout their working life.

	Average annual salary
Pipe Fitter, Welder, Tool Setter Operator, Engineering/Maintenance Fitter	£24,305
Chartered Electrical/Electronic Engineer	£36,103
Electrical & Electronic Technician	£26,226
Production Manager	£47,688

Source: Annual Survey of Hours & Earnings 2005, © Crown Copyright. Salary rates have been calculated using the average, gross pay (before deductions) for full-time workers in the UK.



## What we think will happen

- The most significant area of future skills shortage in engineering in the UK is going to be at technician level (level 3). The main supply of technicians comes from further education, other post-16 education and Apprenticeships.
- There is an increased demand for more flexible, 'multi-skilled' workers, who have both electrical and mechanical engineering skills. Traditional supervisor skills will be less in demand, but team leader skills will increase.
- Skills shortages within the industry are likely to become more severe in the next five to ten years if more young people do not enter the industry, as the current workforce is an ageing one.
- The engineering Apprenticeship has the largest number of apprentices in training of all sectors in the economy.
- Environmental audits of manufacturing businesses are becoming more commonplace and they will increasingly need to reduce effluent and toxic waste.
- There will be a new qualification called a Diploma in Engineering available from September 2009. This will help people prepare for university, college or work. Look out to see whether it's going to be on offer in your area.

## Is this you?

- Good at communicating ideas and theories
- Always pay attention to detail
- Interested in craft, design and technology

## What local students did in 2006

In 2006 a total of 1,383 Year 11 local school leavers entered full-time employment or work-based training. Of this number, 18 went into engineering related work

Source: Connexions Hertfordshire 2006.

## Some job suggestions

- Chartered/Incorporated Engineer
- Chemical Engineer
- Engineering Craftsperson/Technician/Operator
- Sheet Metal Worker/Plater/Fabricator

## Next steps...

**If you're serious about this type of work - FIND OUT MORE!**

Use your Connexions area or visit your local Connexions Centre or One Stop Shop for information about jobs; qualifications; local training; further and higher education; skills and personal characteristics; rates of pay and working conditions; local, national and international employers.

## Really useful websites and resources!

SEMTA - Sector Skills Council for Science, Engineering and Manufacturing Technologies – [www.semta.org.uk](http://www.semta.org.uk)

Engineering Construction Industry Training Board

– [www.ecitb.org.uk](http://www.ecitb.org.uk)

Enginuity – [www.enginuity.org.uk](http://www.enginuity.org.uk)

SCENTA – Science, Engineering and Technology

– [www.scenta.co.uk](http://www.scenta.co.uk)

Why not Chemical Engineering

– [www.whynotchemeng.com](http://www.whynotchemeng.com)

Apprenticeships – [www.apprenticeships.org.uk](http://www.apprenticeships.org.uk) or call the **helpline on 08000 150600**

Diploma in Engineering – [www.engineeringdiploma.com](http://www.engineeringdiploma.com)

E-Clips (information about careers and lifestyle issues)

– [www.connexions-hertfordshire.co.uk](http://www.connexions-hertfordshire.co.uk)

Fast Tomato (interactive careers guidance)

– [www.hertsft.com](http://www.hertsft.com)

Jobs4u (careers database)

– [www.connexions-direct.com/jobs4u](http://www.connexions-direct.com/jobs4u)

Working in Booklets – case studies of people in a variety of jobs. Try your Connexions area, or download them from

[www.connexions-direct.com](http://www.connexions-direct.com). Go to careers>career resources>download publications>Working In.

**Please contact your Connexions Personal Adviser for further information and advice.**

**Freephone: 0800 389 3258 • [enquiries@connexions.hertscc.gov.uk](mailto:enquiries@connexions.hertscc.gov.uk) • [www.connexions-hertfordshire.co.uk](http://www.connexions-hertfordshire.co.uk)**

**The information in this leaflet can be made available in other languages and formats. Contact the Information Team on 01462 704 914.**

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