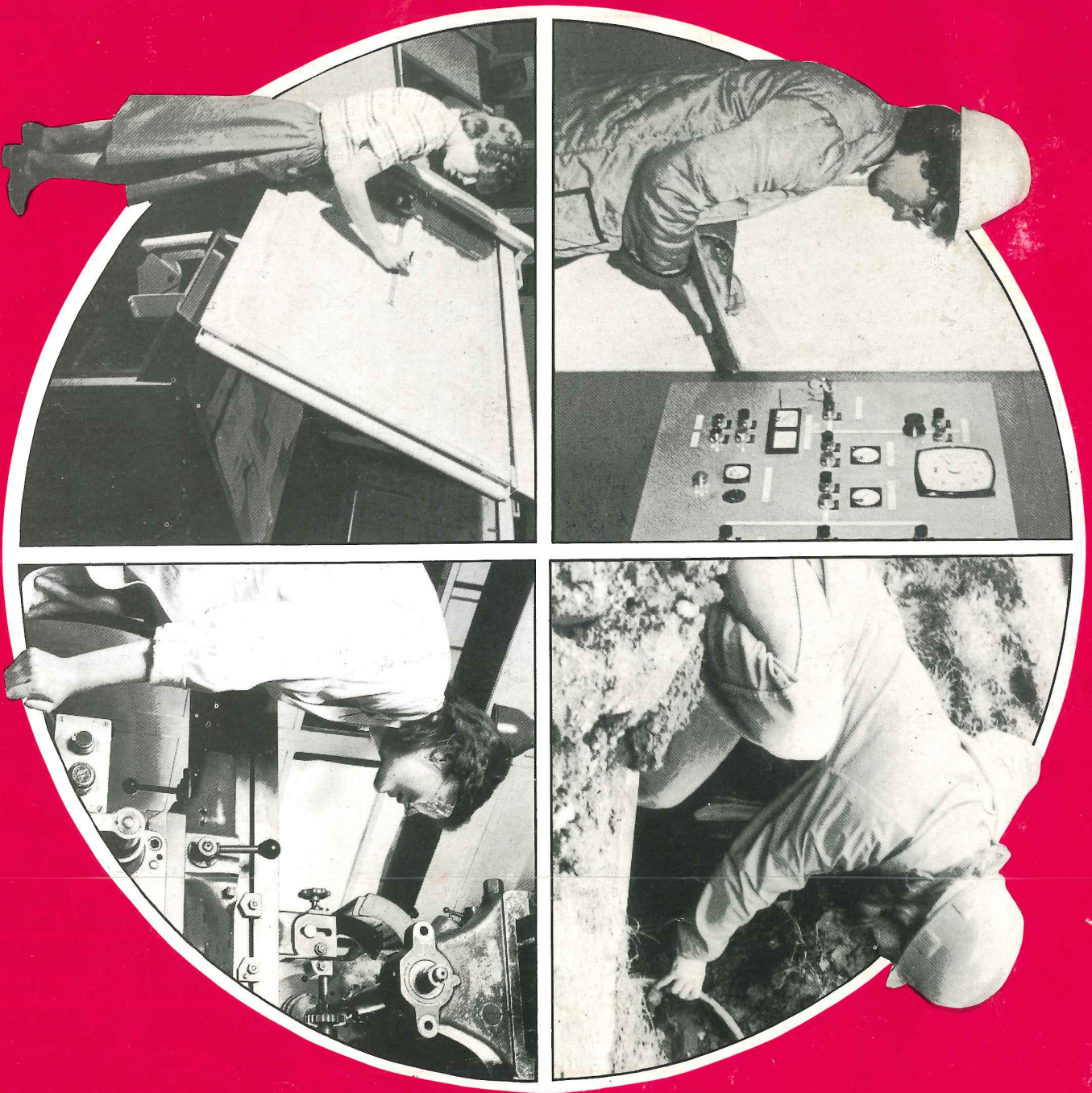
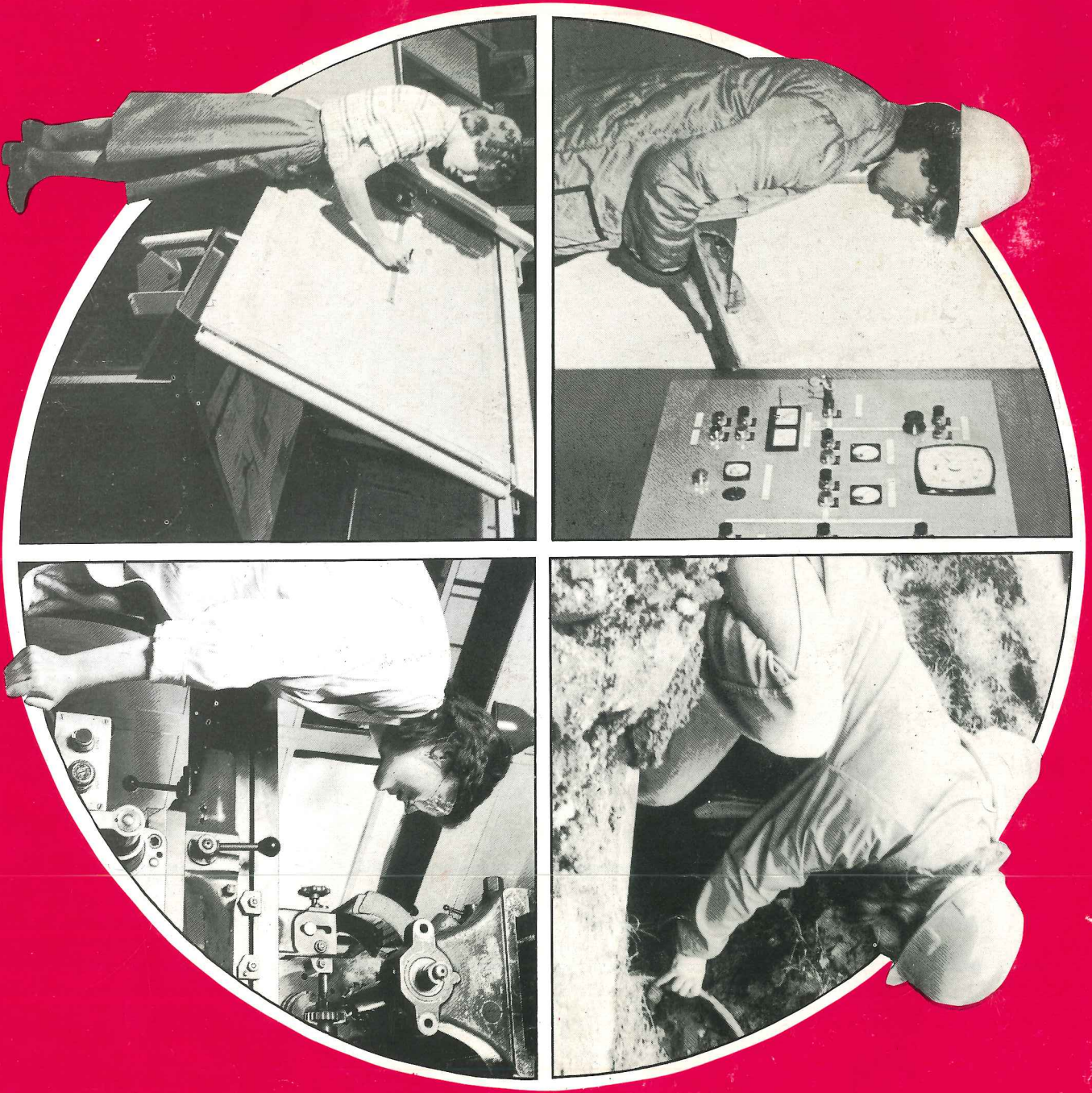


WOMEN IN ENGINEERING



WOMEN IN ENGINEERING



WOMEN IN ENGINEERING

Engineering is still a male dominated profession, but that doesn't mean that the work of a professional engineer cannot be done (or be done even better) by a woman, and if you have an interest in mathematics, science and problem solving, you could have the ability to train to become a professional engineer. A woman in engineering is someone special. She has a good clear mind, and an independent spirit. She is special because she is able to act in the profession as a scientifically trained problem solver. There has always been the myth that all engineers wield spanners, wear overalls and get their hands dirty, however, today's professional engineer is more likely to be found in an office or laboratory, making science useful. The professional training of the woman engineer will enable her to make an impact on the world around her.

A professional engineer analyses problems and designs economic solutions by applying the principles of mathematics, science and commonsense. This may involve drawing plans, conducting experiments or simulating reality by constructing a model, which could be either a physical or mathematical one. An engineer is usually a team member working with other engineers, mathematicians, scientists, technicians, craftsperson and operators. In order to work efficiently and productively, the ability to feel at ease with and communicate well with people in speech and writing is an important characteristic that an engineer should possess.

Many firms recognise the increasing need for well qualified engineers, and accept that although historically the majority of these have been drawn from the male half of the population there are no fundamental considerations which exclude the female half.

MUCH POTENTIAL TALENT HAS ALREADY BEEN WASTED — DON'T WASTE YOURS

.....

CONSIDER ENGINEERING

Professionally it makes no difference at all to be a woman engineer. Women can be equally as successful as men, both in their University training and subsequent careers (as girls at Loughborough University of Technology have shown). One of the real problems in engineering, which is a rapidly changing technology, is that of returning to work after a period of absence to have a family. It is essential not to lose touch with the profession, as employment opportunities do exist but the success depends very much on individual motivation and interest. As one female engineer said "My role as a wife and a mother combined with my job as a chemical engineer provides me with a very satisfying life. The combination is a challenge but for me it is certainly worthwhile."

COVER ILLUSTRATIONS:

Top left: Keeping the log book up to date in the control room.

Top right: Checking the laying of underground electricity cables.

Bottom left: At the drawing board.

Bottom right: Using a milling machine during workshop practice.

Training and Entry Requirements

Engineering skills as well as the technical expertise are developed during training. A professional engineer usually starts her career by enrolling on a degree course at a university or polytechnic. There are many different fields in engineering so there will always be one area which corresponds with your interests. Some of the principal fields are chemical, electrical and electronic, mechanical, civil and production engineering although other branches such as aeronautical, materials, transportation, environmental and mathematical/computer engineering are also popular. It is important to remember, however, that all engineering degrees have a basic core of applied physics and mathematics. Your problem solving skills, no matter what your degree, can be used in a great variety of situations.

The entry qualifications required to study for an engineering degree vary slightly depending on the institution and course chosen. The minimum entry requirements are two GCE 'A' levels, usually in mathematics and physics. Alternatively a TEC certificate at appropriate standard with at least four GCE 'O' levels or CSE Grade 1 including mathematics, English and a science subject, are required. Some students use ONC, OND, HNC, HND as a stepping stone to a degree course.

Sandwich Courses

Many girls decide to train on a thick or thin sandwich course. This means periods of industrial training are incorporated into the overall degree course which will usually be of a four year duration. One academic term a year spent in industry is the basic format for a thin sandwich course whereas a thick sandwich implies a whole academic year is taken on industrial training. This is frequently the third year of a four year course. In order to qualify for Chartered Engineer (CEng) status an approved degree course must be followed by relevant industrial training and responsible experience.

Sponsorship

Many companies are prepared to sponsor promising students on engineering degree courses. Sponsorship arrangements vary but some companies give financial help in addition to the girl's LEA grant, others pay the girl wages throughout the course. Most companies offer employment to their sponsored students after graduation, some insist that sponsored students work for them for at least a year on graduation, others may require the girl to take the course on a sandwich basis.

A list of companies offering sponsorship is available from the Careers and Occupational Information Centre, Manpower Services Commission, Moorfoot, Sheffield S1 4PQ.

Scholarships

National Engineering Scholarships

National Engineering Scholarships are available from the Department of Education and Science to encourage able young people, both boys and girls, to prepare for careers in engineering and the manufacturing industry. They are awarded for a combination of good academic achievement and the personal qualities needed for success in industry. These scholarships are awarded to students undertaking a degree course in engineering and are presently worth £500 per annum, free of tax. They can be held in addition to a Local Education Authority (LEA) grant.

Further information can be obtained from the Secretary of the Committee for National Engineering Scholarships, Elizabeth House, York Road, London SE1 7PH.

Caroline Haslett Memorial Trust

This trust offers a number of scholarships worth £300 per annum to girls who are expecting to follow a University course leading to a degree in engineering, mathematics or physical sciences. They can be held in addition to a LEA grant. Details and application forms may be obtained from the Secretary, Caroline Haslett Memorial Trust, 25 Fouberts Place, London W1V 2AL.

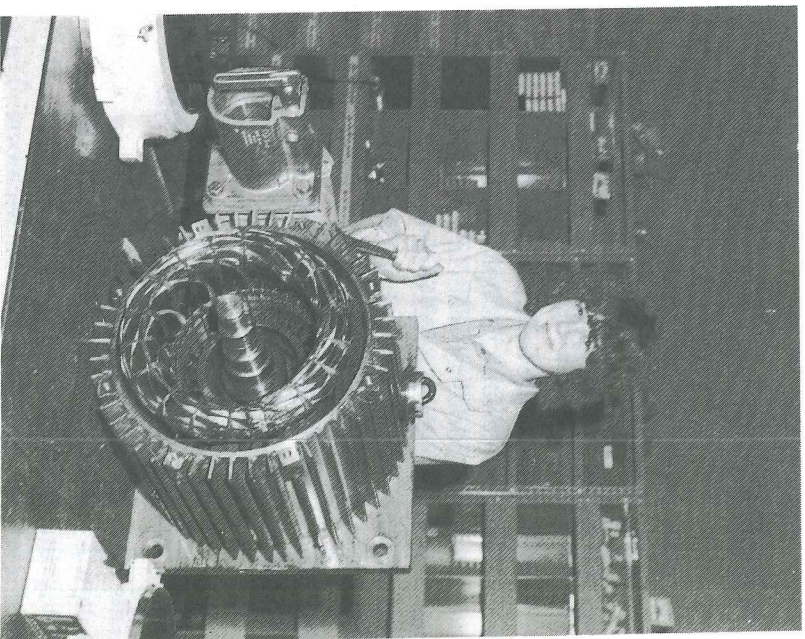
Being accepted as a female engineer is not the fight against male chauvinism you may expect. Once you have shown yourself to be a capable engineer, that is all that matters. The next few pages include personal accounts by women who have graduated from, and others who are currently training to become professional engineers at, Loughborough University of Technology. Though studying different disciplines they are all looking forward to a rewarding career in the engineering profession. Their comments and insights may help you to sort out your own thoughts about engineering and whether it could be the career for you.

CAROLINE FENTON

4th Year B.Tech. Engineering Science & Technology Student;
Joint holder 1981 Sir Robert Martin Prize
for overall best University student

"They seemed keen to accept me, particularly as they had not previously had a girl student."

I am in the final year of a sandwich course in Engineering, Science and Technology. It is essentially a mechanical engineering course but offers a wider choice of final year subjects. I made the decision to study engineering at university when I was in the sixth form after having also considered teaching and accountancy. Mechanical engineering appealed to me since it is a broadly based discipline, and I knew more about it than the other branches of engineering as my father is a mechanical engineer.



Undergoing industrial training.

When I was thirteen he taught me how to use a milling machine and he used to take me around factories whenever possible. I realise that I was lucky but other girls shouldn't be put off engineering if they don't have these opportunities. It is usually possible to arrange visits to companies either with the school or on an individual basis.

My father suggested that I look towards sandwich courses and sponsorship. This was also reinforced by a well-informed careers adviser and an understanding sixth form tutor. I obtained sponsorship with a local company but for various reasons decided after one year that I did not feel that I wanted to be 'tied' to them. Sponsorship has its pros and cons.

After two years at university, I spent the next fifteen months working for Brush Electrical Machines Ltd obtaining industrial training. They seemed keen to accept me, particularly as they had not previously had a girl student. I started on shop-floor training, which involved spending three weeks in various assembly departments and the machine and fabrication shops. This was 'boiler-suit' work and meant getting my hands dirty if I was to join in. I thoroughly enjoyed it all and got on very well with everyone. It not only gave me a basic knowledge of the company's products but also an insight into management-worker relations, trade union work and other related skills. I also spent time in various design and drawing offices and in the Industrial Engineering Department. This was essentially a production area responsible for selecting machines and methods to be used in production. I think the engineering workers were probably more co-operative with me because I was a woman. As long as you know what you are doing and gain the respect of people, the job is challenging and satisfying.

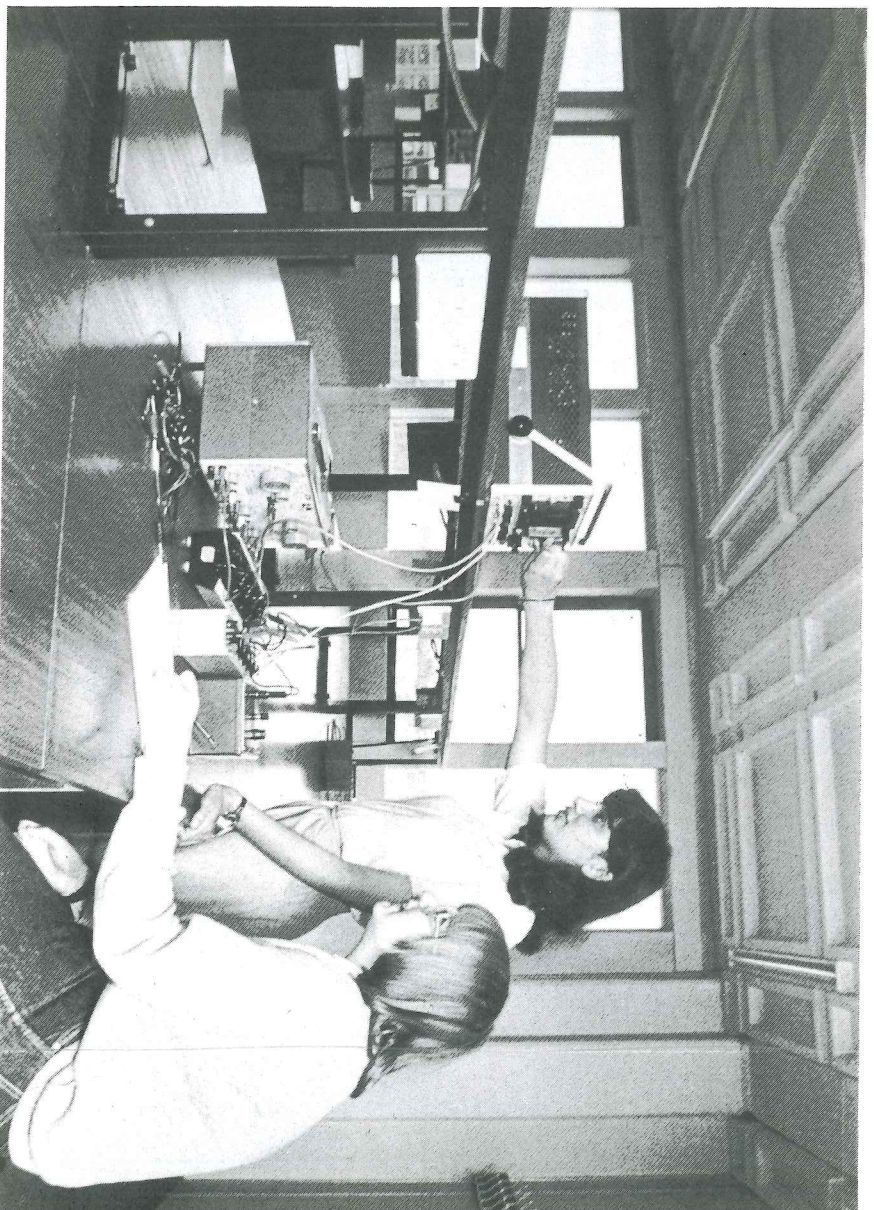
When I was young I was fascinated by trains but now my interest is in canals and industrial archaeology. I spend some of my time working as a volunteer on canal restoration. As part of my industrial training requirements I combined this interest with my work and completed a dissertation on the future of waterway transport in Great Britain. I also help with local youth clubs (5-16 year olds). This I find is a great challenge and provides a complete change from engineering, which I think can be valuable.

I recently found time to get married. My husband is also a mechanical engineer who graduated two years ago. He really appreciates the fact that I'm an engineer too, since we both have sympathetic listeners on technical matters!

BALJIT ATHWAL

1st Year B.Sc. Electrical and Electronic Engineering Student

“I am in no way daunted by the thought of competing with males.”



Electrical engineering laboratory work.

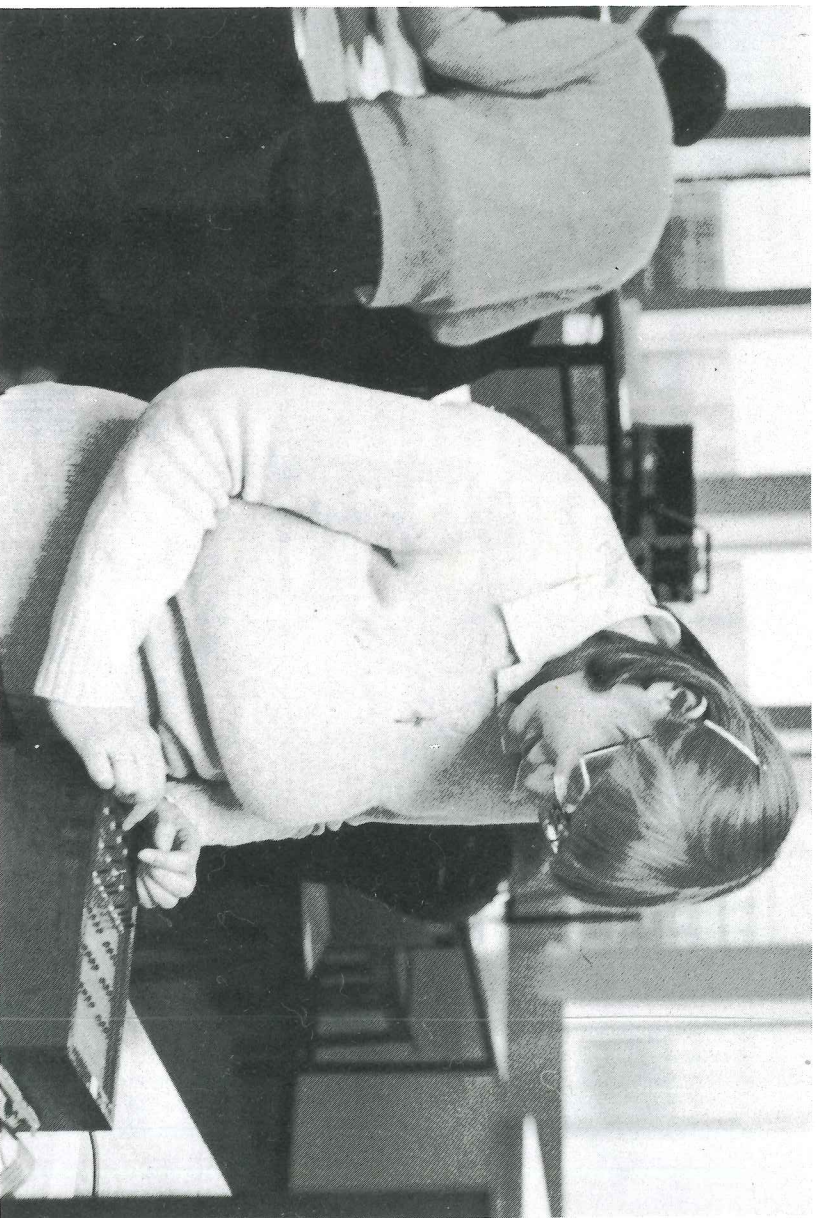
I was born in India but my parents immigrated to Britain when I was a baby. I have lived in the West Midlands practically all of my life. I always knew I wanted to go on to higher education, not because I enjoy studying so much, but because the alternative (for an Indian girl anyway) of leaving school at 16, finding a job (usually in a factory) and getting married in a few years didn't appeal to me. My parents encouraged me to study because they wanted me to become a doctor, but I wasn't too sure what I wanted to do except I knew that any career I chose would have to involve maths, physics and chemistry. After reading careers literature and university prospectuses I decided that electrical and electronic engineering was the best course for me considering my interests and abilities. Also, I was aware that it offered good job prospects. My parents weren't too pleased with my decision, perhaps because there are no engineers in my family.

I didn't manage to get sponsorship, but I console myself with the fact that last year the number offered was reduced drastically. However, I had no difficulty in getting offers of places at university. I am prepared to meet prejudice in my chosen career because of my sex and my colour, but I am in no way daunted by the thought of competing with males. I'm not sure yet how I'm going to arrange to have a full time career and a family but I've no doubt that I'll work it out when the time comes.

I am at present in my first year and I was a little anxious about the course during the summer holidays before coming to university because I didn't really know what to expect. However, I now know I've made the right decision, and I have high hopes for a future career in engineering.

ANGELA FULGONI
2nd Year B.Sc. Electrical and Electronic Engineering Student

“More girls now consider engineering as a career, although many people still express surprise at the idea.”



Programming a microprocessor.

I first became interested in electronics in the 4th form at school, but didn't mention it to anyone until I could find out more details about engineering as a career. I went to an all girls' convent grammar school and, although they didn't know much about the engineering field, they were still very encouraging when I finally explained in the 6th form that I was interested in electrical and electronic engineering.

More girls are now considering engineering as a career, although many people still express surprise at the idea. There are six other girls as well as myself in my year reading electrical and electronic engineering. Most of the time is spent solving technical problems using scientific and engineering knowledge but at the end of the first academic year we did six weeks' workshop training in the Centre for Industrial Studies, learning the basics of milling, grinding, pattern making and foundry work.

In addition to my academic work I have been on industrial visits with the Loughborough University Women's Engineering Society and helped with their schools careers talks. I also like to spend time swimming, playing tennis and squash, and short wave radio listening. This involves listening to S-W radio stations and sending reception reports to the station who then verify with a 'QSL' — a pretty postcard. The aim is for the stations to improve their service as it tells them about signal strength, interference, noise and propagation.

Engineering is such a broad field that frequently one's recreational interests and vocational work can complement each other, as it has in my case.

SUE WARD

B.Sc. Civil Engineering;
Ph.D. Research Student

“However, there were relatively few problems – we all made allowances for each other and my sense of humour came in useful.”



Taking levels on site.

“Why don’t you become a civil engineer – you’re made for it!” This was the rather obscure piece of careers advice I was given by a woman teacher at my all girls’ school. However it started me thinking, “What is a civil engineer?” and “Why not?” Having finally decided to become a civil engineer, I had to find a university course to suit me. (I was taking physics, pure maths and applied maths ‘A’ level.) I opted for a four year sandwich course as I couldn’t bear the thought of three successive years behind a desk. On my “thick sandwich” type course I spent two years at University followed by a year in industry prior to my final year back at University. I thoroughly enjoyed my undergraduate days, the course was hard work, but it was very varied and quite practical, one hour could be spent outside (all weathers!) taking levels and the next could be a lecture on fluid in pipes for example.

I had to learn fairly quickly how to balance study and relaxation, especially when friends on ‘Arts’ courses appeared to have more flexible timetables and no laboratory work. I felt it was better to work sufficiently hard to do well, but also to leave adequate time to enjoy myself, as there is so much more to university than just study. I played table tennis for the university and this gave me the opportunity to spend several weekends at other universities whilst taking part in tournaments.

During my industrial year I worked in the soil mechanics section of a firm of consulting civil engineers. Here I dealt with site investigations, slope stability problems etc, doing calculations, plotting graphs and working in a drawing office. I also spent three months on a site investigation for the Thames Tidal Defence Scheme. Initially I was a bit concerned about how I would get on with the drilling crews, most of whom had been in the trade since before I was born. However, there were relatively few problems – we all made allowances for each other and my sense of humour came in useful.

I decided against sponsorship as I didn’t want to feel tied to any particular firm, and with hindsight I still think that this was the correct decision.

Having just completed three years research in the field of geotechnics I am now job hunting, and am fairly hopeful of finding a job before I leave, as in this branch of civil engineering jobs are relatively plentiful at the moment.



UNDERTAKING PROJECT WORK IN MATERIALS
ENGINEERING LABORATORY

"I'd advise other girls to look seriously at engineering as a career. It gives you job satisfaction."

"I worked for consulting engineers in the summer before University — as a general dogbody, but it was a start."



A PRODUCTION ENGINEER GAINING WORKSHOP
EXPERIENCE AS PART OF HER DEGREE COURSE

"Although I still get a lot of teasing, if ever I don't understand something there is always somebody to help."



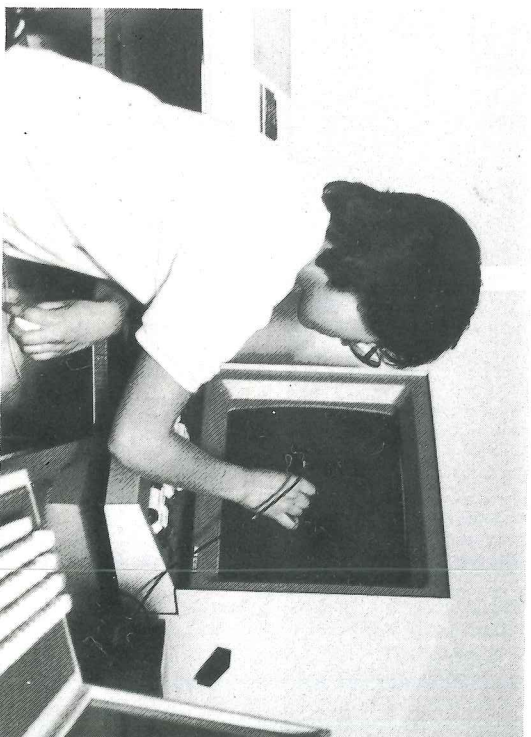
A WELCOME COFFEE BREAK AND A CHANCE TO TALK
INFORMALLY TO OTHER RESEARCH STUDENTS



GIRLS ON AN INSIGHT COURSE FINDING OUT MORE ABOUT AERONAUTICAL ENGINEERING

"I found out about the Insight course from the school's careers officer. One week on the course helped me more than months of ploughing through books and leaflets."

"At school the headmaster said 'Silly girl, she'll change her mind when she sees where she was.' Wrong he was."



A MATHEMATICAL ENGINEER USING A LIGHT PEN ON AN INTERACTIVE COMPUTER AIDED DESIGN STUDY

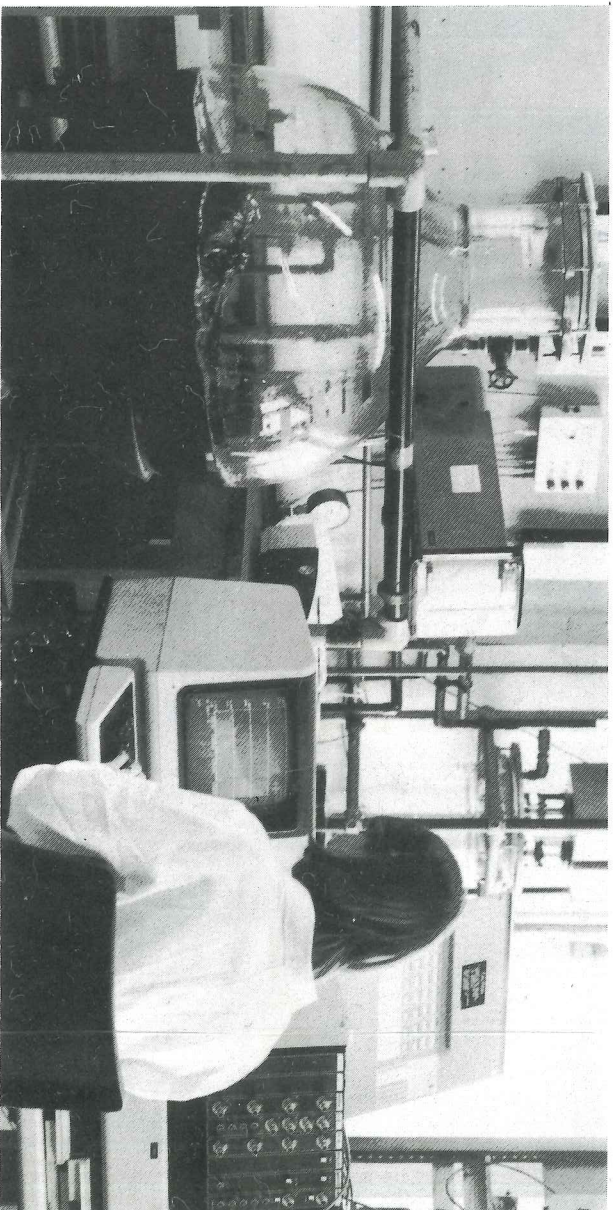
A MECHANICAL ENGINEER CATCHING UP ON HER PAPERWORK



"The work I am doing now is very varied, it incorporates design, estimating and the managerial side of dealing with a labour force on site."

RUTH DOWNING
B.Sc. Applied Mathematics,
M.Sc. Plant Engineering in the Process Industries

"I've found that being a woman engineer didn't appear to go against me when I was accepted for my job as a Development Engineer."



Using a computer to control chemical processes.

I was vaguely interested in engineering when I was doing my 'A' levels, but decided to do my first degree in Applied Mathematics at Birmingham University. I enjoyed the engineering mathematics part of my course and decided to look for an MSc course that would take me more into the field of engineering. The one year MSc course in Plant Engineering at Loughborough University just suited my needs, as it was a "wide course" covering many aspects of engineering without requiring any initial specialist knowledge of a particular branch of engineering.

The area I've found most interesting is that of process control, which involves the running and managing of chemical reactions in industrial manufacturing plants producing any product from fertilizers to medicines and food. Process control used to be supervised by someone called a "process operator", but now the processes involved are often much more complex due to the need to recycle components and to save energy and precious raw materials. This means that there are often time delays and the process operator can then find the job extremely complicated and the chances of missing a potential hazard are increased. Due to the nature of these complexities, and for safety reasons, more and more control systems are being automated. A computer is programmed to run the process and any unknown contingencies arising can be dealt with automatically, or brought to the attention of a process operator.

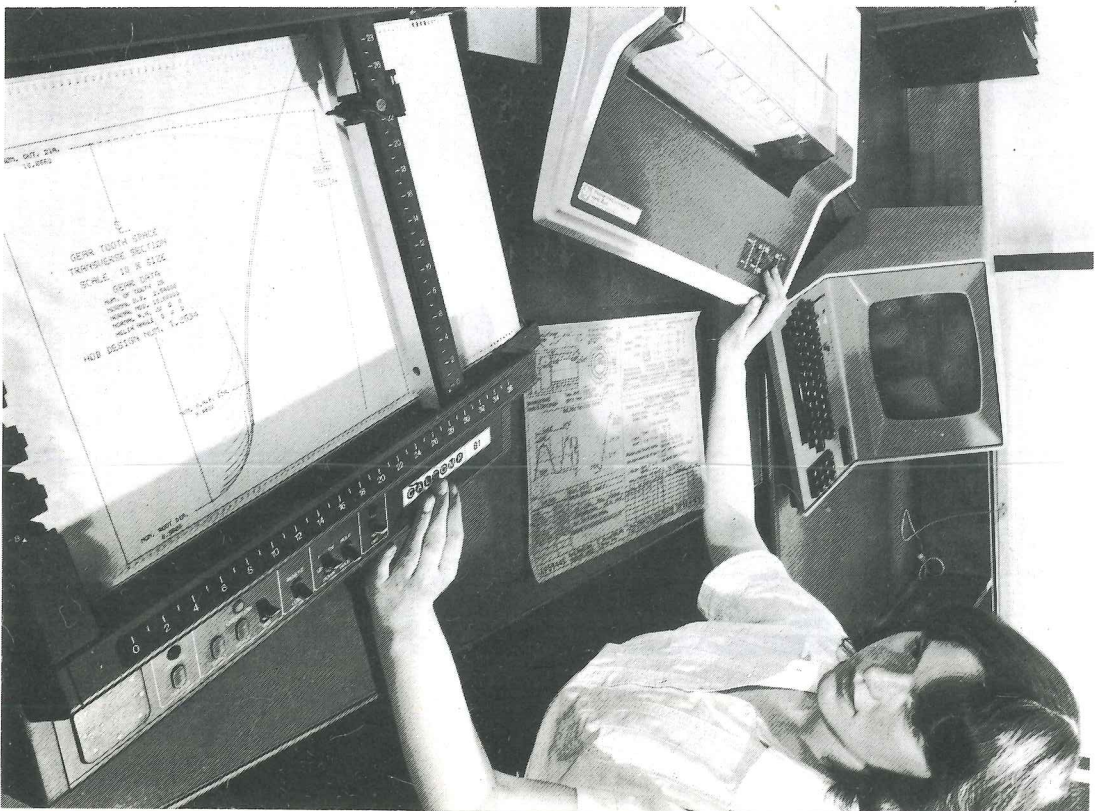
I've found that being a woman engineer didn't appear to go against me when I was accepted for my job as a Development Engineer for Shell International Petroleum Company in The Hague, Netherlands. I'll be working in a junior management position, but as one of a problem-solving team. The working language of Shell at The Hague is English, although I'll also be given lessons in Dutch. Shell provide accommodation in a flat, pay for removal expenses, and pay for one trip home for me to England each year.

I'm engaged, and my fiance is also moving over to The Hague. When he has finished writing up his thesis in polymer technology he hopes to get a job over there too. We are both optimistic that engineering will provide us with a secure future.

SARAH LONSDALE

2nd Year B. Tech. B. Eng.
5 year extended course
Mechanical Engineering Student

"...satisfying feeling when you've solved a problem..."



Using a computer in the design of gears.

My mother jokingly suggested an engineering career to me when I was thirteen and happily spending my time with Meccano, steam engines and building Airfix models. At that time my brother was applying to universities to read aeronautical engineering, and I looked at the prospectuses that he had received. I decided then that I was interested in chemical engineering and also realised the importance of taking physics and chemistry when I had to make my 'O' level options. The headmaster tried to discourage me from engineering but individual teachers were helpful. My physics teacher told me about a course to give girls an insight into professional engineering run by GEC-Marconi, Essex. It was on this course that I decided to do a "thin sandwich" mechanical engineering degree rather than chemical engineering.

The work at university followed on naturally from school work. The work load is not too heavy, but I have to stay organised and work consistently as once you're behind it's difficult to catch up. All my training periods so far with my sponsor, David Brown Gear Industries Ltd., have been spent in their training school and working on the shop floor. I have not found the work difficult and appear to have got on well with everyone I have worked with.

The main attraction of engineering to me is the very satisfying feeling when you've solved a problem, and yet at the same time each problem appears to have no one solution, but sometimes a compromise of several is required. You have to use your initiative to improvise when necessary.

I'd say an engineer is someone who solves problems that arise through the design, development and manufacture of anything, and someone who uses basic scientific principles and constantly changing technology. Whatever you may think about the work load, you'll never be bored!

ALISON HARDING

B.Tech. Production Engineering and Management

"If you asked me whether other women should look at engineering, my answer would be 'Yes!' Industry needs more people with straight-forward commonsense, enthusiasm and engineering knowledge."



Checking the setting on a lathe.

I graduated last year and now I'm Senior Test Engineer in the Indoor Tyre Testing Department at Fort Dunlop, the Birmingham headquarters of Dunlop Limited. I'm concerned with introducing data acquisition and computer control of tyre testing machines to the department. At present there is a single mini-computer with graph plotter. I've written programmes for it so that the machine operators can type in results and obtain graphical output of values such as "slip-angles" and "rolling resistance" of tyres. This has already saved considerable time for the technicians. The next stage is to decide on the overall system to adopt, and to begin modifying machines where necessary to enable data acquisition apparatus to be used directly on the machines. Although I've only recently joined the company this fairly long-term project has been left entirely in my hands, so it should be challenging and ultimately rewarding for me. The technical aspects make up about 30% of my work load. The rest of the time is spent determining exactly what people want, how to achieve those aims, how to get the money which is needed, delegating the work, and even finding out whose toes not to tread on!

Engineering did not immediately spring to mind at school. I had a strong arts bias at 'O' level, but I was fortunate in that I chose physics as my compulsory science subject. I enjoyed maths and physics, but wanted to use them in a practical way. Everything I considered seemed "dry" and had little contact with people. Eventually, on a school visit to Birmingham University, I "stumbled" onto engineering, and in particular production engineering. My mother encouraged me to write to the Institution of Production Engineers (IPE), to find out more about careers in engineering.

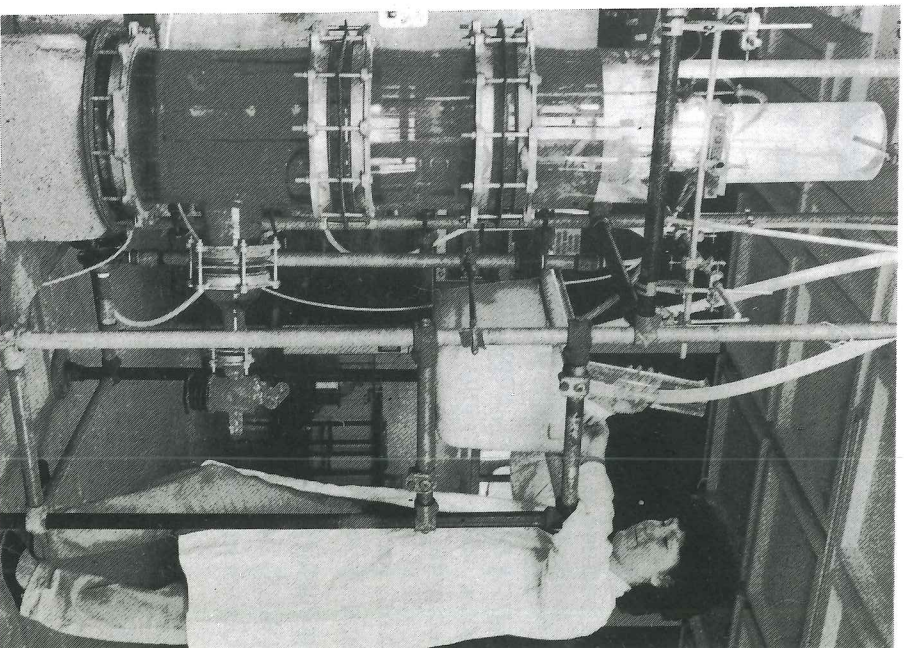
I decided to do a thin sandwich degree course in Production Engineering and Management. My time-table was pretty full with lectures, practical laboratory work, project work and report writing, but it was not excessive as long as you kept on top of the work. There was also time for non-academic activities - I played basketball, squash and netball, and was also secretary of the IPE student section, and president of the Loughborough University Women's Engineering Society (LUWES) in my final year.

I was sponsored by R. H. P. (Bearings) in Newark and during my industrial training periods I worked in most of their departments. This helped me to understand how the theory I'd learnt at University was put into practice. I went round the shop floor, the offices, the Production Engineering Department, Quality Control Section, and even did "nights" a few times.

Engineering is involved in every aspect of life. You just can't escape it, or its effects. It's not just working with machinery, or electronics, or chemicals, in isolation but also the interdependence between these and society and the people who are going to use and work with them. If you asked me whether other women should look at engineering, my answer would be "Yes!" Industry needs more people with straight-forward commonsense, enthusiasm and engineering knowledge. If you have an interest in problem solving and in how things work, you'll probably enjoy working in engineering. The engineering field is very diverse, so you should be able to find some aspect you'll enjoy. An engineering degree can also open the door to other careers such as sales, marketing, teaching, or even accountancy.

KATRINA WILLIAMS
3rd Year B.Sc.
Food Process Engineering Student

“I think many girls are not aware of engineering as a career possibility and that a female point of view has advantages in the field.”



Measuring the efficiency of an air-lift pump.

My natural inclination at school was towards the Arts subjects because I was better at them than the Sciences. I decided, however, that it would be more worthwhile to pursue the sciences as the job prospects seemed better. At school I was the only one out of 40 people in my year pursuing an engineering course in further education. Several of my family worked in the engineering industry, but there were no professional engineers and certainly no women engineers.

An engineer can be described as someone who applies scientific knowledge to the solving and understanding of physical problems, and uses it to create useful products, and in my field this is food. I chose this particular degree for two reasons – the course content and the future career prospects. The course sounded attractive and looked very varied too, subjects range from different areas of chemistry to law and management, and from microbiology to plant design. I am now in the 3rd year of my “thick sandwich” degree course and in the summer started a year long industrial training period at the Aluminium Plant Vessel Company (APV) in West Sussex, which makes equipment for use in the liquid food industry. My main work is to be concerned with the production of industrial alcohol by fermentation of molasses. However, for the next few weeks whilst the equipment for this project is being assembled I have the job of assisting an American who is coming to work on the effects of ultra-high temperatures on oysters!

The university course has been more difficult than I had originally expected, but I have worked steadily and kept up-to-date. I still manage to make time for leisure pursuits, such as swimming, hockey and travelling. My interests range from the “Creative Arts Society” to being on the committee of the Chemical Engineering Society and supporting the Loughborough University Women’s Engineering Society – especially in their schools’ career visits.

I think many girls are not made aware of engineering as a career possibility and that a female point of view has advantages in the field. Women shouldn’t be afraid of trying to enter what is generally thought of as being “a man’s world”. I feel that engineering will be a challenging area to work in and although it will demand a great deal from me, I believe it will provide a rewarding career for all my working life.

**“When I say I’m an engineer, people look at me and say
.... You’re a what?....”**

This is a typical reaction to a woman engineer, and because they are still in the minority, any girl thinking of taking up engineering should not be too sensitive about people’s reactions. If you want to become a professional engineer don’t be deterred.

The girls in these case studies aim to become professional engineers who can choose from a wide variety of careers. Some may work in research and development, design, production or sales. Some may enter into management and others may digress into accountancy, teaching and lecturing.

You, too, could accept the challenge of an engineering career, and look forward to a rewarding and exciting future as these girls have.

If you would like any further information, then please contact the Women’s Engineering Society (WES) or the various professional institutions. Brochures on specific courses are available from University departments. Useful addresses are given on page 16.

WOMEN’S ENGINEERING SOCIETY

The Women’s Engineering Society (WES) aims to promote the study and practice of engineering among women by encouraging the education and training of women in universities, colleges and engineering workshops, and to assist those who have practised or are practising as professional engineers. Finally, it enables women engineers to meet and to exchange ideas on education, training, employment and career development in general.

At Loughborough University of Technology (LUT) not only is there an Engineering Society, but also the Loughborough University Women’s Engineering Society (LUWES) which has been formed to further the aims of the WES.

LUWES is a group where women undergraduate engineers of all disciplines can meet together for technical meetings and visits as well as providing mutual support and advice. Through LUWES it is also hoped to encourage more girls to consider engineering as a career. The LUWES schools’ liaison scheme is a major area of activity and assists the Women in Engineering project which is directed by Dr Susan Bullivant at LUT. It involves school presentations in which the women engineering undergraduates act as role models by describing their engineering experience to date, and life at university in general. This activity also helps the undergraduates to develop their communication skills, which ultimately gives them confidence in the presentation of technical work. Regular social functions are also held.

HOW TO OBTAIN INFORMATION

The following notes will be of benefit to prospective students seeking information on courses available.

1. Courses at Universities

Refer to the UCCA compendium which lists every degree course offered by a university. CRAC publishes degree course guides, each of which contain a list of addresses of universities. Refer to each individual prospectus for details of particular courses. Free copies can be obtained by writing to the Registrar of the University concerned.

2. Courses at Polytechnics

Refer to the Polytechnic Courses Handbook. CRAC course guides include CNAA degree courses at Polytechnics.

3. TEC and Craft Courses

Detailed information is best obtained from your local technical college. Each Regional Advisory Council publishes a Compendium of Courses in Technical Colleges.

4. Entrance Requirements

Basic qualifications for entrance to each course are given in the UCCA Compendium and the Polytechnic Courses Handbook.

5. Applying for admission

Application to universities is through UCCA. Forms are available in schools and colleges or from UCCA.

There is no centralized procedure for polytechnic courses; students apply direct using the Polytechnic Application Forms, which are available in schools and colleges or from the polytechnics.

Technical Colleges hold admission days, the dates of which are widely advertised in the press, public libraries etc.

6. Insight Courses

Details of the course and application forms can be obtained from the EITB.

USEFUL ADDRESSES

Royal Aeronautical Society, 4 Hamilton Place, London, W1V CBQ
Institution of Chemical Engineers, 165-171 Railway Terrace, Rugby, CV21 3HQ
Institution of Civil Engineers, Great George Street, London, SW1P 3AA
Institution of Electrical Engineers, Savoy Place, London, WC2R 0BL
Institution of Electronic and Radio Engineers, 99 Gower Street, London, WC1E 6AZ
Institution of Energy, 18 Devonshire Street, Portland Place, London, W1N 2AU
Institution of Gas Engineers, 17 Grosvenor Crescent, London, SW2X 7ES
Institute of Marine Engineers, 76 Mark Lane, London, EC3R 7JN
Institution of Mechanical Engineers, 1 Birdcage Walk, London, SW1H 9JJ
Institute of Mining Engineers, Hobart House, Grosvenor Place, London, SW1X 7AE
Institution of Municipal Engineers, 25 Eccleston Square, London, SW1V 1NX
Institution of Production Engineers, Rochester House, 66 Little Ealing Lane,
London, W5 4XX
Institution of Structural Engineers, 11 Upper Belgrave Street, London, SW1X 8BH
Careers and Occupational Information Centre, Manpower Services Commission, Moorfoot,
Sheffield, S1 4PQ
Department of Education and Science, Elizabeth House, York Road, London, SE1 7PH
Engineering Industry Training Board (EITB), PO Box 176, 54 Clarendon Road, Watford, WD1
1LB
The Women's Engineering Society, 25 Foubert's Place, London, W1V 2AL
Careers Research and Advisory Centre (CRAC), Bateman Street, Cambridge, CB2 1LZ
Universities Central Council on Admissions (UCCA), PO Box 28, Cheltenham,
Gloucestershire, GL50 1NY
National Union of Students, 3 Endsleigh Street, London, WC1

The matters covered by this edition of the brochure are naturally subject to change from time to time. Notice of changes will be given in subsequent editions. Students should enquire as to the up to date position when they need to know this.

Acknowledgements

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