Vocational Engineering – Y9 Transition

Engineering is a broad subject which splits into many different disciplines, including chemical, civil, mechanical, and electrical engineering. Engineering graduates are often logical thinkers with excellent numerical and problem-solving skills. The careers open to engineering graduates are wide and varied, although you may wish to choose the career most relevant to your engineering specialization and related skills. This may require extra studying and work experience; if you'd like to become a chartered engineer, for example, you will need to take a postgraduate course (MEng) and gain professional experience.

Engineers tend to be clear thinking and logical. They can follow either instructions or design specifications to the letter. They can take on a lot at once, are prepared for a challenge, aren't afraid of long hours and work hard to gain good results.

It's an engineer's job to fix complex problems, improve and innovate so no matter your discipline all engineering careers are exciting. Engineering is one of the country's broadest sectors and produces most of the UK's exports.

<table>
<tr><td></td><td colspan="2">Engineering Technical Award</td></tr>
<tr><td>Preparation</td><td colspan="2">Most services and products in the world are brought to life through engineering. They are the problem solvers of the world and help shape our future and make a real difference to how we live our lives. If you want to work at the forefront of global development, read up on how to become an engineer.
Websites for further information:

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Subject specific:
The Centre Lathe (technologystudent.com)
How to use a Knurling Tool (technologystudent.com)
The Vertical Miller (technologystudent.com)
The Digital Vernier Caliper (technologystudent.com)
Health and Safety (technologystudent.com)
poster_plastics1 (technologystudent.com)
Research - Metals (technologystudent.com)</td></tr>
<tr><td>Overview of course</td><td colspan="2">The final grade is divided as follows:
40% - Unit 1: Manufacturing Engineered Products (NEA)
20% Unit 2: Designing Engineered Products (NEA)
40% Unit 3: Final 1.5-hour exam (Core Content)
The core content is divided into 4 sections:
1 Understanding the effects of engineering achievements.
2 Understanding properties of engineering materials
3 Understanding methods of preparation, forming, joining and finishing of engineering materials.
4 Solving engineering problems</td></tr>
<tr><td>Short term focus: Term 1</td><td colspan="2">In the September of Y10 you start with Unit 1 Preparation.
Health and Safety
Materials and Processes
Practical skill development.</td></tr>
<tr><td>Careers & Suitability</td><td>This course will suit you if you have:

Hard work and determination
Skills using tool and equipment in the workshop
Foundation ability to complete Engineering drawing tasks
Foundation Maths Skills
Foundation exam ability (40%)</td><td>Careers:

Manufacturing Engineer
Mechanical Engineer
Electrical Engineer
Fabricator
CNC machinist
Lathe Operator
Welding
Maintenance Technician
Design Engineer</td></tr>
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