

WHY DO THEY DO IT?

To make things BETTER:

- > smaller
- > healthier
- > happier
- > cleaner
- > cheaper
- > lighter
- > safer
- > faster
- > stronger
- > slower
- > smoother
- > longer
- > further
- > higher
- > more sustainable
- > more reliable
- > better quality

WHAT IS THE FUTURE OF ENGINEERING?

Specialisations and combinations of the five basic areas to create even more sorts of engineering:

- > mechatronics
- > construction
- > biomedical
- > environmental
- > aeronautical
- > software
- > telecommunications
- > computer systems...

SO HOW CAN I BECOME AN ENGINEER?

Study:

- > Physics
 - > Maths
- Enrol in UTS Engineering

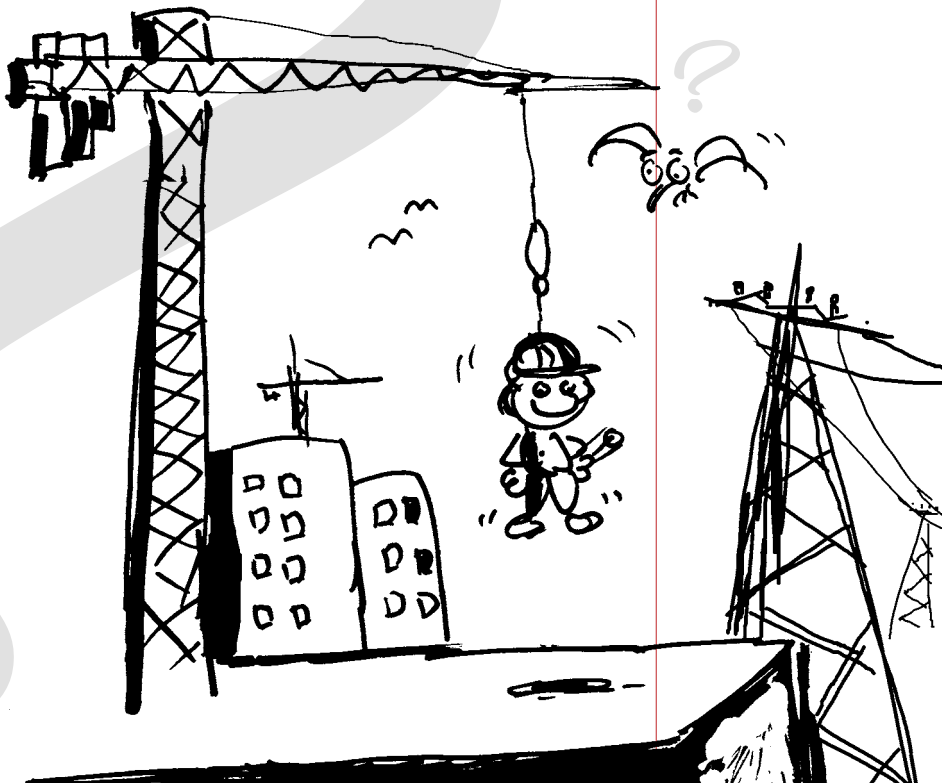
IF YOU WANT TO KNOW MORE ABOUT ENGINEERING

Contact us

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Make an appointment to visit us and see more.

Visit our web site
www.eng.uts.edu.au



ENGINEERING WHAT'S THAT?

UTS: ENGINEERING

THINK.
CHANGE.
DO



WHAT IS ENGINEERING ABOUT?

ENGINEERS DESIGN THINGS WE NEED, THEN MAKE THEM ACCESSIBLE TO US.

ENGINEERS WORK WITH:

Products
things like telephones, cars, software, computers, tunnels, robots, energy...

Processes
design, scientific method, production, flow charts, plans...

People
needs, wants...

Systems
manufacturing, networks, mobile phone systems, production, security, control, communication...

Standards
product safety, OHS, quality control, consistency...

Sustainability
global, community, individual, resource management, wastes, recycling, energy production, environmental management...

WHAT DO ENGINEERS DO?

Create solutions
that balance conflicting needs...

Use
maths, science, communication, creativity, logic...

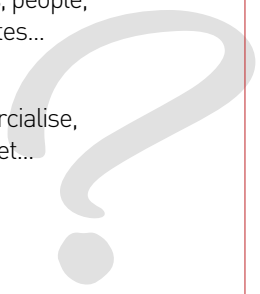
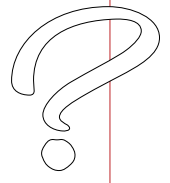
Design
create ideas, choose solutions, make - prototypes, models, simulations; evaluate - trial, test, analyse, appraise; present...

Develop
systems, procedures, plans...

Communicate
with you and me, written, internet, media, mobiles, in teams, with scientists, out into space...

Manage
projects, cost/profit, time, materials, people, construction sites...

Innovate
invent, commercialise, manage, market...



WHAT SORTS OF ENGINEERING ARE THERE?



CIVIL things that sit on or under the ground - buildings, bridges, roads, dams, water pipes...



MECHANICAL things that move - cars, planes, rockets, air and water, washing machines, mars rover, robots...



ELECTRICAL things that use or generate electricity - power plants, electronics, household appliances, CD players...



CHEMICAL the materials things are made from - mining, production, storage, recycling, disposal...



DIGITAL computers, robots, software programs, telecommunications systems...