

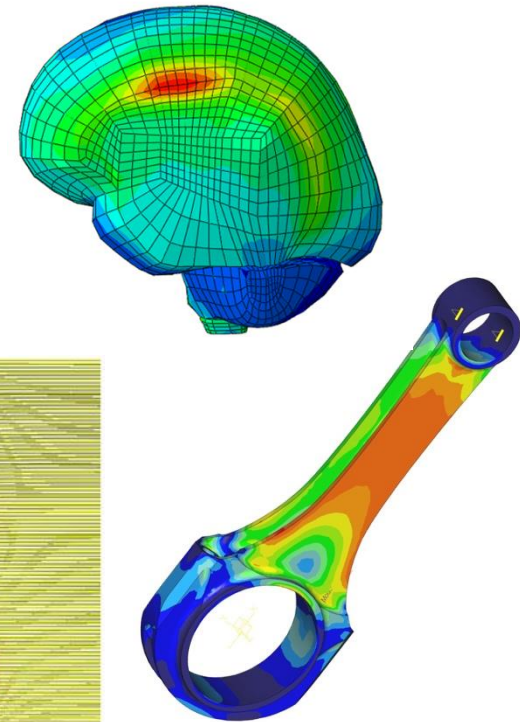


Mechanical Engineering

Michael Gilchrist

Peter Stringer (BE, Mech)

November 19th 2024



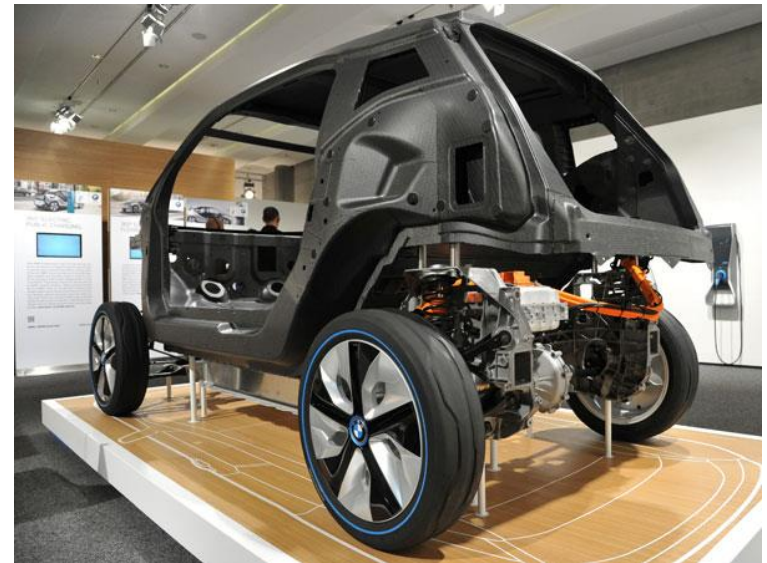
What do mechanical engineers do...?

Power generation



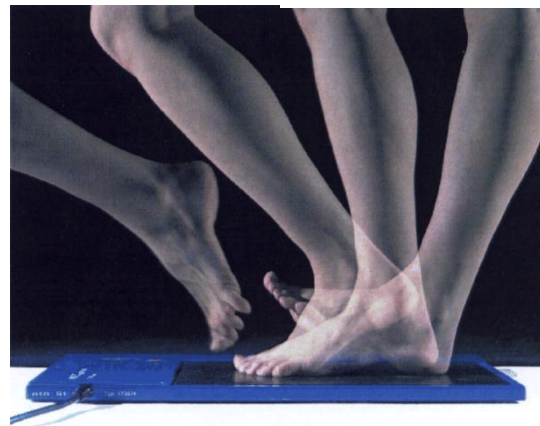
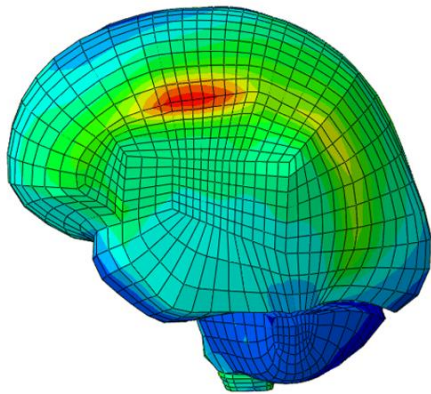
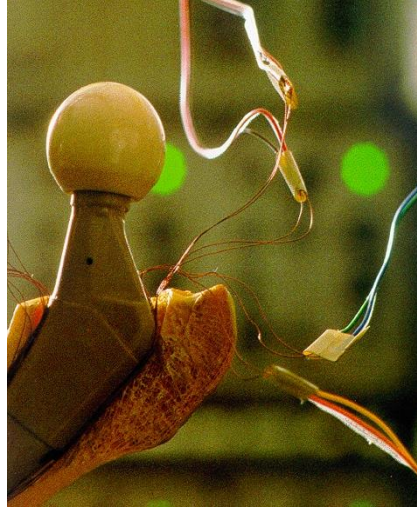
What do mechanical engineers do...?

Transport



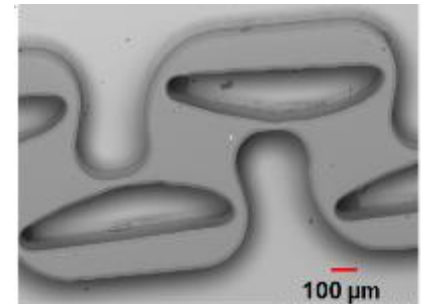
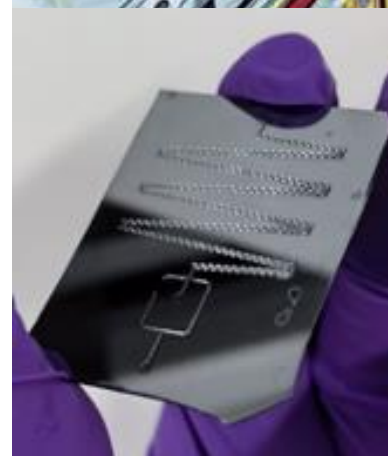
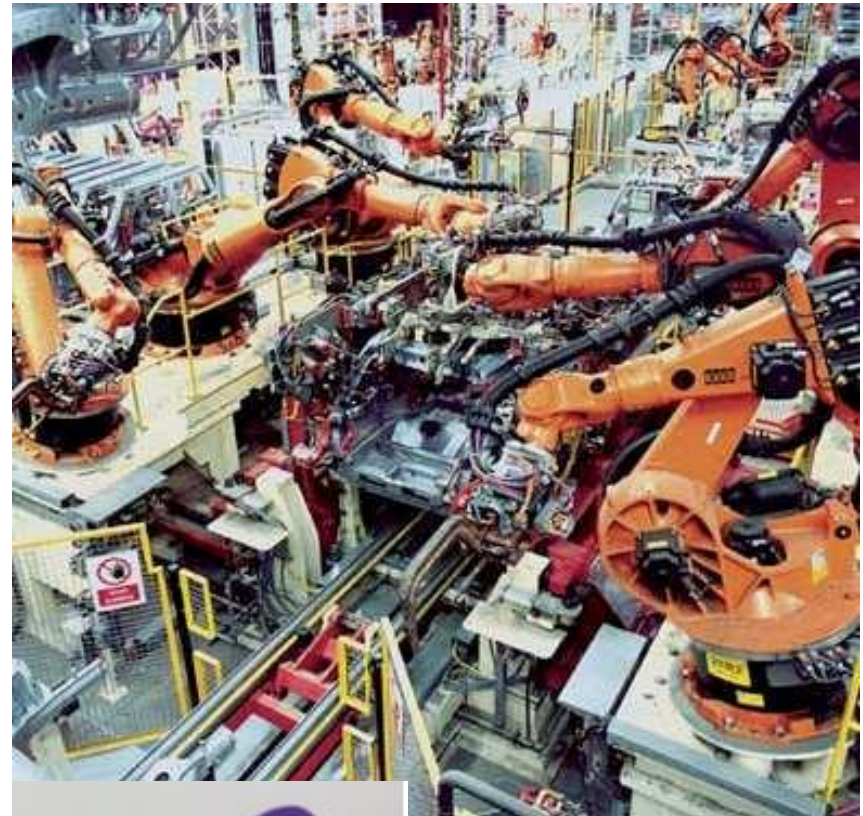
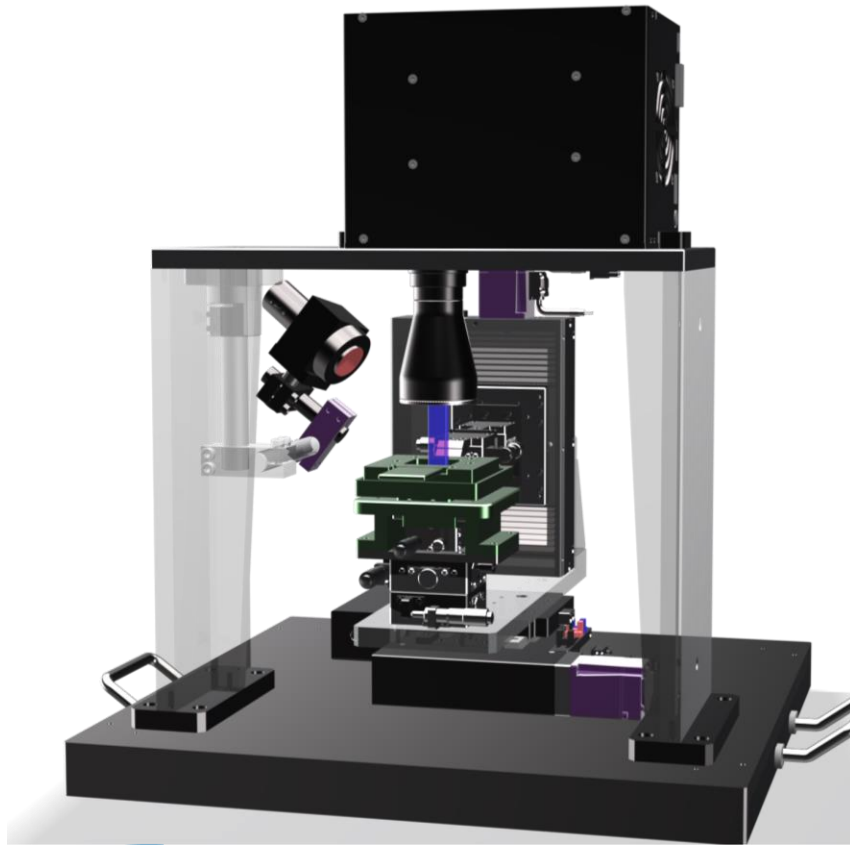
What do mechanical engineers do...?

Biomedical



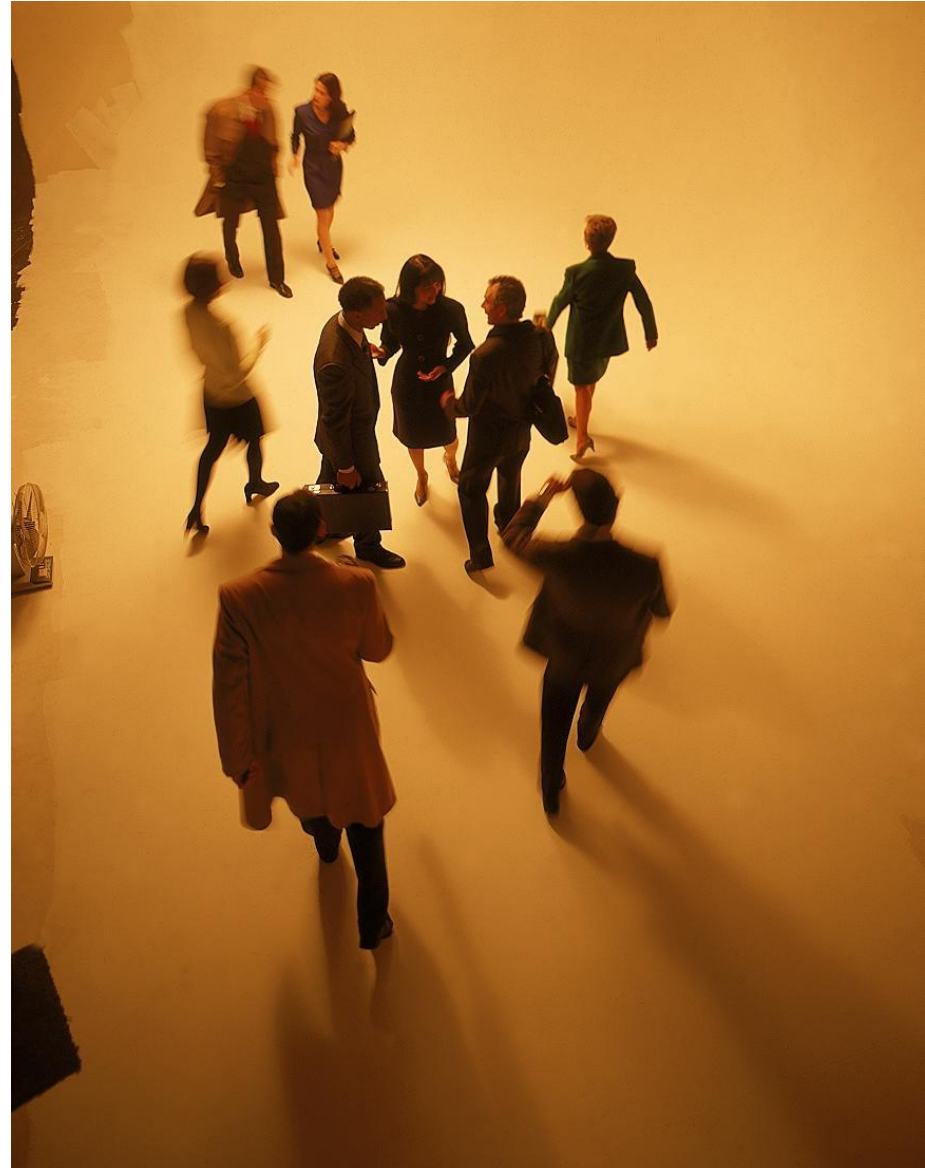
What do mechanical engineers do...?

Manufacturing



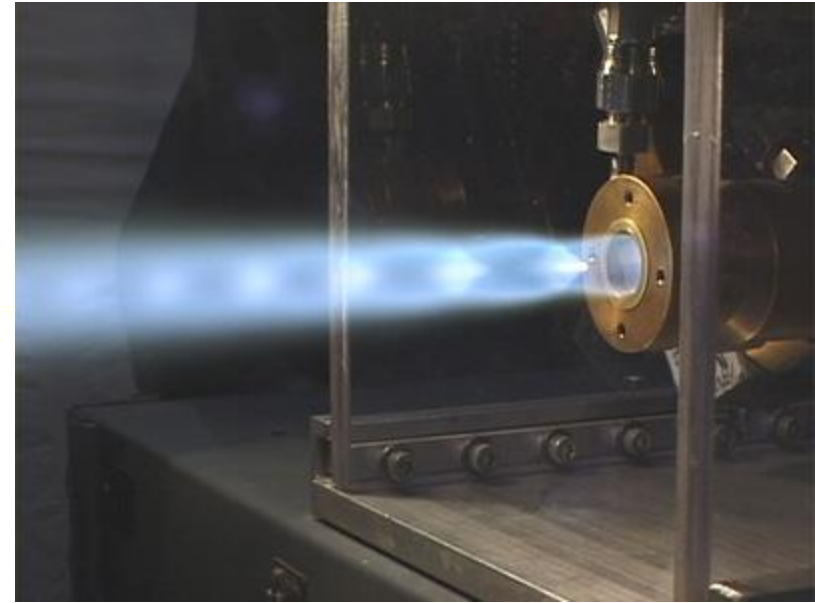
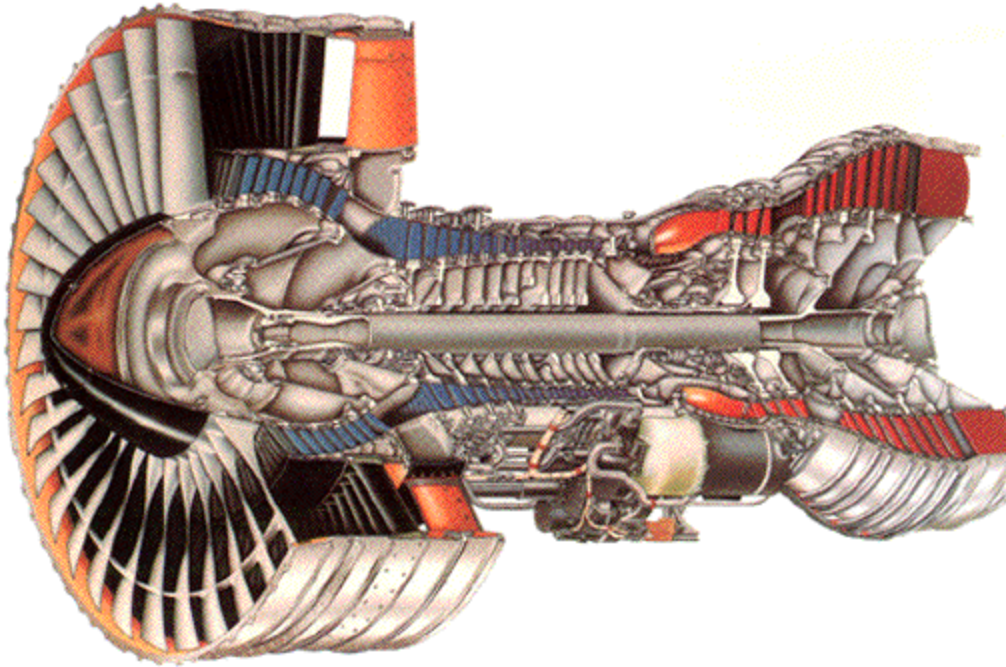
What do mechanical engineers do...?

Management



What will you study..?

Thermodynamics



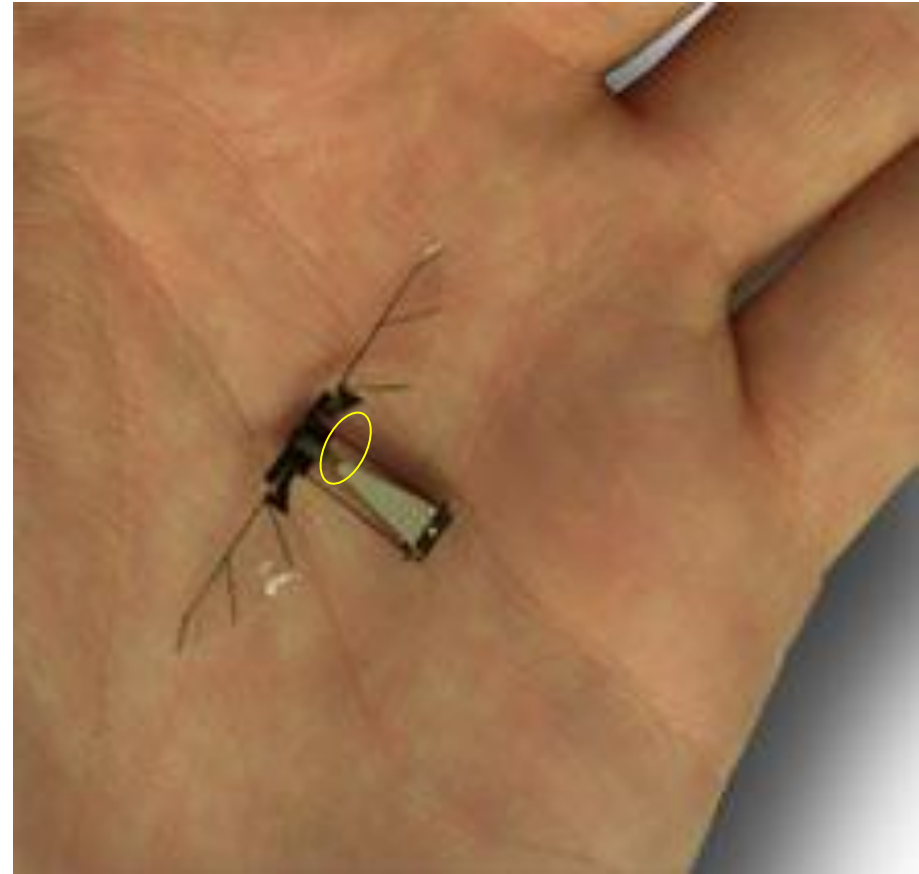
What will you study..?

Dynamics



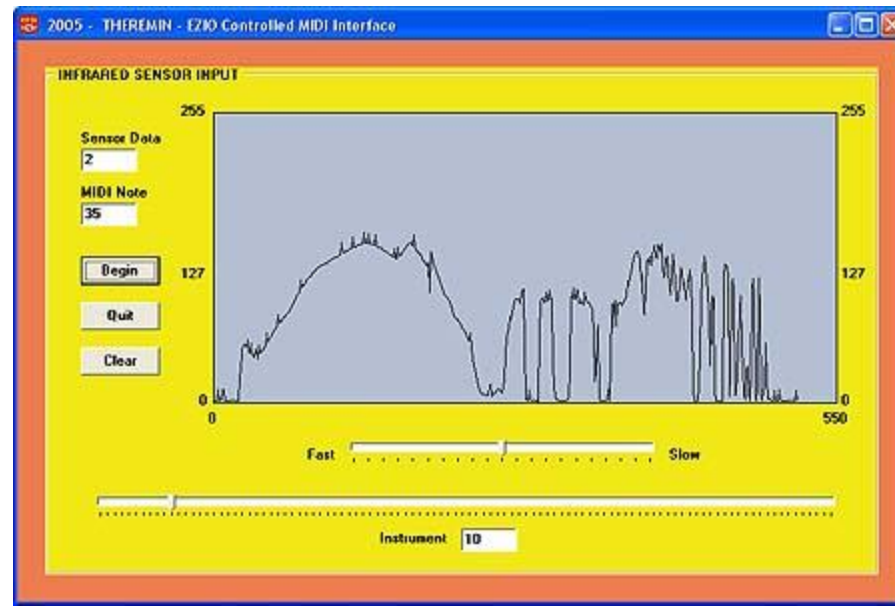
What will you study..?

Control



What will you study..?

Electrical and Electronic engineering

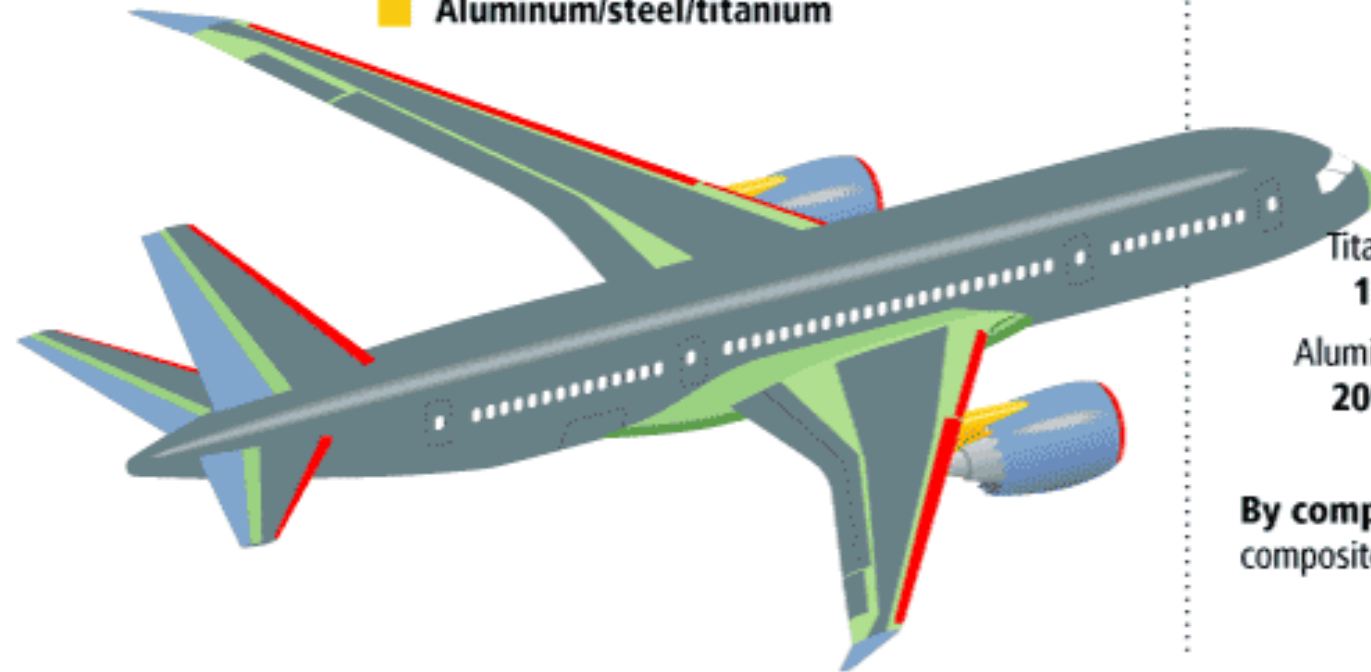


What will you study..?

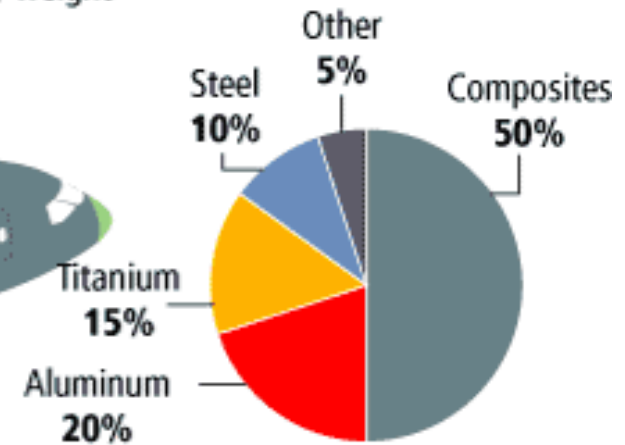
Materials

Materials used in 787 body

- Fiberglass
- Aluminum
- Carbon laminate composite
- Carbon sandwich composite
- Aluminum/steel/titanium



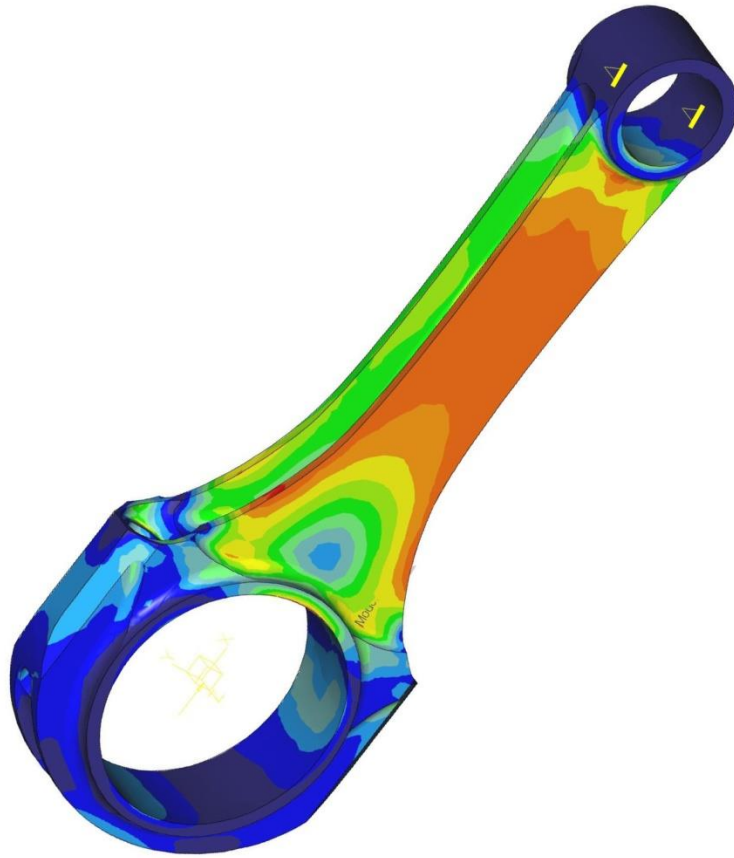
Total materials used By weight



By comparison, the 777 uses 12 percent composites and 50 percent aluminum.

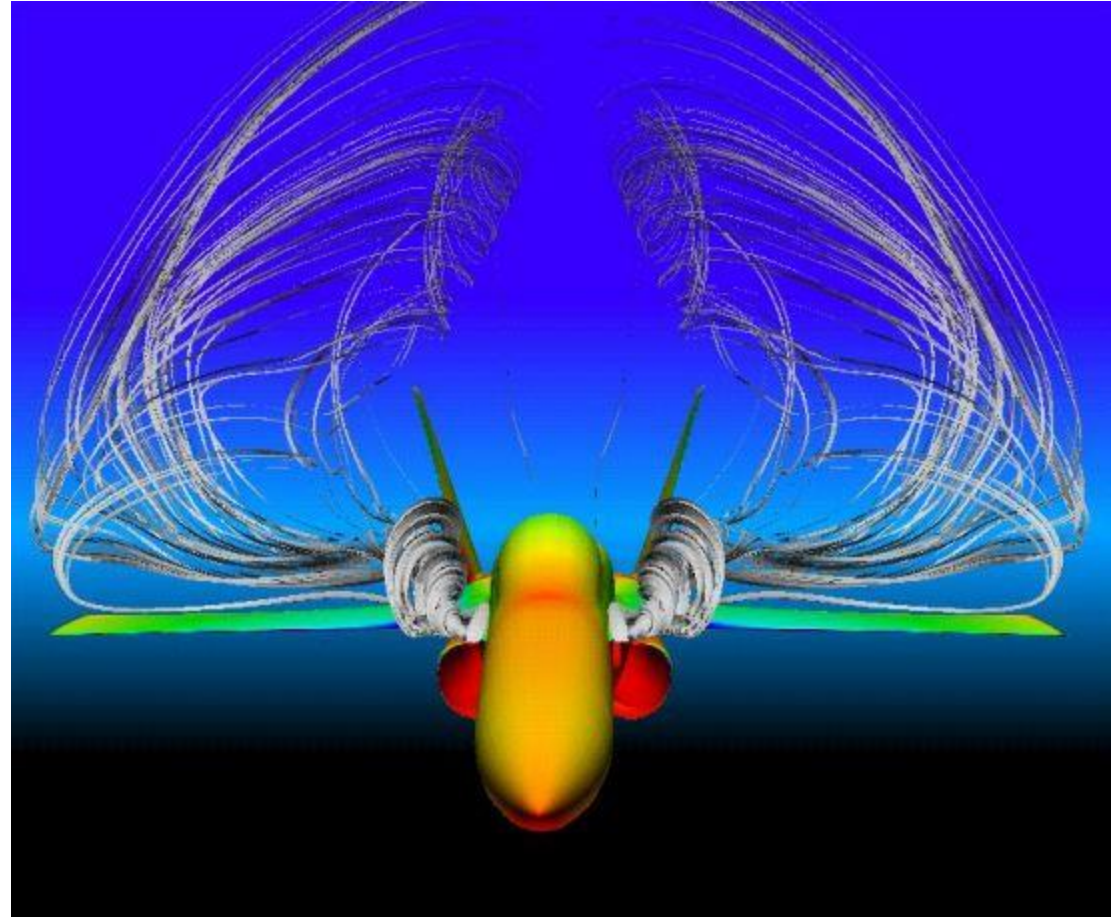
What will you study..?

Mechanics of Materials



What will you study..?

Fluid Mechanics and Heat Transfer



UCD Engineering Degree Programme Pathways

Years
2 & 3

Choose your pathway

Chemical & Bioprocess

Civil

Electrical/Electronic

Mechanical

Biomedical

Structural Engineering
with Architecture

Optional Study Abroad

Years
4 & 5

Focus on your area(s) of specialisation

BE (4 years)
Bachelor of Engineering

Biomedical

Chemical & Bioprocess*

Civil

Electrical

Electronic

Energy Systems

Mechanical

Graduate with
a Bachelor
of Engineering

ME (5 years)
Master of Engineering

**Biosystems & Food Engineering -----	Engineering with Business -----
Biomedical -----	Materials Science & Engineering -----
Chemical & Bioprocess Engineering -----	Mechanical -----
Civil, Structural & Environmental -----	Structural Engineering with Architecture -----
Electrical Energy -----	Professional Work Experience
Electronic & Computer -----	
Energy Systems	

Graduate with
a Master
of Engineering



Mechanical Engineering

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