

The Rough Guide to being a Visiting Professor



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September 2017



VPs: Some facts

- Purpose is to support teaching
 - 250+ VPs during last 20 years
 - 50+ at any one time
 - 20+ new appointments each year
 - Usually 3-year term
 - Principal funding from BIS
 - Honorarium negotiable
-
- “Professor” title is in gift of host university
 - Often from industry, but can be retired
 - RAEng VP title ends at end of award

Building A Future For Engineering

Do universities need to
change the way
engineering is taught?



The Academy is
committed to engaging
higher education (HE)
and supporting
engineering work in
academia.



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[You are here](#) [Home](#) > [Industry](#)

Industry

The following are Academy schemes to facilitate closer contact between the academic and industrial worlds.

As the site grows we encourage others to have their industrial schemes on this site. If you know of any other suitable schemes then email [Higher Education](#).

Visiting Professors



This industry-into-academia initiative aims to the experience of the Visiting Professors from industry to enhance student learning as well as the employability and skills of UK engineering graduates.

Sainsbury Management Fellowships



The Sainsbury Management Fellowship scheme, funded by the [Gatsby Charitable Foundation](#), enables engineers of high career potential to undertake full time MBA courses at major international business schools. Since 1987, the scheme has supported more than 300 engineers.



Exchanges between industry and academia

Grants and prizes >

[Royal Academy of Engineering
Award Winners 2016](#)[Schemes for students](#)[Exchanges between industry
and academia](#)[Support for research](#)[International research and
collaborations](#)[Prizes and medals](#)[Ingenious: public engagement
awards](#)[Support for entrepreneurs](#)[Online grants management
system \(GMS\)](#)

The Academy runs a series of schemes to encourage engineering research and facilitate closer contacts between the industrial and academic worlds.

For Research Chairs and funding to support academic research, visit:

[Support for research](#)

Industrial Secondment scheme

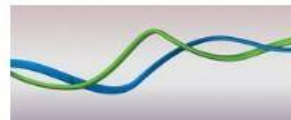
Supports early to mid-career academics to spend 6-12 months in industry



Visiting Professors



Wainwright Management Fellowships



Visiting Teaching Engineers



**MOTOROLA SOLUTIONS
FOUNDATION**

Visiting Teaching Engineer - Motorola Solutions Foundation



Visiting Professors

Exchanges between industry and academia



Industrial Secondment scheme

Visiting Professors

- [How to apply](#)
- [Current VP Awardees](#)
- [Guidelines for Current Awardees](#)
- [Centres of Excellence in Sustainable Building Design](#)

Sainsbury Management Fellowships

Visiting Teaching Engineers

Visiting Teaching Engineer - Motorola Solutions Foundation

Applications for the 2016 cohort are now closed. The next round for new applications will be in early 2017.

This industry-into-academia initiative aims to utilise the experience of the Visiting Professors to enhance student learning as well as the employability and skills of UK engineering graduates.

Under the scheme, senior industry practitioners deliver face to face teaching and mentoring at the host university. They may also contribute to postgraduate teaching, curriculum development (such as the development of new modules/programmes) and strategy development. This award provides up to £10,000 per year over three years for a Visiting Professor to support the university with these activities.

Scheme events

The Academy organises an annual Visiting Professors Conference for our cohort of Visiting Professors and their academic partners. The purpose of this event is to develop a community of practitioners and share best practice in industry-inspired teaching and its impact upon student learning.

In 2015, the Visiting Professors/Visiting Teaching Fellows Annual Conference was held at Aston Business School on 19-20 November. Attendance at this conference is by invitation only.

Publications

The Academy has published six reports to date to support these schemes, the most recent, *Educating engineers to drive the innovation economy*, was published in April 2012.



[Educating engineers to drive the innovation economy \(1,018.68 KB\)](#)



[Rough Guide to being a RAEng Visiting Professor \(459.24 KB\)](#)



Current Visiting Professor Awardees

Exchanges between industry and academia



RAEng Industrial Fellowships

Visiting Professors

[How to apply](#)

[Current VP Awardees](#)

[Guidelines for Current Awardees](#)

Sainsbury Management Fellowships

Visiting Teaching Engineers

Visiting Teaching Engineer - Motorola Solutions Foundation

2017/18 Awardees

The following people have been named as Visiting Professors (subject to contract) in the 2017/18 funding round:

- **Dawn Bonfield MBE** (Towards Vision) at Aston University
Visiting Professor in Inclusive Engineering: Embedding Diversity and Inclusivity in Engineering Education
- **Dr Tim Fox** (Independent Energy Consultant) at University of Exeter
Visiting Professor in Clean Energy and Public Engagement
- **Malcolm Lees** (Independent IT Consultant) at King's College London
Visiting Professor in Software Performance Engineering
- **Dr Nicholas John Hazel** (Retired / Independent Industry Consultant) at University College London
Visiting Professor in Out-Of-The-Box Solutions for Engineering Problems
- **Atul Roy** (British Telecom) at University of Kent
Visiting Professor in Communication Networks
- **Professor K. Clive Thompson** (ALS Life Sciences) at University of East London
Visiting Professor in Sustainable Environmental Sciences and Engineering
- **John Eldridge** CEng FIMechE (Cammell Laird Shiprepairers & Shipbuilders Limited) at University of Liverpool
Visiting Professor in Developing the Next Generation Engineers
- **Gary Morgan** (ETAS Ltd) at University of York
Visiting Professor in Development of Deeply Embedded Safety-Critical Systems
- **Robert Deaves** (Dyson Ltd) at Imperial College London
Visiting Professor in System Architecture for Robotics
- **Ruth Allen** (RSKW) at University of Exeter
Visiting Professor in Infrastructure Engineering
- **Don McQuillan** (RPS Consulting Engineers) at The Queen's University of Belfast
Visiting Professor in Engineering Design
- **Patrick Cunningham** (Retired) at Heriot Watt University

2016/17 Awardees

The following people are currently active RAEng Visiting Professors from the 2016/17 funding round:

- **Andrew Jackson** (Foster + Partners) at University of Sheffield
Visiting Professor in Sustainable Building Design

Andrew Jackson has primarily worked with Architectural Engineering students on their Integrated Design Project, helping them develop the practical skills they need to apply the previously learnt theory to the process of sustainable building design. Using this experience, Andrew has helped the University develop the syllabus to ensure it meets the needs of industry and gives the students the best opportunity to secure a top position within the industry. He has also lectured students from various courses on topics including sustainability, passive design, renewable technologies, systems design, and analysing context.

- **Andrew Langridge** (PRICE Systems Ltd) at University of Bath
Visiting Professor in Whole life Cost Engineering and Cost Data Management
- **Andrew Banford** (National Nuclear Laboratory) at University of Manchester
Visiting Professor in Next Generation Nuclear Chemical Engineer
- **Anthony Morgan** (IBM) at University of Leeds
Visiting Professor in Innovation in Industry

Tony Morgan has created a new 10 credit "Innovation Thinking and Practice" module for final year Engineering and Business undergraduates. This focuses on developing innovation, collaboration, commercial awareness and communication skills through team based projects creating a prototype, business case and presentation. Tony has also delivered employability workshops and carried out a range of additional activities.

- **Dr Allen J Edwards** (Consultant / Retired) at Cardiff University
Visiting Professor in Nuclear Engineering

Professor Allen Edwards has been lecturing in Nuclear Engineering to undergraduate and postgraduate students, as well as supervising Nuclear Engineering related UG projects. He has facilitated UG year in industry placements, along with organising and accompanying students on nuclear industry visits. Additional activities undertaken for the School of Engineering have included attending meetings as a member of the Industrial Advisory Board, attending the PhD Conference, and mentoring one of the School's Research Groups.

- **Dr Andrew Sherlock** (ShapeSpace Ltd) at The University of Edinburgh
Visiting Professor in Product Design for Profitability
- **Dr Caspar Clark** (Helia Photonics Ltd) at University of the West of Scotland
Visiting Professor in Functional Thin Film Materials & Applications

Dr Caspar Clark has been working closely with four PhD students mentoring on aspects of advanced gas sensing diagnostics for medical applications, lead selenide deposition for infrared detectors (including hosting the student at his company), post deposition processing and novel plasma source development. In addition, Caspar is assisting with the design of courses and will deliver aspects of two taught MSc modules. He also chairs the industrial advisory board and is developing a student summer placement

VPs: Some examples of activity

- Write new modules or lectures
 - Deliver new modules or part-modules
 - Suggest, supervise, moderate, judge, assess project work
 - Lead industry liaison
 - Mentor staff or students
 - Stimulate competition entries
 - Advise on and critique programmes, curricula and syllabi
 - (Advise and collaborate in research bids and projects)
 - Anything your host would find helpful
-
- But they should leave a permanent mark, not just be a short-term stopgap.
 - and make them feel a part of your Department/School/Faculty

Engineering students

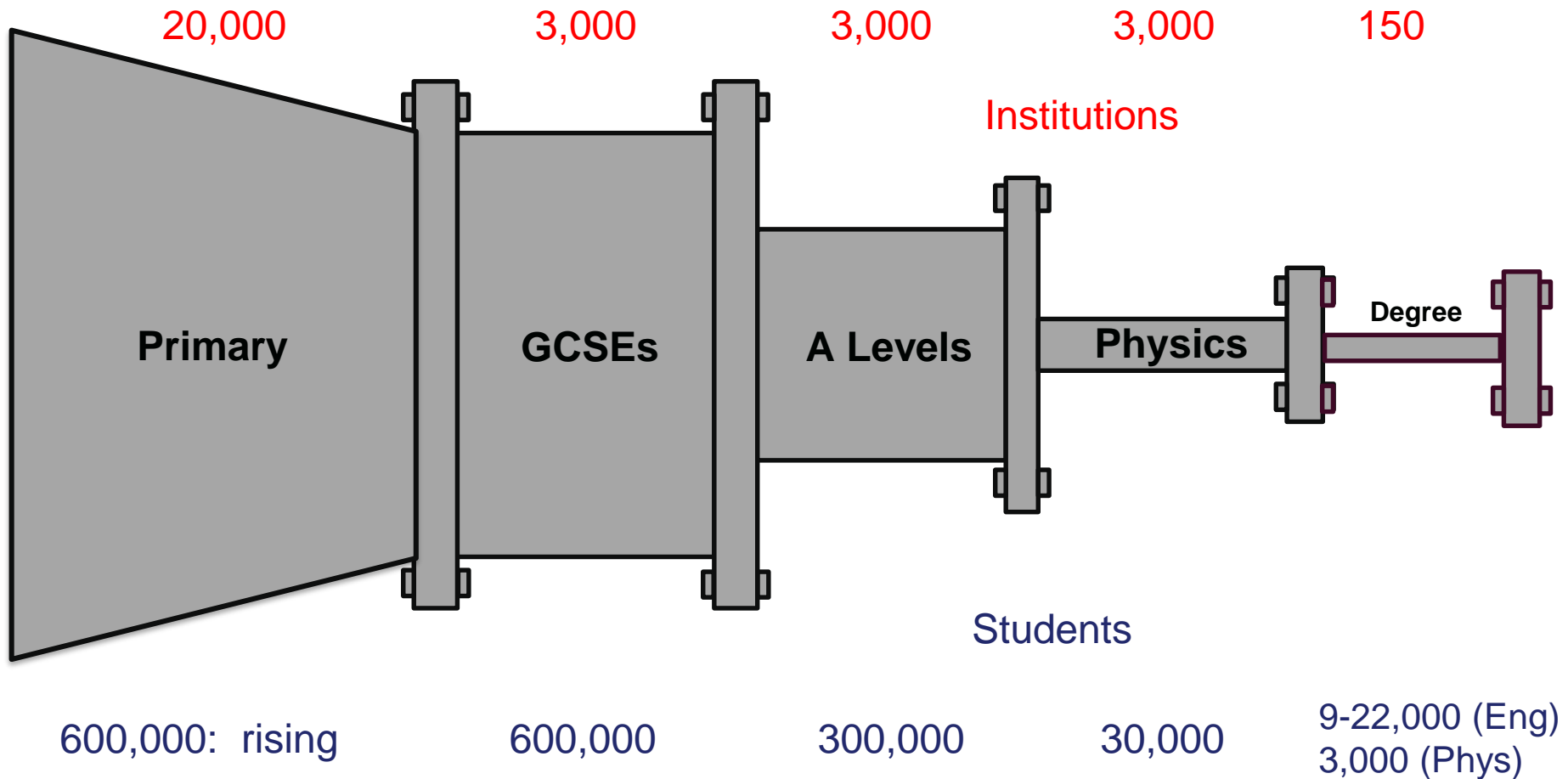


... and where they come from

Active engineering students



The UK pipeline

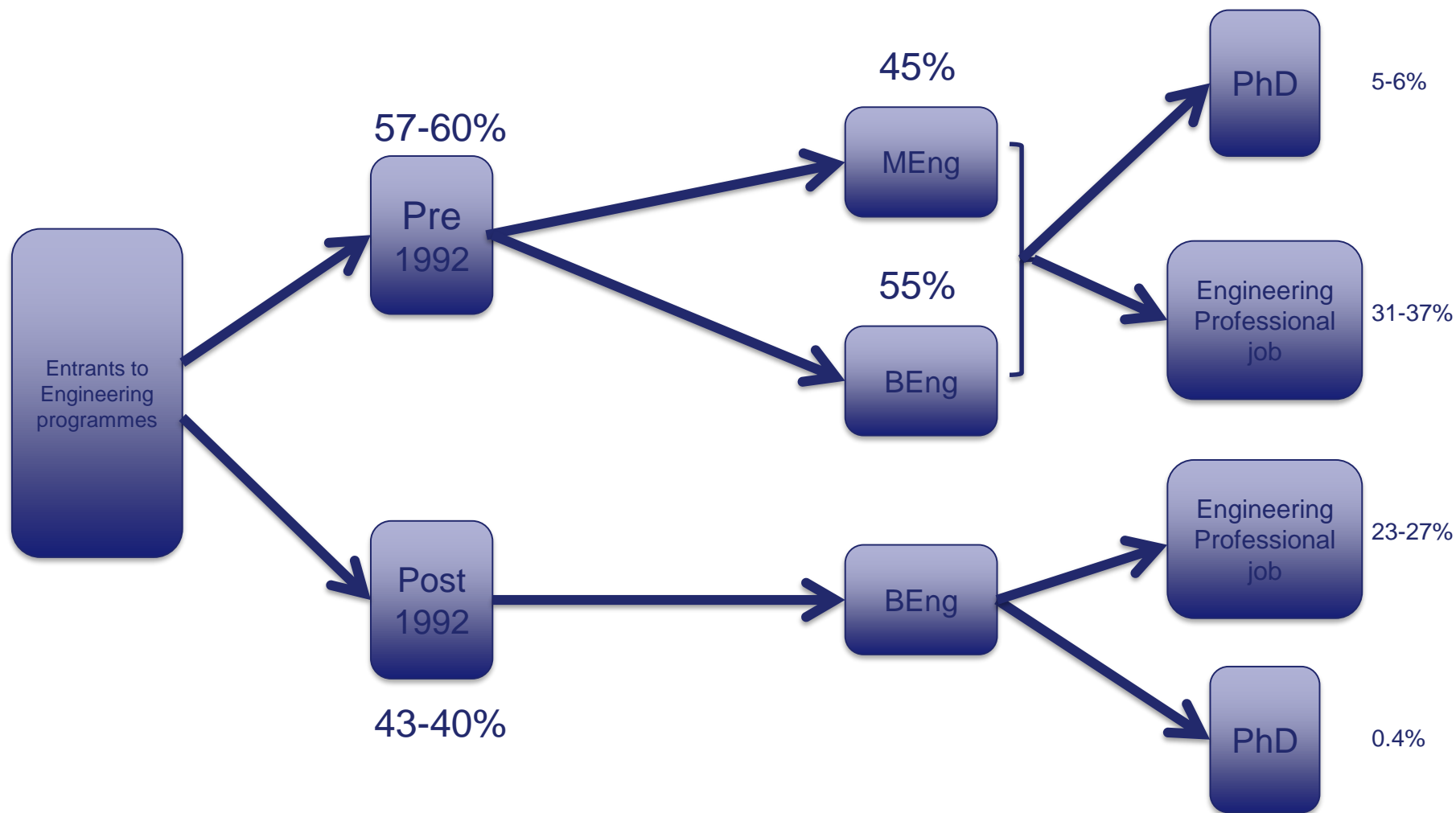


Degree programmes chosen by those with A level Physics in 2011

Engineering	10,000+
Physics	3,000
Mathematics	3,000
Computer Science	1,200
Chemistry	1,200

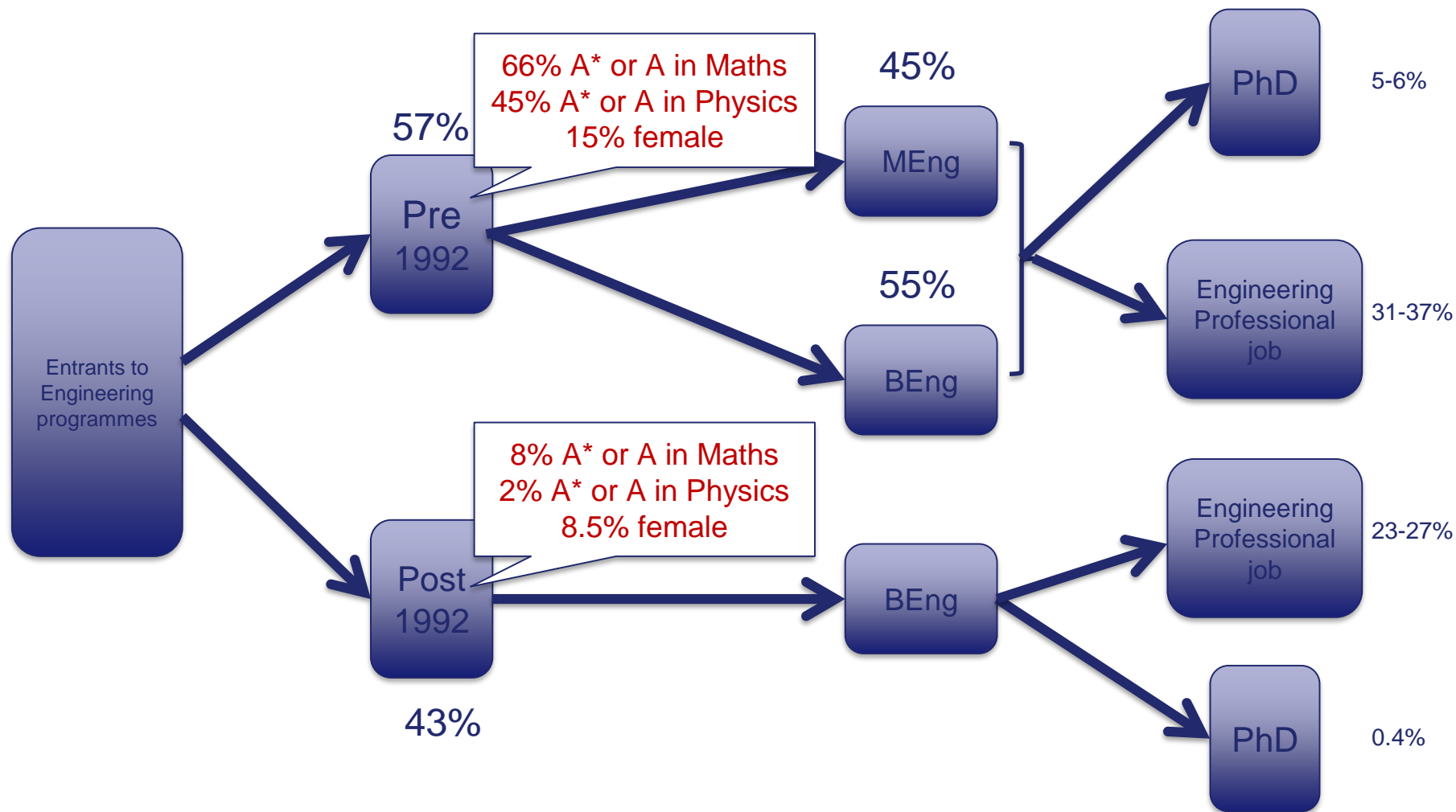
Medicine	1,000
Economics	850
Architecture	650

When they undertake an engineering degree



[2010 data from UCAS, HESA, NSS]

When they undertake an engineering degree



[2010 data from UCAS, HESA, NSS]

A concept question

You are sitting in a boat in a small pond. You have a six-pack of beer. You throw it into the water and it sinks to the bottom.



Does the level of the water in the pond:

1. Rise?
2. Fall?
3. Stay the same?

Some questions you might like to ask

What are the Department's strategic objectives?

What are LOs for the programme(s) on which I will be teaching?

Is the teaching “research led”? If so, how does this impact the undergraduate curriculum?

What pedagogic techniques are in use? [lectures; PBL; PjBL; flipped classes; ug research;]

How much maths is taught? By whom? Why?

What is the procedure for changing things? [content; LOs; teaching methodology; assessment methods]

Some more questions

Do you have guidelines for deadlines?

How do you assess individual contributions to team work?

Do the students have access to specific software for PRS;
or a twitter account for complaints, or other social media,
or a VLE?

(of your AC) Which of us should write the first draft of our
report?

How do I find out what the students have been taught in
other modules?

Some really important questions

Where do staff have coffee?

Where do I park? How much?

How do I get an ID card with as many rights as possible?

Why don't the students laugh at my jokes?

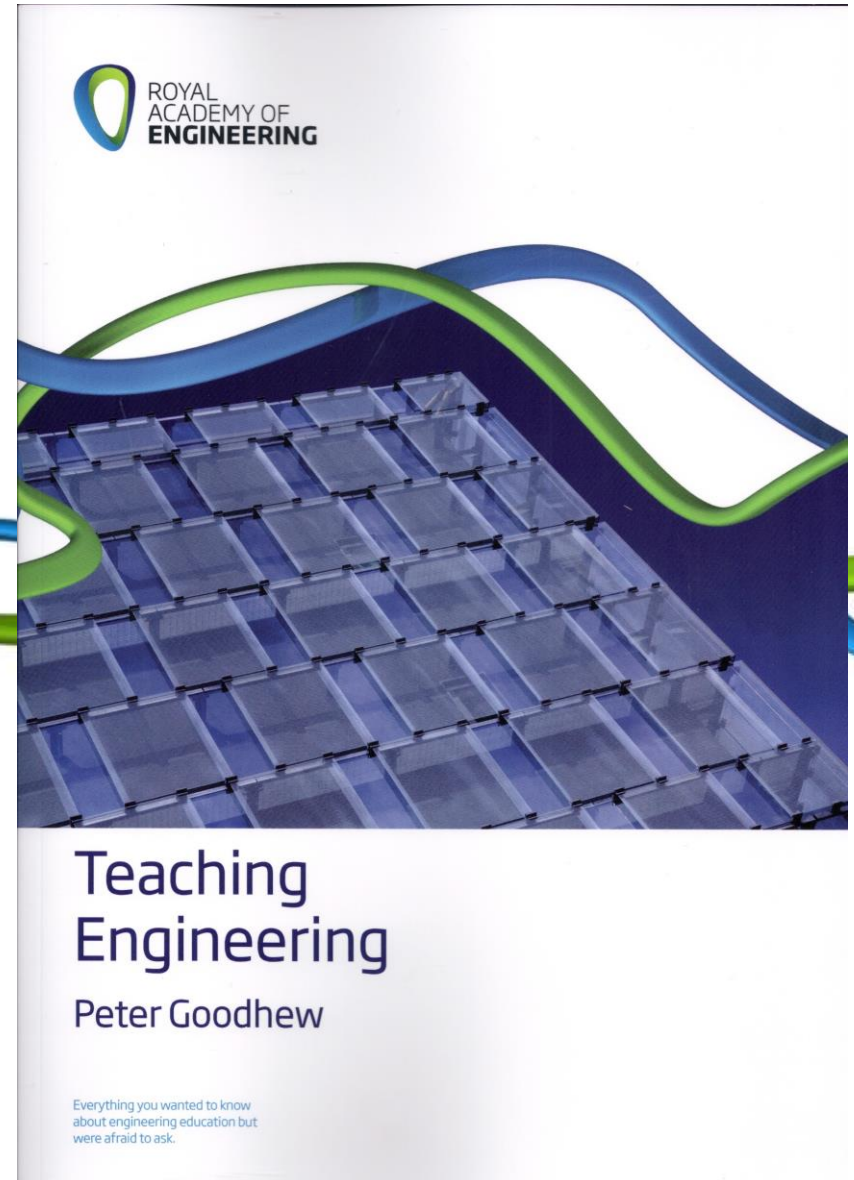
How should I handle students who: don't attend; talk incessantly; are constantly on facebook or snapchat; don't hand in any work?

How do I get out of this?

A blatant advert

“Teaching Engineering” book:

Comment and print at
teachingengineering.liv.ac.uk



Educating engineers to drive the
innovation economy

Engineering graduates for industry

February 2010



Educating Engineers for the 21st Century

June 2007

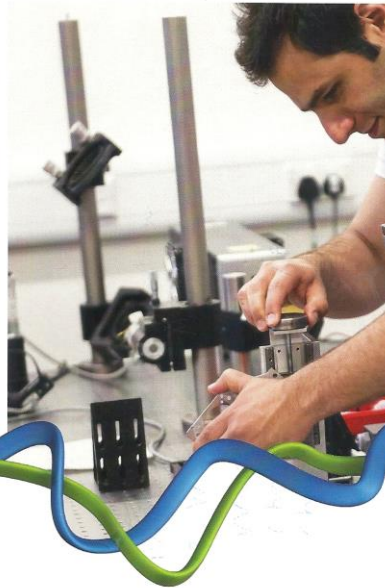


“Engineering graduates should be able to do something”



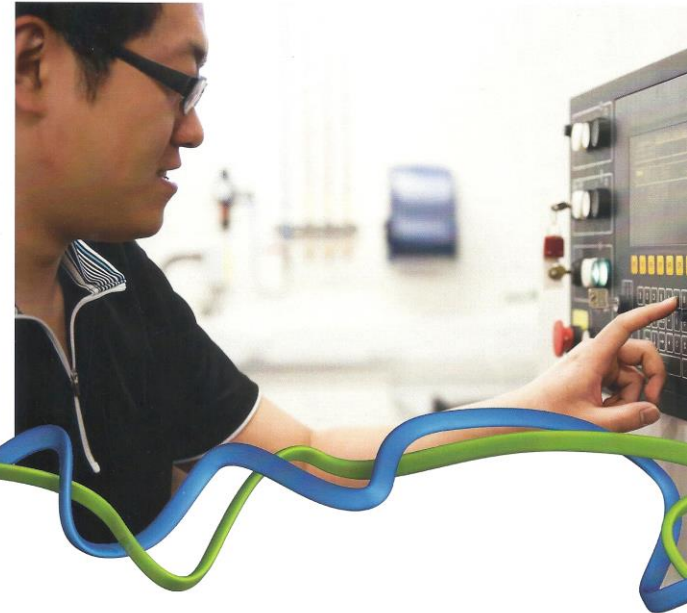
Development of e-learning resources

- A good practice guide



Experience-led learning for engineers

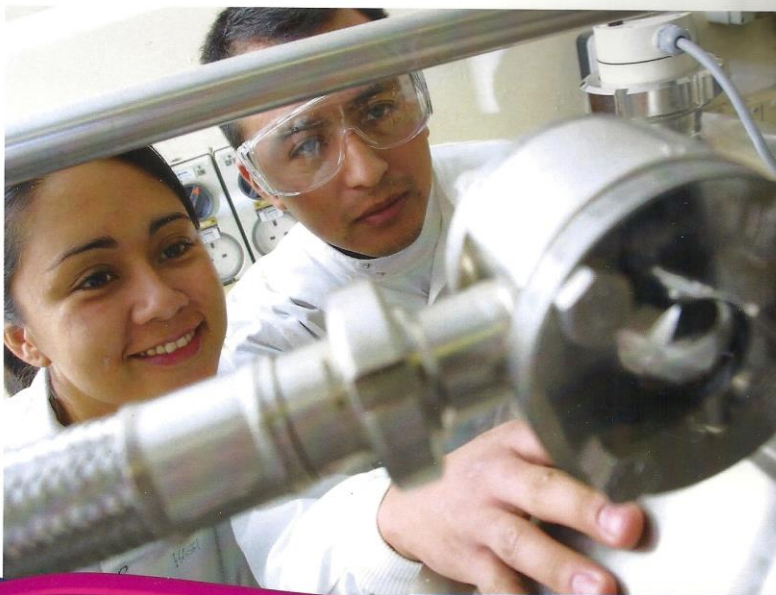
- A good practice guide



Effective industrial engagement in engineering education

- A good practice guide

Employment outcomes of engineering graduates: key factors and diversity characteristics



Please feel free to ask me for advice
before (or after!) bidding for a VP
(goodhew@liv.ac.uk)



Building A Future For Engineering

Do universities need to
change the way
engineering is taught?



The Academy is
committed to engaging
higher education (HE)
and supporting
engineering work in
academia.



SIGN UP

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Over to you



... for questions or comments!