Engineering

Employability Project

2012

University of the
West of England

UWE
BRISTOL

bettertogether

Contents

Introduction

The engineering degree employability audit was carried out by six students [two from electrical and four from mechanical engineering degrees] from the 7th March to 4th April 2012.

The project had four strands:

1] Employer consultation:

The students having identified the top five 'key' skills graduate employers require, surveyed engineering employers to determine how these skills and attributes can be successfully evidenced on application forms, at assessment centres and at interviews. They were able to identify a range of concrete examples.

Sources: Airbus, Delphi, Broadcom, Infineon, Aeopona, Hewlett Packard, Intel, Stirling Dynamics, Ultra Electronics, GE Aviation, Zircon

2] Module audit:

Using the knowledge gained from the employer consultation, students conducted a module by module employability audit of their electrical and mechanical engineering to identify 'evidence gathering' opportunities related to these five skill areas. They then made suggestions as to how these opportunities could be further developed.

3] Comparison of employability skills development opportunities in mechanical and electrical degrees:

The students asked if there differences in opportunities to develop or enhance employability skills between awards? If so, what examples of good practice from one area could be suggested for adoption by the other?

4] Personal career goals:

What are their personal career goals? After reviewing occupational literature detailing the key skills required for that specific role, how well does their degree prepare them by offering opportunities to acquire these? What gaps if any are there? How can these be filled e.g. work experience, volunteering?

Student Outputs:

Engineering Employability Blog – on main UWE website called 'Engineering Employability Project' – all contributed over the duration of the project charting their progress and writing reflectively about the challenges encountered.

Engineering Employability Audit Report describing the project's rationale and findings including all the documents produced during the audit and their recommendations.

Dissemination events:

26/4/2012 - UWE's Teaching and Learning Conference – poster session

14/5/2012 - UWE's Department of Engineering, Design and Maths – session at their staff development day

18/6/2012 - HE STEM Workforce Development and Employability Conference - workshop session

21/6/2012 – UWE Employer and University Engagement to Support the Advanced Engineering Sector Conference – workshop session

Employer Survey Questions

Explaining the rationale for the project at the mini fair and to your employer contacts and fellow students:
The project is a student led employability audit focusing on electrical / electronic and mechanical engineering degrees.

Stage 1: Survey relevant engineering employers to build up a matrix of the type of evidence / experience they would find convincing at application, assessment centre and interview stages of the recruitment process in relation to five key, soft skills [not technical] agreed by the project group below.

Stage 2: This information will lead on to an audit of the degree modules to identify opportunities to gather this evidence/ experience, identify gaps and suggest remedies to fill these either within or beyond the curriculum. It is an opportune time to be doing this as the engineering courses are being re-written and our findings will feed into this process.

Questions for employers:
How might each of these skills be assessed during each stage of the selection process?
Can you offer examples of how these key skills have been successfully evidenced by applicants?
Why might applicants be unsuccessful in demonstrating convincingly possession of these skills? Where do they tend to be weak? Can you think of any actual examples?

Questions for fellow students:
Give examples of how you have been asked to evidence each of these skills during each stage of the selection process.
If you have been unsuccessful and received feedback from the selector, what did they say in relation to how you evidenced any of these key skill areas?

Key skills areas: experience examples:	**Employer name:**	**Evidence /**
Oral communication		
Self management		
Project management & team working		
Problem solving		
Commercial awareness		

Employer Survey Results

Key Skill areas	Evidence/experience examples
Oral Communication	• Example of a relevant group project exercise
	• Group presentation at assessment centre, assessment of communication skills between the group and in front of an audience
	• Phone interviews choice of words is assessed (i.e. slang)
	• Assessed by noticing if the person listens to others, interrupts their conversation.
	• Group exercise –opportunity to demonstrate : good listening skills
	• 4 students were put into a group and were given a MOC scenario (they were directors of a company and had to distribute a set budget between different provide projects). The company was assessing how the students were able to influence others and listen to them.
	• Candidates are assessed on their conversational ability, including the use of slang in telephone interviews/assessment centres. Whether they are active listeners as well as speakers, and if they interrupt other candidates
Self Management	• Examples of extra-curricular commitments that cannot be dropped temporarily when workload is high.
	• Evidence of ability to manage course and extra curricular commitments simultaneously.
	• Examples of how work-loads and deadlines were dealt with, multitasking & organisation.
	• At interview: "do you carry out your work all at the last minute or do you keep on top of it?" or "give an example of how you prioritise your work".
	• How they organise mundane daily tasks
	• Whether any software is used to facilitate the workload
	• Whether the candidate is a self starter and is proactive in indentifying plans of action and adhering to them
Project Management & Team Working	• Application of project management skills e.g. resource management; linking the skills gained on the degree to the workplace.

	• Forming effective and cohesive teams during the selection day, or referring to an example of when this has been done.
	• Demonstrating the ability to listen and contribute effectively without being too loud, shy, or controlling.
	• Example of a group project undertaken on degree course including the overall team output, personal input and influence within the team, and level of success.
	• Extensive experience of working in group projects in different areas so that they practice working in groups in different settings/for different purposes.
	• Show some understanding of underlying theory, such as fault tree analysis and resource management.
	• Team management –how would you approach someone that wasn't doing their task?
	• During the interview the student was asked to list all the group projects he'd been part of and explain his role in each of them.
	• When discussing various tasks and/ or activities, candidates should follow the STAR (Situation, Task, Action, Results) methodology in their description.
	• If in a group project a team member did not complete their share of the task, how did the candidate approach them? Were they confronted or was the candidate passive in his /her chosen actions? If the candidate was shown and understanding of their flaws and that of their colleagues, then that would be classed as a satisfactory answer.
	• How they participated and fit into the team and how they shone when being lead by others.
Problem Solving	• Examples sought on application form and expanded upon in interview.
	• Example of how a problem was solved in the interview
	• Evidence of how a problem has been solved as a team.
	• In interview practical examples of problem solving were asked for. Student was also asked to draw a 3D cube on a sheet of paper (2D).
	• They should have coherent and well thought out answers to questions ranging from the design of a particular solution right down to testing and comparison of the end result with the original requirements.

Commercial Awareness	• Evidence of the research on the company
	• Awareness of the importance of the customer to the company
	• How well the company is doing e.g. share price movements
	• Research company acquisitions
	• Understanding how knowledge obtained from the degree will be used in their role
	• "How long do you think it takes to develop a missile?" • Share price on the FTSE 500 index, brief knowledge about acquisitions (news reports) annual reports etc

Module Audit - Electrical

	Nothing can be changed
(blue)	Nothing can be changed
(green)	Already good
(red)	Needs improving
(yellow)	Needs a little improvement

Oral Communication

	Module		Current Opportunities?		Can it be Improved?	
Year 1 modules	Introductory Maths	Core	No	Purely theoretical	No	Theoretical subjects
	Engineering Maths					
	Digital Systems Development		Yes	Lab Sessions and Practicals	No	Suggestion: Short Demo about work accomplished at the end of each lab session (m)
	Digital Design and Instrumentation		No	Lab Sessions and Practicals	No	Individual work
	Analogue Circuit Analysis		No	Lab Sessions and Practicals	No	
	Programming in C		Yes	Review of working with others, Presentations, Asking correct questions, Group Projects etc	No	Pretty much close to perfection
	Professional Studies		Yes		No	
	Practical Electronics		Yes		No	

	Module		Current Opportunities?		Can it be Improved?	
Year 2 Modules	Industrial Control Systems	Core	Yes	One Group Project	Yes	Short demonstration of work accomplished at the end of each practical [m]
	Signals and Circuits		Yes	One Group Project		Short demonstration of work accomplished at the end of each practical [m]
	Mathematics for Signal Analysis		No	Purely theoretical	No	
	Microcontroller based Systems		Yes	Practicals, Individual Proj.	Yes	Reviews after each practical class [b]
	Group Project and Management		Yes	Communication is this module's bread & butter	No	
	Electrical Technology	Option 1	No		Yes	Possible presentations, coursework [a]
	CPU Architecture and VHDL	Option 2	Yes	Lab sessions and Groupwork	Yes	Short demo at end of practical (m)

	Module		Current Opportunities?		Can it be Improved?	
Year 3 Modules	Control Systems Design	Core	Yes	Individual Project, Presentation	No	
	Integrated Case Studies		Yes	2 Presentations	No	
	Alternative Energy		No	Theoretical		Presentation opportunity [a]
	Individual Project		Yes	Presentation, Viva, Poster	No	
	Telecommunication Systems	Option 1	Yes	Presentation	No	
	Power Systems		No	Purely theoretical		
	Embedded Co-Design (VHDL & C)	Option 2	Yes	1 big group project, Labs	No	
	Digital Signal Processing		Yes	Group Project, Labs	No	

Self Management

	Module		Current Opportunities?		Can it be Improved?	
Year 1 modules	Introductory Maths	Core	Yes	Online Tests	No	
	Engineering Maths					
	Digital Systems Development		Yes	Bill of Materials, Lead Time for PCBS etc, Log books	No	
	Digital Design and Instrumentation		Yes	Logbook	No	Guidance on keeping log books [e]
	Analogue Circuit Analysis		Yes	Logbook	No	Guidance on keeping log books [e]
	Programming in C		Yes	Worksheets, Project	No	
	Professional Studies		Yes	Lots of little projects	No	
	Practical Electronics		Yes	Log book	No	Guidance on keeping log books [e]

	Module		Current Opportunities?		Can it be Improved?	
Year 2 Modules	Industrial Control Systems	Core	Yes	Practicals, Group Project	No	
	Signals and Circuits		Yes	Log book, self directed practicals	No	
	Mathematics for Signal Analysis		Yes	Online Tests	No	
	Microcontroller based Systems		Yes	Practicals, Project	No	
	Group Project and Management		Yes	Lots of them	No	
	Electrical Technology	Option 1	No		No	
	CPU Architecture and VHDL	Option 2	No	Nature of subject		

	Module		Current Opportunities?		Can it be Improved?	
Year 3 Modules	Control Systems Design	Core	Yes	Coursework, practical labs	No	
	Integrated Case Studies		Yes	Minimum attendance	No	
	Alternative Energy		No		Yes	
	Individual Project		Yes	self discipline required	No	
	Telecommunication Systems	Option 1	Yes	Lab classes, coursework	No	
	Power Systems		No	Just 1 coursework	Yes	
	Embedded Co-Design (VHDL & C)	Option 2	Yes	Optional Lectures, Group Project	No	
	Digital Signal Processing		Yes	Group project, labs	No	

████	Nothing can be changed		
████	Already good		
████	Needs improving		
████	Needs a little improvement		

Project Management and Team Working

	Module		Current Opportunities?		Can it be Improved?	
Year 1 modules	Introductory Maths	Core	No	Purely theoretical	No	Very Unlikely
	Engineering Maths					
	Digital Systems Development		Yes	Lab Sessions and Practicals	No	
	Digital Design and Instrumentation		No	Individual Work	Yes	Reviews at the end of each lecture and practical [a]
	Analogue Circuit Analysis		No	Individual Work		
	Programming in C		Yes	Reviews of working with others in teams, Presentations, Group Projects etc	No	Pretty much close to perfection
	Professional Studies					
	Practical Electronics					

Year 2 Modules	Industrial Control Systems	Core	Yes	1 Major Group Porject	No	
	Signals and Circuits		Yes			
	Mathematics for Signal Analysis		No		No	
	Microcontroller based Systems		No	Individual Project only	Yes	1 Term Group Project [c]
	Group Project and Management		Yes		No	
	Electrical Technology	Option 1	No		No	
	CPU Architecture and VHDL	Option 2	Yes	Lab sessions, Group work	No	

Year 3 Modules	Control Systems Design	Core	No	Individual Project	Yes	Individual Presentation [a]
	Integrated Case Studies		No	Individual presentation	No	
	Alternative Energy		No		Yes	Group Project, with Mechanical Engineers[o]
	Individual Project		No		No	
	Telecommunication Systems	Option 1	Yes	Major group project	No	
	Power Systems		No		No	
	Embedded Co-Design (VHDL & C)	Option 2	Yes	1 Big Group Project	No	
	Digital Signal Processing		Yes	Team project	No	

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Problem Solving

	Module		Current Opportunities?		Can it be Improved?	
Year 1 modules	Introductory Maths	Core	No		No	
	Engineering Maths		No		No	
	Digital Systems Development		Yes	Troubleshooting (Diagnosis, fault finding, error correction)	No	
	Digital Design and Instrumentation		Yes	Troubleshooting	No	
	Analogue Circuit Analysis		Yes	Troubleshooting	No	
	Programming in C		Yes	Troubleshooting	No	
	Professional Studies		Yes		No	
	Practical Electronics		Yes	Troubleshooting	No	

	Module		Current Opportunities?		Can it be Improved?	
Year 2 Modules	Industrial Control Systems	Core	Yes		No	
	Signals and Circuits		Yes		No	
	Mathematics for Signal Analysis		No		No	
	Microcontroller based Systems		Yes		No	
	Group Project and Management		Yes		No	
	Electrical Technology	Option 1	No	Currently there are lots of real life examples [h]	No	
	CPU Architecture and VHDL	Option 2	Yes	Troubleshooting	No	

	Module		Current Opportunities?		Can it be Improved?	
Year 3 Modules	Control Systems Design	Core	Yes	Coursework, labs	No	
	Integrated Case Studies		No		No	
	Alternative Energy		No		Yes	Incorporating real life situations[h]
	Individual Project		Yes		No	
	Telecommunication Systems	Option 1	Yes	Coursework	No	
	Power Systems			Theoretical		
	Embedded Co-Design (VHDL & C)	Option 2	Yes	Design to a specification	No	
	Digital Signal Processing		Yes		No	

			Nothing can be changed
			Already good
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Commercial Awareness

	Module		Current Opportunities?		Can it be Improved?	
Year 1 modules	Introductory Maths	Core	No	Purely theoretical	No	Very Unlikely
	Engineering Maths					
	Digital Systems Development		Yes	Circuit design, taught aspects of chip selection etc	No	
	Digital Design and Instrumentation		No		No	
	Analogue Circuit Analysis		No		No	
	Programming in C		No		No	
	Professional Studies		Yes		Yes	More employment perspective [h]
	Practical Electronics		Yes		No	

	Module		Current Opportunities?		Can it be Improved?	
Year 2 Modules	Industrial Control Systems	Core	No		Yes	Case Studies for reference [h]
	Signals and Circuits		Yes	PCB design, components used etc	Yes	Possible justifications for going with one manufacturer as opposed to another. Stock Price Index of companies involved, stronger stock might imply less likelihood of component reaching End of Line (EOL) soon [k] and [h]
	Mathematics for Signal Analysis		No		No	
	Microcontroller based Systems		Yes		No	
	Group Project and Management		Yes		No	
	Electrical Technology	Option 1	No		No	
	CPU Architecture and VHDL	Option 2	No		Yes	Case studies, link lectures to industrial context [h]

	Module		Current Opportunities?		Can it be Improved?	
Year 3 Modules	Control Systems Design	Core	Yes	Lecturers, Consultant Report	No	
	Integrated Case Studies		Yes	Industry presentations	No	
	Alternative Energy		Yes	Module is based on it	No	
	Individual Project		No	Depends on project		
	Telecommunication Systems	Option 1	No		Yes	Possibly [h]
	Power Systems		No		No	
	Embedded Co-Design (VHDL & C)	Option 2	Yes	Coding standards put to practise, designing a failsafe for certain situations etc	No	
	Digital Signal Processing		Yes	Practical coursework based on a real life entity	No	

Module Audit - Mechanical

	Nothing can be changed
	Already good
	Needs improving
	Needs a little improvement

Oral Communication

	Module		Current Opportunities?		Can it be Improved?	
Year 1 modules	Introductory Maths	Core	No	Theoretical Subjects / Foundation for other Modules	No	
	Engineering Maths		No		No	
	Engineering Design		No		Yes	Individual Presentations [k]
	Thermodynamics and fluids		Yes	Lab. Sessions	Yes	Discussion in Lab. Sessions [l]
	Stress and Dynamics		Yes		Yes	
	Electrical Interface		Yes		Yes	
	Materials and Manufacturing		Yes		Yes	
	Mechanical and Motorsport Applications		Yes	Intro. Group Projects	Yes	Second group project [c]

	Module		Current Opportunities?		Can it be Improved?	
Year 2 Modules	Fluid Systems and Power Conversion	Core	No	Theoretical Subjects / Foundation for other Modules	No	
	Stress Analysis		No		No	
	Heat Transfer		No		No	
	Dynamics		No		No	
	Mathematics for Mech Eng		No		No	
	Design Embodiment & Materials		No		Yes	Individual Presentations [k]
	Group Project and Management		Yes	Presentations	Yes	Compulsory Involvement [d]
	Heat and Power Experiments		Yes	Lab. Sessions	Yes	Have Group Discussions [l]
	Stress & Dynamics Labs		Yes		Yes	More Group Discussions [l]

	Module		Current Opportunities?		Can it be Improved?	
Year 3 Modules	Mechanics of Materials	Core	Yes	Collaborative C/W discussions	No	
	Advanced Materials		Yes	Group presentations	No	
	Thermofluid Systems		Yes	CFD ideas are shared	No	
	Dynamics, Noise and Vibration		No	Theoretical subject	Yes	Create lab session to discuss theory
	Individual Project		Yes	Presentation	No	
	Control Systems Engineering		Yes	Group lab sessions and report	No	
	Operations Planning and Improvement		Yes	Presentations	Yes	Compulsory Involvement [d]

	Colour	Meaning
	(blue)	Nothing can be changed
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Self Management

	Module		Current Opportunities?		Can it be Improved?	
Year 1 modules	Introductory Maths	Core	Yes	Online Tests	No	
	Engineering Maths		Yes		No	
	Engineering Design		Yes	Deadlines	Yes	Interim Deadlines
	Thermodynamics and fluids		Yes		Yes	Online Tests
	Stress and Dynamics		Yes		Yes	
	Electrical Interface		No		No	
	Materials and Manufacturing		Yes	In Class Tests	No	
	Mechanical and Motorsport Applications		Yes	Group Project	No	

	Module		Current Opportunities?		Can it be Improved?	
Year 2 Modules	Fluid Systems and Power Conversion	Core	No		Yes	Online Tests
	Stress Analysis		No		Yes	
	Heat Transfer		No		Yes	
	Dynamics		No		Yes	
	Mathematics for Mech Eng		No		Yes	
	Design Embodiment & Materials		Yes	Feedback Deadline	No	
	Group Project and Management		Yes	Gantt Charts	Yes	Improve Guidance and specific feedback [a]
	Heat and Power Experiments		Yes	Overlapping Deadlines	Yes	"Week of Work" [n]
	Stress & Dynamics Labs		Yes		Yes	

	Module		Current Opportunities?		Can it be Improved?	
Year 3 Modules	Mechanics of Materials	Core	No		No	
	Advanced Materials		Yes	Group project deadlines	No	
	Thermofluid Systems		Yes	CFD coursework	No	
	Dynamics, Noise and Vibration		No		Yes	Mandatory tutorial questions
	Individual Project		Yes	Project planning	No	
	Control Systems Engineering		Yes	Group lab sessions	No	
	Operations Planning and Improvement		Yes	Group project	No	

		Color
	Nothing can be changed	(blue)
	Already good	(green)
	Needs improving	(red)
	Needs a little improvement	(yellow)

Project Management and Team Working

	Module		Current Opportunities?		Can it be Improved?	
Year 1 modules	Introductory Maths	Core	No		No	
	Engineering Maths		No		No	
	Engineering Design		No		No	
	Thermodynamics and fluids		No		No	
	Stress and Dynamics		No		No	
	Electrical Interface		No		No	
	Materials and Manufacturing		No		No	
	Mechanical and Motorsport Applications		Yes	Group Project	Yes	Second Group Project [c]
Year 2 Modules	Fluid Systems and Power Conversion	Core	No		No	
	Stress Analysis		No		No	
	Heat Transfer		No		No	
	Dynamics		No		No	
	Mathematics for Mech Eng		No		No	
	Design Embodiment & Materials		No		No	
	Group Project and Management		Yes		Yes	Better guidance [a] and log books [f]
	Heat and Power Experiments		Yes	Results as a Team	Yes	More emphasis on getting it done in the lab, definite aim & roles
	Stress & Dynamics Labs		Yes	Project Manager each week	Yes	
Year 3 Modules	Mechanics of Materials	Core	No		No	
	Advanced Materials		Yes	Group report and presentation	No	
	Thermofluid Systems		No		No	
	Dynamics, Noise and Vibration		No		No	
	Individual Project		No		No	
	Control Systems Engineering		Yes	Group lab and report	No	
	Operations Planning and Improvement		Yes	Group lab, report and presentation	Yes	Clearer aims and outcomes

	Colour	Meaning
	(blue)	Nothing can be changed
	(green)	Already good
	(red)	Needs improving
	(yellow)	Needs a little improvement

Problem Solving

	Module		Current Opportunities?		Can it be Improved?	
Year 1 modules	Introductory Maths	Core	Yes	Limited/Theoretical	Yes	Problem Solving Techniques and Approach (more real life situations) [o]
	Engineering Maths		Yes		Yes	
	Stress & Dynamics		Yes		Yes	
	Thermodynamics and fluids		Yes		Yes	
	Engineering Design		Yes	Further Study Required	Yes	Two stage deadline [p]
	Electrical Interface		Yes	Logic Skills	No	
	Materials and Manufacturing		Yes	Lab. Discussions	Yes	More group discussions [l]
	Mechanical and Motorsport Applications		Yes	Group Problem	No	

	Module		Current Opportunities?		Can it be Improved?	
Year 2 Modules	Fluid Systems and Power Conversion	Core	Yes	Logic/Theory	No	
	Stress Analysis		Yes		No	
	Heat Transfer		Yes		No	
	Dynamics		Yes		No	
	Mathematics for Mech Eng		Yes		Yes	Real Life Situation [o]
	Design Embodiment & Materials		Yes	Excel Spreadsheets	Yes	More marks for ingenuity
	Group Project and Management		Yes	Team Solving	No	
	Heat and Power Experiments		Yes	Limited	No	
	Stress & Dynamics Labs		Yes		No	

	Module		Current Opportunities?		Can it be Improved?	
Year 3 Modules	Mechanics of Materials	Core	Yes	Logic/Theory	No	
	Advanced Materials		Yes		No	
	Thermofluid Systems		Yes		No	
	Dynamics, Noise and Vibration		Yes		No	
	Individual Project		Yes	Thinking what is next step	No	
	Control Systems Engineering		Yes	Interpreting lab results	No	
	Operations Planning and Improvement		Yes	Solving problems using Excel	No	

Commercial Awareness

	Module		Current Opportunities?		Can it be Improved?	
Year 1 modules	Introductory Maths	Core	No		No	
	Engineering Maths		No		No	
	Engineering Design		No		No	
	Thermodynamics and fluids		No		No	
	Stress and Dynamics		No		No	
	Electrical Interface		No		No	
	Materials and Manufacturing		No		No	
	Mechanical and Motorsport Applications		Yes	Basics	Yes	Method of Delivery (Case Studies) [i]

	Module		Current Opportunities?		Can it be Improved?	
Year 2 Modules	Fluid Systems and Power Conversion	Core	No		Yes	Application of Theory / Case Studies [j]
	Stress Analysis		Yes	Examples of Application	Yes	
	Heat Transfer		No		Yes	
	Dynamics		Yes	Examples of Application	Yes	
	Mathematics for Mech Eng		No		Yes	
	Design Embodiment & Materials		Yes	CAD more time-saving	No	
	Group Project and Management		Yes	Lectures	Yes	Case Studies [i] and across subject disciplines [b]
	Heat and Power Experiments		No		Yes	Companies Report Formats [e]
	Stress & Dynamics Labs		No		Yes	

	Module		Current Opportunities?		Can it be Improved?	
Year 3 Modules	Mechanics of Materials	Core	Yes	Examples of Aircraft Application	Yes	Application of Theory / Case Studies [j]
	Advanced Materials		No		No	
	Thermofluid Systems		Yes	Related industry problems	Yes	Application of Theory / Case Studies [j]
	Dynamics, Noise and Vibration		No		Yes	
	Individual Project		Yes	Design project for company	No	
	Control Systems Engineering		No		Yes	Application of Theory / Case Studies [j]
	Operations Planning and Improvement		Yes	Real life group project	Yes	

Comparison of Opportunities: Electrical and Mechanical

In general, it has become clear that students on the electrical engineering course have more opportunities to improve their soft skills than those on the mechanical engineering course, largely as a result of the smaller course size. Below is the summary of a detailed comparison:

Course	Electrical 30 students	Mechanical 200 students	Both
Oral Communication	• There is a lot more contact time with tutors as a result of the smaller course size, which gives plenty of opportunity for technical discussion. • In labs students are asked why they did what they did, as opposed to simply filling out a worksheet. • In programming, tutors would give vague answers unless asked very specific questions using correct vocabulary.	• Group discussion could be prompted in lab sessions.	• Many core subjects that require understanding, which cannot provide opportunities to improve this skill.
Self-Management	• Use of online tests to ensure students are managing work.	• Clashing deadlines provides a good opportunity to evidence self-management. • Design embodiment project feedback deadline encourages students to plan their work effectively. • Practical sessions with weekly deadlines require self-management. • Use of online tests in first year mathematics.	• Factoring time into group project work develops understanding of time management.
Group Project and Team Working	• Electrical students currently have more different opportunities for group working. • Opportunities to discuss and reflect on the group dynamics with a tutor, to improve understanding and performance.	• Group project is marked on team performance and team output, just as in real life.	• Use of Gantt charts and Project management software in group projects.
Problem Solving	• Frequent need to find the source of a problem on an electrical circuit during labs. • The use of real life problems e.g. budget allocation for a project.	• First year trebuchet project introduces the use of mathematical models to solve problems and provide optimum solutions. • Basic problem solving in theoretical subjects.	
Commercial Awareness	• Commercial awareness actively taught in first year. • Extra marks for considering cost-effectiveness in production.	• Case studies used occasionally in lectures, linking theory to real-life applications in the group project and dynamics modules. • Extra marks for simplicity in design embodiment.	• No guidance on log book format.

Recommendations

Letters in [brackets below] cross reference to the two previous spreadsheets: Mechanical and Electrical Module Overviews: pages: 7 - 16

Group Projects

[a]. Detailed guidance and feedback for every individual group member. Give groups an opportunity to bond and assess themselves in a controlled environment (no risk), so performance can be improved upon in later stages leading up to the final presentation.

[b]. Cross disciplinary group projects, involving members of different courses, e.g. business, economics, marketing, engineering and mathematics. Mirroring workplace practice, this should build commercial awareness as well.

[c]. A second group project instead of the reflective essay in the 1st year Mechanical and Motorsport Applications module.

[d]. Compulsory involvement in presentations, to ensure every team member gets an opportunity to present.

In the mechanical engineering year 2 group project, more marks given overall to the management aspect and rotation of group roles to ensure more wide ranging experience.

Commercial Awareness

[e]. Conform to a report format used in industry i.e. the module academic obtains the report format from a company.

[f]. Logbook format taken from IET and IMechE for group project logbooks.

[g]. Electrical and Electronic Engineering courses should make more use of commercially justified practises during circuit and Printed Circuit Board (PCB) design such as using ingenuity in designing PCBs over a smaller area should warrant a greater reward to impart pragmatic skills to students.

[h]. In case of Electrical and Electronic Engineering degrees, the choice of components for a particular circuit design should be questioned, with possible justifications of going with one manufacturer over another. Stock price, likelihood of components reaching end of life (EOL) are just some of many justifications that could be used.

Inclusion of an economic module to enhance students' business awareness, and understanding of profitability.

Case Studies and Application of Theory

[i]. Group project lectures based on specific case studies such as company successes and failures, and supporting theory linked to the case studies. This way the theory is more readily absorbed because the students have anecdotes on which to base it.

[j]. For mechanical engineering specifically, linking content covered in theoretical subjects to its application in the real world, for example linking study of flow in convergent-divergent nozzles to its real world application: rocket engine nozzles. Focus placed on understanding and relevance

instead of passing exams. (Application of course theory is a key requirement for placements at GE aviation).

Individual presentations

[k]. Each student presenting their own design work to a group at the end of an individual design project, to ensure they are able to communicate it effectively. This should greatly improve oral communication and confidence during presentations.

Improving group discussion during lab sessions

[l]. Lecturers could facilitate much more technical discussion during the lab sessions, to broaden the group's understanding of the work. Lab sessions provide an excellent opportunity for technical discussion.

This opportunity could be improved using a system similar to the current one in the *stress/dynamics labs* module in mechanical engineering, where a group leader is nominated and must ensure that their own team completes the lab work to a strict timescale. The workload can be spread amongst the team, and ensure all tasks are completed within the lab session.

The lectures could be coordinated with the lab sessions, and links made to them. This would increase the proportion of students that understand what they are doing in the lab.

[m]. In case of the Electrical and Electronic Engineering degrees, a short presentation/demo at the end of each lab class will ensure students not only demonstrate their understanding but also use succinct terminology.

Week-long Project

[n]. Similar to the wings week for the aerospace students and the first-year trebuchet project for mechanical students, a week-long project gives an excellent source of evidence for a number of soft skills, problem solving and oral communication in particular. By having the deadline at the end of the week, effective self-management and team management would be required to meet the deadline.

Real-life Problems in Mathematic Modules

[o]. Design questions embodying mathematical concepts gleaned from past lectures, applicable to real-life situations, especially for mathematics or subjects which are pre-dominantly mathematics based.

Modelling Techniques for Problem Solving

[p]. Use a two-stage deadline in the first year engineering design trebuchet project, to make sure students have completed the theoretical calculations and have dimensions for their physical model before they build it.

Professional Practice Module

Offer an optional distance learning module for students on placement to improve understanding of application of course material in the workplace, enhancing commercial awareness. This module could be linked to an independent professional organisation such as ILM.

Appendix:

Personal Reflections

Job Profile – Mechanical Engineering

Maja

I have been interested in engineering for many years. It is probably not the biggest surprise since I've always enjoyed maths and physics and on top of that, I've grown up around a lot of engineers, giving me an insight to what different types of engineers work with in the real world. However, I don't know if this made my choice within engineering easier or harder since I could see myself doing a wide range of different jobs, from working with environmentally friendly energy sources to working with telecommunications companies etc. This is probably the main reason why it ended up being mechanical engineering, because it is one of the most diverse types of engineering, enabling me to go into most of the areas of interest in the future.

A mechanical engineer is required to have good oral communication skills, which I feel that I partially have from working as a PAL leader, requiring me to talk to students and explain maths in such way that it is easy for them to understand. I also feel that good communication skills have been gained from working with the Engineers Without Borders society. As a vice president and founder of the UWE branch, my friends and I worked a lot in the beginning with getting contacts from other university branches and also talk to other students at the university about the organisation to get more members for the society. However, I cannot help but feel that these communication skills have been gained from extra curricular activities, and there should be opportunities to get these skills directly in the modules since this skill is one of the most important skills a mechanical engineer should have.

Furthermore, a mechanical engineer should be able to work well in a team. There are very few situations in real life where engineers work alone. This means that if an individual cannot work well with other people, then their opportunities as a mechanical engineer are very limited. Good communications skills and team work skills are more or less linked since good team working skills include being able to communicate well with other team members. Personally, team workings skills are mostly gained from Group Project and Management module in my degree, but this module could be improved. It would be good to see this skill coming from other modules as well.

Last, a mechanical engineering should work well under pressure. This has a lot to do with self-management skills. This is something that should come more or less from a lot of university student's daily lives. I feel that constantly trying to keep up with work, meeting the deadlines for coursework, doing extra curricular activities and still being able to spend time with friends requires good self-management, or else at least one of the areas will suffer. However, is this type of skill something that could come from the degree on it's own (not just from clashing deadlines)?

It is interesting to see how requirements for mechanical engineers are not just technical, but a lot of soft skills are involved. This could be assumed to be because a person could have all the technical skills required, but if they cannot communicate, work with others and manage their workload, then they will not function in a work place. There, these types of skills evidently must be able to be gained from the degree as well.

Career Goals – Mathew Swinburne

From a young age I have always been fascinated by how things work, taking them apart, putting them back together and trying to work out how I could improve them or make them more efficient. The transition to wanting to be an engineer was almost fluid.

There are two roles I hope to achieve in my life's career. The first role is working as part of a research and development team within the Automotive Engineering industry. The second is to go on to take a more executive role within an automotive company.

As with all engineering careers there are five key soft skills that are required as an engineer; project management and team working, self-management, oral communication, problem solving and finally commercial awareness.

Semester one of the first year and the whole of the 2nd year we all took part in a group project. For the 2nd year project I have been elected the chairman which became a very quick learning curve. We started the project with a different chairman but as he came to the university with a technical background he was signed off as completing this module, I was then voted in, attempting to fill his shoes which seemed a difficult task. From this experience I gained confidence within my own ability and management skills and learnt that people do things differently but both ways can still be correct.

Coming up to the latter part of the year we were inundated with assignments. To achieve the deadline set I had to work extremely long hours and as a result it has imbedded in me the importance of time management. This time I was still able to get the work done to an extremely high standard but next time I may not be so lucky and therefore need to make a better schedule. From this experience I hopefully have gained the skills to cope in a working environment when there are overlapping deadlines.

One soft skill which I believe I already had and wasn't because of university is oral communication. Working as a duty manager at a number of go-kart centres taught me to deal with a range of people and ages. Although through group projects and laboratory sessions this skill could be improved.

As an engineer one of the most vital skills to have is the ability to problem solve, this is stated on 'www.prospects.ac.uk' as an automotive engineer should have 'a creative approach to problem-solving'. Many of the modules at University have taught intuitively problem solving skills through logical and technical subject, i.e. Mathematics.

The final skill is often overlooked, during our questionnaires I found out that HP would be impressed if a graduate had looked at their stock prices as they are a good indication of how a company is doing. Only through our Dynamics lectures with Neil Larson have we even begun to think about commercial awareness, often he will link a problem with a real life scenario, i.e. the Millennium Bridge in London. It makes the subject more interesting but at the same time will make you aware of everything you do.

In conclusion I believe University has helped us learn these soft skills through both direct and indirect learning. The one thing I feel that is lacking from the module selection is language skills. Engineering is a global industry and therefore to strengthen candidate quality I feel that if a language course was offered as an extra option this would be helpful to many candidates.

Career Goals - Kelly

Although I am on a Mechanical Engineering degree, my dream job would be to work in an aerospace engineering company.

During the first two years of my degree I felt as if quite a few soft skills required by aerospace engineering companies were covered. The ability to work to deadlines with self-motivation is taught to us from day one, in particular at the end of semesters when deadlines tend to accumulate and self-motivation is the only resource to deal with them.

Personally I feel like I gained organisational and time management skills because of my very busy style of life. University is not all that I focus on, I have a couple of part-time jobs and many hours a week of sport and recreational activities, so it essential to be able to organise my time to keep up with all these tasks and meanwhile succeed in my degree.

Meticulous attention to detail is a skill that is assessed continuously, through exams or coursework, detail is generally what increases the mark.

Two of the most wanted skills required by employers are team working and communication skills. Both are developed during the course only within group projects, which are composed of other engineering students, opposed to what will actually happen in a typical work-scenario, where the engineer is required to work and communicate to clients, teams, suppliers as well as other professionals within the aerospace industry. In addition, at least within the first two years of my course, out of eleven students only one is given the chance to be project manager for the whole year, when I think everyone should have this chance. Presentations are not compulsory, so often communication skills are not gained by all students, but only by the most confident ones.

The ability to think creatively and be innovative is developed a little in practical projects, but not much freedom to creativity is given overall. Commercial awareness is rarely referred too, mostly is given by spontaneous research. Regarding problem-solving and analytical skills, lots of problem-solving theoretical questions are given in maths and physics modules, but not much in practice.

Finally, what I feel as if my degree is lacking in the most is language skills and cultural competence. I am an international student myself and it wasn't until I came to England that I realised how much British universities ignore the fact that once graduated, if in a large industry, the employee will be asked to leave the country and be able to communicate with other cultures, not only by maybe speaking another language, but even by being able to adapt to the new culture for a long or short period of time.

Career Goals – Asad

Akin to the capricious British summer time, which sees an overnight mercurial twist from boiling hot to the familiar sight of people wearing hats and scarves in a feeble attempt to ward off the chill, my aspirations have changed every year I have been on my course.
Rewinding the clock to almost 4 years ago, I came on the course, naive and innocent, unaware of what I would end up doing, hopefully something related to the two words, 'Electrical' and 'Engineering.' I suppose this was for the better, since the first year had its roots in discovering one as a person and involved team work and actual reviews of the bright and dark sides of being involved in the latter, brought about by the excellent module Professional Studies. Coupled with other modules, I had quite a few presentation opportunities, which went hand in hand in aiding me overcome raised heart palpitations every time I stepped in front of a group. Perhaps I could say I accomplished the most group projects in Year 1 as compared with any other year. This alone introduced me to the dynamics of group work, which would only be waiting once I step out of the Cathedral with a black robe and a rolled parchment with a shiny ribbon.
Stepping ahead one year in memory lane, the second year also brought some additional opportunities for further personal development. Being the treasurer of the engineering society, I had to do all sorts of budgets and this opened up the world of estimating costs and timescales, something my degree has a dearth of but is nonetheless required of graduates. I also became a Peer Assisted Learning Leader, in which second year students facilitated group study sessions with first years in difficult modules. The PAL scheme was instrumental in developing my leadership skills, and perhaps was the only such outlet, since none of my other modules had anything remotely related. Save perhaps, Group Project and Management. As the name implies, this module involved lots of cross-discipline engineering students working harmoniously, or at least trying to, with the objective of managing and documenting a year-long project. Logbooks were an integral part of keeping records, although one could not help but feel it was a half-baked effort since no guidelines on observing industry standards was given or implied.
Fast forward two more years, one for my industrial placement, and the other for the final year and I find myself facing the gloomy path of justifying how my needs will be met by any given graduate role. I have since realised that the role itself is only of so much significance, what matters more is intellectual stimulation. The latter can be attributed to the various design projects I have accomplished which required thorough analysis. I guess this is the other area my degree has prepared me well, along with group work. Keeping up with my ever changing career goals, it was only this year I discovered a somewhat hidden profession, that of a patent attorney. The role involves working with inventors and effectively using language to construe novel claims which would give the inventor a right to enforce the patent in a given area. Apart from a scientific degree, the other skill of paramount importance for this role is the accurate, succinct and perfect use of English and other languages. This is one area my degree

has severely underprepared me for, since most assessments are impartial to the language used and its correctness, rather the emphasis is on getting the idea across. While this is helpful for students, the practise of condoning proper sentence structure, spellings and grammar can haunt not most engineers in their practical lives. Hence this is an area that needs rather requires intense scrutiny to ensure the next graduating class can aspire to enter the intellectual property or the legal profession.

Personal Career Goals – electronics Engineering Profile

Marwan

Actually, I am a second year student who is studying electrical and electronics engineering, I have decided to do this subject for several reasons, one of the most important reasons is to join one of the biggest companies in the world which supply the oil to many countries and generate the electrical power in the Arabian Gulf.

During my studies in the first year I have studied subjects in both Electrical and Electronics fields and I have gained some soft skills which are required for an engineer, I have done many practical classes which contain individual and group projects. In fact, in the group project classes I have worked with students from different subjects such as Mechanical engineering and Robotics engineering and I have learnt many skills such as problem-solving, communications and team-working skills.

Apart from individual works, I have dealt with dangerous equipments such as soldering, building and drilling circuits which increase the confidence on the students. In addition, there are bones for commercial awareness in some of the projects which enables the student to be economical in using the components like it has shown me.

On the other hand, in my second year I have worked as a PAL leader (peer assisted learning) which gave me a chance to develop some important skills. I used to lead two groups in maths, passing onto them the academic knowledge needed as simply as I could as well as arranging group meetings for the class whenever they needed. Personally, I feel like I have improved in many of my skills such as leading groups, giving presentations, organization and self management.

Engineering Employability Project Blog

How the Engineering Employability Project has enhanced my awareness on employability.

Posted by Maja Persson | 0 Comments

28Mar2012

Working on the Engineering Employability Project has given me an insight to different skills that employers are looking for that doesn't necessarily come from the degree. Employers have especially emphasized on team working and communication skills, and ironically I feel that these two, especially communications skills, have developed through this project. By asking the employers ant the employers fair about specific examples with the five key soft skills, I became more comfortable in talking to big companies, which was helpful for the telephone interview I had. Furthermore, working as a group in this project trying to achieve the goal of giving useful recommendations on improving the degrees to include more soft skills, has developed my team working skills by dividing up the work between the people.

I also feel that when we tried to see how the five soft skills were found in the modules we have done, it made me consider the modules on a deeper level, refreshing my memory of what we had done, not only the technical skills that had come out from them. For example, I hadn't until this project thought that the lab sessions in one of the first year modules had developed communication skills. However, when fully considering the module, we realized as a group that the discussions during the lab when the lecturers asked us to explain what was happening using the knowledge that we had gained from the lectures, we improved our communication skills, because we had to explain it in such way that everyone understood. This led to us feeling that it could be increased further.

Overall, I feel that this project has increased my employability awareness, and also has made me consider the skills I gain from my degree on another level.

Employability Project - In retrospect

Posted by Asad Raja | 0 Comments

28Mar2012

The project has been quite fruitful in terms of gleaning the assessed criteria in the whole recruitment process. Even though I had some knowledge about the requirements of soft skills, actually talking to recruiters and learning how something so menial as a slang term one would ordinarily use without giving a second thought can have far reaching consequences in the process illuminated the need for self awareness at every stage. The audit of the electrical engineering degree was instrumental not only because it gave me a chance to walk down the once forgotten memory lanes and revisit the projects accomplished but also the mental exercise in the analysis of said projects culminated in various examples of demonstrable people skills which aided the self audit for my learning record. For instance, the knowledge of a particular skill such as leadership and the circumstances under which it was demonstrated will prevent misconstrued statements during assessed interviews, telephone and personal.

tags: none

The most important thing I've learnt from this project..

Posted by Kelly Antonini | 0 Comments

28Mar2012

Before I started this project, because I'd never had much direct experience with interviews and assessment centres, I imagined employers as being only interested in assessing skills and technical knowledge of the applicant rather than the person in whole. It was very surprising to hear that, for example, during telephone interviews they do have some standards to meet, but they also assess if the person would fit in the company just by asking informal questions. Even where the employer is a very big multinational company they still worry whether or not a candidate would fit with the current employees.

Talking to the Academics

Posted by Maja Persson | 0 Comments

26Mar2012

A few days ago, I was talking to an academic for my course who was showing a great interest in the engineering employability project. They were asking about what soft skill we were focusing on, what we had done so far and most importantly, if we had already found anything that we felt could be improved. I talked about how I felt that there should be more opportunities for communication skills since some of the employers at the fair pointed out that an engineers could have all the skills and ideas in the world, but if they can't communicate it to other people then it doesn't matter. The academic then suggested that maybe there could be some type of coursework where students individually have to present their work as a small presentation, and said that they could look into it further. This is something that I also had been considering and it's great that the academic staff is showing an interest in this project. It shows that our findings could make a difference.

tags: none

Dissemination event poster

Posted by Kelly Antonini | 0 Comments

21Mar2012

During today's meeting we were asked to produce a poster representing the project in whole, which will then be used in our future dissemination events. Every member of the team produced a very unique poster, both in terms of layout and of content, indicating what each person found most important to disseminate. The best ideas from each poster were chosen and will then be included in the final version.

tags: Category 1

Third meeting activities

Posted by Adele Merrison | 0 Comments

21Mar2012

The matrix of evidence examples [collated results of employer survey] related to the 5 soft skills we are investigating was shared between team members and common themes noted and discussed such as the requirement to draw on group projects experience, effective communication at application and interview stages of both individual and group problem solving activities.

The group was then asked to decide how they were going to conduct the audit. Various options were discussed but they settled on taking each module in turn and asking if there were opportunities to develop this skill area/ evidence examples already, could this be improved, if not there could there be opportunities and if so what might they look like.

Then they decided on how to present their findings. Two spreadsheets were drawn up: one for mechanical and the other for electrical/electronic engineering and the key skill development opportunities were analysed module by module. The opportunity to continue to add to these shared documents between meetings was created by using Dropbox.

tags: none

Project update

Posted by Adele Merrison | 0 Comments

19Mar2012

We have achieved all the project milestones so far and, as the employer survey was easier to accomplish than envisaged at the outset, we are actually a week ahead of the project plan! However the time of year we are doing this is a key limiting factor here as all of the students will shortly be revising for their exams, then going home for the summer and then off for their placement year. This means that most will be unable to attend any dissemination events to share our project findings and recommendations. For this reason, in addition to the students' report we will produce a poster for use at the Learning and Teaching Conference in April, where we have been invited to present our findings, and also at the Department of Engineering's annual staff development day in May.

tags: none

Audit

Posted by Alex Szymanski | 0 Comments

17Mar2012

Today we decided on a structure and began carrying out the audit. After a number of computer and printing based problems, we began discussing in great detail every module and what could be improved, relevant to the 5 areas of focus. It seems that the modules fit into particular categories. Some modules, such as group project, are hugely important and will need to be dealt with seperately, while recommendations for others can be combined.

tags: none

Telephone Interview

Posted by Maja Persson | 0 Comments

16Mar2012

Last week I had a telephone interview where the majority of the questions were about soft skills. The employer wanted me to give examples where for instance I had worked in a group and a problem had occurred, what we did and what the outcome was. They also asked questions regarding communication, drive and decision making. The interview made me realize that since all the questions were about soft skills and not technical skills, it is very important to not only have the technical knowledge, but to also have the skills to for example communicate the knowledge and work within a team to solve problems.

tags: none

Group brainstorming

Posted by Kelly Antonini | 0 Comments

14Mar2012

In today's meeting we were asked to brainstorm as a group what could be improve in every module taken so far according to what employers look for in terms of soft skills. I was surprised to see how often each member of the audit highlighted a different soft skill for the same module.

Assessment Centre with EOn

Posted by Mathew Swinburne | 0 Comments

Yesterday I had my assessment day at EOn for an Undergraduate Placement/Undergraduate of The Year. I didn't know what to expect as it was the first assessment centre I had ever been to. The first task was an individual presentation to two executives, we had to describe ourselves, why did we apply for the placement, and where did we see ourselves in the future. This was obviously to test our communication skills and afterward began the question side of the interview, the first questions were easy, "when have you led a group", well easy, I am the chairman of our Group Project, however the question became harder to answer, especially using the STAR method (Situation, Task, Action, Result) for example one was "Have you encountered people from a different diversity, and how did you have to adapt yourself".

The next task was a group task; this was to test our team working skills. We sat around a conference table with an individual marker just watching one person each, it felt very unnerving as you did not know who was watching you, but after a while just forgot about them and got on with the task.

The final task was an individual task, where as a project manager you had to stage a discussion with a fellow colleague, and find out why they were turning up late and not doing their work to the best of their ability. My 'colleague' was a 60 something year old man which made it very hard to picture him as this 20 something year old I had been briefed on, I found this the hardest task out of them all as it was very hard to put yourself in the right mind, you have to pretend you have this relationship with them, when really they had just walked in the door.

Even if I do not get the placement, I took away a huge amount of experience and would recommend people to do the same.

tags: none

Employer Fair

Posted by Alex Szymanski | 0 Comments

08Mar2012

I was surprised how open and willing the employers were to share some information about their recruitment and selection processes, and I believe as a result we've come out with a lot of useful and relevant information. It felt like an unusual situation to be in - asking the employer about how they work and the skills they look for, instead of trying to sell myself as a potential employee.

tags: none

Employer Survey

Posted by Kelly Antonini | 0 Comments

07Mar2012

After surveying many employers today I was surprised by discovering how much flexibility is expected from the employee, in some big companies he could be required to change job every 6 months, and so be able to adapt to change whilst continuously developing new skills.

tags: Category 1

Employer's Fair Overview - A Student and Surveyor's Perspective

Posted by Asad Raja | 0 Comments

07Mar2012

The Employer's Fair, to my mind, brings up images not too far off from those of a Bazaar with stall owners out to oversell the neighbouring stalls by an impressive marketing pitch delivered in categories ranging from baritone to counter-tenor. The reality though is far less picturesque, but impressive nonetheless.
The Employment Fair had the 'Embedded in Bristol' mantra which went hand-in-hand with the various graduate and placement roles on offer. Nearly all positions had their roots in embedded programming, languages ranging from C and C#(C sharp in case anyone is wondering, though I like to call it C hash) to Verilog and the like. Perhaps this is where the similarity ended, for the roles were based in a diverse range of companies. From small start-ups such as MathEmbedded with less than 50 employees to huge conglomerates including HP, and everything in between.
Our impressive five members, or the Famous Five as Enid Blyton would have termed us, were lead by the fantastic Adele Merrison who supervised the preliminary meeting. As we entered the Atrium in the Architecture block, we were greeted by half set up stalls, a coffe machine happily smoking away, quite a few absent stalls and a few eager employers twiddling their thumbs waiting for the onslaught of students in half an hour (we were quite early!). The first one we went up to was HP, and we quizzed the lovely lady about all aspects of demonstrable soft skills and received very positive answers. Adele probed her for some more examples and

we eagerly jotted them down. For subsequent surveys, we split up into groups since the other invitees had started arriving. One after another, we checked off the names from our lists.

I approached one software firm, the members of which welcomed me with open arms. Feeling confident, I started off by explaining the purpose of the survey and how UWE was undergoing a curriculum refresh how this survey would be essential in ensuring the next wave of graduates have relevant soft skills. However, as soon as they saw "Employer Survey" written on top of my page, it was pretty much a case of slamming the telephone receiver to the cold-calling telephone marketer. The warm atmosphere turned chilly cold; a part of me expected to see a Dementor gliding around, sucking the warmth and emotions from the place. I was told to email them the survey, which was fair enough so upon a polite request of a personal email address, I was handed the job description flyer and given the generic email. Talk about a cold shoulder! The rest of the employers however were pretty open gave honest answers. Long story short, it was a very successful day!

tags: none

Employer Fair

Posted by Mathew Swinburne | 0 Comments

07 Mar 2012

Today in R Block we had the chance to meet some employers.This ranged from the huge multimillion pound organisations of HP and Broadcom to much smaller companies, all with differing opinions on what was important in a hopeful candidate and what they do to try and find these skills during an interview/assessment centre. HP was the first organisation we spoke to and we went up as a group so we all understood the kind of questions we would need to be asking the other employers. The key piece of information that I will takeaway which I had not even imagined research before was a company's stocks. HP said having a good commercial awareness was vital and if you know how someone's stocks are doing, then you know how they are doing as a company as a whole. They also mentioned that knowing recent acquisitions and new clients likewise showed a good commercial awareness. I was really surprised at how easy the companies were to talk to, and so freely open to give information. A small part I picked up on was how small companies different to the larger organisations. Talking to one managing director he mentioned how unlike a large company which would look at grades and academic excellence they looked at whether you would fit into their 'family' but the way you acted and came across.

Engineering Employers Fair

Posted by Adele Merrison | 0 Comments

07 Mar 2012

The students and I have just returned from an engineering employers fair, where they conducted a key skills survey, drawn up after our first meeting. This will feed into the matrix of key skills evidence examples on which we will base our audit [stage 2 of the project], looking at their modules and identifying where there are opportunities [or not] to develop those skills within the curriculum.

tags: Category 1

Project now underway!

Posted by Adele Merrison | 0 Comments

06 Mar 2012

The first stage of this project is an email and face to face survey of engineering employers to gather examples of the type of evidence they would find convincing at application, assessment centre and interview stages of the recruitment process in relation to five key, soft skills [not technical] selected by the project students. This information will feed into an audit of their degree modules - more on stage 2 to follow!

First Time Meeting

Posted by Mathew Swinburne | 0 Comments

02 Mar 2012

So met up for the first time today and found out what would be installed for us for the next few weeks. We will be undertaking an employability survey for engineering, something that is being completed alongside The University of Loughborough and The University of Exeter. We will be looking at it from a number of different angles; what an employer is looking for in an 'ideal candidate', how we feel our current modules teach us these soft skills and how could the modules be improved with soft skills in mind to make us a better graduate. I am really looking forward to this project as I am currently looking for a placement for next year as well as already having an interview lined up for EOn, hopefully I can learn some things that I did not already know to give me a great chance.