



# Workshop 1: developing work-ready skills, confidence and experience in students to enable them to move into work and further study

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# This session will cover

- ▶ Linking business/university partnerships to your university or business's objectives
- ▶ Case study: how the University of Warwick works in partnership with business to make students work-ready
- ▶ Time to reflect how your university or business can develop mutually beneficial partnerships



# Challenges for Universities

- ▶ “We prepare graduates for jobs that don’t yet exist, who will have to solve problems we don’t yet know about”
- ▶ In a VUCA (volatile, uncertain, complex, ambiguous) world that needs work-ready and future-proofed graduates
- ▶ Being employer-informed, not employer-led
- ▶ →SCS’s mission: “enabling students to take personal responsibility to become successful students and employable graduates”

# Employers want:

- ▶ Good degree from a good university
- ▶ Relevant work experience
- ▶ Extra-curricular experiences, e.g. sports, charity work, volunteering
- ▶ Ability to record and understand their experiences, tell their unique story, and adapt it for different audiences. Then be able to secure a job in the graduate labour market



## Why these are important

- ▶ Good degree = guarantee of quality
- ▶ Work experience = can delivery quickly
- ▶ Extra-curricular experiences = proves skills, attitudes and qualities, e.g. a leader, team-player, enthusiastic, agile, committed, flexible
- ▶ Tell their story = demonstrates fit with employers and independence in a globalised VUCA world



## What this means

- ▶ Universities need staff\* to work with the labour market/employers, who can interpret and mediate that knowledge for students
- ▶ Employers need staff to work with the universities, who can interpret that knowledge for their organisations
- ▶ \*Student Careers and Skills has the External Relations unit of Employer Connect, Internship Development, Volunteering = 18 staff. We work alongside the academic curriculum



# External Relations

- ▶ Mission: enabling students to make good decisions about their futures by providing an extensive range of graduate employment, work experience and volunteering opportunities.
- ▶ Context: employers compete for best talent in a global VUCA labour market. Skills shortages/labour market changes create demand; we enable employers to access suitably qualified and able graduates
- ▶ External Relations unit: creates mutually beneficial and innovative partnerships, done with care and thought by skilful people
- ▶ The team works with 3,200 local, regional, national and international employers to provide 1,000 students volunteers in the local community, 7,300 work experience opportunities on campus/in local area, 65 students on internships, 261 in receipt of bursary, 100 employer events, 9 fairs and 18 mini fairs p.a. Specialist areas include: international employers; SMEs\*; PhD employers
- ▶ \*Small and Medium Enterprises, with less than 250 employees







## WMG objectives

- ▶ Facilitating technology transfer and knowledge for industry
- ▶ Through applied research that addresses industry's problems
- ▶ Through education programmes that are designed to meet industry's needs





## And what about you?

- ▶ What are your university's or business's plans for business/university engagement?
- ▶ What are your strategies to find the best graduate talent?
- ▶ What works well with the university/business partnerships now?
- ▶ What needs changing and why?

# University services for employers

- ▶ Advertising vacancies for graduate jobs and vacation internships
- ▶ Meeting students at fairs, mini fairs, skills sessions, interviews on campus
- ▶ Attracting students using vacation internships; experience days; projects within curriculum; sponsorship of individuals and degrees; guest lectures; input to curriculum design, etc.

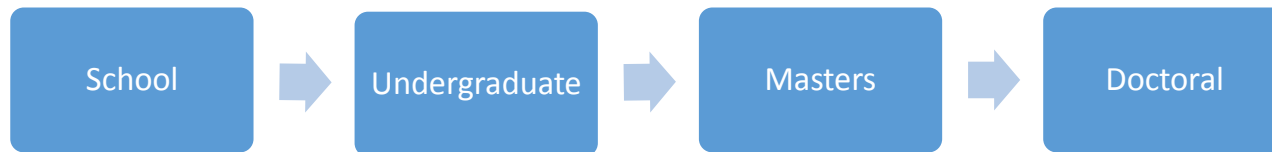


# Attracting and securing graduate talent

- ▶ How attractive are your graduate programmes, and how do you compete with other employers looking for the same graduate talent?
- ▶ Early engagement, e.g. in Y1 and 2. spring weeks, summer internships, projects → spot top talent, and secure them before graduation. NB: 35% of Times Top 100 graduate roles are filled prior to graduation by students who worked in the organisation whilst studying; this rises to 74% in investment banking
- ▶ Many graduate employers cannot find suitable graduates, so recruit school leavers to programmes

# The WMG story, Academy to DTC

- ▶ Developing skills from school to doctorate
  - Academic Knowledge and Skills
  - Transferrable skills



<http://www2.warwick.ac.uk/fac/sci/wmg/>

# WMG Academy for Young Engineers

## What is the problem?

Institute of Engineering Technology report Skills gaps amongst school leavers are:

- Practical experience
- Technical skills
- Leadership skills
- Communication skills
- Ability to work on own initiative
- Literacy
- Numeracy
- Teamwork

## What we did

- A new school in Coventry
- Governed by Business and University
- Longer hours (like a business)
- Behavior Framework
- Business-like and business-led
- Business led projects to deliver engineering education
- <http://www.wmgacademy.org.uk/>

# Applied Engineering UG Programme (AEP)

- Responds to the notion that traditional engineering graduates don't have the ability to apply knowledge from 'day one'.
  - Part Time, BEng degree in Applied Engineering taken over 4 years part-time
  - Company based assignments and projects
  - Blended and flexible learning supported by the VLE (Virtual Learning Environment)
  - Common first two years
  - Engineering Specialisation in Years 3 and 4
  - Close relationship with business and able to respond to business needs
  - New needs: New modules
- Companies pay and can choose to further develop their own staff
  - With the 'right' engineering skills for the business
  - AEP can help companies attract and retain the best talent
  - Low financial commitment from the student means the company can then encourage its staff to develop their skills in the direction the business needs

# Technical Accreditation Scheme

- ▶ Developed with Jaguar Land Rover and now offered to supply chain.
- ▶ Masters level modules.
- ▶ Up-Skilling for the **Engineering Needed in 2010 to 2020** and Beyond
- ▶ Offer to staff business-needs driven training, which will also engage employees and encourage continuous self development.
- ▶ Engage with Universities, who can offer leading teaching and training on specific technical subject areas, where possible linked directly to university research projects.
- ▶ Develop necessary skills, to support future technology and product development and supporting strategic skills needs highlighted by UK government for the automotive industry.





# TAS Statistics

- ▶ Programme established in 2010, first modules delivered in 2010-2011 academic year
- ▶ Partnership of 9 universities, led by WMG
- ▶ 76 MSc modules offered
- ▶ 4927 module places booked to date since the programme began
- ▶ 1553 module places booked for 2014-15 academic year
- ▶ 68% of JLR Product Development engineers have undertaken at least 1 module
- ▶ Accredited by Institute of Mechanical Engineers, Institute of Engineering Technology and Institute of Materials, Minerals and Mining



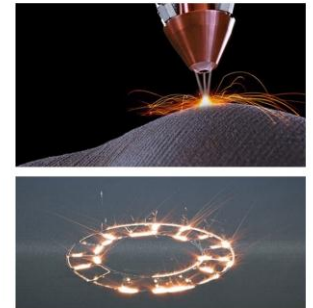
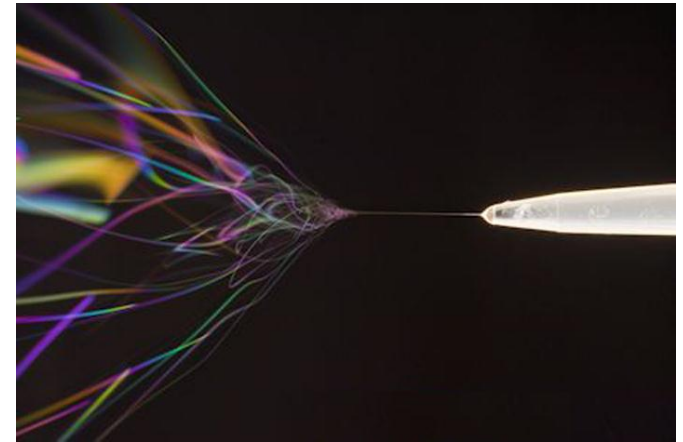
# The WMG Engineering Doctorate

- ▶ *Aim...to create a future generation of manufacturing leaders with high-level know how and research experience that is essential to succeed in a global environment...*
- ▶ Current focus: “High Value, Low Environmental Impact Manufacturing” – not sector specific
- ▶ The award will be an EngD with an embedded MSc in Innovation & Entrepreneurship where relevant
- ▶ The sponsoring company will benefit from a portfolio of commercially valuable research and a potential future industry leader already embedded within the organisation.
- ▶ Those Research Entrepreneurs will: -
  - Be champions for high value, low environmental impact manufacturing
  - Be adept at working in multidisciplinary teams
  - Be exceptionally well networked - both nationally and internationally
  - Have experience and appreciation of different working environments in other companies and locations
  - Be able to challenge the global manufacturing issues of tomorrow



# WMG Internships

- ▶ **WMG Summer Research Internships**
- ▶ Undergraduates spend the summer working in research groups
- ▶ The aim is to identify and develop researchers of the future.
- ▶ The eventual goal is to significantly grow the number of students studying for an EngD and PhD.
- ▶ But, the internship improves employability by developing experience and key skills such as problem solving, team working and self discipline.





## Success measures

- ▶ Number of employers, vacancies advertised, sectors covered etc.
- ▶ Graduate employment rates and salaries, x months after graduation
- ▶ Number of graduates in different sectors
- ▶ Graduate and employer feedback
- ▶ How well we meet labour market needs
- ▶ How well we serve our economy



## And what about you?

- ▶ Universities: how do you measure success of your service to employers?
- ▶ Business: how do you measure the success of your work with universities?
- ▶ How will you use measures and feedback to improve these?





## And what about you?

- ▶ Which ideas from this workshop can you use to improve your services to each other?
- ▶ How and when will you implement them?
- ▶ 3 questions: (1) what will you do for your university or business; (2) what will you do for your team; (3) what will you do for you?