# Engineering Reliability Management

Your Careers Adviser Peter Lewis

T+353 1 402 3868 E engcareers@tudublin.ie



# Skills developed in college

You've developed a range of skills through your education, work experience and personal interests and achievements.

Understanding what skills you have to offer and like to use can help you understand what you want in a career, as well as providing key information for job or further study applications.

In terms of securing a job, academic qualifications alone will not guarantee success. Evidence-based skills sections on your CV can demonstrate the broad range of qualities you have to offer employers.

Opposite are some of the main skills you may have developed while in college:

- Communication skills, both verbal and written Expressing ideas effectively and conveying information appropriately and accurately. Influencing others by expressing self effectively in a group and in one to one situations. Showing a range of verbal and nonverbal signals that the information being received is understood.
- Teamwork/working with others

Working effectively and confidently within a group to achieve a common goal or task. Including understanding your role within the team, and listening and supporting other team members.

Problem-solving ability
 Identifying, prioritising and solving problems, individually or in groups;
 possessing the ability to ask the right questions, sort out the many facet

possessing the ability to ask the right questions, sort out the many facets of a problem, and contribute ideas as well as answers regarding the problem.

- Time-management skills/ability to meet deadlines
   Managing several tasks at once; being able to set priorities and to allocate time efficiently in order to meet deadlines.
- Planning and organising
  Establishing a course of action for self and/or others to accomplish a
  specific goal. Planning proper assignments of personnel and appropriate
  allocation of resources.
- Leadership skills
   Motivating and taking responsibility to lead other people, in order to achieve set goals and objectives.
- Initiative & self-management Identifying opportunities and being proactive in putting forward ideas and potential solutions. Self-disciplined and self-motivated, in the pursuit of studies and professional practice.
- Ability to make quick decisions/work under pressure
   Making decisions and taking action. Maintaining performance under pressure and/or opposition.

You may also have developed a wide range of technical/specific course related skills

# Types of employers/industry sectors

Some of the main types of employers/industry sectors in which Engineering Reliability Management graduates work include:

- Process industries, including food & drink, chemical, cosmetics, textiles, tobacco, steel.
- IT / ICT. Advance process plants
- Aerospace/Aeronautical, marine and automotive industries
- Pharmaceuticals / Biopharmaceuticals / Biotechnology
- Medical Devices/Technologies
- Electronics and engineering;
- Healthcare
- Oil and gas industries, including petro-chemical industries
- Energy Companies / Renewable and Sustainable Energy
- Energy utilities such as gas, electricity and water.
- Research and Development
- Irish Defence Forces
- Government agencies
- Safety
- Education

For sector information see: www.gradireland.com www.careersportal.ie www.prospects.ac.uk www.targetjobs.co.uk

# Career options with your course

Some of main occupations and job profiles secured by Engineering Reliability Management graduates include:

- Maintenance Technologist / Technician
- Maintenance Systems Designer
- Industrial Services Technologist
- Manufacturing Technologist
- Mechanical technologist
- **Electrical Technologist**
- **Process Technologist**
- Production Technologist
- **Customer Engineer**
- Work Planner
- **Operations Technician**
- PLC Programmer
- Reliability & Maintainability Technologist
- **Engineering Systems**
- Support Technologist
- **Building Services**
- Maintenance Technologist
- Maintenance Planner / Scheduler
- Preventative Maintenance Planner
- **Technical Sales Representative**
- Technical Author
- Service Engineer
- Software Engineer
- Maintenance Planning Manager
- Process Plant & Environmental Control Technologist

For occupational information see:

www.gradireland.com www.careersportal.ie www.prospects.ac.uk

www.targetjobs.co.uk

# Employers who have recruited in your area

Companies who have recruited Engineering Reliability Management graduates:

- Wyeth Pharmaceuticals
- · Wyeth Medica
- Pfizer
- Intel
- Bristol Myers Squibb
- Henkel
- Hewlett Packard
- IBM
- Jaguar Land Rover
- Kerry Group
- Glanbia
- Cadbury Ireland Diageo
- Masterfoods
- Janssen
- · Schering Plough
- Eli Lilly
- Amgen
- Stiefel Laboratories

## Job Hunting

It is important that you access both the advertised and hidden jobs market and use any and every means available to you to job hunt effectively.

## **Advertised Jobs**

Most University and IT Careers Services have jobs listings on their websites:

## www.tudublin.ie/jobscene

Graduate programmes and immediate vacancies

# **GRADUATE RECRUITMENT WEBSITES**

- GradIreland (Ire): www.gradireland.com
  Glassdoor (Ire): www.glassdoor.ie
  Gradcracker (UK): www.gradcracker.com
  Prospects (UK): www.prospects.ac.uk
  TargetJobs (UK): www.targetjobs.co.uk
- Milkround (UK): www.milkround.com

# ONLINE SEARCH ENGINES / AGENCIES

- Recruitment Agencies www.irishjobs.ie/agencies complete list of agencies
- On-line recruitment search engines e.g. www.indeed.ie; www. irishjobs.ie; www.jobs.ie; www.recruitireland.com; www.monster.ie; www.careerjet.ie; www.simplyhired.ie; www.jobsireland.ie;

#### OTHER ENGINEERING JOB-HUNTING WEBSITES

- Engineers Ireland Job Desk/Employment Services (Jobs Desk) www. engineersireland.ie
- LinkedIn Groups (e.g. Engineers Ireland) www.linkedin.com
- Association of Consulting Engineers (Directory) www.acei.ie
- Irish MedTech Association www.irishmedtechassoc.ie
- 'the engineer' jobs site (UK) https://jobs.theengineer.co.uk/
   Top Engineering Jobs (UK) www.topengineeringjobs.com
- Internships www.internjobs.com
- Institute of Engineering and Technology Jobs Site https:// engineering-jobs.theiet.org/
- ASME Jobs Board http://jobsearch.asme.org/
- US Engineering Jobs Website www.engineeringjobs.com
- IAESTE (International work experience) http://iaestelc.ie/
- lagora (International Jobs & Internships) www.iagora.com

#### **PUBLIC SECTOR JOBS**

• Public Service - www.publicjobs.ie, www.localgovernmentjobs.ie

#### EVENTS/PUBLICATION ETC.

- Careers fairs GradIreland Fair Autumn, STEM (Feb), Summer Fair, plus many others
- Organisation websites trainee programmes, vacancies, summer internships
- Specialist Magazines & Publications e.g. Engineers Journal (Engineers Ireland)
- Notice boards/Student email account/Lecturers
- Company Presentations (On or Off-Campus)
- Local and national press http://www.mondotimes.com/1/world/ie

## SUMMER WORK / PART-TIME JOBS

- Be proactive use company directories and your network and contact employers directly
- Some useful websites: www.dit.ie/jobscene; www.gradireland.com; www.ditsu.ie/welfare/employment/positions-available/; www.jobs.ie; www.spunout.ie; www.campus.ie; HiUp App; www.parttimejobs.ie

### VOLUNTARY SECTOR / CHARITIES

- Volunteering/NGOs www.dit.ie/careers/studentsgraduates/ thinkingaboutvolunteering/
- DIT Student Volunteering www.studentvolunteer.ie/dit
- Engineers Without Borders www.ewb-ireland.org/
- Community/NGO Links www.activelink.ie, www.volunteering.ie, www.dochas.ie, www.comhlamh.org , http://www.wheel.ie/directory (directory of voluntary and community organisations need to register (directory of voluntary and community organisations need to register)

# **Engineering Reliability Management**

## **Unadvertised Vacancies**

#### **NETWORKING**

- Use help from anyone in your Network friends, family, classmates, lecturers, neighbours, colleagues, friends from clubs & societies, teammates, work-mates
- LinkedIn is a vital resource for networking!!!!
- See LinkedIn resources at http://www.dit.ie/careers/studentsgraduates/ resources/
- Informational Interviewing identify and speak to relevant people in industry
- Work Experience/Job Shadow gain onsite experience through formal roles or observation
- Attend events, conferences, short courses, trade shows, Engineers Ireland events
- Get in touch with past guest speakers connect on LinkedIn!
- Use First/Graduate Destination Reports to ID where past grads have gone
- Join Professional Bodies
- Join Alumni Association/Linked-in DIT Alumni group Use Alumni function on LinkedIn
- Find a mentor i.e. someone who can advise and guide you from a career perspective
- Use contacts gained from Thesis/College work actively build these contacts
- Keep a job hunting record

#### **CONTACT COMPANIES DIRECTLY**

- Speculative applications + cold calling.
- Contact organisation with ideas (ways to reduce costs, make them more money, speed up R+D, Your Unique Selling Point)
- Utilise directories (Also see 'Useful Links' section below) www. kompass.com, www.idalreland.com, professional bodies e.g. Engineers Ireland, www.goldenpages.ie

#### **ENTREPRENEURSHIP**

- Freelancing/Work experience/Self-employment/Start-Up
- http://www.dit.ie/careers/studentsgraduates/ interestedinselfemployment/
- TU Dublin Hothouse www.dit.ie/hothouse/
- · Local Enterprise Office www.localenterprise.ie
- The Digital Hub www.thedigitalhub.com

#### Start Ups:

- Start-up companies www.startupdublin.com, dublinstartupjobs.com
- FDI and indigenous www.makeitinireland.com, www. itshappeninghere.ie
- https://angel.co/ start up jobs worldwide

## Track companies

- Scholarships/Competitions/Blogs / Guest lecturer
- Check out Labour Market trends, www.careersportal.ie, IDA, IBEC (Retail/Financial Services), www.tudublin.ie/careers (labour market news)
- Search newspaper business pages on-line to get success stories on businesses as they are growing – TU Dublin Careers website (labour market news)
- Check out industry award recipients,

#### Other proactive ideas

- Enter competitions / scholarships
- Get Work Experience / internship
- Social networking sites (facebook, twitter, LinkedIn, Facebook, Blog, Discussion Groups)
- Linked-In (set up a profile, link to others, search for companies employees who have
- Linked-in profiles, advertised jobs)
- · Follow & target companies on facebook, linked-in, twitter

For more information on how to go about finding a job and job-hunting sites, <u>See www.tudublin.ie/careers</u>

## Interviews

For more information on how to perform in interviews, <u>See www.tudublin.ie/careers</u>

# CVs/Cover letters and applications

For information on how to put together a great CV/Cover Letter or Application, <u>See www.tudublin.ie/careers</u>

# Useful links (e.g. Company Databases, Professional Bodies, LinkedIn Groups)

This list contains links to some of the most useful websites for your course including professional bodies and associations, employer directories, information sources and LinkedIn groups.

## General websites — useful links

- www.engineersireland.com Engineers Ireland (Institute of **Engineers Ireland**)
- www.ied.org.uk Institute of Engineering Designers
- www.engc.org.uk The Engineering Council UK
- www.irishmedtechassoc.ie Irish Medical Device Association
- www.fmireland.com Facilities Management Ireland
- www.maintenance.org Association of Asset Management **Professionals**
- www.euramet.org European Association of National Metrology
- www.nsai.ie/NationalMetrologyLab.aspx NSAI National Metrology
- www.isa.org International Society of Automation
- www.seai.ie Sustainable Energy Ireland
- www.aee.ie The Association of Energy Engineers Ireland
- www.dccae.gov.ie Department of Communications, Climate Action & Environment
- www.energyireland.ie Energy Ireland (info articles and list of companies)
- www.ipha.ie Irish Pharmaceutical Healthcare Association
- www.biopharmachemireland.ie BioPharmaChem Ireland
- www.kompass.com Search for Agricultural Engineering Companies
- www.theiet.org Institution of Engineering and Technology
- <u>www.ieee.org</u> <u>Technical Professional Organisation</u> / <u>Advancement</u> of Technology
- www.raeng.org.uk Royal Academy of Engineering
- www.epsrc.ac.uk Engineering and Physical Sciences Research
- www.semta.org.uk Skills Council for Science, Engineering & **Manufacturing Technologies**
- www.engineeringuk.com Engineering UK
- www.er-online.co.uk Engineering Resources online
- www.asme.org American Society of Mechanical Engineers
- www.energyinst.org Renewable Energy Institute
- www.aerosociety.com Royal Aeronautical Society

#### Useful Websites re Design Talks/Events

- www.facebook.com/idiireland
- www.facebook.com/ididesignsocial
- www.creativemornings.com/cities/dub
- www.facebook.com/makingspacedublin
- www.meetup.com/Hackers-and-Founders-Dublin
- www.iloveoffset.com
- www.pottingsheddublin.com
- www.showcaseireland.com

#### Portfolio Websites

- www.coroflot.com
- www.behance.net
- www.squarespace.com
- www.deviantart.com
- www.krop.com
- www.wix.com
- www.instagram.com
- www.pinterest.ie

There are many relevant groups on LinkedIn – do a keyword search and request to join those of interest to you. Some examples:

#### Sample LinkedIn Groups

- **Engineers Ireland Official Group**
- TU Dublin 'Graduate Network' (Alumni)
- Facility and Manufacturing Engineers & Maintenance Technicians
- Facilities Management, Ireland
- Industrial Maintenance
- Plant Reliability & Maintenance Professionals
- Meeta The Irish Maintenance & Asset Management Society
- Association for Maintenance Professionals AMP
- Calibration, repair, asset management Engineering Technician Forum
- Metrologically Speaking
- Pharma Calibration

# Careers open to all disciplines (Including 'Paths Into...' Series)

Many graduate vacancies don't require specific degree subjects as possession of a degree is taken as evidence of intellectual ability. What is more important to the potential employer is the range of transferable skills and experience you can demonstrate.

Many graduate training programmes take final year students from a wide range of disciplines, register with the Career Development Centre's Jobsence for a full list of programmes. Here is a range of career areas that are potentially open to graduates of all disciplines. It's important to note that some of these options may require further study either on the job or beforehand.

If you are considering diversifying or changing career direction a postgraduate conversion course may be a viable option.

Some examples of career areas open to students of all disciplines:

- Teaching & Education
- Financial Services & Accounting
- Marketing, Advertising and PR
- Retail, Sales and Customer Service
- Banking, insurance and financial services
- Charities and voluntary sector
- Fund management / administration and investment banking
- Human resources, recruitment and training
- Management consulting
- Management, business and administration
- Media and publishing
- Public sector and civil service
- Social, community and youth

For further information see: www.gradireland.com/career-sectors

# **Further Study**

Are you considering further study or training? See <u>www.tudublin.ie/careers</u> for comprehensive information

As with all choices good research and planning are very important. . Useful undergraduate course search websites include www.cao.ie, www.qualifax. ie, www.careersportal.ie and www.ucas.com (UK)
Here are some examples of undergraduate courses pursued by graduates of your discipline:

#### TU Dublin

- BSc Medical Device Innovation
- BEng Manufacturing and Design Engineering

- BEng Mechanical Engineering
- BSc Electrical Services & Energy Management

#### Other options:

- BEng Mechanical and Manufacturing Engineering DCU
- BE Manufacturing Engineering UL
- BSc Manufacturing Systems UL
- BSc (Eng) Manufacturing Engineering with Management Science -TCD
- BEng Manufacturing Systems Engineering Waterford IT

#### Chartered Engineer Recognition - Engineers Ireland

- See the following link to the Accreditation Criteria for Professional Titles: http://www.engineersireland.ie/EngineersIreland/media/ SiteMedia/services/accreditation/EngineersIrelandAccreditationCriteria2014.pdf
- Please note that, while chartered recognition may be beneficial for career progression, not all engineering disciplines require candidates to hold chartered status to progress.

# Self Employment

Ever thought of being your own boss? Think you have an innovative product or service idea that could have commercial value? Want to commercialise your research? See www.tudublin.ie/careers

## Other Options (e.g. Time out, travel etc.)

Volunteering and working with communities with is a great way to gain valuable real world experience, to develop new skills, to meet new people, to do something worthwhile and to improve your employability. For more details, see <a href="https://www.tudublin.ie/careers">www.tudublin.ie/careers</a>.

## **Labour Market Information**

For information on the latest labour market trends see www.tudublin.ie/careers.

## Additional Information/Advice

For any query you might have, please do not hesitate to get in touch with us.

Disclaimer: TU Dublin Career Development Centre offers advice in good faith on the basis of the best information available.

The Centre accepts no responsibility for decisions made by individuals based on such advice.