

# UL Graduate Outcome Survey 2017 Faculty of Science & Engineering



## Key Facts - All Faculties

### 97%

### 97%

primary degree<br/>graduates are in<br/>employment or<br/>further studypos<br/>dip<br/>gra

postgraduate diploma graduates are in employment or further study

### 100%

research masters graduates are in employment or further study

### 96%

taught masters graduates are in employment or further study

### **95**%

**PhD graduates** are in employment or further study



# Graduate Outcomes Survey 2017 Faculty Spotlight

**Cooperative Education & Careers Division** 

# **Science & Engineering**

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## Introduction

The University of Limerick Graduate Outcome Survey (GOS) is a detailed review of the employment outcomes of UL graduates conducted annually by the University and supported by the Higher Education Authority of Ireland (HEA). The survey forms part of a nationwide review of the employment outcomes of Irish university graduates; its focus is the employment and further study patterns of yearly graduates. UL surveys its graduates in March/April of each year, eight months after they graduate. This year 3,590 graduates were surveyed, that is, a response rate of 69%. Simultaneously, the HEA publish What Do Graduates Do? Outcomes from this report facilitate the comparison of UL's statistics with those nationally. According to the inaugural Times Higher Education, (THE) Europe Teaching Rankings published in July the University of Limerick is among the top three universities in Europe for career preparation through internships and for staff and student gender balance. These outcomes reflect the success of the University's engagement with industry and graduate empowerment through employability, which are founding principles of the University. They are also reflected in the statistics below.

## Graduate Outcome Survey – 2017 Results

### **Primary Degrees**

The GOS continues to reflect a growing confidence in the graduate employment market with a 5% growth in employment levels overall on 2016, and growth of 4% in those graduates securing employment within Ireland. It is not possible to make comparisons with the national employment level of graduates as that data is not yet available but the employment record of UL graduates has always been consistently higher than that national average. Key outcomes for Primary Degree graduates include:

- Number of graduates and survey respondents 2,180 Primary Degree graduates surveyed with a response rate of 73%.
- In postgraduate study or research 18% of graduates, a decrease of 2% on 2016.
- Currently employed 79% of graduates, 67% in Ireland and 12% overseas.
- Seeking employment 2% of graduates, a decrease of 3% on 2016. This is less than half the current national unemployment rate of 5.9%.
- Not available for employment 1% of graduates. This remains the same as 2016. It is important to note that this category includes graduates who cannot pursue a career or further study due to taking a year or more out to travel, or due to domestic circumstances, or illness.
- Average salary €29,788 with 49% of graduates achieving a salary in excess of €30,000. This is an increase of €2,354 on 2016.
- Key sectors Employment of Primary Degree graduates in the Professional, Scientific and Technical sectors at 18% and Human Health and Social Work at 18% has overtaken Financial, Insurance, and Real Estate at 15%. In addition, Primary Degree graduate employment in Education has fallen again, but is still significant at 14%. The overall employment rate for Education graduates is 88%, which is strong, with 74% employed in Ireland and 14% teaching overseas, a decrease of 6% on the previous year. This indicates a return of opportunities in Ireland with 86% employed in full-time and 14% employed in part-time positions.
- Employed by region 67% of UL Primary Degree graduates is the highest percentage of graduates employed in the West (including the West, Mid-West, the South West and the South East) followed by 28% in the East, both increases on the previous year. The most popular overseas location was North America at 32% overtaking the UK at 25%, which was a fall of 15% on the previous year.

Growth in Primary Degree employment in the Professional, Scientific, and Technical Sectors reflects the growth being enjoyed by those particular sectors in Ireland. In addition, the confusion and negativity surrounding the UK and Brexit is clearly a key factor in the decline of the UK's popularity as an overseas location for graduate employment.

## **Executive Summary**

### **Higher Degrees**

### PhD

Results for PhD graduates for 2017 reveal that UL's doctoral students are very much in demand particularly in Ireland. Key outcomes for PhD graduates include:

- Number of graduates and survey respondents 113 PhD graduates surveyed with are response rate of 66%.
- Further study or research 3% of graduates, a fall of 1% on the previous year.
- **Currently employed** 92% of graduates, which is a 3% increase on the previous year. 76% of those graduates are employed in Ireland, an increase of 6% on the previous year and 16% are employed abroad, a fall of 3% on the same year.
- Seeking employment 4%, a fall of 1% on the previous year.
- Not available for employment 1%, a fall of 1% on the previous year.
- Average salary €42,039.
- Key sectors Education 42%, Professional, Scientific and Technical Activities 18%, Human Health and Social Work Activities and Industry both at 13%, Information and Communication and Public Administration and defence low at 1%.
- Employed by region Mid-West 47%, East 18%, outside Ireland 17%, and South-West 12%.

Growth in PhD employment in the above key sectors reflects the growth being enjoyed by those particular sectors in Ireland.

### **Research Masters**

Results for Research Masters graduates of 2017 also reveal that UL's masters graduates are very much in demand, in particular, in Ireland with a 0% rate of these graduates seeking employment. Key outcomes for Research Masters' graduates include:

- Number of graduates and survey respondents 26 Research Masters graduates surveyed with a response rate of 77%.
- Further study 10% of graduates, that is an increase of 2% on the previous year.
- **Currently employed** 90% of graduates, which is an increase of 6% on the previous year. 80% of those graduates are employed in Ireland, a fall of 4% on the previous year and 10% are employed abroad, a decrease of 2% on the previous year.
- Seeking employment 0%, a decrease of 12% on last year which is particularly significant.
- Not available for employment 0%, a fall of 8% on the previous year.
- **Average salar**y €35,000.
- Key sectors Industry at 28%, Professional, Scientific and Technical Activities at 22%, Education and Human Health and Social Work Activities both at 17%, Information and Communication is low at 1%.
- Employed by region Mid-West at 50%, East at 22% and South-West at 11%.

## **Executive Summary**

### **Taught Masters**

Results for Taught Masters graduates of 2017 reveal an average salary increase of just under  $\leq$ 4,000 on 2016 as opposed to the decrease of  $\leq$ 4,500 in the average salaries of Research Masters graduates. Industry us returning to support further study for employees with an increase in starting salaries for further study graduates. Key outcomes for Taught Masters' graduates include:

- Number of graduates and survey respondents 932 Taught Masters graduates surveyed with a response rate of 65%.
- Further study 6%, no variation on previous year.
- **Currently employed** 90% of graduates, which is an overall increase of 10% on the previous year. 74% of those graduates are employed in Ireland, a fall of 2% and 16% are employed abroad, that is an increase of 4%.
- Seeking employment 3%.
- Not available for employment 1%.
- Average salary €33,540, that is an increase of €3,951 on the previous year.
- Key sectors Human Health and Social Work Activities at 20%, Education at 19%, Professional, Scientific and Technical Activities at 13%, Financial, Insurance and Real Estate Activities and Information and Communication at 11%.
- Employed by region Mid-West 32%, East 21%, outside Ireland 17%, South-West 12% and West 8%.

#### Postgraduate Diplomas

Results for Postgraduate Diploma holders of 2017 reveal that these graduates enjoy the highest average salary of all graduates, reflecting the fact that most are in employment while undertaking their Postgraduate Diploma courses. In addition, this category represents the highest percentage entering further study at 19%. Employer support for professional development and in particular, in the areas of Nursing, Engineering, and Aviation, which is consistent with the growth in those particular sectors. Key outcomes for Postgraduate Diploma holders include:

- Number of graduates and survey respondents 166 Postgraduate Diploma graduates surveyed with a response rate of 56%.
- Further study 19%, a 12% increase on the previous year.
- Currently employed 78% of graduates, which is a fall of 6% on the previous year. 70% of those graduates are employed in Ireland, a fall of 11% on the previous year and 9% are employed abroad, that is an increase of 6% on the previous year.
- Seeking employment 0%, a fall of 9% on the previous year.
- Not available for employment 2%, an increase of 2% on the previous year.
- Average salary €44,750, an increase of €9,337 on the previous year.
- Key sectors Human Health and Social Work Activities 19%, Industry 13%, Education, Professional, Scientific and Technical Activities.
- Employed by region Mid-West 41%, East 24%, South-West 15%, outside Ireland at 10% is greater than the Midlands, South-East and West combined.

# **Executive Summary - All Faculties**

### Faculty of Arts, Humanities & Social Sciences

This is a primary degree summary only. Visit www.ul.ie/careers for detailed faculty reports.

2017 survey results for the Faculty of Arts, Humanities & Social Sciences reveal that:

- Number of graduates and survey respondents 683 AHSS graduates surveyed, with a response rate of 66%,
- Currently employed in Ireland 56%,
- Currently employed abroad 15% is the highest percentage of graduates in employment, which is in line with the number of students who participate in our global coop programme.
- Further study 24% is the highest percentage of graduates in further study consistent with the trend across
  the University sector due to the non-vocational nature of some programmes. Graduates specialise or look for
  opportunities to jump industries. Employers in business industries look for Postgraduate AHSS students with
  niche skills such as, research and behaviour analysis from an MSc in Sociology, or communicative skills from a
  postgraduate in linguistics or international studies,
- Seeking employment 3%,
- Not available for employment 2%,
- **Average salary** €26,334,
- Gender AHSS primary degree graduates comprise 155 males and 293 females, with 1% more females than males in employment.

### Faculty of Education & Health Sciences

2017 survey results for the Faculty of Education & Health Sciences reveal that:

- Number of graduates and survey respondents 812 EHS graduates surveyed with a response rate of 64%,
- Currently employed in Ireland 74% is the highest percentage in employment in Ireland.
- Currently employed abroad 12%,
- Further study 11% is the lowest percentage of graduates in further study,
- Seeking employment 2%,
- Not available for employment 1%,
- Average salary €31,672 is the highest average salary, which includes graduates employed in Public Service where rates of pay are banded,
- Gender EHS primary degree graduates comprise 200 males and 318 females with the same percentage of males and females in employment, 87%, the latter being the highest percentage of females in employment for any faculty.

## **Executive Summary - All Faculties**

### Kemmy Business School

2017 survey results for Kemmy Business School reveal that:

- Number of graduates and survey respondents 674 Kemmy Business School graduates surveyed with a response rate of 77%.
- Currently employed in Ireland 72%.
- Currently employed abroad 11% is tied with Science & Engineering for the lowest percentage of graduates in employment abroad.
- Further study 15%.
- Seeking employment 1%.
- Not available for employment 1%.
- Average salary €28,856, which includes trainee accountants on training or part-qualified contracts, who go on the command much higher than average salaries on receipt of a professional qualification.
- Gender Kemmy Business School primary degree graduates comprise 251 males and 271 females.

### Faculty of Science & Engineering

2017 survey results for the Faculty of Science & Engineering reveal that:

- Number of graduates and survey respondents 909 Science & Engineering Primary Degree graduates surveyed with a response rate of 75%
- Currently employed in Ireland 73%
- Currently employed abroad 11% is tied with Kemmy Business School for lowest number currently employed abroad
- Further study 12%
- Seeking employment -3%
- Not available for employment -1%
- Average salary €31,178 is the second highest average salary
- **Gender** Science & Engineering primary degree graduates comprise 488 males and 195 females with the second highest percentage of females in employment.

Note: Any discrepancy in total student numbers is due to inclusion of inter-faculty courses

## **Executive Summary - Conclusion**

The **University of Limerick Graduate Outcome Survey** results represent a snap shot in time, nine months after students' graduation. They reflect what for many graduates is the first step in their career journey; some graduates are still exploring their career choices. Economic recovery in particular sectors is also influencing students' CAO choices, with student first preferences for engineering and business reflecting a changing jobs market.

UL Cooperative Education & Careers Division would like to thank all those who assisted in any way with the Graduate Outcome Survey 2017. This project is important not only for internal reporting purposes but also for providing key information for the various league tables and university ranking activities to which the University of Limerick contributes. More detailed information on Graduate Outcome Survey results for each faculty is available at www.ul.ie/careers.

I trust that you will find this publication a useful resource for future planning.

#### **Gavin Connell**

Head of Careers Cooperative Education & Careers Division University of Limerick September 2018 www.ul.ie/careers





## **Primary Degrees: All Faculties**

### Overview

### Nationally

Graduate employment trends in Ireland reflect the positive change and growth in the economy. There have been new company announcements, higher levels of output from biopharma and biotech sectors, and an increased flow of foreign direct investment. The national unemployment rate for 2018 is 5.9% down 0.3% on last year. This figure is close to the full employment rate in Ireland.

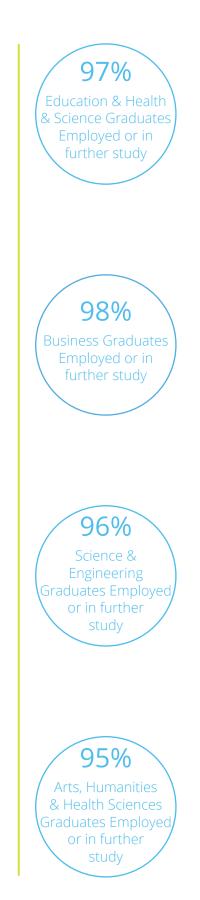
### Demand for graduates

Demand for third-level graduates is very positive particularly in the areas of Professional, Scientific and Technical Activities, with Human health and Social Work Activities, Information and Communication and Construction up slightly. Employers are using graduate talent as a strategic instrument. They are actively seeking out the best talent and accordingly, the jobs marketplace is very competitive.

### National challenges

However, challenges do exist in the labour market, challenges which drive graduate demand. They include uncertainties in the Global and the European arenas, and in particular Brexit. Developing a national talent pool that is resilient, skills-appropriate, and entrepreneurial in outlook is core to the UL mission. There has been a continued increase in the level of graduate recruitment activities on campus this year, including the UL Careers Fair, which is currently booked to capacity with many employers enquiring about an additional Spring Fair. In addition, the Cooperative Education programme confers significant advantage on UL graduates. Substantial research on the benefits of work-based learning ground this programme, and the high demand for UL graduates clearly demonstrates its success. In addition, work experience and internships continue to drive the graduate recruitment agenda, with employers viewing those aspects of the programme as key to a graduate's successful integration into professional roles.

	2013	2014	2015	2016	2017
Employed Ireland	49%	56%	60%	63%	67%
Employed Abroad	21%	17%	12%	11%	12%
Further Study/Training	24%	19%	20%	20%	18%
Not Available	1%	1%	2%	1%	1%
Seeking Employment	5%	7%	6%	5%	2%



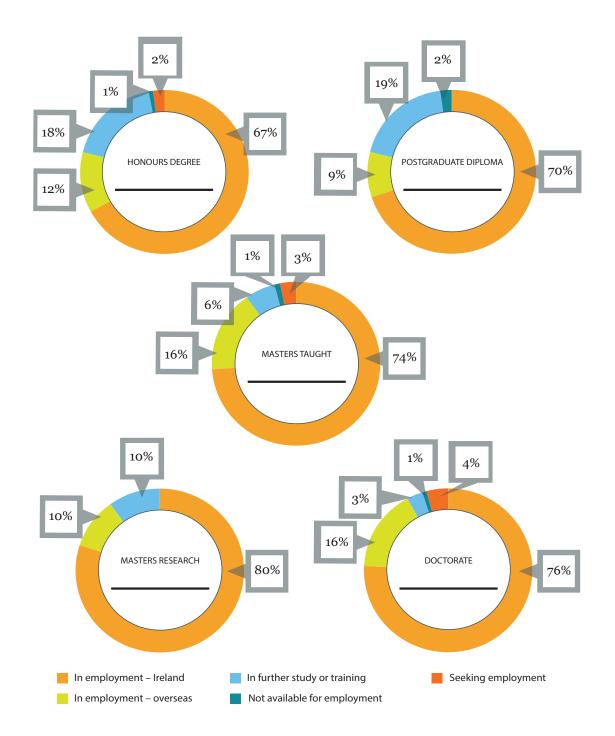
## **Employment by Degree Discipline: All Awards Level**

### UL Graduate fair: October 4th, 2018

The annual UL Careers Fair offers recruiters the opportunity to attract, engage with, and retain highly skilled candidates early in the selection process. In addition to job-related qualifications, skills in demand include technical skills of analytical thinking, self-motivation, collaboration, and flexibility, and soft skills of demonstrating respect for others, working effectively in diverse teams and building trust (Graduate Market Survey 2017).



**Employment by Award Level: All Faculties** 

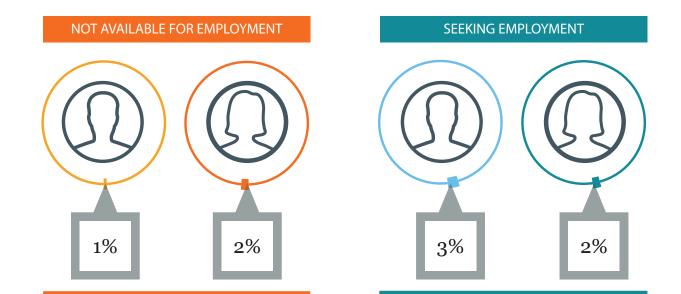


A key result of the UL Graduate Outcome Survey 2017 is the high value placed by employers on postgraduate qualifications including postgraduate diplomas. The differential between Levels 8 and 9 graduates going directly into employment reflects this value-based demand. The continued strong demand for UL Taught Masters' graduates is reflective of this particular result.

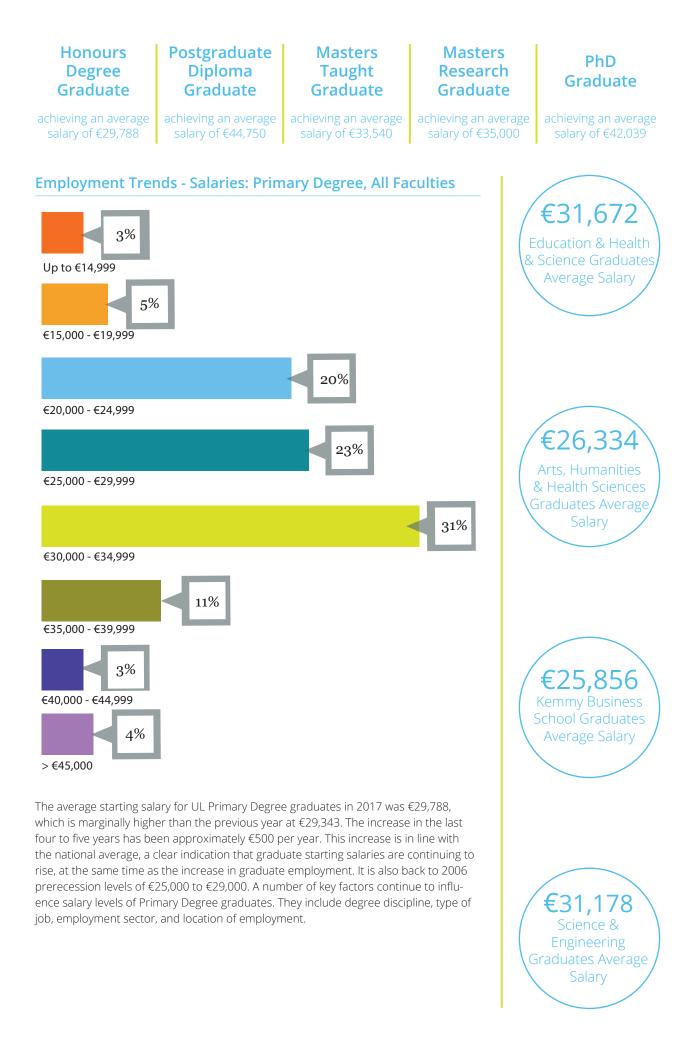
Employment by Gender: All Award Levels, Science & Engineering





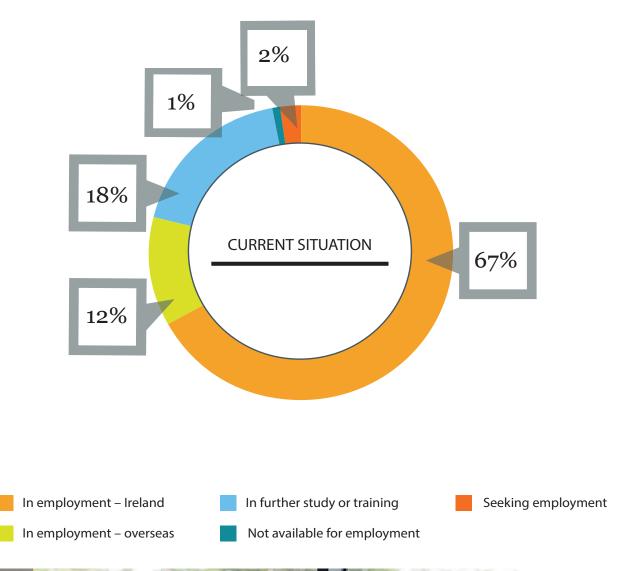






# **Overview of Survey Results**

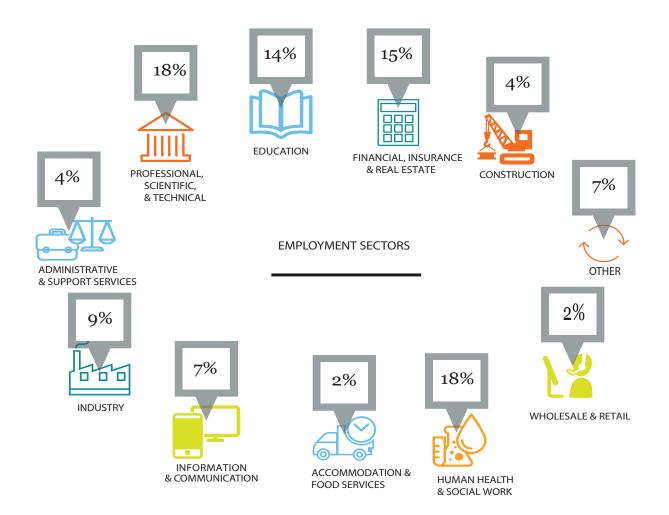
Primary Degree Graduates: Science & Engineering





# **Employment Sectors**

**Primary Degree**, Science & Engineering



Sectoral trends in the employment of Primary Degree graduates from all faculties include the unprecedented demand for Professional, Scientific, and Technical activities graduates, and Human Health and Social Work activities graduates, both at 18%:

### Professional, Scientific, and Technical Activities Graduates Human Health and Social Work Activities Graduates

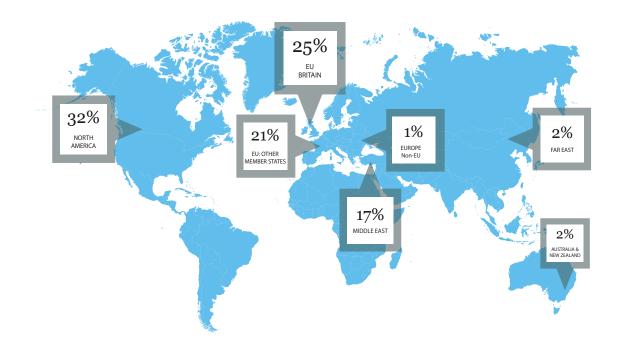
- Law and Accountancy •
- Management Consultancy
- Architectural and Engineering: Technical Testing and • Analysis
- Scientific Research and Development
- Advertising and Market Research .

However, graduate numbers employed in other key sectors declined in 2017; financial, insurance and real estate activities at 15% down 6%; education at 14% down 2%; industry at 9% down 7%; and wholesale and retail trade at 2% down 1%. These are marginal shifts and possibly reflective of the HEA's sectoral re-categorisation.

- Human Health and Social Work Activities
- Residential Care Activities
- Social Work Activities without Accommodation •

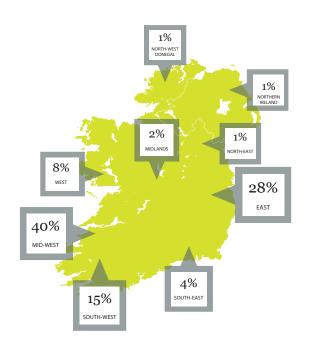
## **Regions of Employment**

Global and Ireland: Primary Degree, Science & Engineering



### Global

There is a significant change in the distribution of Primary Degree graduate employment. Graduates employed in the UK declined by a significant 15% decline on the 2016 figure. The confusion and negativity surrounding the UK and Brexit is clearly a key factor in the decline of the UK's popularity as an overseas location for graduate employment. On the other hand, EU graduate employment has grown by 7% and in the Middle East by 5%. This trend is reflective of teachers, nurses, and business remaining in Ireland and the growth in new opportunities related and, unrelated to Brexit. Overall, opportunities in Ireland are growing.



### Ireland

Employment rates for Primary Degree graduates in the West (including the West, Mid-West and the South) continue to rise, with 62% of UL graduates working within these regions. This high concentration of graduates employed in the West and in the Mid-West in particular, across all faculties, is a significant factor in the attraction of foreign direct investment to the region, and is fundamental to the development of the strategic regional development plan. The shortage of available rental property in the East is also driving employers to 'nearshore' some of their operations in regional offices.

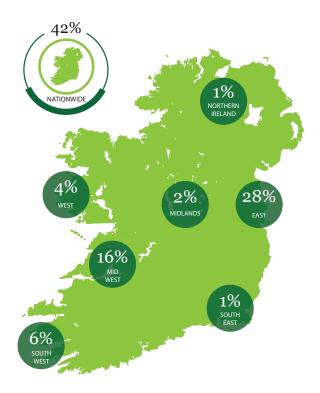
# Jobs Analysis

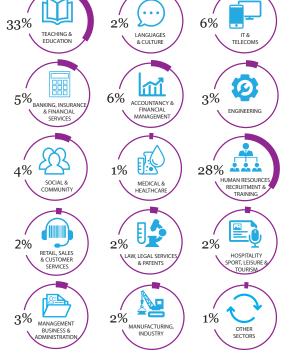
The University Careers Service advertised 10,631vacancies to graduates in the last academic year.42% of these vacancies were within Ireland and remaining 17% were international.

# Jobs Analysis

### Ireland

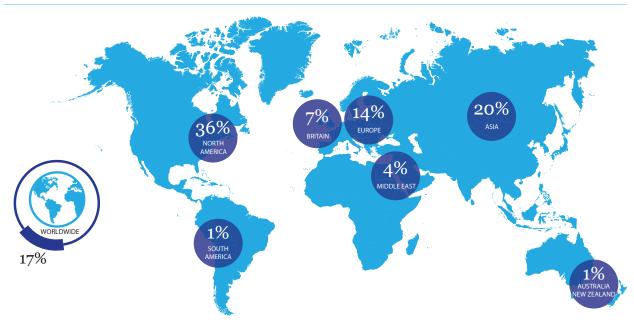
### Sectors for job opportunities





The % of job opportunities of specific regions around Ireland. It is split into nine different regions. The 'Nationwide' region consists of job opportunities that had more than 1 specific location in Ireland.

The highest sector was Teaching and Education at 33%, the high demand was driven by the UK seeking Irish teachers.



These figures indicate the job positions available outside of Ireland (from our UL Careers Connect website).

## Global

# **Career Sector Spotlight**

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**Cooperative Education & Careers Division** 

# Biopharma

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# Biopharma

### Sector Overview

Pharma includes Biopharma, the chemical production of drugs, and Biologics, the production of medicines in living organisms such as plant or animal cells and medical technologies. Ireland is one of the leading locations for pharmaceutical and pharma related industries in Europe. Irish companies contribute greatly to the discovery, development, production, and marketing of pharmaceutical drugs and medical devices. This sector is transitioning from a chemical processing model to a high-value biopharmaceutical investment in complex, cutting-edge science. A \$10 billion investment in new facilities in Ireland in the last 10 years is close to the biggest investment in new facilities anywhere in the world. These companies are making thirty-year investments in their futures. Ireland is attracting this type and level of investment because of the highly skilled talent available.

### Location

90 Pharma companies currently operate in Ireland including 9 of the world's top ten Pharma and Biotech companies. 30 of those companies have FDA approval (US Food and Drug Administration). This sector employs 53,000 people (28,200 directly and, 25,000 indirectly) with 85% of the total number employed by 35 companies, almost all of which are located in Cork.

### Graduate Opportunities

The Expert group on Future Skills Needs (EGFSN) expects the biopharma sector will create more than 8,500 jobs by 2022, bringing the total number employed in this sector to almost 40,000. Opportunities for graduates exist across the disciplines of science, engineering, technology, business, and communication. This sector employs 25% of all PhD graduates, and 86% of other graduates have a Level 8 degree.

### Skills

Health; Science: process development analytical biochemistry; Engineering: bioprocessing with an emphasis on single use manufacturing systems; product development and design; precision engineering toolmaking; systems installation including plant and equipment; Technology: biotechnology skills to support bioprocessing with an emphasis on analytical technology; data analytics and data savvy; Business: Supply chain management; regulatory affairs in biopharmaceutical manufacturing & release testing; Communication: public relations and marketing; technical communication including technical writing.

### **Related Sectors**

MedTech (Medical Technologies) and Medical Devices.

### **Future Trends**

Organic growth and strengthening innovation in order to capitalise on new opportunities are key priorities of Pharma CEOs. In addition, leadership, problem solving, creativity, and innovation are key soft skills for their employees. The trajectory for healthcare demand is a positive one with ageing populations in major markets and expanding affluence in emerging ones driving inputs and outputs. Ireland remains a world leader in the area of pharmaceutical manufacturing, the seventh largest exporter of medicines, and the largest net exporter of pharmaceuticals in the EU. 50% of the total goods exported from Ireland are pharmaceutical products. Accordingly, diverse opportunities for graduates in this sector and related sectors will increase.

#### Sources

Future Skills Needs of the Biophara Industry in Ireland, by the Expert Group on Future Skills Needs (EGFSN), August 2016; IDA; Life Science Consultants; NIBRT (The National Institute for Bioprocessing and Research and Training);P-WC Twenty years inside the mind of Pharmaceuticals and Life Sciences CEOs (2017)

## QUICK FACTS

### Companies operating in Ireland

90 Pharma companies including 9 of the world's top 10; 35% providing 85% of the employment

### Graduates employed in this sector

25% of all PhD graduates; 86% of graduates with a Level 8 degree

### Graduate Opportunities

Science, engineering, technology, business, and communication



# **Career Sector Spotlight**

**Cooperative Education & Careers Division** 

# MedTech



UNIMAN

# MedTech

#### Sector Overview

Medical Technology or MedTech is any technology used to treat individuals suffering from a wide range of conditions, and to improve and extend their lives. It diagnoses, monitors, and treats most diseases that affect society today. Ireland produces a wide range of medical device products including at the low-tech end of the scale, everyday objects such as pregnancy tests, contact lenses, and ventilators. At the high tech end, production includes pacemakers, stents, orthopaedic hip, and knee joints. The European Med-Tech market represents 31% of the world market and is the second largest after the US. In 2015, Ireland secured one third of all Medtech investment in Europe, with €652 million invested by existing Medtech companies. In 2016, exports from this sector reached €12.6 billion. The sudden increase in potential for Internet of Things (IOT) businesses is set to reach €6.5 trillion by 2025, with healthcare the single greatest sector its driving force. Advanced manufacturing meets modern MedTech to create personalised medical devices. This is connected health. Ireland is uniquely placed to take a global lead in this area having not only a global MedTech hub but also 9 of the top 10 biopharma companies and 10 of the top 10 ICT companies located here.

### Location

250 medical technology companies currently operate in Ireland. 9 of the world's top 10 have operations here. 60% of these companies are Irish owned making important contributions to the medical devices sector and global exports. The sector employs 38,000 people; it is per capita the second largest employer in the EU.

#### **Graduate Opportunities**

The Expert group on Future Skills Needs (EGFSN) expects the medical technology and medical devices sector will create more than 4,000 jobs by 2020. Opportunities for graduates exist across the disciplines of science, engineering, technology, business, and communication. The convergence of different technologies with medical device products means that there is a demand for graduates with expertise in the areas of informatics, maths, nanotechnology, software development, engineering, and statistics. The fastest growing sub-sectors are in-vitro diagnostics, connected health, and combination devices.

#### Skills

Science: biological science; chemical science; material science; pharmaceutical science; Engineering: automation; bioprocessing; processing; new product development; polymer; lean sigma; quality assurance; risk assessment; software validation technology; informatics; nano technology; software development; statistics; Business: finance; healthcare economics; human resources; purchasing and sales; Communication: public relations and medical marketing; technical communication including technical writing; international and applied languages.

### **Related sectors**

Biopharma, and ICT.

#### **Future Trends**

The trajectory for demand in medical devices is a positive one with ageing populations in major markets and expanding affluence in emerging ones driving inputs and outputs. Sector growth stands at 4.4% annually, and for nearly a decade in Europe. The available pool of talent is growing too with an increase in STEM graduates over the last five years. Level 8 engineering applications in particular, have increased by 23.9%, science applications by 17.2%. The Irish MedTech sector has grown, with exports quadrupling in the past ten years to €12.6 billion, which represents 10% of Irish exports.

## Q U I C K FACTS

## Companies operating in Ireland

250 including 9 of the world's top 10

## Graduate Opportunities

for graduates with expertise in informatics, maths, nano-technology, software development, engineering and statistics

### Future Trends

A positive trajectory with sector growth standing at 4.4% annually, for a decade in Europe

# **Career** Sector Spotlight

**Cooperative Education & Careers Division** 

# **Financial Services**







# **Financial Services**

### Sector Overview

Financial services involve the investment, lending, and management of money and assets. It includes a number of sub-sectors including: aircraft leasing and financing; asset management and investments; banking and payments; an insurance and reinsurance. Ireland is a leading location for financial services. The IFSC (International Financial Services Centre) situated in Dublin is the location for many foreign-owned multinationals as well as Irish-owned companies. Ireland is the fourth largest exporter of financial services in the EU. Emerging sub-sectors in this sector include: business process outsourcing; Islamic finance; sports betting; smart ageing; marine finance; green finance; and sustainability investment. Financial technology of Fin-Tech is a rapidly growing related sector, which competes and collaborates with financial institutions, through innovations and technologies that are radically changing the traditional financial service sector.

### Location

430 international financial services companies currently operate in Ireland. This figure includes half of the world's banks. 200 of those companies are Irish owned. 20 of the world's top 25 companies have operations here. 8 of the top 10 global aviation lessors are based in Ireland, and over 60% of the world's leased commercial aircraft is owned or managed from Ireland. It is also a significant location for payments technologies, with 25 payment companies operating here.

### **Graduate Opportunities**

Brexit and additional regulatory and financial changes are now creating opportunities across all financial services. In addition to the long-established activities within this sector, there is a need for graduates with expertise in high-end ICT, and graduates who are commercially minded capable of performing more traditional roles, and at the same time excelling in customer facing opportunities.

### Skills

Business including: accountancy; actuarial; data analysis including big data, data visualisations; quantitative modelling; forecasting; evaluating; reporting and web analytics; insurance and re-insurance; management consulting including organisational change and performance; regulatory affairs and tax analysis; Technology including: financial technology with skills in specific software packages; **Communication** including: public relations and marketing, technical communication including technical writing; international and applied languages. Soft skills including a capacity for innovation and problem solving.

### **Related Sectors**

FinTech; RegTech.

### **Future Trends**

Global challenges shaping the financial services industry today include: disruptive changes driven by ICT; new breed technology-enabled competitors; big data; increased emphasis on risk; compliance; security; new business models, products; and, services. In addition, the intensified global competition for foreign direct investment and for talent requires a concerted response in terms of the supply of quality graduates; talent attraction; ongoing skills development, and the capacity for innovation and problem solving. Many financial roles have become unrecognisable due to rapid change in this sector. It is people with varied technical skills and multi-industry experience who will transition more easily between clients, countries, and assignments. Leveraging technology is key to achieving growth priorities.

#### Sources

"A New Take on Talent" - PWC Annual CEO Survey, 2015; IFS2020: A Strategy for Ireland's International Financial Services sector 2015-2020 Published March 2015; The National Skills Bulletin 2016 produced by (SLMRU) in SOLAS on behalf of the Expert Group on Future Skills Needs (EGFSN)

## QUICK FACTS

### Companies operating in Ireland

430 including 50% of the world's banks

### Graduate Opportunities

for graduates with expertise in high-end ICT

### **Future Trends**

supply of quality graduates must respond to intensified global competition for foreign direct investment and talent

# **Career Sector Spotlight**

Cooperative Education & Careers Division

# FinTech

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# FinTech

### Sector Overview

FinTech is the use of technology to deliver financial services and products, which are accessible, convenient and tailored to 21st century consumers' needs. New technologies will transform and disrupt every aspect of the financial services sector from payments and transactions, to risk and compliance, to trading and commodities. This sector holds out the exciting prospect of achieving success through established foreign and indigenous firms, and indigenous dynamic start-up companies working together. Ireland has a very suitable mix of IFS and High Technology companies along with a good entrepreneurial culture and highly qualified talent pool. In addition, Ireland has the support ecosystem, including graduates and workers, to ground many of the capabilities needed for success in this sector. Deloitte's Blockchain Lab and Citi's RIDL Centre are just two examples of multinationals recognising Ireland's potential as a geographically advantageous and knowledge-rich country driving financial innovation. The very rapid uptake of mobile technology in the developing world offers tremendous potential for Irish companies to achieve rapid growth in new markets.

Location There are 40,000 people employed within financial services, and a further 100,000 working in technology. The FinTech sector employs 8,800 people, up 7% on the 2015 and 40% on 2008. On May 1st, 2018 Enterprise Ireland launched the first Fintech Census which will provide a crucial fact-base for FinTech companies, investors, policymakers and other stakeholders on the scope, scale, and strategic positioning of the Fintech sector in Ireland and will chart its growth.

### Graduate Opportunities

Brexit, additional regulatory and financial changes together with advances in technology are creating the opportunities in this sector, which exist across the disciplines of technology, software engineering, business, and communication. Demand exists in particular for graduates with expertise in all areas of financial services and high-end ICT.

### Technical Skills

Mathematical; Financial services including: peer-to-peer lending and crowdfunding; digital and crypto-currencies including bitcoin and digital wallets; robo advisory services; insurance; risk management; **Technology** including: Al; cybersecurity; programming; software engineering and development; and RegTech. **Communication** including: technical communication and technical writing.

### **Related Sectors**

Financial services and RegTech.

### **Future Trends**

Changes in the international and European environment will further disrupt this sector. Related regulatory and legislative changes will create challenges and opportunities across the entire professional services eco-system. Notwithstanding, the prospect of achieving an EU wide market for financial technology that benefits SMEs looking for finance, consumers seeking faster and cheaper ways to do business, and savers and pensioners is both exciting and challenging. FinTech Ireland's vision is 'to support and foster a vibrant, globally-oriented FinTech hub that is synonymous with the development of cutting edge technology, the design of great products and solutions, and the growth of globally scalable FinTech firms.' The proposed census report will ground a comparison between the Irish Fintech sector and other leading Fintech hubs to highlight areas where Ireland needs to improve. In addition, it will inform future policy across the areas of tax, regulation, investment and employment.

#### Sources

https://fpai.ie/downloads/FPAI\_FinTech\_Report.pdf; https://careersportal.ie/sectors/sectors.php?sector\_ id=14#.WQlUhfnyuCg; https://www.siliconrepublic.com/ companies/fintech-ireland-opportunity PwC (2016) Report – Blurred lines: How FinTech is shaping financial services ( A View from Ireland)

# QUICK FACTS

## Employed in Ireland

8,800 people employed, up 7% on 2015 and 40% on 2008

# Graduate opportunities

for graduates with expertise in all areas of financial services and high-end IT

### Future Trends

Meeting the challenge of a growing EU wide market for financial technology that benefits SMS's, consumers savers, and pensioners

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# **Career Sector Spotlight**

**Cooperative Education & Careers Division** 

# Insurance

# Insurance

### Sector Overview

Insurance is a sub-sector of financial services and a key player in that sector. It is a means of protection from financial loss. It is a form of risk management, primarily used to hedge against the risk of a contingent or uncertain loss. An entity which provides insurance is known as an insurer, insurance company, insurance carrier or underwriter. Since the financial crisis of 2008 Ireland has become a global centre for insurance innovation by collaborating with the ICT sector. In 2016, a major survey of the Irish insurance sector found this sector's leaders focused on growth and innovation amidst changing market conditions, economic challenges, and international competition. More particularly, 79% of sector leaders said there were more opportunities for growth in their organisations now than there were three years ago. International competitiveness is a key priority for the insurance industry, enabling further development of Ireland as an international hub for insurance.

### Location

More than half of the world's top 20 insurance companies have a base in Ireland. This sector employees 28,000 people with 1 in every 4 people employed directly or indirectly by the insurance sector.

### **Graduate Opportunities**

The insurance sector is highly regulated by the Central Bank of Ireland and the Minimum Competency Code is in place to ensure that those advising insurance customers are fully qualified and keep their knowledge up to date through Continuing Professional Development (CPD) including:

Accredited Product Adviser (APA) – through the III – entry level qualification
Professional Diploma in Insurance (CIP) through the III – full qualification
Professional Diploma in Financial Advice (covers the broad spectrum of financial services products) leading to the Qualified Financial Adviser (QFA) through the III – full qualification •Actuary - Institute and Faculty of Actuaries, UK – full qualification

In addition, the following University of Limerick qualifications are highly recognised insurance-specific qualifications within the insurance sector which among others may provide exemptions from some of the professional insurance exams:

•Bachelor of Business Studies with Risk Management

•Master of Science in Risk Management and Insurance

•Bachelor of Financial Mathematics – provides exemptions from the professional actuarial exams.

Financial services, Fintech, RegTech, business, ICT, communication

### **Future Trends**

The landscape of the insurance sector is undergoing very significant change including radical social, and technological change. Social trends are shaking up traditional business practices. Increasingly, customers are demanding simplicity, transparency, and speed in their transactions. This change represents both a challenge and an opportunity for the sector. Information and communication technologies are impacting insurance as they are other sectors. Increased access to the internet through smart phones and tablets is fundamentally changing the market. Insurers need to process the vast quantities of information generated (big data). The next wave of competitive advantage will come from exploiting unstructured data such as social media information, to maintain competitive advantage.

#### Sources

"Creating the future for Insurance in Ireland" PWC Report, April 2014; "Insurance Ireland-PwC Pulse Survey", 2016; "www.careersportal.ie"

# Q U I C K FACTS

### Companies operating in Ireland

More than 50% of the world's top 20 insurance companies

### Graduate Opportunities

for fully professionally qualified financial advisors QFA's

### Future Trends

industry responding to radical social and technological change

# **Career Sector Spotlight**

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Cooperative Education & Careers Division

Information and Communication Technology

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### Sector Overview

2017 was again a strong year for ICT professionals who up-skilled in sought-after technologies and methodologies. Ireland's ICT sector continues to experience rapid change covering many niche areas. Many start-ups and younger companies continue to expand their information and communication technology teams. Ireland is the 2nd largest exporter of computer and ICT services in the world. Both foreign owned multinationals as well as home-grown start-ups continue to set up ICT shared services and competence centres in Ireland thereby requiring the addition of a second European language as well as ICT expertise. EU estimates suggest Europe could face an 800,000 person ICT skills shortage by 2020. Currently, the compound rate of growth in high level ICT skills in Ireland is 5% per annum. In 2017, greater than 90% of IT professionals had a third level degree.

### Location

16 of the top 20 global technology companies have their EMEA headquarters or their significant operations in Ireland including 9 of the top 10 US companies. 105,000 are directly employed in this sector. Dublin in particular, is a hub for gaming companies.

### **Graduate Opportunities**

Companies continue to favour Python for development projects, sustaining demand for graduates experienced in this language. There is increasing demand for experienced project managers who combine the necessary ICT technical skills with stakeholder and client management. These professionals are in short supply as software development is not always a typical career path for project managers. Consequently, salaries have increased and competition for such experience is likely to sharpen further in 2018/2019. Coding, automation and software development .net specialists are key qualifications currently in demand. This has encouraged indigenous up-skilling in this area,

and as a result has created interest from overseas.

Software development has seen a significant increase in demand for .net specialists. However, the local talent pool is insufficient, forcing some companies to seek international graduates. Although demand for Java-based developers remains, new companies are increasingly choosing other technologies. Web and mobile development continues to be a strong area of growth leading to a predominantly acute shortage of professionals with niche skills at commercial level.

## Future skills and trends in IT sector include:

• Increased demand for skilled professionals with automation experience combined with strong coding skills, in response to rapid influx and growth.

• Major growth in big data and data analytics, as businesses of all sizes seek to exploit their information assets and find new ways to use it they are seeking specialised analytical skills sets.

• Creation of specific degrees in data analytics which are relatively new. However, graduates coming on stream are suited only to junior and mid-level roles. Thus, Irish based companies are looking to continental Europe and further afield for more experienced professionals. Accordingly, graduates with a PhD in a quantitative field such as statistics, economics or engineering are in increasing demand for data scientist roles.

• Growth of hybrid roles, for example .net plus strong front end experience for a more C# user interface-based projects. Unquestionably, the primary challenge facing this sector across Ireland is the attraction and retention of high-level ICT skills to address the immediate requirement for advanced ICT expertise.

#### Sources

Morgan McKinley - IT Salary & Benefits Guide, 2017

## Q U I C K FACTS

## Companies operating in Ireland

16 of the top 20 global technologies have their EMEA headquarters in Ireland including 9 of the top 10 US companies

## Graduate Opportunities

increasing demand for experienced project managers combining ICT skills with stakeholder and client management

### Future Trends

industry meeting challenge to attract and retain graduates with high-level ICT skills



# **Career Sector Spotlight**

**Cooperative Education & Careers Division** 

# **Education Sector**

# **Education Sector**

## Sector Overview

The Department of Education and Skills 'Action Plan for Education 2016 – 2019' sets out the strategic direction and goals for the Irish education and training system, with an ambition for Ireland's system to be the best in Europe by 2026. The primary objective of this action plan is to provide a strong talent pipeline which combines knowledge, skills and employability, one which responds effectively to the needs of the enterprise, public service, and community sectors, both nationally and regionally, and at the same time maintains Irish leadership in Europe for skills availability. One third of all public service employees work in the education and training sector. The Department of Education and Skills anticipates school enrolment will continue to grow over the next ten years. As the economy recovers, the ability to attract persons with science and maths skills into teaching may become more challenging given that such skills are also in demand, in other sectors such biopharma, financial services, and information and communication technology.

## Location

In 2015, there were approximately 120,000 people employed in selected education occupations, representing 6.1% of national employment. Compared to five years previously, this represents a net 8,500 additional jobs created within the education sector.

## **Graduate Opportunities**

In Budget 2016, the Government announced the creation of over 1,400 additional teaching posts for September 2016 to deal with demographic demand alone. Government also announced the creation of over 800 additional teaching posts to reduce class size at primary level, and to enhance guidance and leadership at second level. Notwithstanding recent periods of oversupply of teachers (in May 2016, there were 460 job ready job seekers with third level qualifications), issues with sourcing teachers with a high level of expertise in specific fields, such as science and mathematics still exist.

## **Future Trends**

The National Association of Principals and Deputy Principals (NAPD) anticipates 10,000 extra second-level students – an increase of 15 per cent by 2020. In addition, the association believes that Ireland is now a key, if not leading player in the development of ICT products and services. Accordingly to maintain this leadership position, Ireland needs sufficient teachers to teach the STEM subjects at second level.

#### Sources

The Class of 2015 (HEA ReportFebruary 2017) What Do Graduates Do? The Class of 2015, An Analysis of the First Destination of University Graduates. A report by the Higher Education Authority, February 2017 Expert Group on Future Skills Needs. National Skills Bulletin 2016, September 2016; Ireland's Education and Training Sector Overview of Service Delivery and Reform. Department of Education & Skills, 2015; http://www. independent.ie/irish-news/education/graduates-gettingjobs-quickly-and-more-staying-in-ireland-35452728.html; http://www.thejournal.ie/teachers-students-increase-principals-1318957-Feb2014/; http://www. education.ie/en/Publications/Corporate-Reports/Strategy-Statement/Department-of-Education-and-Skills-Strategy-Statement-2016-2019.pdf; (Second Level Education) National Figures; Ireland's Education and Training Sector Overview of Service Delivery and Reform. Department of Education & Skills, 2015.

## QUICK FACTS

## Strategic direction 2016-2019

ambition for Ireland's system to be the best in Europe by 2026

## Graduate Opportunities

issues with sourcing teachers with a high level of expertise in specific fields, such as science and mathematics still exist

## Future Trends

NAPD anticipates 10,000 extra second-level students - an increase of 15% by 2020

# **Career Sector Spotlight**

**Cooperative & Careers Division** 

Law

## Sector Overview

In 2012, four years before the EU referendum on Brexit, total output from the legal services sector in Ireland was €2.16 billion, more than property activities, engineering, and financial services such as accounting, tax consultancy, and audit. Currently it is €2.3 billion. As a 'hard Brexit' is the current UK government's preferred outcome, the legal services sector in Ireland should become even stronger, bolstered by global law firms whose clients need to work within the framework of EU law, including GDPR. The number of UK lawyers registering in Ireland has increased by 275% following the triggering of Article 50. 806 lawyers from England and Wales have entered the Roll in Ireland. Lawyers who register in Ireland retain access to the European Court of Justice, EU tribunals and other EU legal institutions. The increased presence of leading global clients such as Google and Apple is also a draw. Other sectors including banking, potentially affected by Brexit, have also identified Ireland as an alternative to the UK. Banks in particular, have been vocal in naming Ireland as a potential post-Brexit location. Ancillary service providers such as eDiscovery, document review and computer forensics services also stand to benefit from this growth. Combined with the impressive roster of global corporations such as Google and Apple who already call Ireland home, thanks in part to the region's attractive corporation tax regimes, many firms will follow where their major clients lead.

## Location

Legal practitioners in Ireland include solicitors, barristers, judges, legal executives, and company secretaries. Currently, 2,000 law firms operate in Ireland. As of June 2017, there were 10,122 solicitors. In 2018, there were 2,300 barristers registered to practice. 20% of all solicitors work in-house or in the public sector, and 24% in the largest 20 firms in the country, all with over 40 solicitors and some with many multiples of that. According to the Law Society, 2014 was the first time a female majority has existed in any legal profession anywhere in the world. There were 4,623 female practising solicitors, compared with 4,609 male practising solicitors. 52% of legal practitioners are women with 48% in private practice.

## **Graduate Opportunities**

The supply from the education and training system appears to be sufficient to meet the current annual recruitment requirement, estimated at just over 1,000. There were over 1,500 law graduates from NFQ level 8 in 2015. EU Legal Services Directives allow legal practitioners qualified in one jurisdiction to practise in another EU jurisdiction, thus increasing labour mobility and international opportunity. Opportunities for graduates exist in Ireland and across Europe in the following areas: private professional practice as solicitors and barristers; corporate; company secretarial; commercial; banking; financial services; technology; property; legal and compliance; financial services; pharma; information and communication technology; EU institutions where a second EU working language a requirement.

## **Future Trends**

Demand for legal professionals outside Dublin is strong and increasing since 2016. Firms in regional areas particularly Cork, Limerick and Galway have increased their staffing levels. Key growth areas remain litigation and property. Regional salaries have increased but they still lag behind Dublin salaries. While traditionally financial services has been the market leader in recruiting legal professionals, 2016 saw a notable increase in roles within the pharmaceutical and technology industries with many companies expanding their Irish operations. Sources

Legal Sector Report – FDR 2017; (careersportal); 2017 Legal Salary Guide - Morgan McKinley Ireland; https:// www.brightwater.ie/docs/default-source/surveys/ salary-survey/2016/brightwater-salary-survey-2017. pdf?sfvrsn=2; www.irishtechnews.ie

## Q U I C K FACTS

## Solicitor Firms operating in Ireland

2,000 private law firms in Ireland 10,122 solicitors on the Roll of Solicitors

## Barristers in private practice

2,300 barristers registered to practice

## Future Trends

The number of UK lawyers registering in Ireland continues to increase - by 275% since the triggering of the UK's Article 50

# **Career Sector Spotlight**

**Cooperative & Careers Division** 

GI III

# **Retail Sector**

# **Retail Sector**

## Sector Overview

The retail sector is Ireland's largest private sector employer and its most geographically diverse. Sub-sectors include the wholesale and motor trade sectors. In 2016, total spending by households on goods and services was €95.7 billion. Retail contributes €7 billion in tax revenue to the national exchequer equating to 23% of total tax intake; more than twice that of Ireland's second largest sector, financial services, which contributes 11%. Currently half of Irish retailers believe overall employment in this sector may contract between 2018 and 2020, citing competitiveness, a more uncertain economic outlook, and the increasing use of automation and technology in the sector. 25% believe it will grow. As technology and consumer behaviour change, so retail changes, dramatically. In November 2017, more than 73% of Irish consumers surveyed by the European Consumer Centre (ECC) Ireland had shopped online in the previous 12 months, generating sales in the region of €5 billion. 60% of those sales went to online retailers overseas.

## Location

There are 37,400 active wholesale and retail enterprises in Ireland. 85% of those enterprises employ less than 10 people. Overall, the sector employs 280,000 employees. 72% of those jobs are based outside of Dublin, much higher than the ICT and financial services sectors, which, is less than 50%.

## **Graduate Opportunities**

Ireland's retail sector comprises a broad mix of the very best in Irish and global retailing, including high profile department stores; pharmacy chains; DIY, home and electrical outlets; Irish and international fashion, footwear and luxury goods brands; major supermarket multiples; shopping centres; leading symbol groups and convenience stores; service stations; specialist outlets; and several local, independent operators.

Small indigenous companies continue to dominate Ireland's retail sector driving demand for Irish graduates. Many large, international, and indigenous retail chains compete for talent using their own international recruitment patterns. They seek graduates to join their yearly graduate programmes with opportunities to rotate across divisions, to gain experience. This change matches the mix of knowledge, skills, and abilities currently in demand in this sector. While retailers anticipate limited growth, in overall employment, they anticipate the quality of roles and positions in the sector will improve as the sector evolves. 85% of Irish retailers' intend to grow investment in people and careers, mainly in technology and refurbishment. Sales are at the very heart of this sector, with every single business involved in selling either a product or a service. Employment opportunities exist across the disciplines of business, ICT, sciences, and communication.

## **Future Trends**

Brexit poses an ongoing threat to the retail sector. The fear is, it will be a hard Brexit, resulting in possible cost inflation and tariffs. However, Irish retailers remain optimistic about the future, with the majority having ambitions to develop, invest in, and expand their businesses in the next three years. Customers now shop online from a desktop, mobile device, or in-store. Customers now want to combine the personal service of traditional retailing with the convenience of using technology. Organisations strive to provide a seamless shopping experience whether online, on mobile or face-to-face. Accordingly, there is a greater demand for digital and analytical skills in retail, including knowledge of 'big data' to analyse consumption patterns and target consumers.

#### Sources

https://www.pwc.ie/media-centre/assets/publications/ surveys/2017/2017-pwc-total-retail-ireland.pdf; (Retail Ireland 2020 Report); (Ibec 2025); (prospects uk) https://www.rec.uk.com/news-and-policy/corporate-blog/ the-future-of-retail-and-what-this-means-for-recruitment

## Q U I C K FACTS

## Companies operating in Ireland

37,400 active wholesale and retail enterprises in Ireland employing 280,000 with 85% employing less than 10

## Graduates Opportunities

Business, ICT, sciences, and communication

## Future Trends

growing demand for graduates with digital and analytical skills specific to retail, to meet the challenge of customers shopping online



## **Career Sector Spotlight**

**Cooperative & Careers Division** 

**Traditional and Performing Arts** 

# **Traditional and Performing Arts**

## Overview

Traditional and performing arts have become an intrinsic part of Irish the cultural life of Ireland. In recent years the traditional and performing arts have become economically significant and performers including musicians, singers and dancers, have careers across the entire globe. In our fast paced global economy, these performers not only need excellent performance skills to have a successful career, but also a wide variety of vocational skills including education, technology, and business to be successful in these competitive fields.

## Funding

Currently, traditional and performing arts are enjoying positive growth and support from the Arts Council of Ireland. The Arts Council is the government body which encourages artists to embark on challenging and innovative projects through a range of awards and traditional arts funding. Artists, arts organisations and groups working with the arts can apply for funding through the Arts Council. Examples of funding available which may be of interest to performing arts graduates include: •Next Generation Bursary Award - this award supports promising artists across all disciplines at an early but pivotal stage in their career.

•Traditional Arts Bursary Award – this award supports professional artists to develop their art practice. It provides artists with the time and resources to think, research, reflect, and critically engage with their art.

•Deis - Deis encourages and facilitates the traditional arts community to seek funding from the Arts Council for a range of projects.

•Music Capital Scheme - this scheme funded by the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs and managed by Music Network, provides support and funding for the purchase of musical instruments to both non-professional performing groups/ensembles, and professional musicians. Detailed information on all traditional and performing arts initiatives is available at http://www.artscouncil.ie/Arts-in-Ireland/Traditional-arts/

## **Scholarships**

The Irish World Academy in UL offers some interesting scholarships for undergraduate and postgraduate students. https://www.irishworldacademy. ie/about/scholarships/

## **International Presence**

The Irish World Academy has a strong international presence, with students from over 40 countries studying there. The Academy is the location for 'Fidget Feet,' Ireland's leading aerial dance theatre company,

## Future Trends in Culture and Investment

The Irish government is aware that a vibrant cultural offering is vital to attracting foreign direct investment. In particular, local authorities identify cultural vibrancy as a key instrument in making their areas attractive for inward investment. Likewise, companies investing in Ireland now look for workers who demonstrate both technical and creative skills. Companies will invest in locations where well-educated and mobile workers want to live.

## Q U I C K FACTS

## Funding

Available from Arts Council of Ireland

## UL Irish World Academy Scholarships

Undergraduate and postgraduate available

## UL Irish World Academy as a location

Location for 'Fidget Feet' Ireland's leading aerial dance theatre company



# **Career Sector Spotlight**

Cooperative & Careers Division

**Creative Arts Therapies** 

# **Creative Arts Therapies**

## Sector Overview

Creative Arts Therapist is an umbrella term for therapists trained in music, dance movement, art, or drama therapy and accredited by the Irish Association of Creative Arts Therapists (IACAT). Creative Arts Therapists receive training in clinical practice, theory, and research. This includes assessment, treatment, planning and delivery, and evaluation. Ongoing personal therapy and clinical supervision are an integral part of the training. The therapists work in a variety of areas from private practice to multidisciplinary teams within hospitals, rehabilitation centres, hospices, residential care facilities, mental health, and social care services. They also work in early intervention, schools, and disability services. Types of Creative Arts Therapies include Music Therapy, Dance Movement Therapy (DMT), and Art Therapy. IACAT is actively campaigning for statutory recognition and registration of Creative Arts Therapies in Ireland. In the UK, since 1999, Creative Arts Therapists must register with the Health and Care Professionals Council.

## **Music Therapy**

Music therapists work in a variety of settings including:

Educational care where the therapy facilitates many developmental skills in children and adolescents with learning and intellectual disabilities, sensory impairments, emotional and behavioural disorders, communication deficits, and developmental disabilities including autism.

Health care where the therapy is included in neo-natal settings, oncology, and in the treatment of burns, acquired brain injuries, and stroke centres. Geriatric care where the therapy supports those living with dementia, promoting positive mood, cognitive function, communication, reminiscence, and managing behavioural and psychological symptoms of dementia. Palliative care where the therapy supports individuals at their end-of-life, by providing emotional support, inspiring life review, and alleviating symptoms. **Courses:** Master of Arts in Music Therapy. **The Master of Arts in Music Therapy in UL is the only one of its kind available in Ireland.** It is a two-year full-time programme of study, which prepares graduates for professional practice as a music therapist. Further information is available at https://www. ul.ie/graduateschool/course/music-therapy-ma.

## **Graduate Opportunities**

Opportunities exist for music therapy graduates with the HSE, charitable organisations, the ETBs, private healthcare providers, the Department of Education, and social services. Music Therapy has a growing evidence base, and is now an integral part of health, education, and social care systems in many countries. Many statutory services recognise it as a core therapeutic option. However, music therapists in Ireland await statutory recognition.

accredited creative arts therapist, with IACAT, the Irish Association of Creative Arts Therapists, the minimum requirement is a master's degree in music, dance, art or drama.

## Q U I C K FACTS

## Types of Creative Arts Therapies

Music Therapy, Dance Movement Therapy, Drama Therapy, and Art Therapy

## Masters of Arts in Music Therapy

UL Masters of Arts is one of its kind available in Ireland

## Relevant Work Experience

Is a pre-requisite for training to be a creative arts therapist in Ireland

## PRIMARY DEGREES FOR FACULTY OF SCIENCE AND ENGINEERING

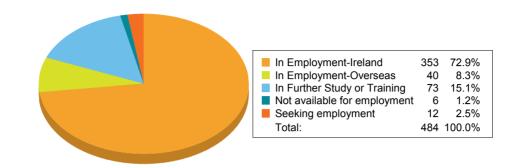
This section provides a complete set of statistical charts for each degree program with the following information:

- Current Situation
- Sector of Employment
- Salaries (Ireland)
- Region of Employment (Ireland)
- Region of Employment (Overseas)

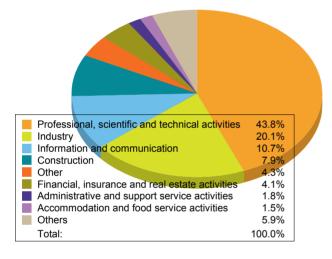
## Graduates of 2017

No. of Graduates	614
Total Respondents	484

## **Current Situation**

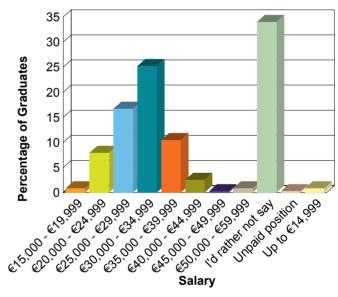


## Sector of Employment

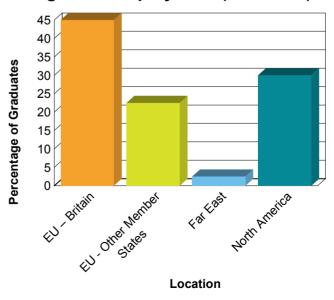


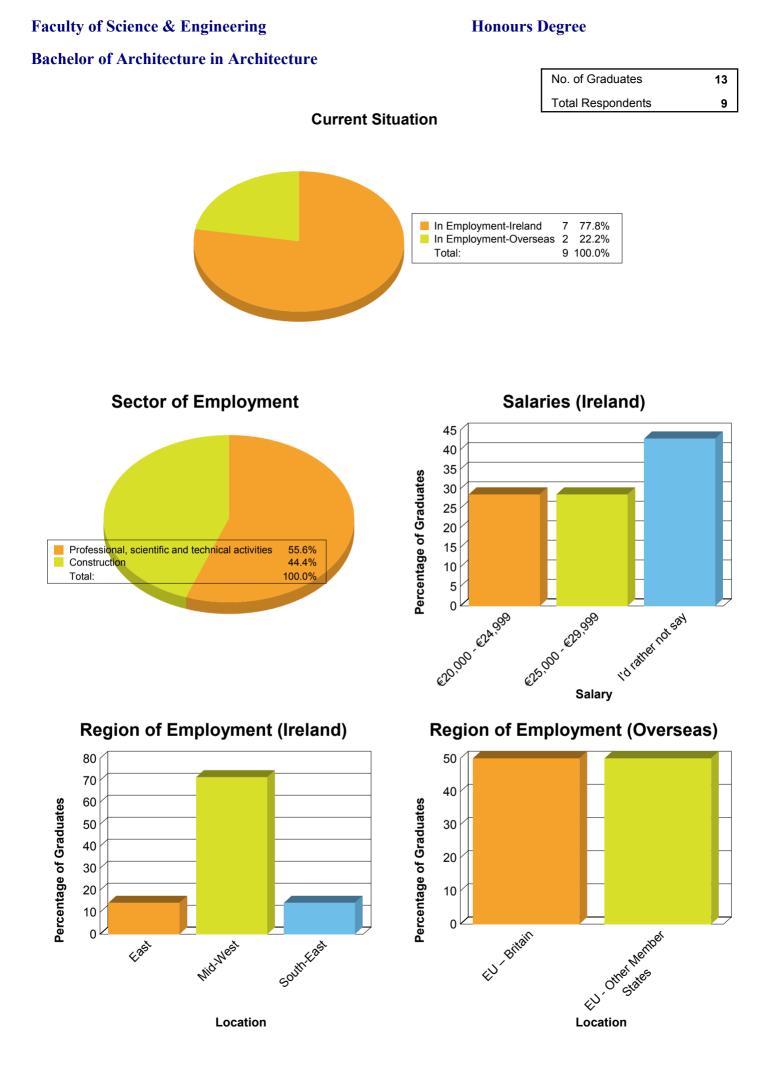


Salaries (Ireland)



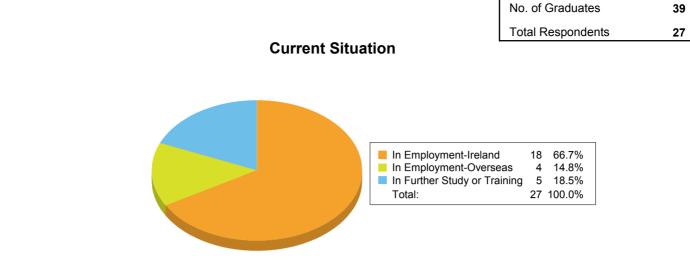
## **Region of Employment (Overseas)**



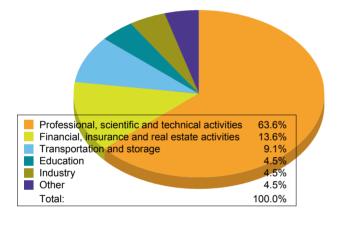


## **Honours Degree**

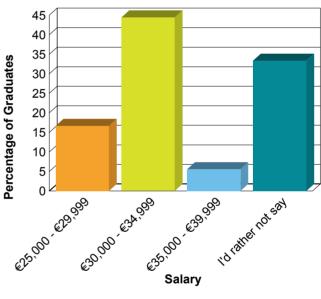
## **Bachelor of Engineering in Aeronautical Engineering**



## Sector of Employment



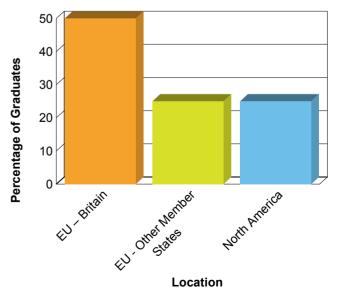
Salaries (Ireland)

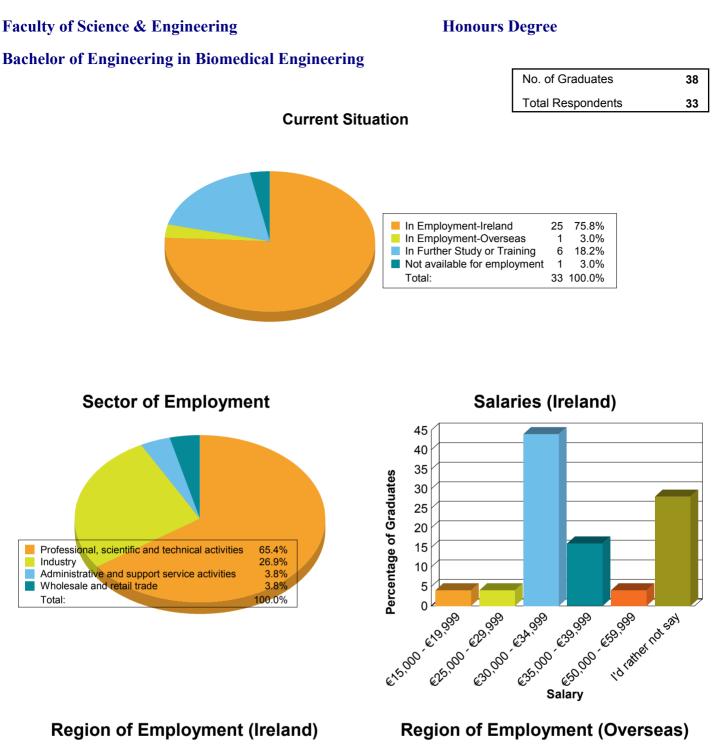


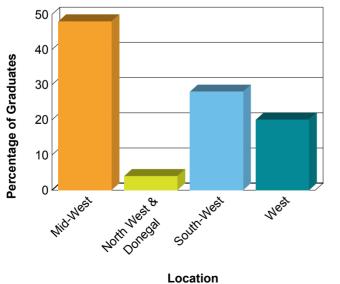
# Region of Employment (Ireland)

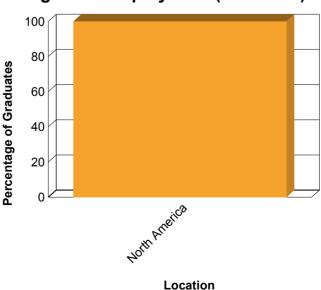
Location

## **Region of Employment (Overseas)**





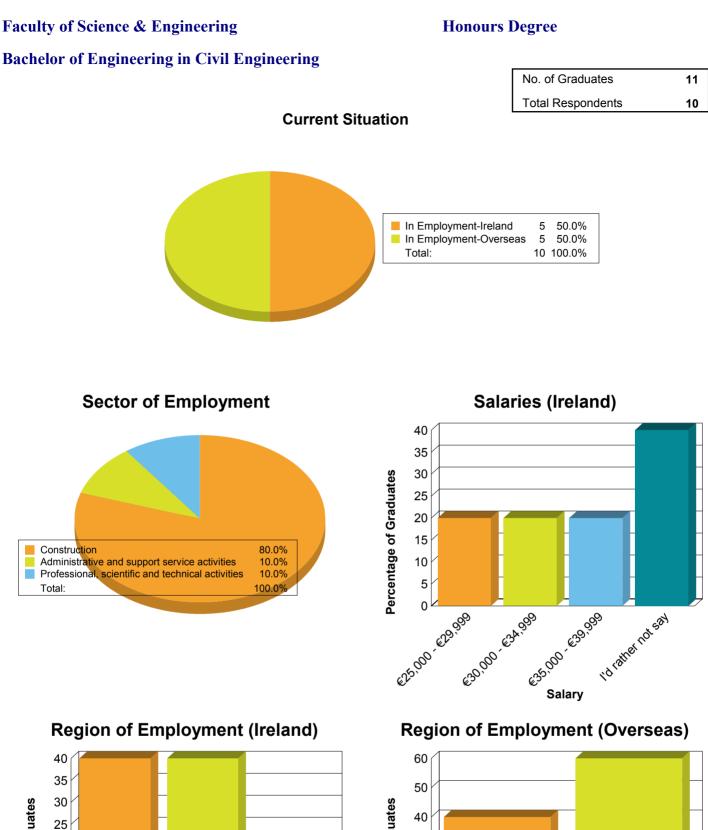


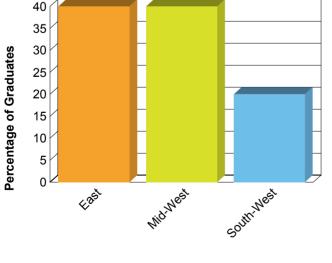


## **Honours Degree**

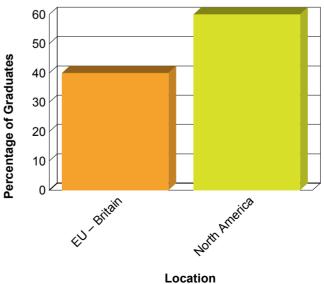
## **Bachelor of Engineering in Chemical and Biochemical Engineering**

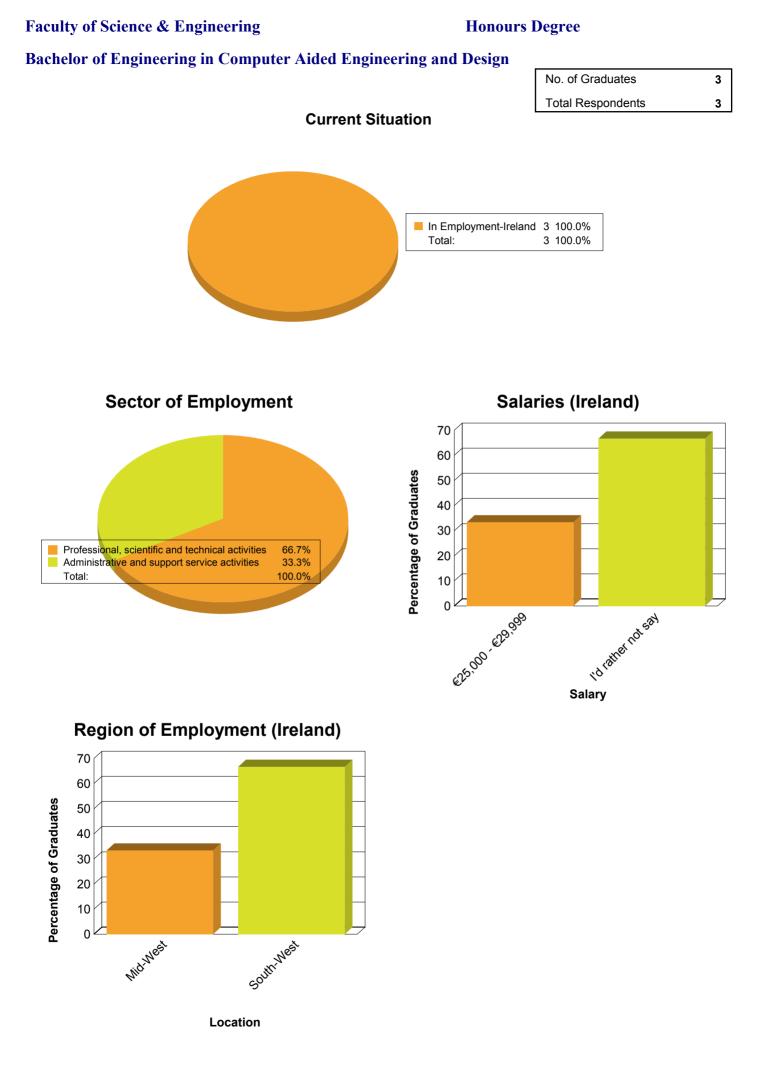






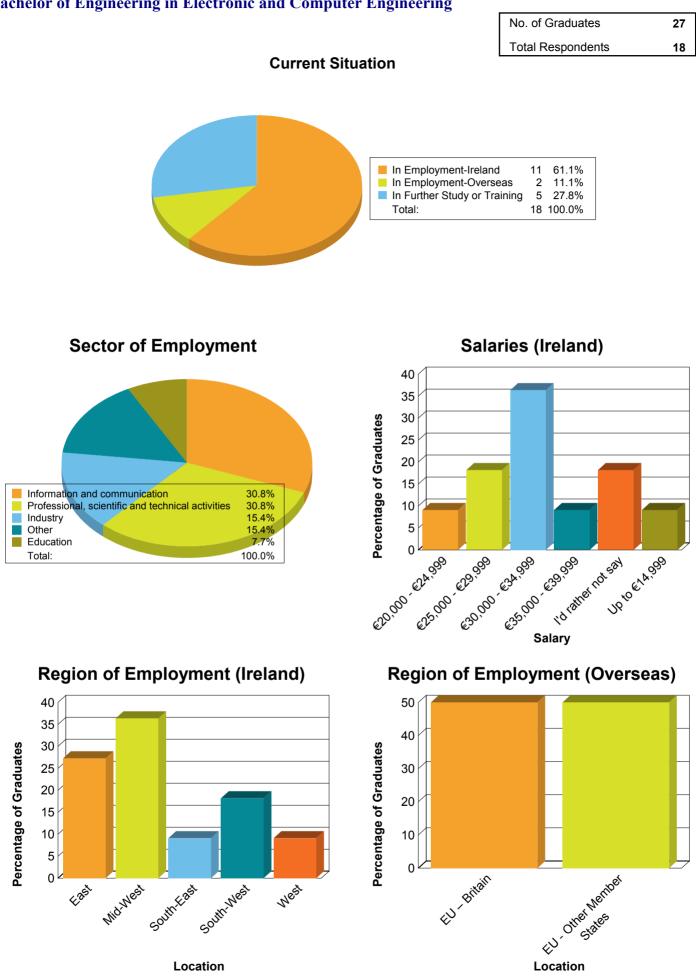
Location





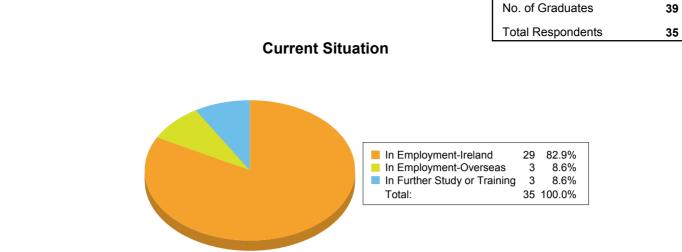
## **Honours Degree**

## **Bachelor of Engineering in Electronic and Computer Engineering**

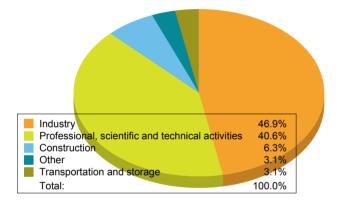


## **Honours Degree**

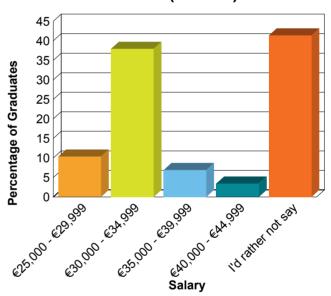
## **Bachelor of Engineering in Mechanical Engineering**

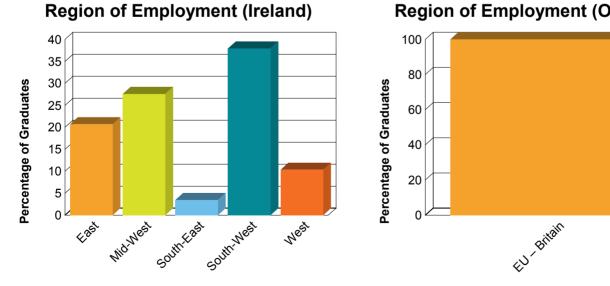


## Sector of Employment



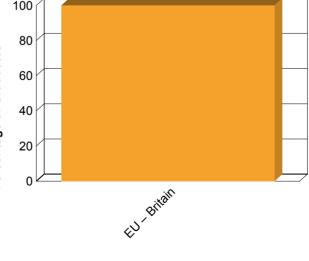
Salaries (Ireland)



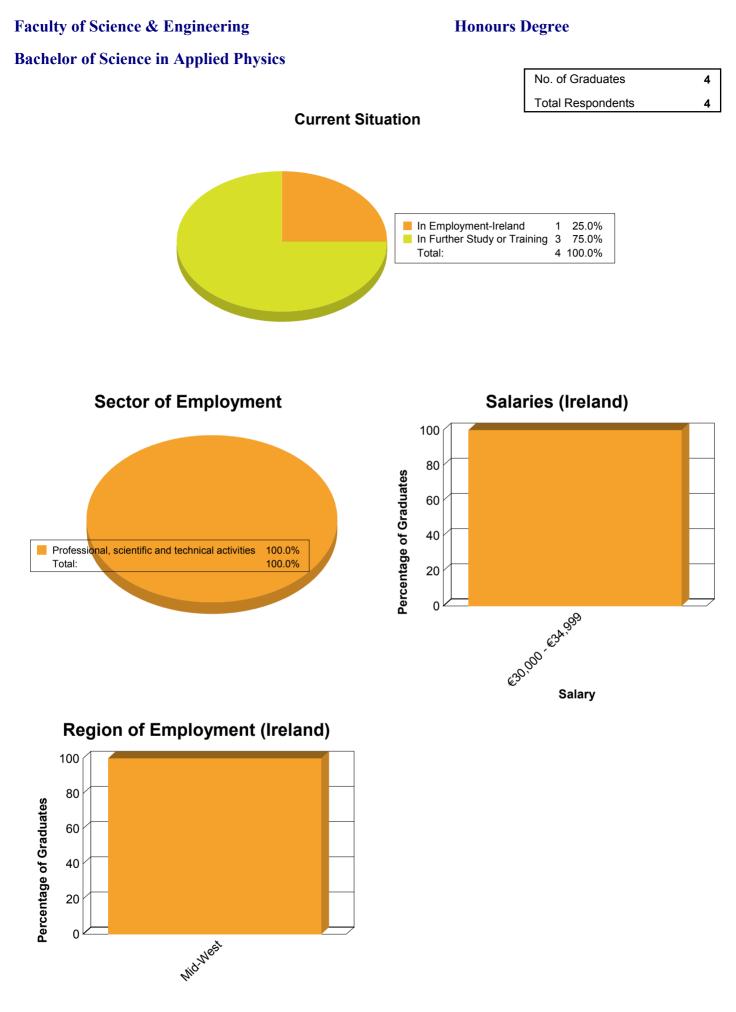


Location

## **Region of Employment (Overseas)**

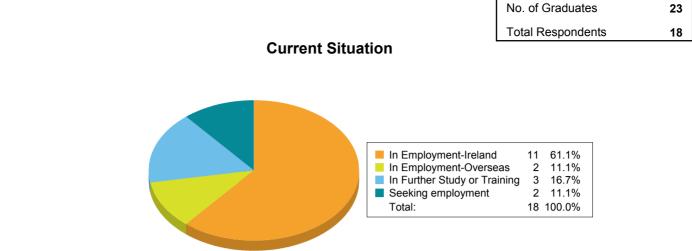


Location

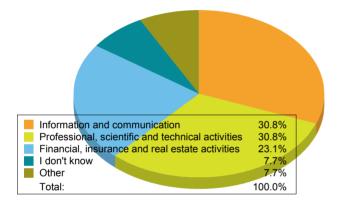


## **Honours Degree**

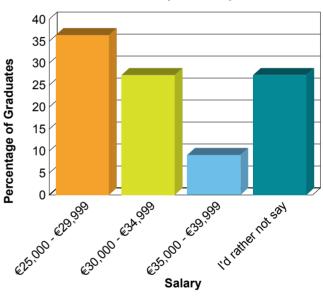
## **Bachelor of Science in Computer Games Development**



## **Sector of Employment**



Salaries (Ireland)

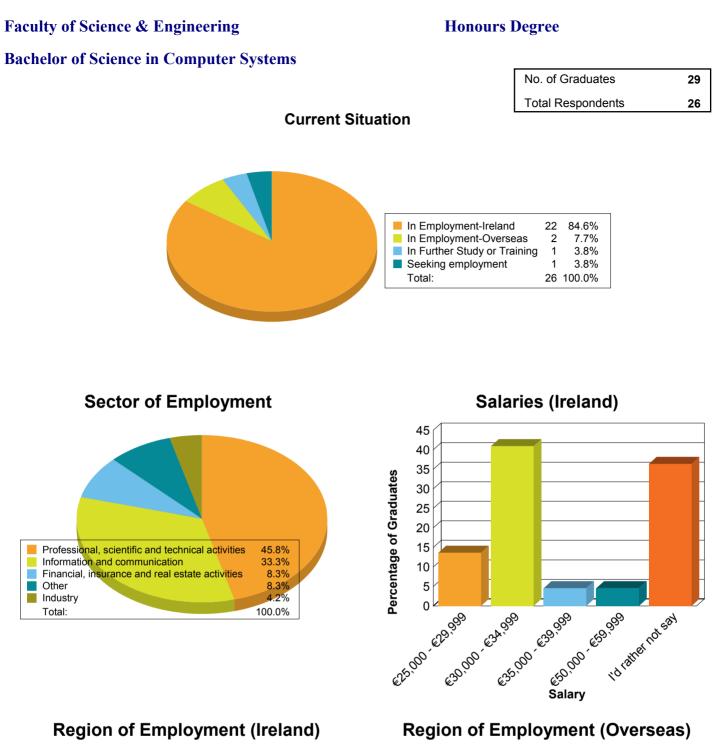


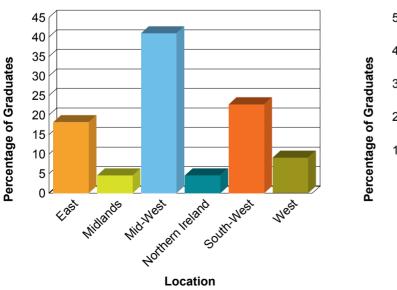


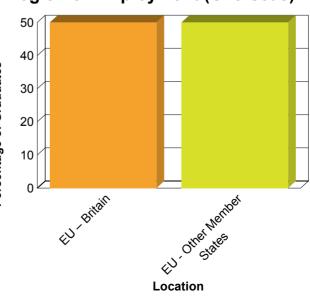
Location

**Region of Employment (Overseas)** 

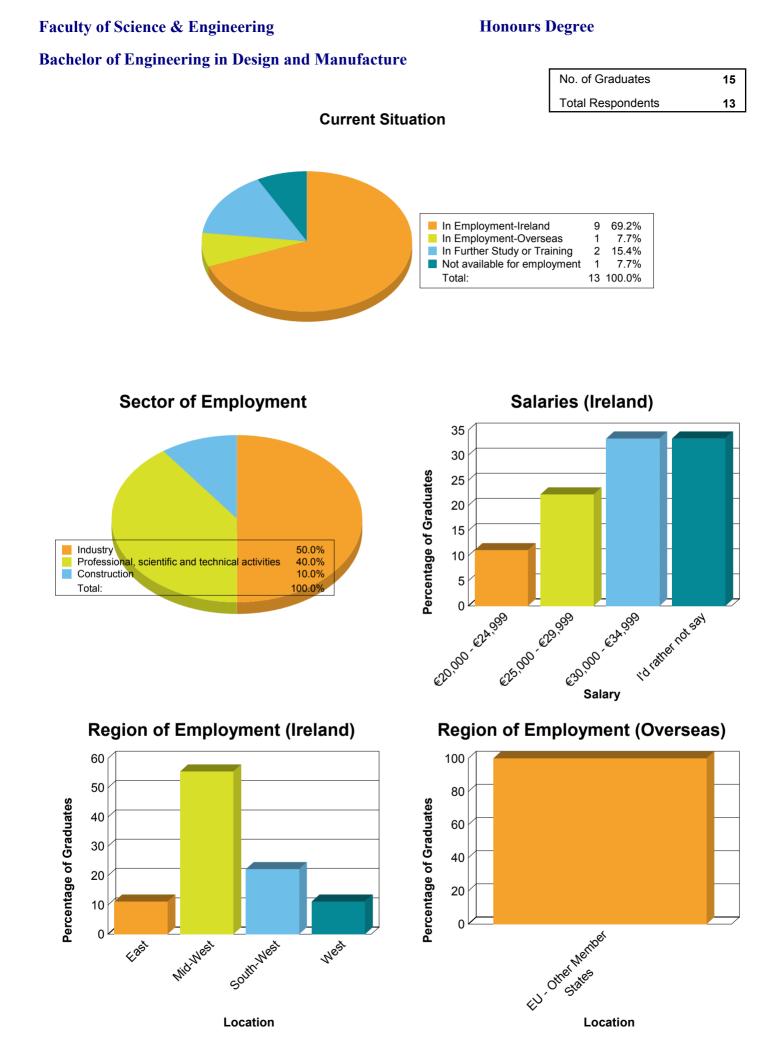
57





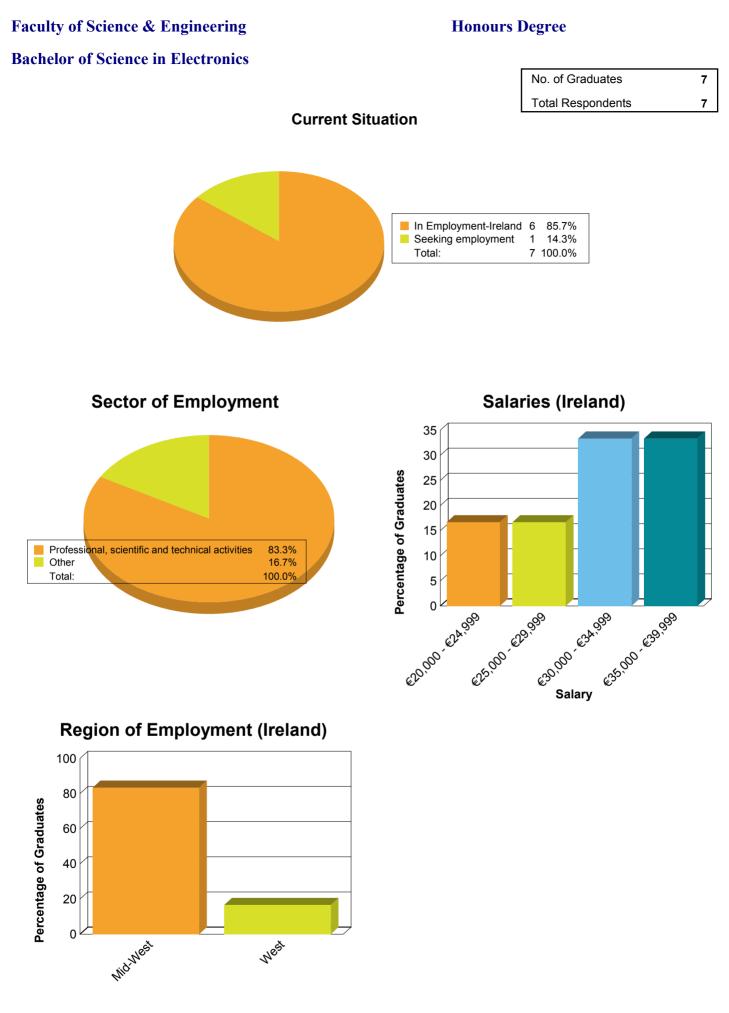






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## **Faculty of Science & Engineering Honours Degree Bachelor of Science in Environmental Science**

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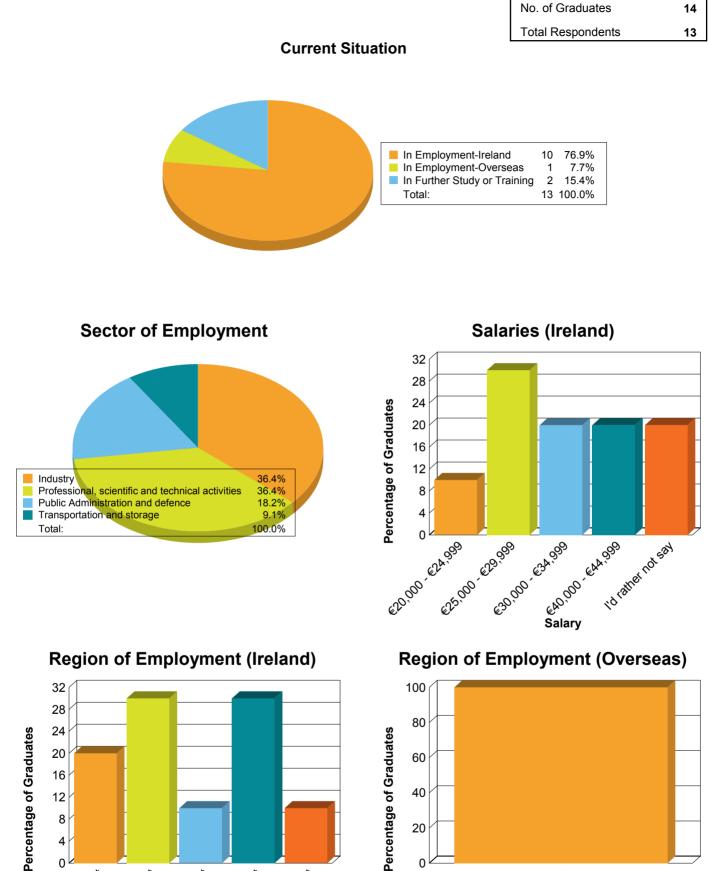
Mid-West

NothFast

Location

South-West

Nest

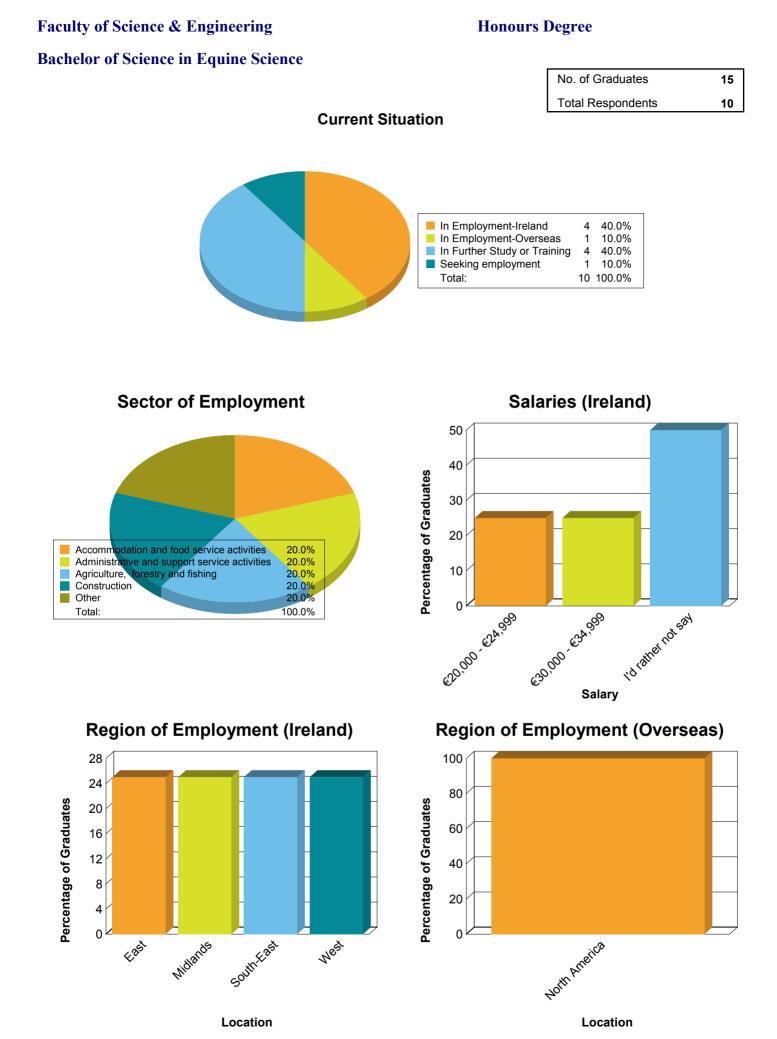


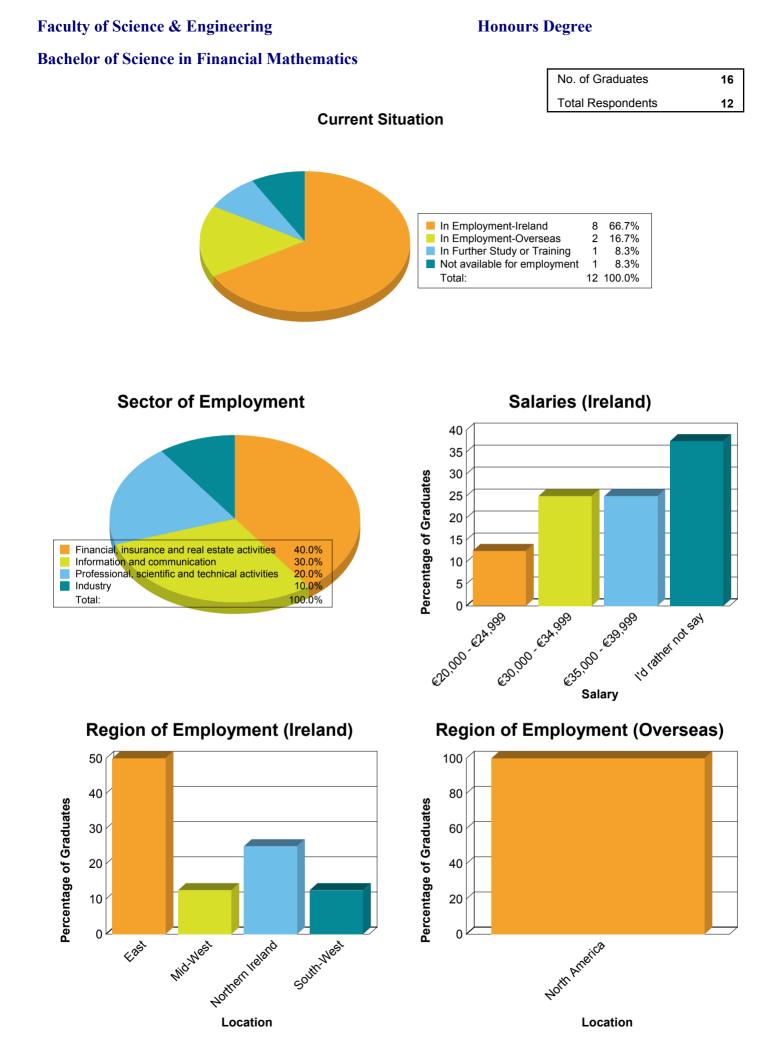
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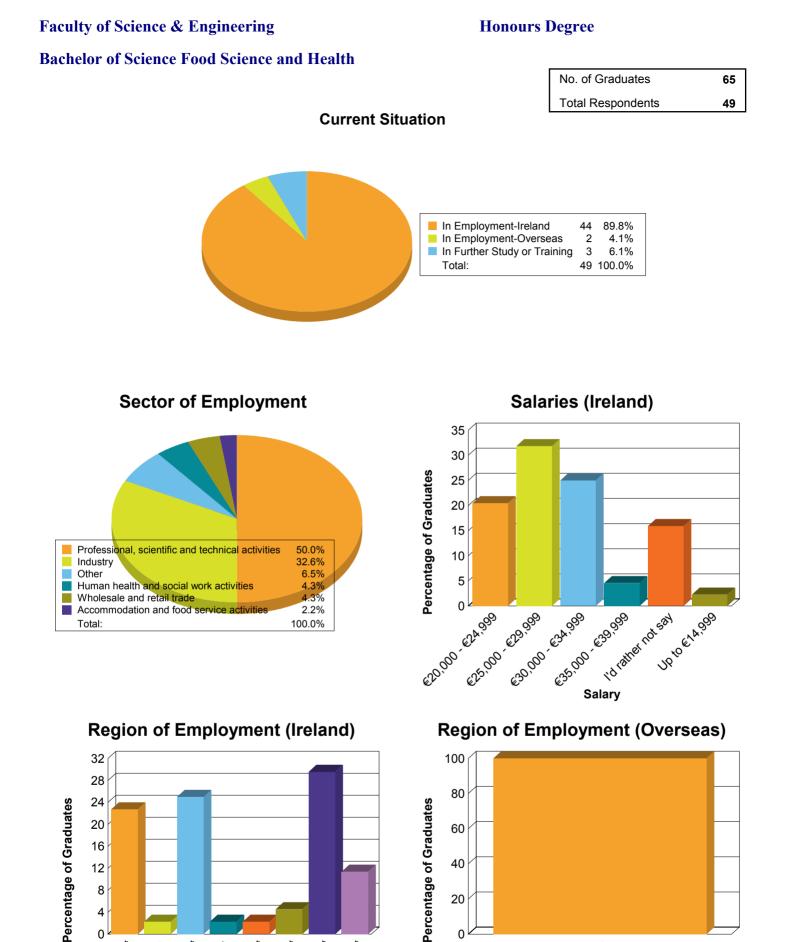
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EU-Britain







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North Dore at the fast

Mid-Mest

Midlands

south West

Nest

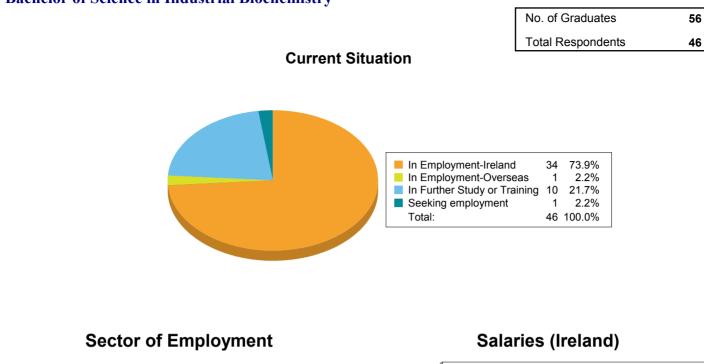
SouthEast

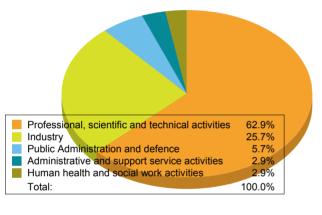
Location

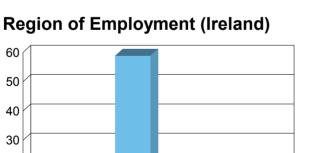
Location

Noth Anerica

# Faculty of Science & EngineeringHonours DegreeBachelor of Science in Industrial Biochemistry







SouthWest

Nest

SouthEast

Location

Percentage of Graduates

20

10

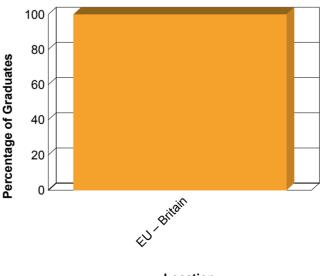
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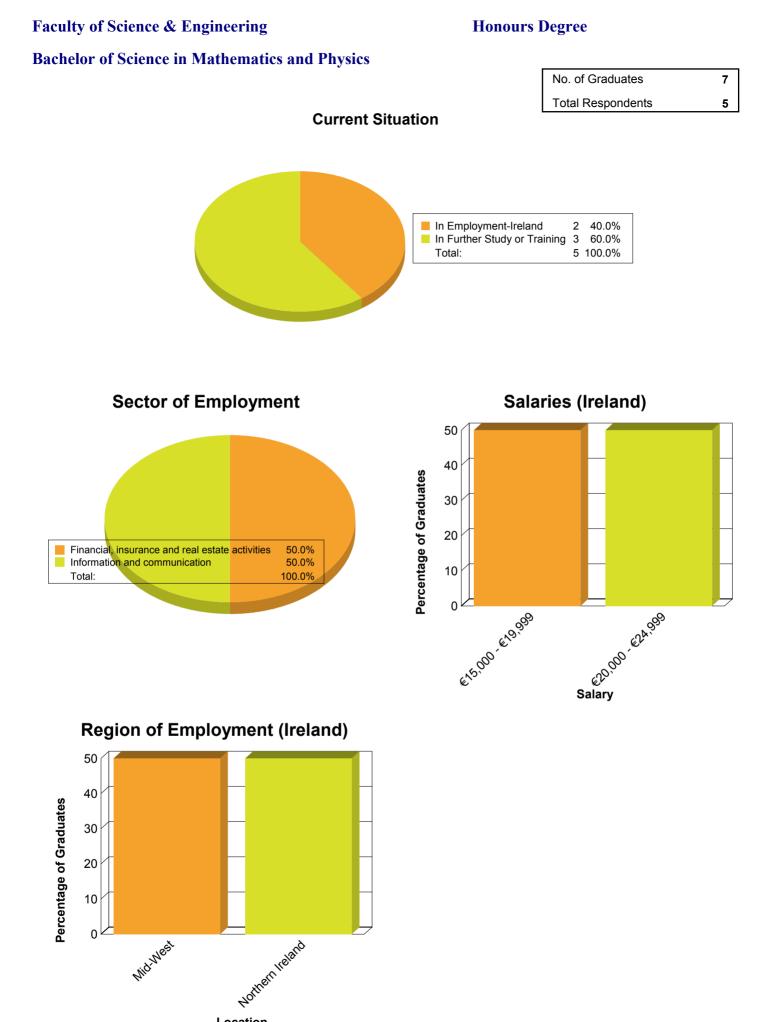
Midlands

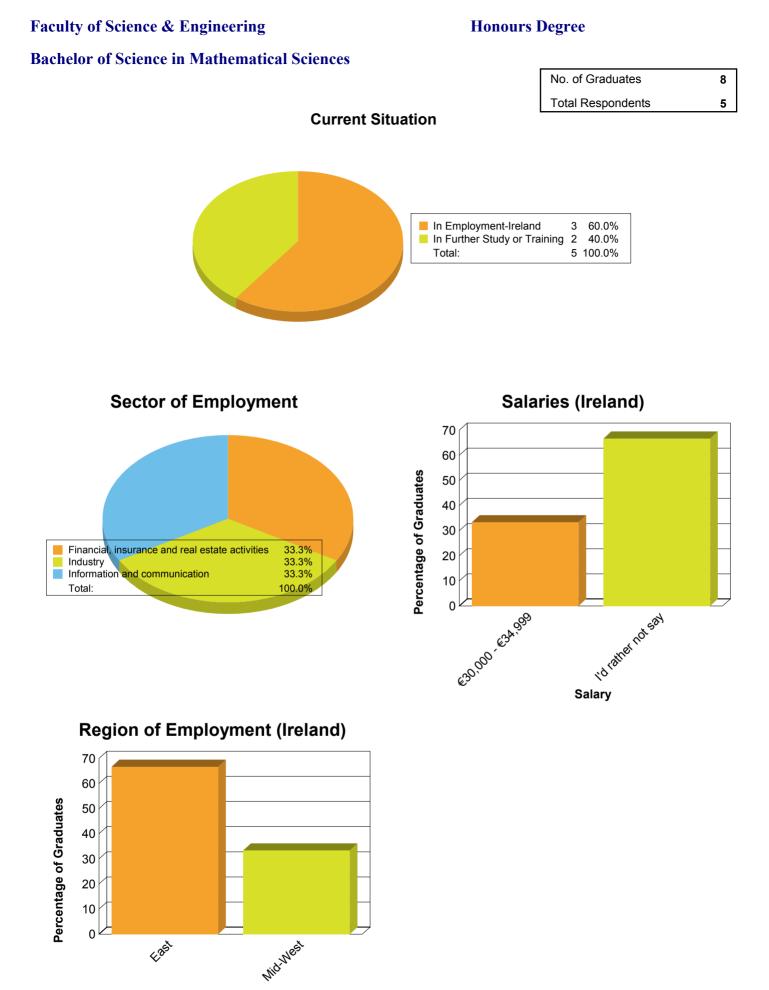
WidWest

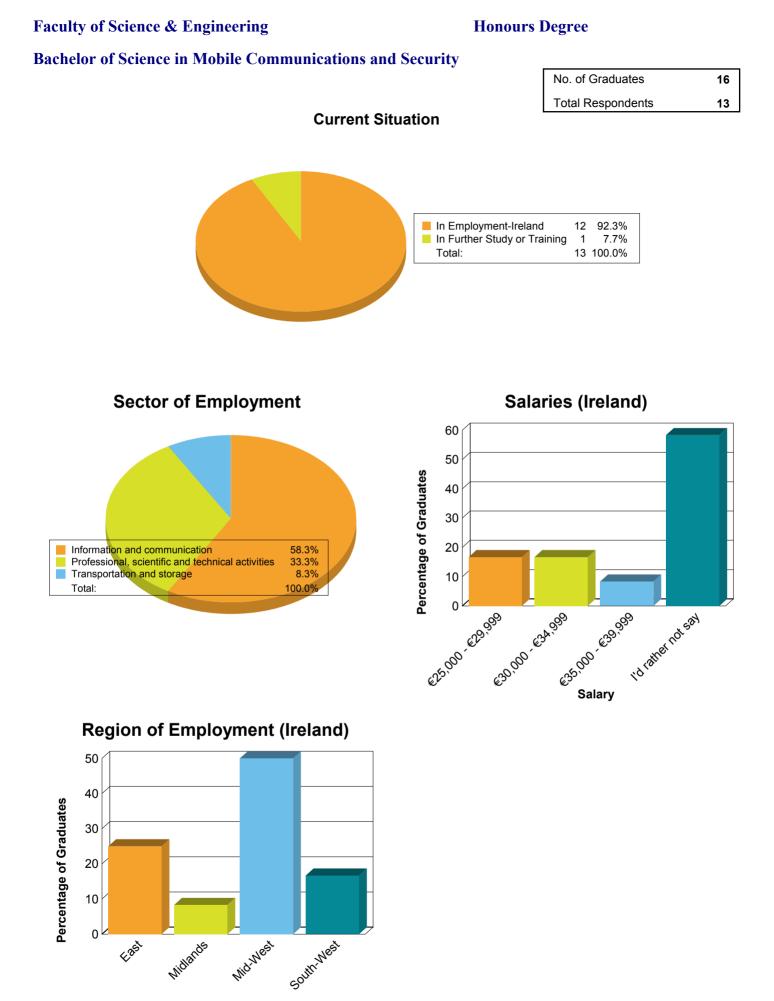
Region of Employment (Overseas)



Location





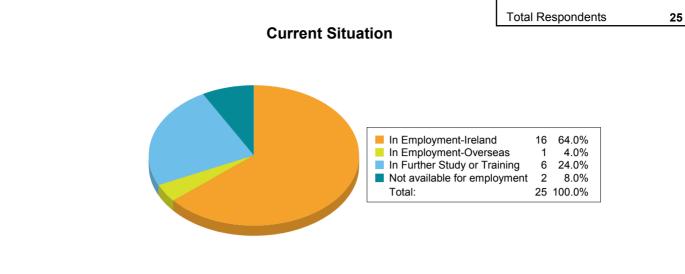


## **Honours Degree**

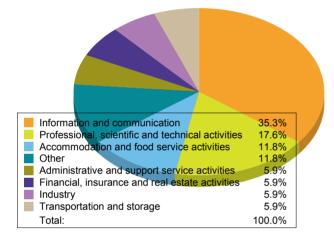
No. of Graduates

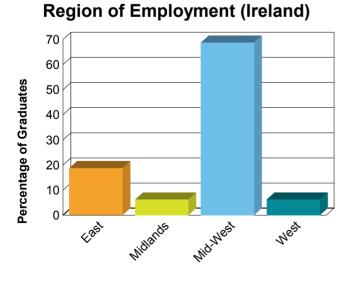
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## **Bachelor of Science in Music, Media and Performance Technology**



## Sector of Employment

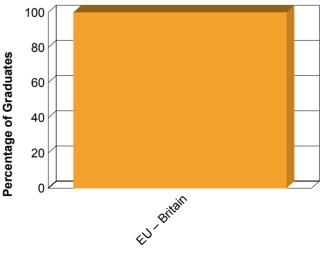




Location

Salaries (Ireland)

## **Region of Employment (Overseas)**

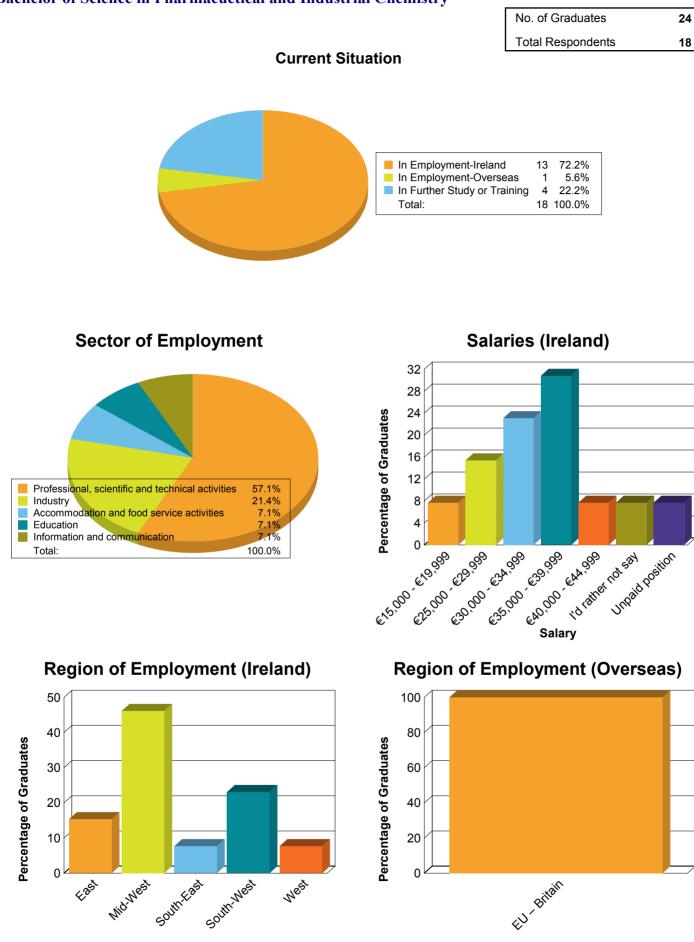


Location

## **Honours Degree**

## **Bachelor of Science in Pharmacuetical and Industrial Chemistry**

Location



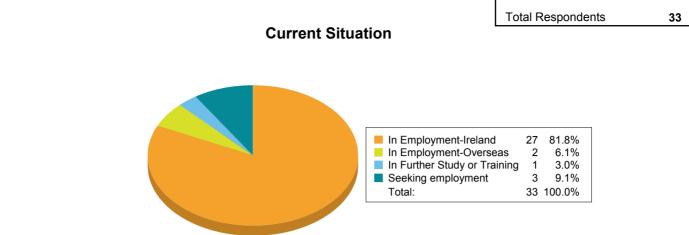
#### **Faculty of Science & Engineering**

#### **Honours Degree**

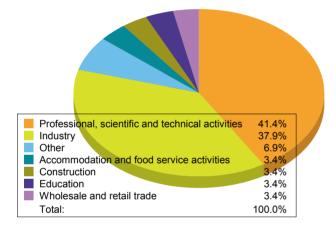
No. of Graduates

41

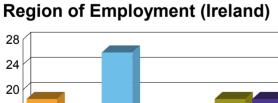
#### **Bachelor of Science in Product Design and Technology**



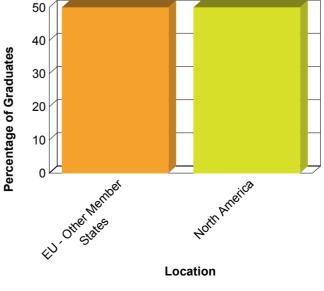
## Sector of Employment

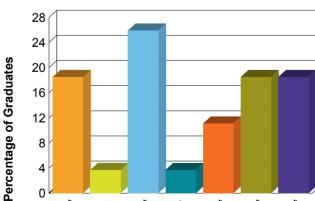












North Nest o

Midwest

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Midlands

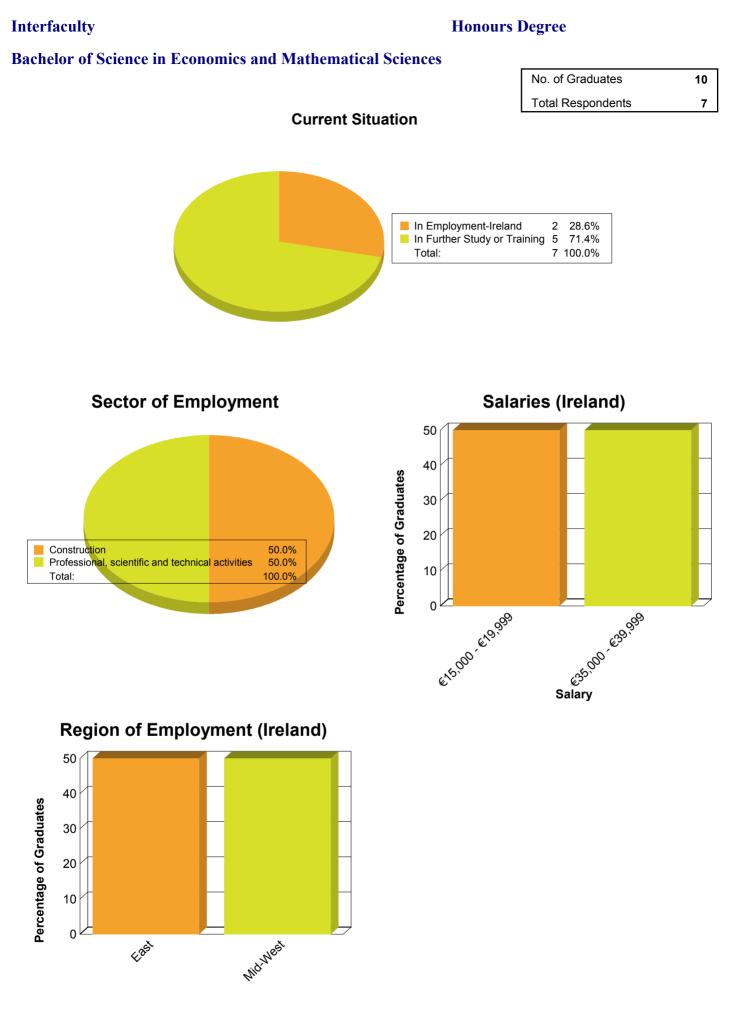
Location

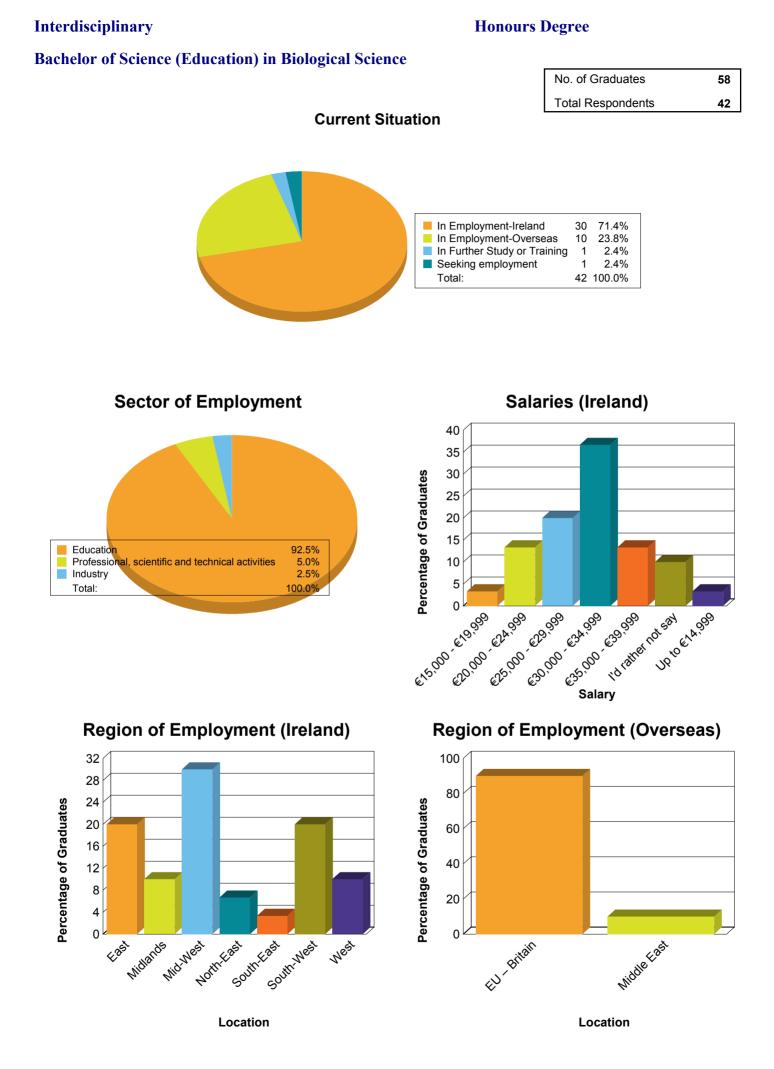
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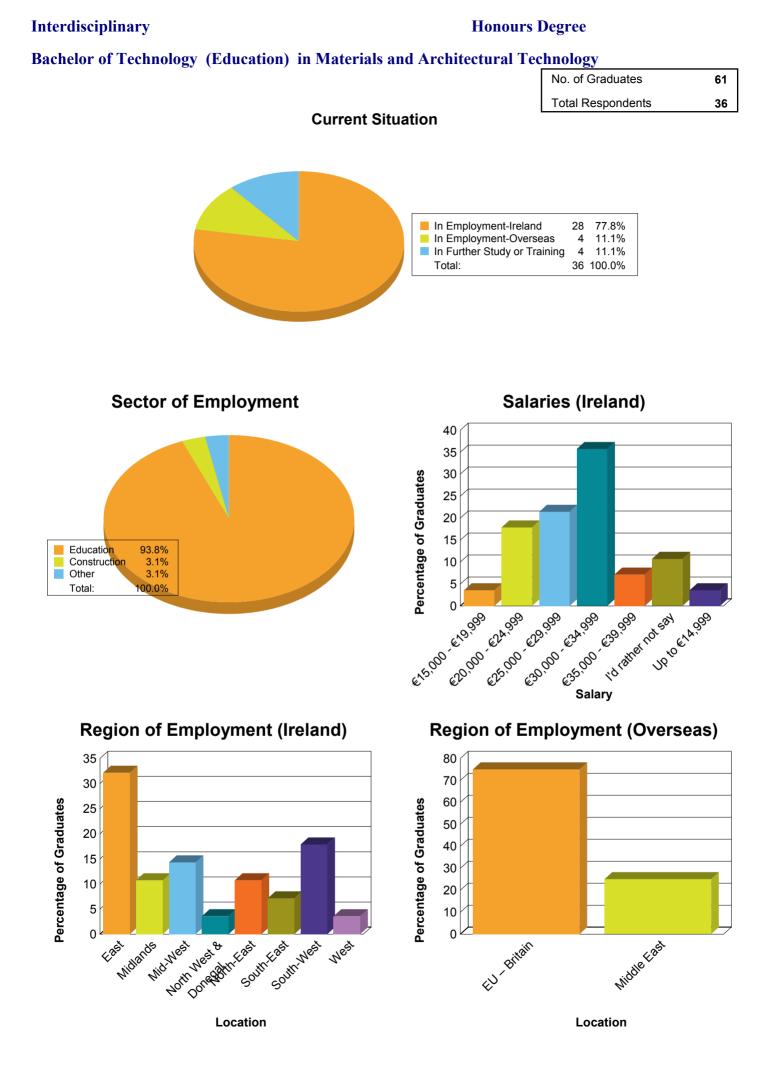
South-West

Nest







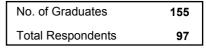




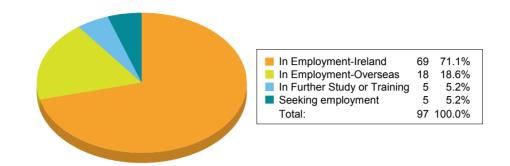
## MASTERS TAUGHT FOR FACULTY OF SCIENCE AND ENGINEERING

This section provides a complete set of statistical charts for each degree program with the following information:

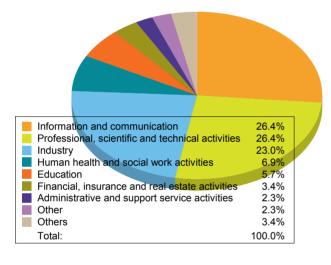
- Current Situation
- Sector of Employment
- Salaries (Ireland)
- Region of Employment (Ireland)
- Region of Employment (Overseas)

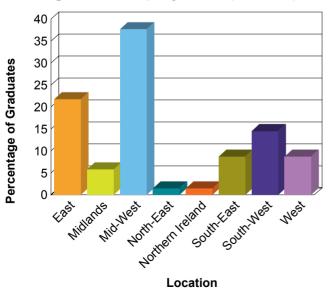






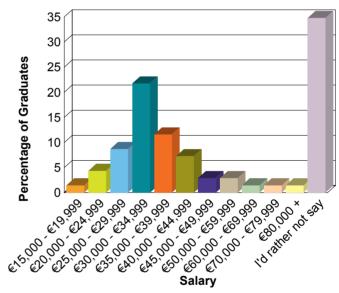
# Sector of Employment

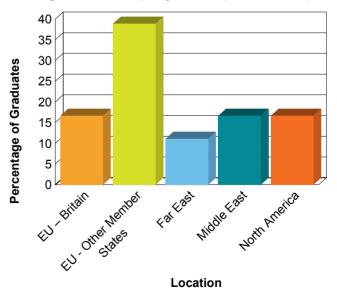


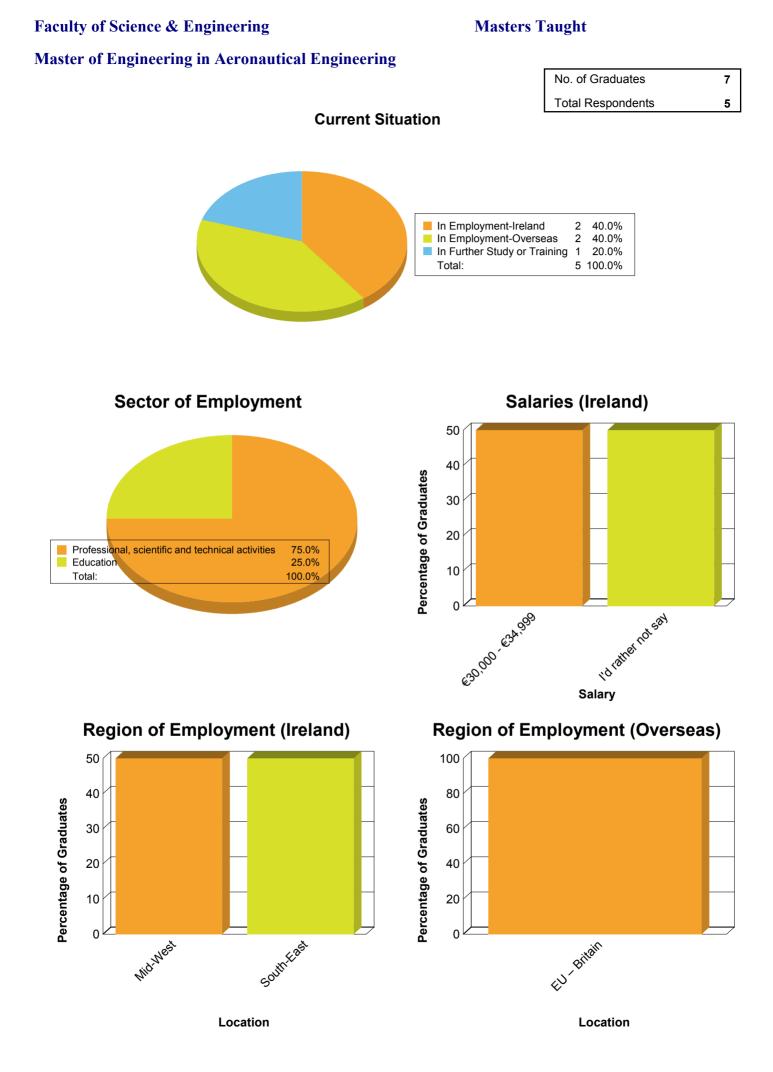


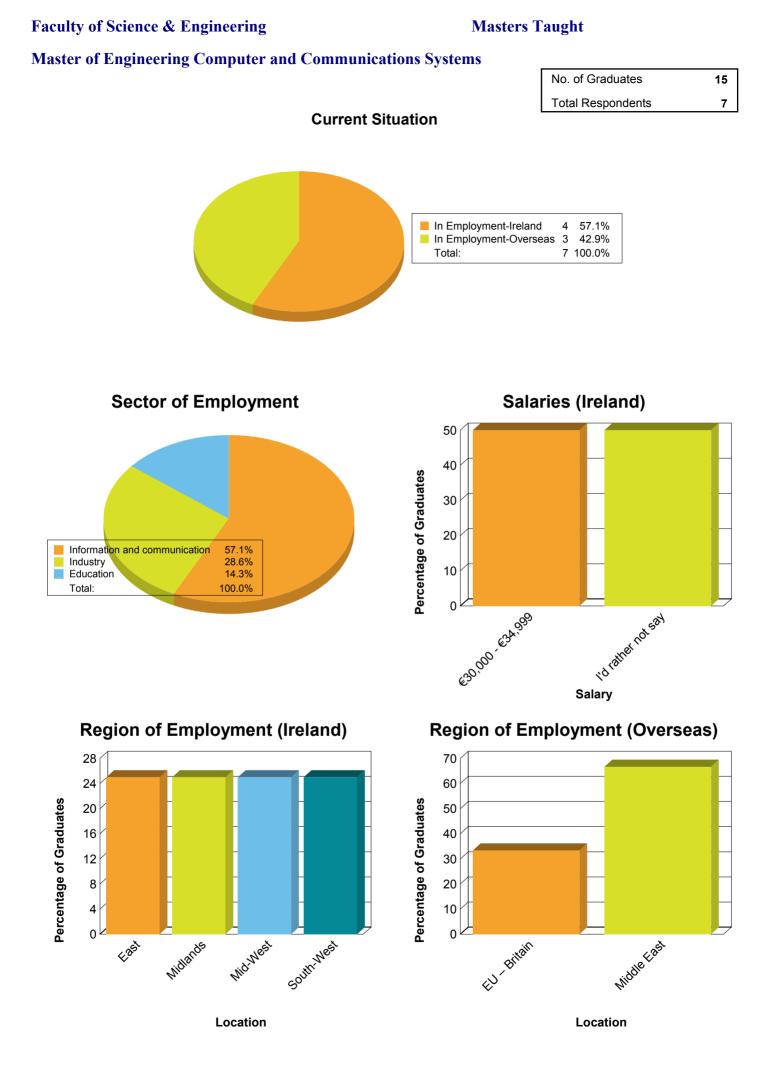
Region of Employment (Ireland)

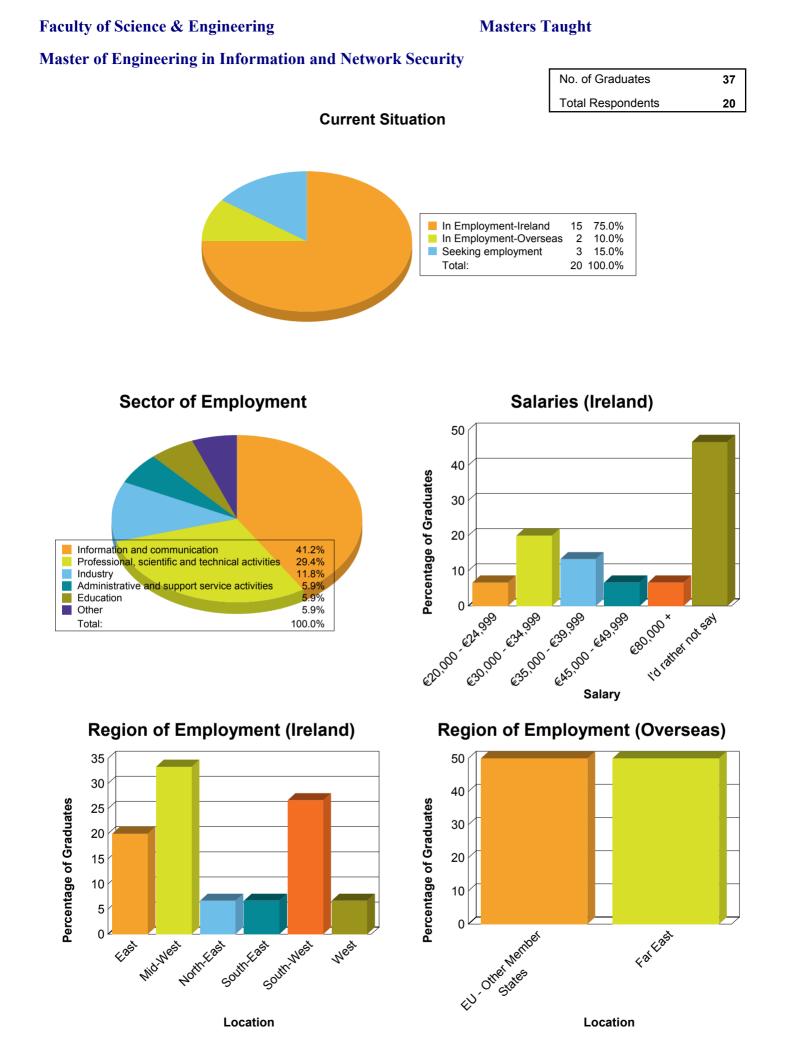
Salaries (Ireland)



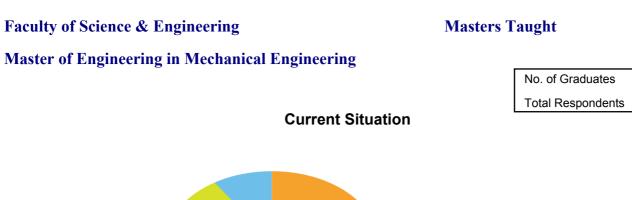


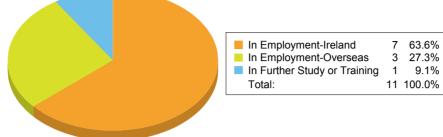




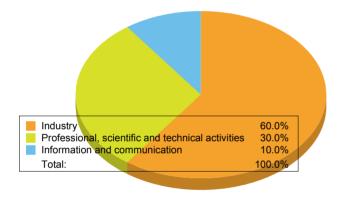


83



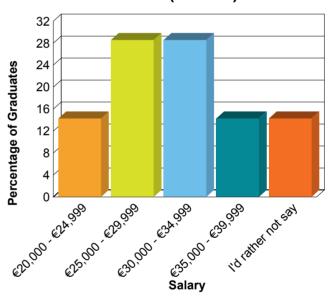


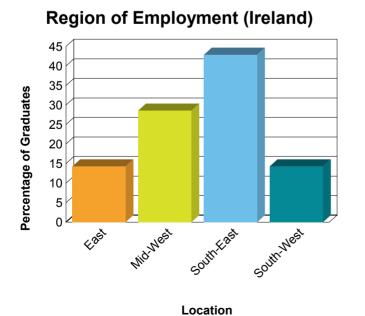
Sector of Employment



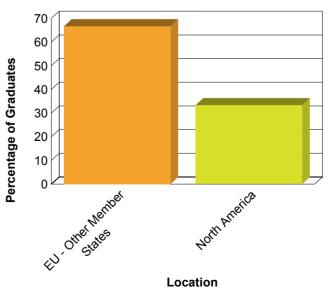
Salaries (Ireland)

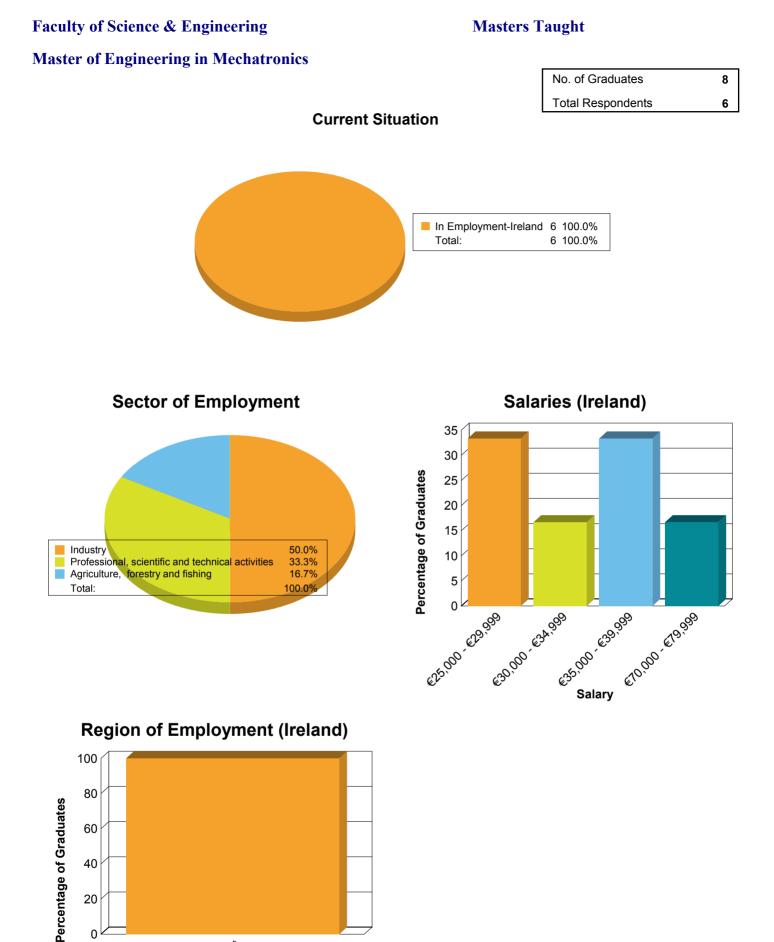
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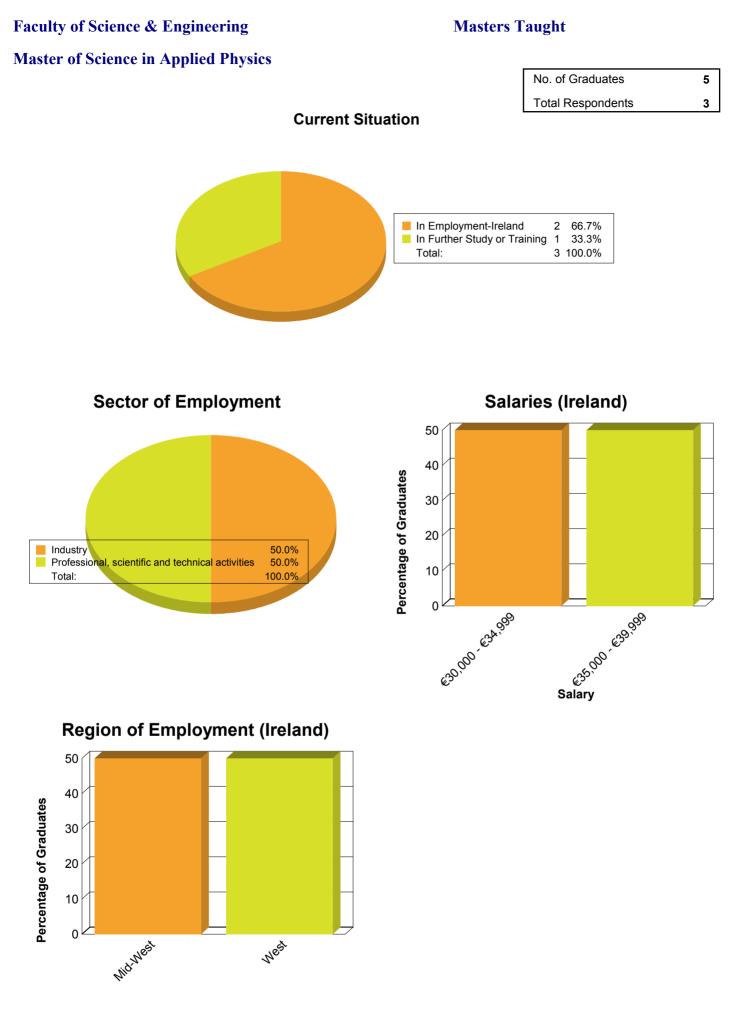


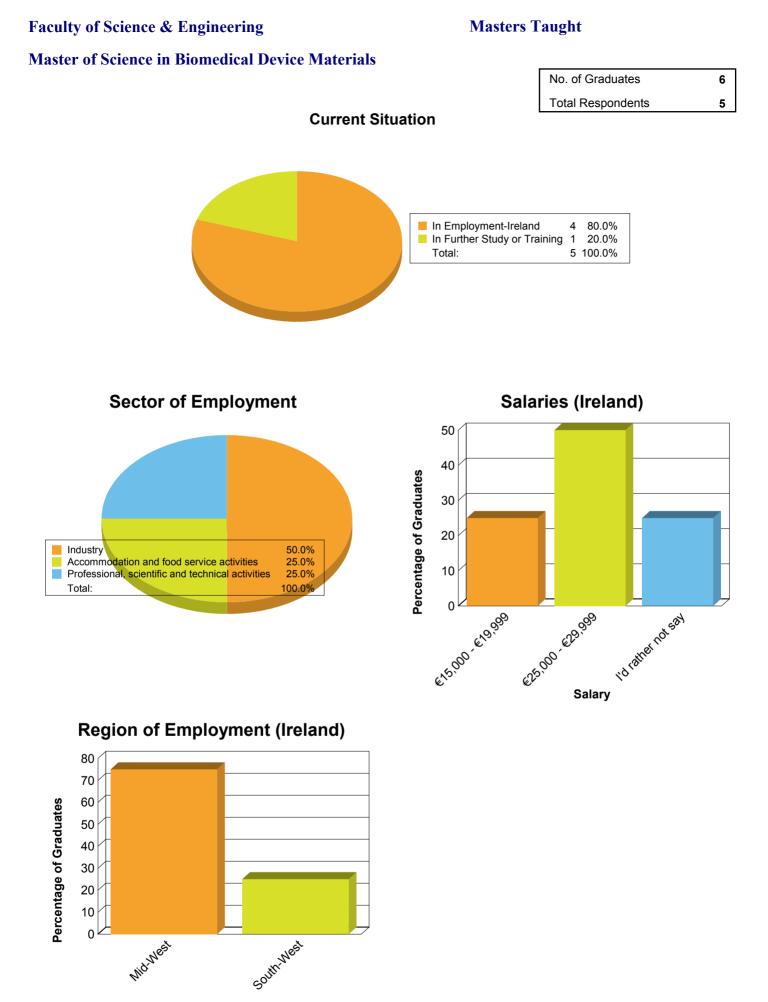
**Region of Employment (Overseas)** 

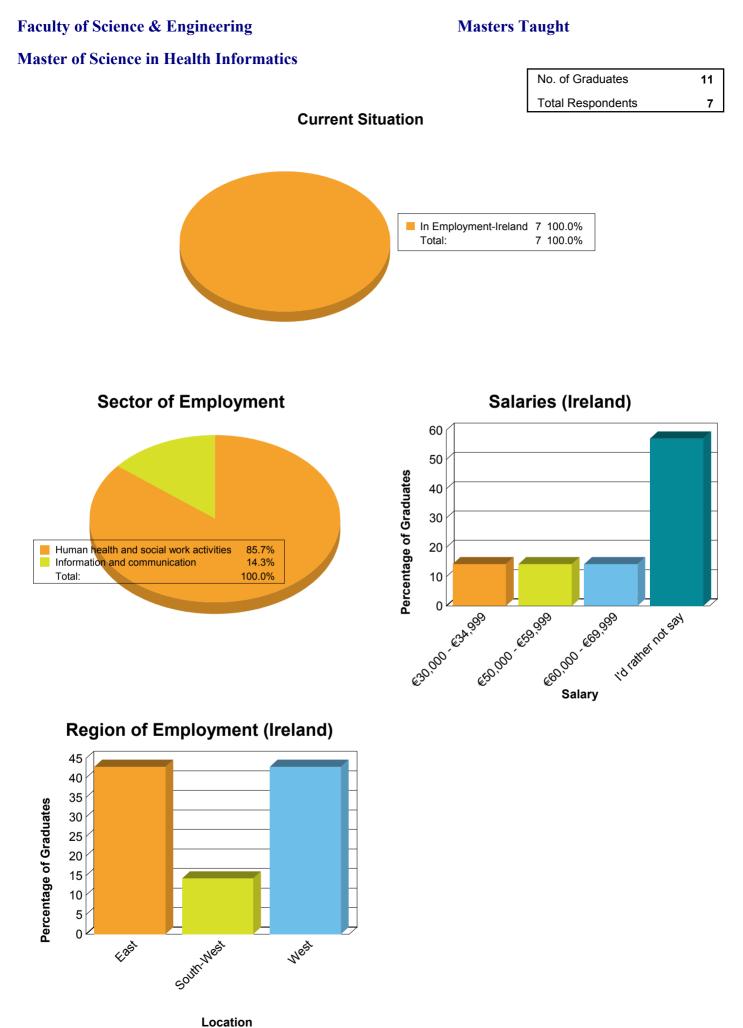


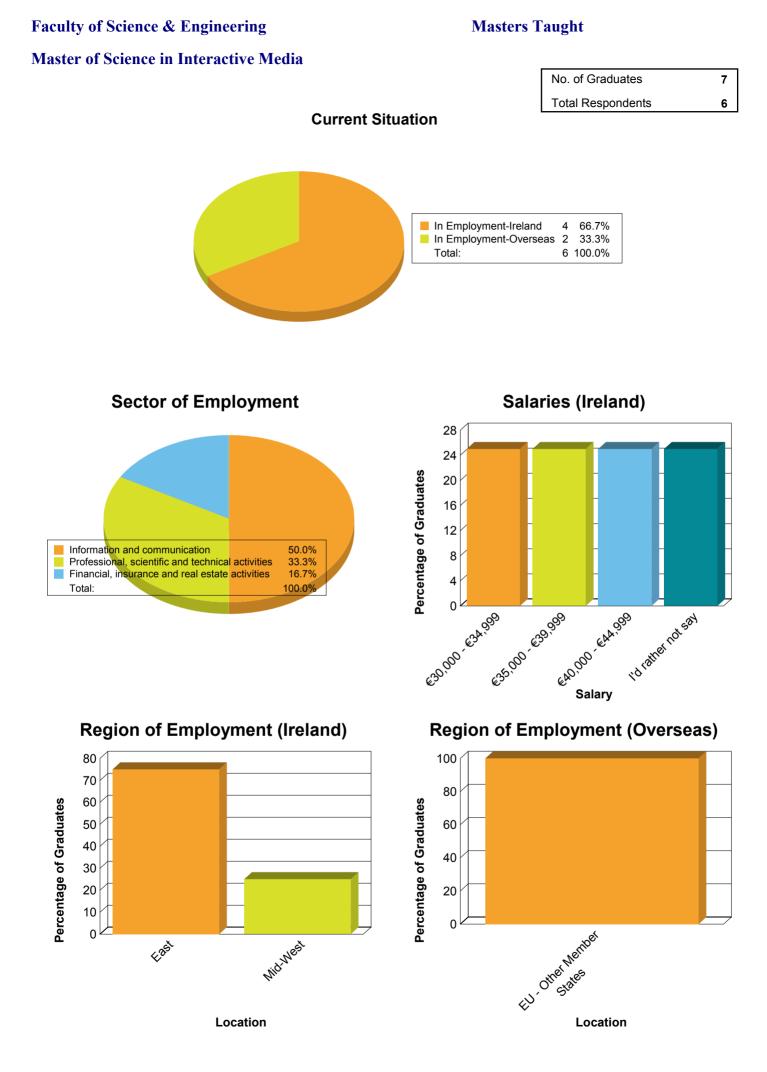


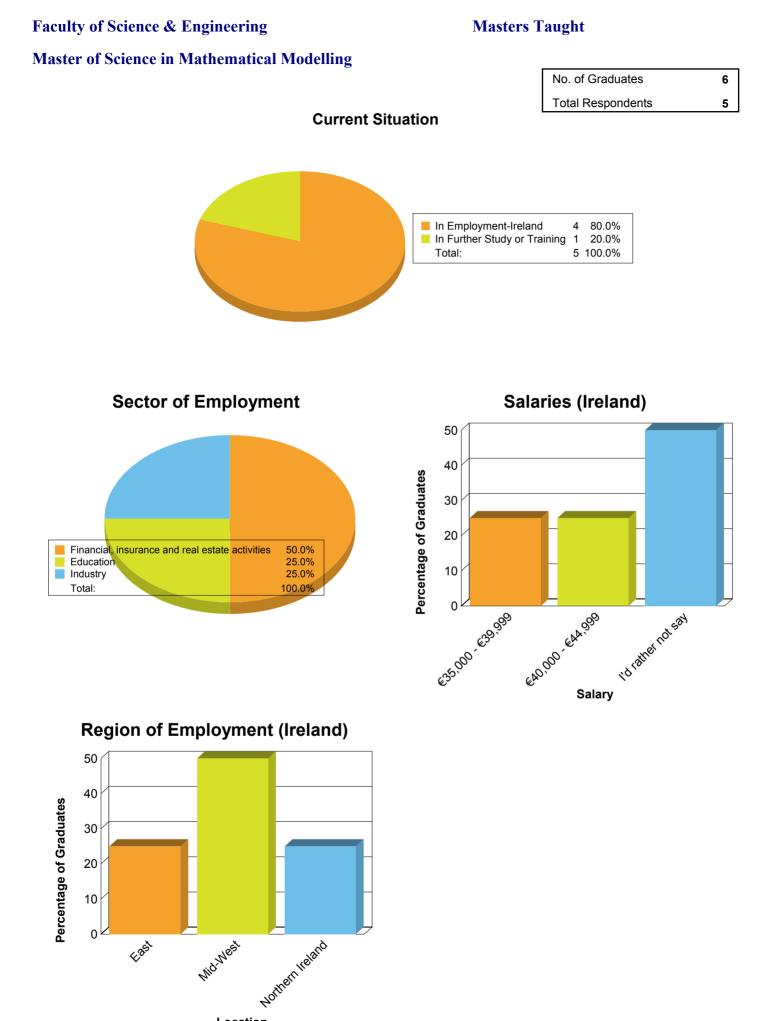
NidWest



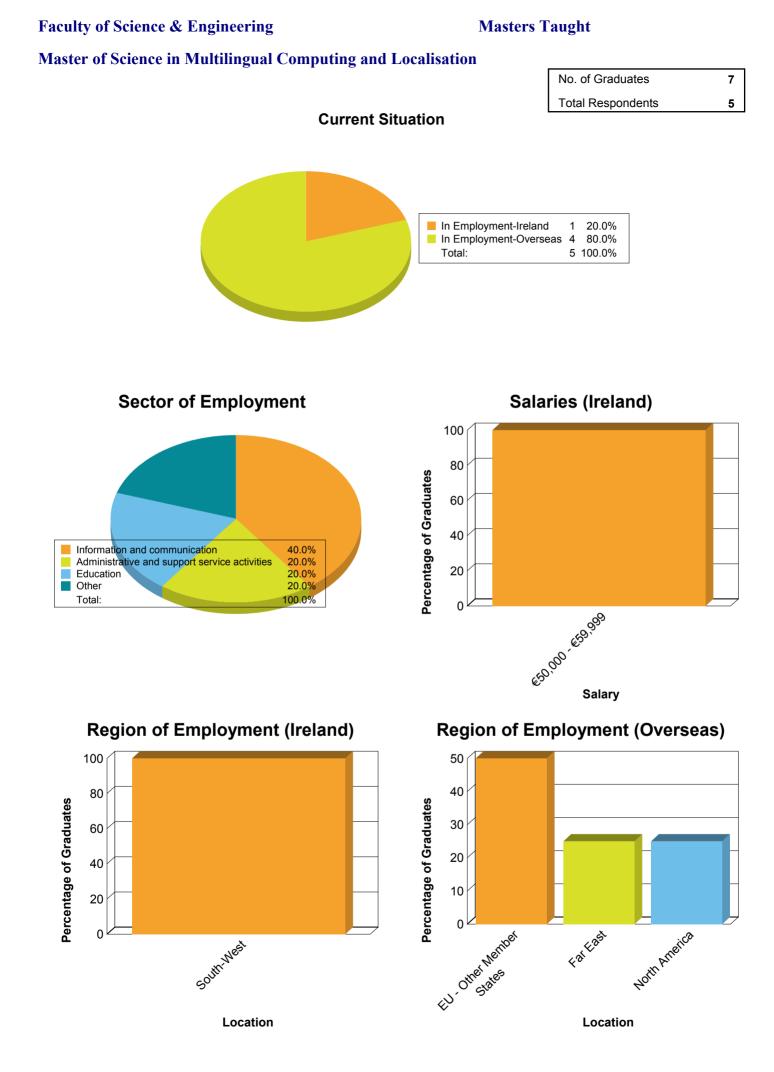








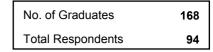




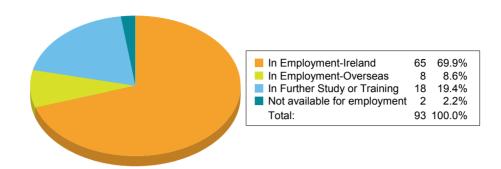




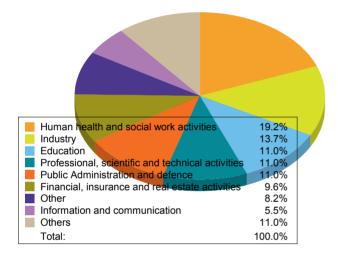


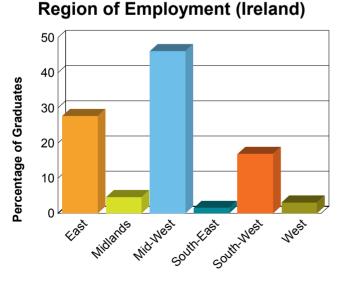






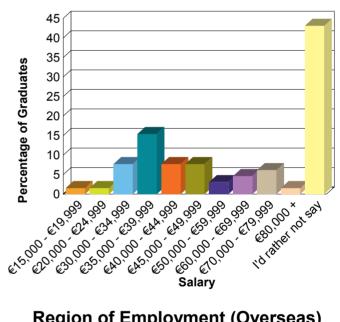
# Sector of Employment

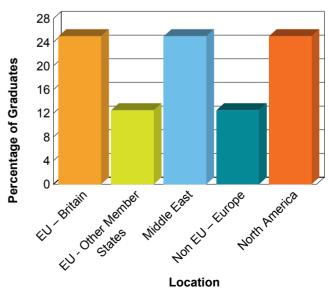


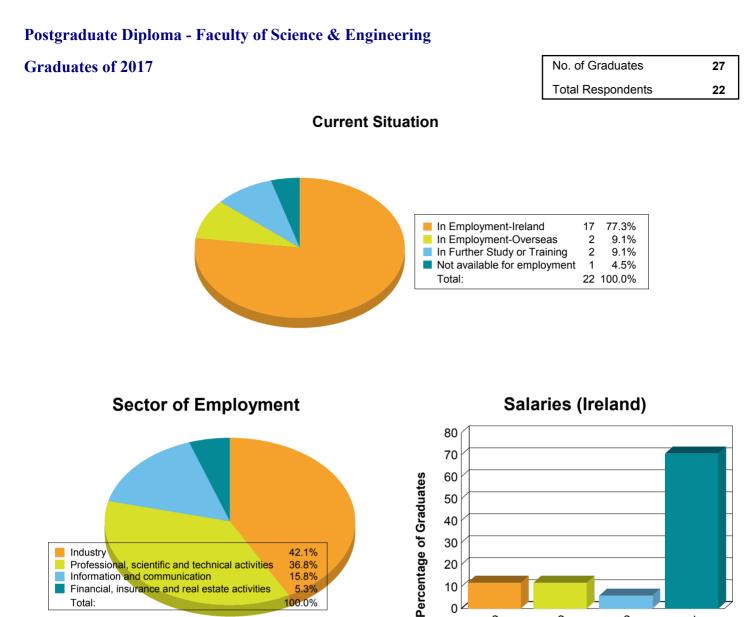


Location

Salaries (Ireland)







630,00 634,99 635,00 639,99 640,0

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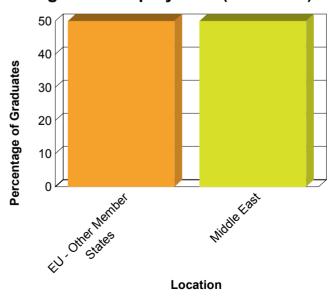


Total:

**Region of Employment (Overseas)** 

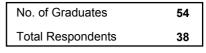
Salary

ea0,00 exa,00 idratter not east

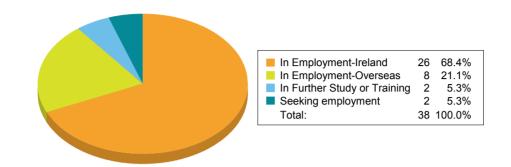


## **Doctorate - Faculty of Science & Engineering**

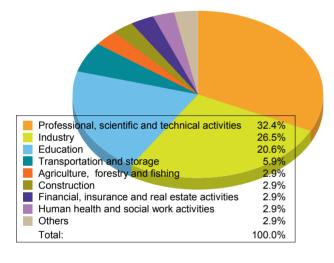
#### Graduates of 2017

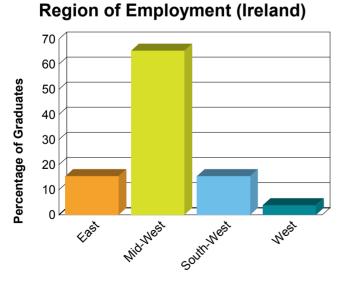






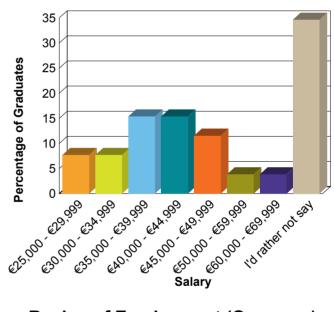
## **Sector of Employment**

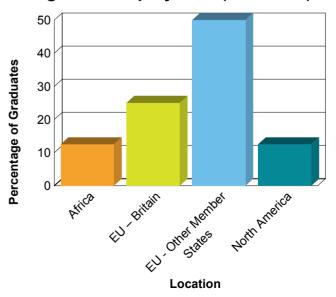




Location

Salaries (Ireland)

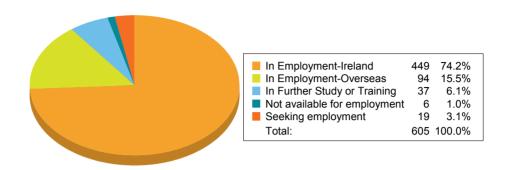




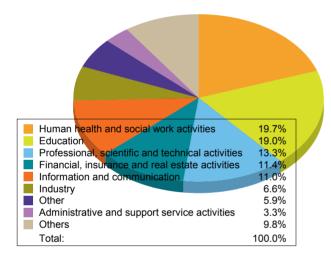


No. of Graduates	931
Total Respondents	605

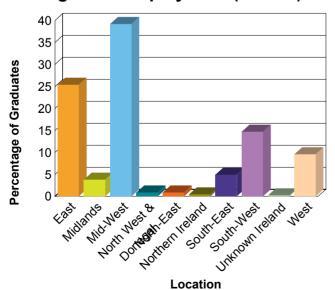




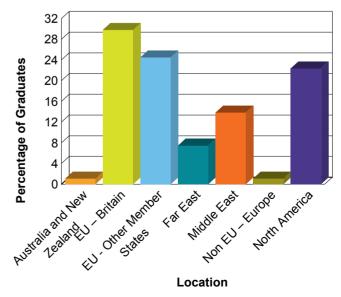
## Sector of Employment

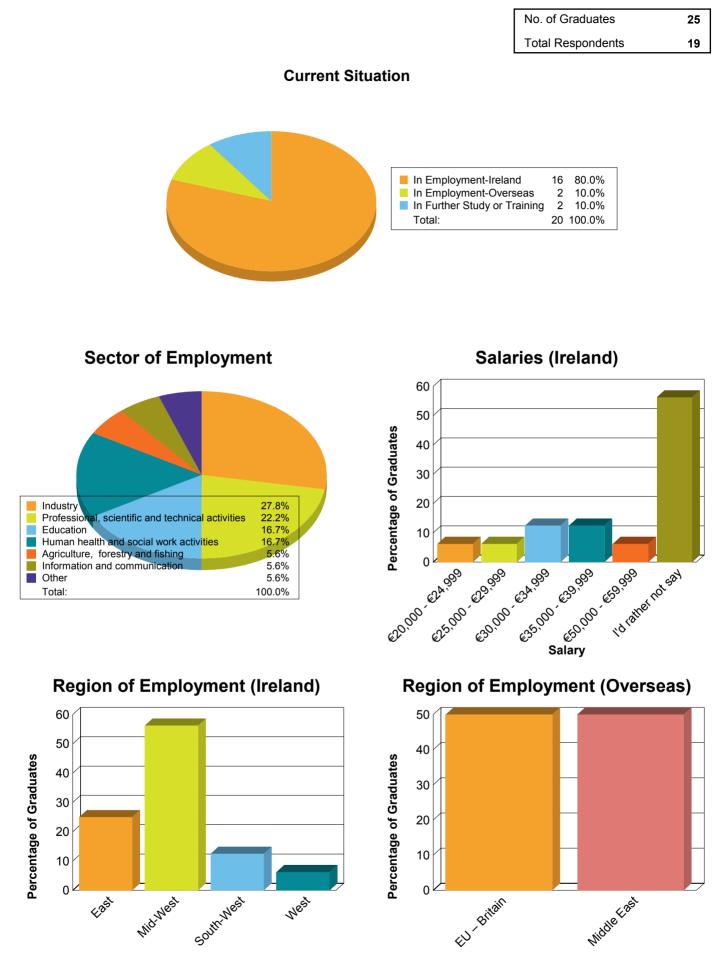






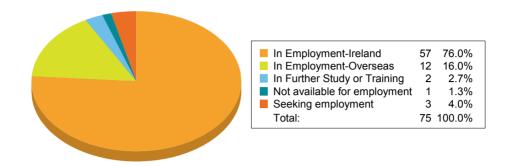
# Region of Employment (Ireland)



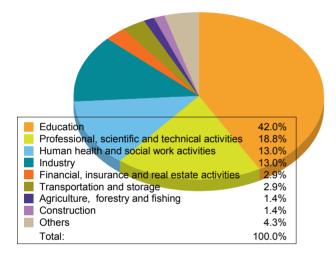


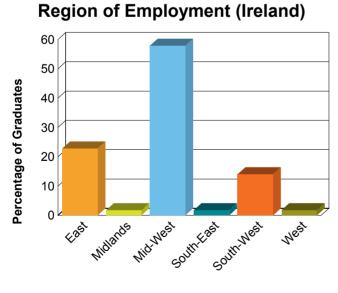
No. of Graduates	113
Total Respondents	75

#### **Current Situation**



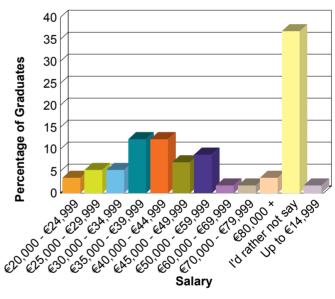
## Sector of Employment

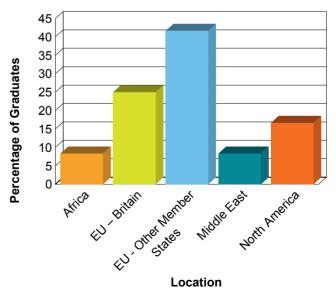




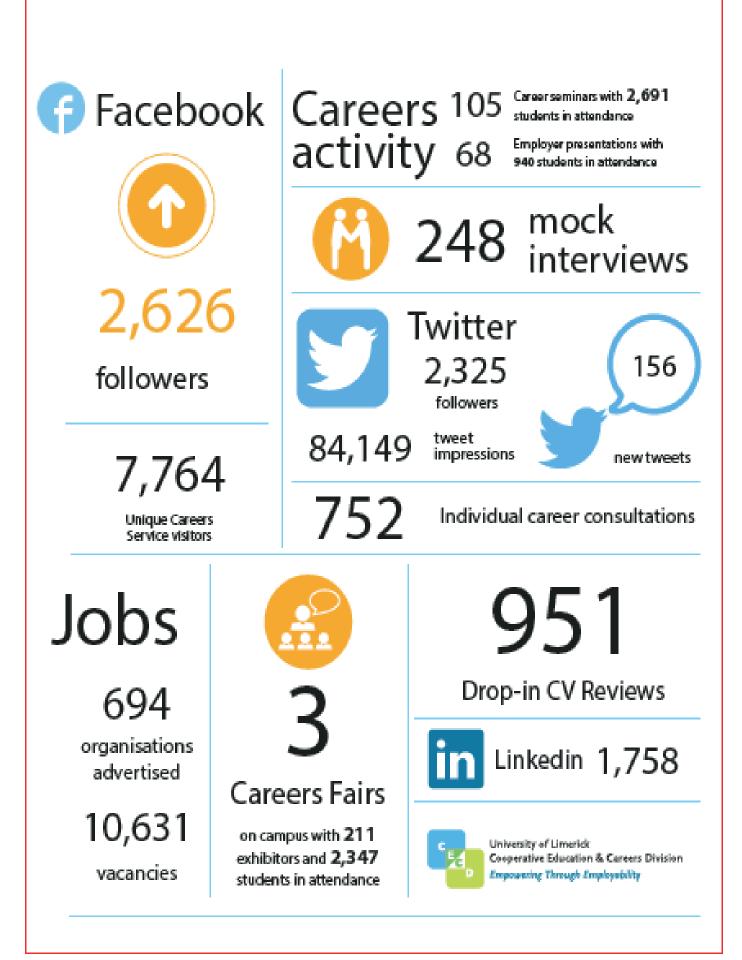
Location

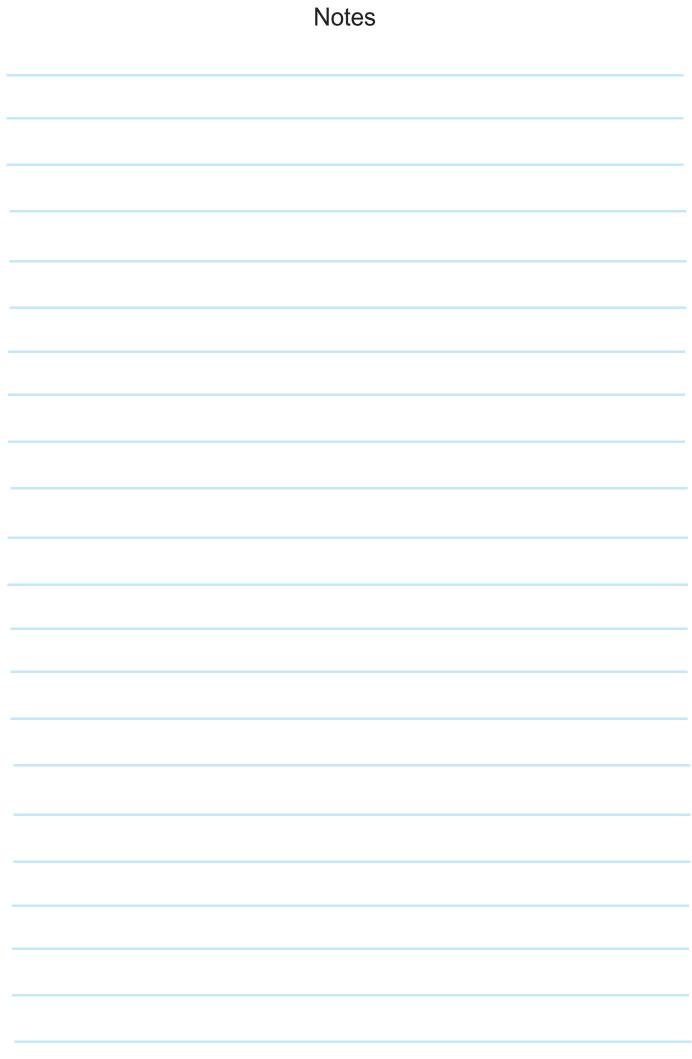
Salaries (Ireland)





# Our Careers Service 2016–2017









University of Limerick Cooperative Education & Careers Division *Empowering Through Employability*