

The logo for Cardiff University, featuring the text 'CARDIFF UNIVERSITY' in white on a red rectangular background.

CARDIFF  
UNIVERSITY

The logo for Cardiff University, featuring the text 'PRIFYSGOL CAERDYDD' in white on a red rectangular background.

PRIFYSGOL  
CAERDYDD

The background of the entire page is a close-up photograph of numerous fiber optic cables. The cables are illuminated from within, creating a vibrant display of warm colors including red, orange, and yellow. The light from the cables is blurred into soft, circular bokeh spots, giving the image a sense of depth and a futuristic, technological feel.

School of Engineering  
**Postgraduate**  
Degree Programmes

[www.cardiff.ac.uk/engineering](http://www.cardiff.ac.uk/engineering)

# MSc Wireless and Microwave Communication Engineering with a Year in Industry

**This two year MSc course will develop your expertise in the latest areas of microwave engineering and mobile communications. It will also provide you with the opportunity to spend a year working in industry while you complete your research project and gain valuable professional experience.**

**You will also develop technical, intellectual and research skills that will enhance your general engineering competency and employability, providing you with an excellent platform for career development, whether that be within industry or academic research.**

## Special Features

This course will give you the basic knowledge and skills you require in the areas of wireless and microwave communication engineering while allowing you the opportunity to spend a year working in industry while you hone your professional skills and develop your research project.

You will also have the opportunity to receive a salary during the second year of the course to help fund your studies.

You will have access to well-equipped modern facilities commensurate with a world class research university. Your teaching will be complemented by guest lectures from industrial professionals and you will receive specialist academic support from your designated MSc Tutor during the course.

The School aims to foster a research group atmosphere where you and your fellow MSc candidates can enhance each other's learning and feel part of our vibrant research community.

This MSc meets the Bologna requirements for a 2 year Master's programme.

## Course Description

The course comprises a taught element in the first two semesters in which you will acquire expertise in mobile communications, medical applications of microwaves, computer aided design, measurement and characterisation, and communication systems engineering. You will learn about advanced engineering management in addition to RF engineering and non-linear RF design and concepts. You will also study micro and nano-technology along with optoelectronics.

## Course Structure

The course is a two year full-time programme which comprises two semesters of taught modules in the first year.

After successfully completing this first taught stage you will then undertake a 10 month industrial placement which will lead to the submission of a portfolio of work worth 120 credits. We will support you to find a placement which will allow you to experience a professional working environment and you will be paid a salary while working in industry. This experience will give you the training and practical industrial experience you need to gain employment in this fast growing field and will enhance your employability skills.

At the conclusion of your placement year, as part of your portfolio, you will also submit a dissertation based on your research project.

## Career prospects

Career prospects in this field are generally excellent, with graduating students following paths either into research or related industry.

If you are interested in working in industry, many of our graduating MSc students achieve excellent employment opportunities in organisations including Infineon, Huawei, Cambridge Silicon Radio, Vodafone and International Rectifier.

## Entry Requirements

A 2:2 honours degree in Electrical or Electronic Engineering or a similar field from a good UK university or an equivalent international degree qualification.

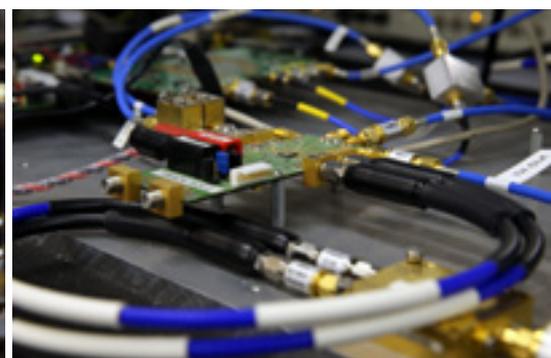
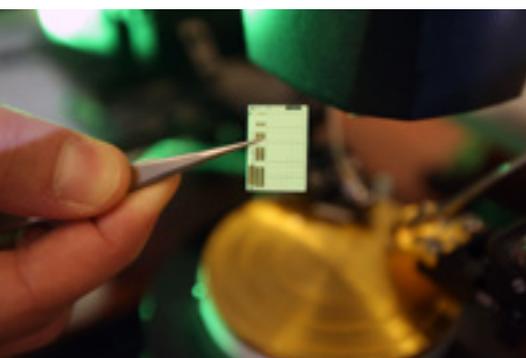
Applicants whose first language is not English will be required to pass IELTS exams. Minimum requirements are an IELTS score of 6.5.

## Further Information:

Tel: **+44 (0)29 2087 9999**

Email: **engineering-pg@cardiff.ac.uk**

Web: **www.cardiff.ac.uk**



# What our students say about our courses

## **Kat Page**

**MSc in Civil and  
Geoenvironmental Engineering**

“The Geoenvironmental Engineering MSc appealed to me because there was a broad range of topics I was interested in, but I also had flexibility to focus on areas of interest through optional modules and the dissertation project.

I continue to use these skills in my current role as a consultant. The postgraduate study helped me to gain employment and I have since progressed quickly in my field. My employer supports postgraduate study and finds graduates that have completed master's or PhDs 'have developed their research skills, have tested their knowledge and developed their communication abilities.’”

## **Javier Rodriguez Corral** **MSc in Civil Engineering**

“In October 2015, just after finishing my MSc in Civil Engineering at Cardiff, I started a PhD in Newcastle University in the School of Architecture, Planning and Landscape.

One thing I will always be grateful for to Cardiff University is the amount of resources and expertise you are provided with during the execution of research projects. Cardiff University is one of the best universities in the UK in terms of research, and this helped me a lot when applying for my PhD.

Finally, besides the academic quality of Cardiff University and the excellent facilities, the best thing about studying in Cardiff is the number of international students you constantly meet, which enriches you culturally, and the friendliness and kindness of Welsh people.”

*One thing I will always be grateful for to Cardiff University is the amount of resources and expertise you are provided with during the execution of research projects.*

## **Daniel Clifford**

**MSc in Electrical Energy  
Systems**

“I found the course particularly interesting as most of the coursework has practical applications and is relevant to what is currently occurring within the electricity industry. The staff are very approachable and helpful. I was lucky enough to be recruited by Alstom Grid during my studies and started working pretty much as soon as I handed in my dissertation. I enjoyed the diversity of the students at the School of Engineering and met students from Brazil, Greece, Germany, Nigeria, China, Japan and my home country Ireland.”

## **Abbas Ibrahim**

**MSc in Communication Technology  
and Entrepreneurship**

“I am currently working as a Software Developer for the Ministry of Commerce and Industry, Oman. I successfully studied for the MSc in Communication Technology and Entrepreneurship, which naturally awakened entrepreneurial ambitions in me. When I started off with my Master's project of designing a business plan, it armed me with the tools of running, managing and scaling growth of a business. As I graduated with the proof of concept in my hand and theoretical knowledge by my side, I embarked upon my own start-up journey. Currently, I am midway through the business plan development for a LAN Gaming Centre.

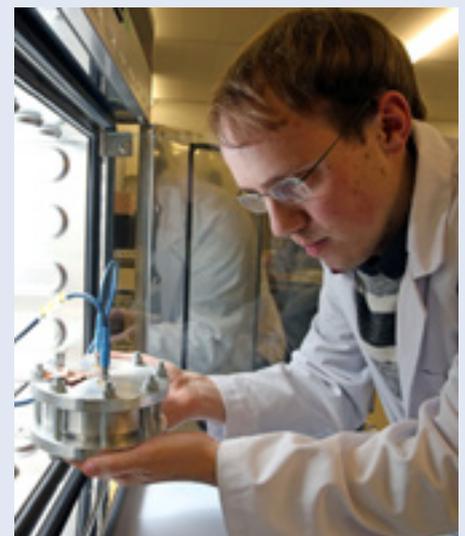
Studying at Cardiff University was a life-changing experience for me. Cardiff is a vibrant, dynamic and safe city in Wales where you are sure to bump into friendly people and enjoy all the best perks of living in a modern European metropolis!”

*The postgraduate study helped me to gain employment and I have since progressed quickly in my field.*

## **Elango Nagasundaram**

**MSc in Wireless and Microwave  
Communication Engineering**

“I studied the MSc in Wireless and Microwave Communication Engineering part-time whilst working as a Senior Test Technician. Thanks to this engineering degree I have secured a position as an engineer in the same firm. Cardiff University has a very stimulating learning atmosphere. Everyone is really friendly and lecturers are always there to help. I would recommend this course to anyone interested in RF/microwave engineering and research.”



*Cardiff University has a very stimulating learning atmosphere.*