

## Electronic Engineering Summer School

The Cardiff University School of Engineering is one of the UK's leading engineering schools. We combine a friendly and supportive learning environment with a commitment to excellence in both teaching and research. In the most recent Research Excellence Framework (REF), our research was ranked 1st in the UK for Civil Engineering and 7th for General Engineering. The impact of our research, across all areas, was ranked as the best in the UK.

We are proud of our international reputation for high standards, which is in keeping with Cardiff University's Russell Group status. In the 2016/17 QS World Rankings, we were ranked among the top 150 global universities.

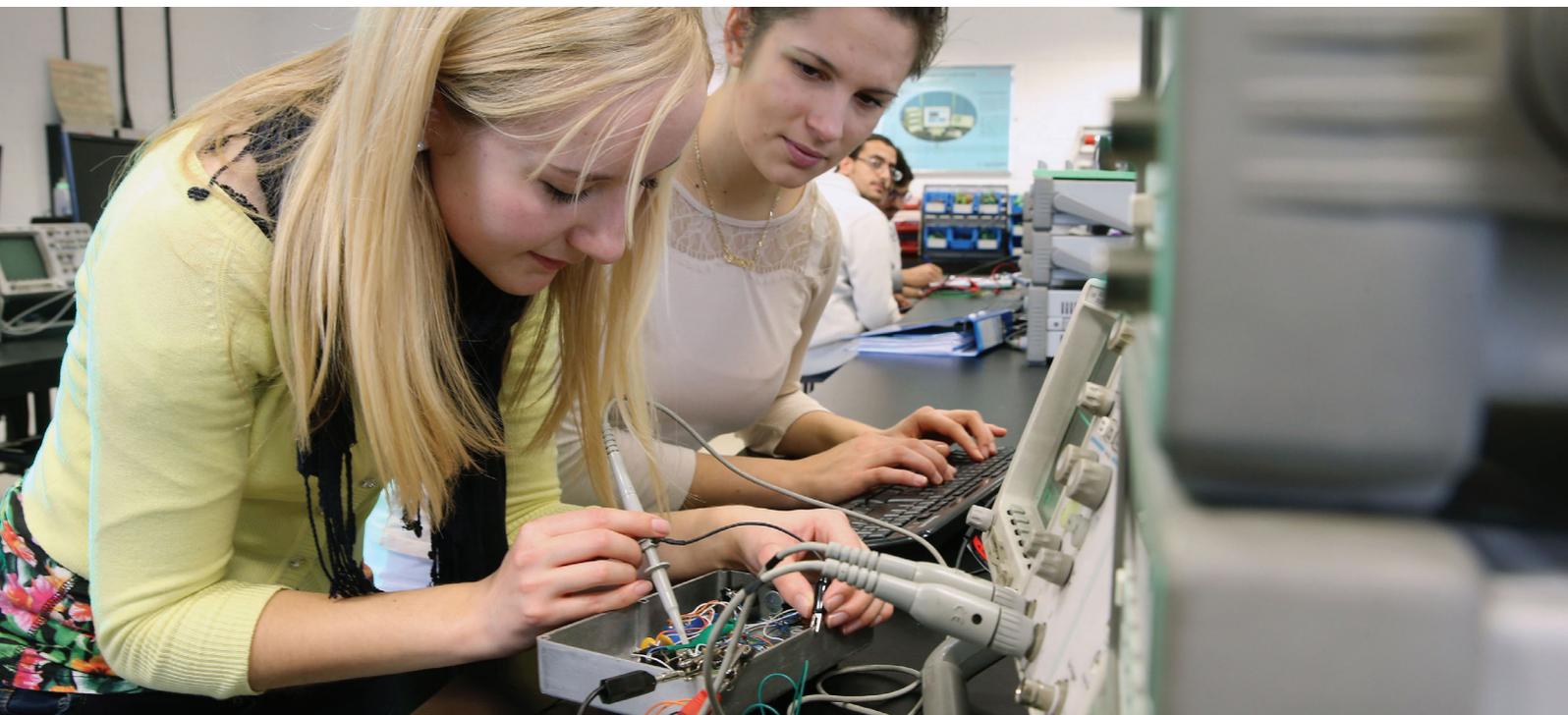
We benefit from a location in the heart of the city of Cardiff, the capital of Wales. The School is located in the Queen's Buildings complex, close to all of the University's other facilities and just a short walk from the city centre. As well as being a bustling capital with a vibrant social scene, Cardiff has excellent transport links via road, rail and our international airport.

Our Electronic Engineering Summer Camp brings together advanced undergraduates and recent

graduates from around the world to develop their knowledge of electronic engineering and to gain first-hand experience of laboratory work and industrial application.

Participants will be able to work with world-leading research and academic staff from in the School's high-quality facilities, located in the multi-million-pound Queen's Buildings complex. You will also have the opportunity to take part in a workshop with National Instruments, the global leader in test, measurement and control solutions.

Throughout the two-week long camp, there will be other planned excursions and free time included in the schedule for participants to explore Cardiff, get a feel for life in the UK and socialise with each other.



# Electrical Engineering Summer School preliminary schedule

(subject to change)

|                   |   |
|-------------------|---|
| Saturday 15 July  | Arrival in Cardiff  |
| Sunday 16 July    | Free time   |
| Monday 17 July    | Welcome talk and social event   |
| Tuesday 18 July   | Lecture: What are mobile communications?<br><br>Build a freestanding mobile system transmitter tower<br><br>Laboratory session                              |
| Wednesday 19 July | Lecture: Interdisciplinary uses of microwave sensors and actuators<br><br>Lecture: Radio communication, modulation and detection<br><br>Laboratory sessions |
| Thursday 20 July  | Lecture: Mobile base station power amplifiers<br><br>Laboratory sessions  |
| Friday 21 July    | Lecture: Information theory, encoding and networks<br><br>Laboratory sessions   |
| Saturday 22 July  | Field trips and free time   |
| Sunday 23 July    | Field trips and free time   |
| Monday 24 July    | Lecture: The development of active harmonic load-pull and the development of RFPAs<br><br>Laboratory sessions   |
| Tuesday 25 July   | Industrial site visit   |
| Wednesday 26 July | Lecture: RF I-V waveform measurement and engineering<br><br>Tour of School research laboratories<br><br>Free time and social event                          |
| Thursday 27 July  | Hands-on laboratory with National Instruments   |
| Friday 28 July    | Lecture: What is engineering?<br><br>Barbecue   |
| Saturday 29 July  | Departure from Cardiff  |