MSc, PDip INTEGRATED CIRCUIT DESIGN ENGINEERING

The University of Kent is one of a select group of UK universities to offer Master’s conversion courses in engineering, and our MSc/PDip programmes in Integrated Circuit Design Engineering target one of the key areas identified as having a shortage among engineering roles.

Integrated circuits have been powering the information revolution for over 50 years. Continuous innovation has resulted in greater processing power, memory and new devices. This, together with ever reducing manufacturing costs and reliability, has enabled the mass production of integrated circuits for consumer products that are more powerful than the supercomputers of the 1980s. While the fabrication technology advances, there is an increasing need for innovative design which can harness the power of these circuits, while taking into account constraints such as requirements for energy efficiency.

About the programmes

The programmes can be taken flexibly over one, two or three years, and will give you an extensive and thorough understanding of the use of integrated circuit technology in digital, mixed-signal and analogue design. You also gain knowledge and experience of computer models, simulation tools and design software for analogue and digital integrated circuits. This hands-on proficiency with industry-standard tools is in high demand. You are taught by our digital/embedded electronics team and the IC design team at the University of Bath. The programmes are wholly delivered at our Canterbury campus.

Course content

Analogue Integrated Circuit Design; Communications Theory; Computer and Microcontroller Architectures; Digital Integrated Circuit Design; Digital Signal Processing; Electronic Design Automation for IC Design; Reconfigurable Architectures; Research Methods and Project Design; MSc Project (MSc only).

Who should apply

Graduates with a good honours degree in mathematics or physics. We accept graduates from other scientific/cognate disciplines, but you must demonstrate mathematical ability at a high level. Those who have not done any mathematics since A level or only have AS level mathematics should contact us; a pre-sessional mathematics module is available to bring candidates up to the required standard.

How to apply

www.kent.ac.uk/courses/postgrad/apply

Further information

Postgraduate admissions
T: +44 (0)1227 827323
E: eda-admission-pg@kent.ac.uk
www.eda.kent.ac.uk/postgraduate/default.aspx

Full details of our terms and conditions can be found at: www.kent.ac.uk/termsandconditions