

**SCHOOL OF
COMPUTING/**
Computer Science for Health
BSc (Hons)

August 2018



BSc (Hons) Computer Science for Health (available with a Year in Industry)

Are you interested in computers and technology, and motivated to use your skills to improve health and wellbeing? Are you interested in a computing career in the health sector or in using computers to improve society? Are you inspired by fitness trackers, wellbeing applications, wearable technology and online or mobile health resources? Do you see a gap between what mobile and wearable computing is capable of in terms of health/medical treatment, and what it is currently used for? Are you excited by the amazing potential of computers to modernise and assist our health services to deliver world-class cutting-edge care in future?

Introduction

Building on our internationally-recognised research strengths in eHealth and health-related computer science, we are pleased to be one of the first universities in the UK to offer this exciting new degree.

Computer Science for Health is a full Computer Science (CS) degree with additional modules tailored towards healthcare computing, wellbeing and medical-related IT. Throughout the degree, application projects, case studies, examples and industrial placement options with health providers and related companies provide a solid focus on developing CS skills that are relevant to the health sector.

We have very strong partnerships with local health authorities and hospitals, and have been running a number of projects over the past few years that have shown real benefit to both patients and healthcare providers alike. However there is so much more that can be done, and our partners are constantly looking for well-educated computer scientists and software developers who have an interest in healthcare. We have worked with our partners to formulate a programme that will educate the next generation of healthcare-aware Computer Scientists.

About the programme

We teach programming, software engineering and all of the traditional CS elements with a healthcare focus. Through a cluster of specialised modules (about one each term), you will be tasked with applying your computer skills to health- and medically-related projects and applications. Examples and case studies from the healthcare and related sectors will be used throughout so that you can see exactly the relevance of what you are being taught. Guest lecturers and contributors from the healthcare industry will keep you up-to-date with the challenges, changes and opportunities in the health-related CS sector. Please visit: <https://www.kent.ac.uk/courses/undergraduate/2496/computer-science-for-health>

Stage 1 Computer Science foundations / Object oriented programming / People and computing / Databases and the web / Introduction to human anatomy and physiology / Healthcare computing

Stage 2 Computer systems / Web development / Data structures & algorithms / Agile development & software security / Theory and foundations of computer science / Database systems / Computer Science topics in eHealth

Year-in-industry (optional)

Stage 3 Group project / eHealth / Signal analysis for computing / Evidence based practice / Choose another 3 optional modules (out of 12 currently)

You will graduate with all of the skills of pure CS graduates – nothing is missing from this degree! You will also have knowledge and application experience related to health. We aim to make you confident in your programming, software development, software engineering and information systems analysis skills, but also in your domain knowledge relating CS healthcare.

After graduation you might choose to pursue a mainstream CS career, or you might go on and apply your skills to improve the health and wellbeing of our nation. Like many of our existing graduates you might choose a career working in a bank's IT department, or you might wish to help an NHS software development team produce new apps and online tools for patients. You might set up your own business developing eCommerce solutions, or you might start a business selling health and fitness tracking software. We will help you develop the skills to be able to do any of those things; the choice is up to you.