UCS
University Campus Suffolk

Subject Knowledge Enhancement:
Computing

SNITT

Computing is now integral to every aspect of modern life, and this is being recognised in the transformation of the teaching of the subject at school. The new Computing GCSE will be given standing as a science equal to physics, chemistry and biology in the English Baccalaureate. Even those who do not study Computing as a GCSE will find computing woven through their studies to 16 and beyond. Computing is a subject where there is an opportunity for teachers to advance the information revolution by inspiring the next generation of programmers.

If you are a graduate intending to embark on an initial teacher training (ITT) course, or if you are a qualified teacher who has trained to teach another subject, this course is an attractive professional development opportunity to improve your computing knowledge and programming skills in order to add computing to the subjects you are able to teach.

- You will gain a thorough grounding and critical insight into the new rigorous computer science to be taught at secondary level.
- Through regular face to face classes and workshops you will master the science of programming and of teaching programming in an engaging way using a variety of approaches.
- On successful completion, you will also acquire 40 credits towards the UCS MA in Learning and Teaching*.

Start date: 28 February 2015
Duration: 24 weeks
Attendance: 21 days at UCS Ipswich Waterfront campus, plus guided independent study
Tuition fees: A bursary from NCTL of up to £4,800 may be available for ITT entrants. All other applicants will be charged £1000, the fee for a 40 credit MA module

Find out more:

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The new course **Subject Knowledge Enhancement: Computing** offered at UCS from February 2015 represents a carefully planned and long-term solution to address the current problem of a shortage of computer science and programming skills among existing and future teachers. The course fulfils the requirement of a Subject Knowledge Enhancement programme (SKE) as defined by the National College of Teaching and Leadership on behalf of the Department for Education.

There are too few computer science and informatics graduates to meet UK industry's needs and so there will be a long-term shortage of those graduates able and willing to choose teaching. Moreover the new GCSE Computing curricula has the breadth (and in places depth) of a generalist first-year of an applied computer science degree. This represents a bold challenge to schools and teachers alike. Upskilling the current workforce, and enhancing the underpinning skills of new entrants to the teaching profession, will contribute to the ability of schools to respond to the technical depth and rigor of computing in the new curriculum, as well as enhancing the career prospects of staff able to teach computing.

This course gives a thorough grounding in the computer science knowledge appropriate for National Curriculum Key Stages 3 and 4, including the new importance placed upon practical programming. It will also address how computer science develops beyond GCSE, in order that teachers can support pupils with progression and respond confidently to the needs of the gifted and talented.

Teaching and learning comprises of a mix of tutor-led classes, collaborative workshops, structured study of online resources, virtual discussion forums, self-directed study and reflection.

Assessment will consist of a timed examination, a programming portfolio, and a critical analysis of GCSE style computing questions.

* The MA Learning and Teaching offers a choice of routes for practising professionals and managers in educational settings. Optional modules allow a focus on areas of professional interest including leadership and management. Different qualifications are available: a Postgraduate Certificate (60 credits); a Postgraduate Diploma (120 crdits) or the full MA degree (180 credits). For further details please look at the website **www.ucs.ac.uk/malt** or contact Dr Clare Gartland **c.gartland@ucs.ac.uk**