

## Project proposal template – Faculty studentships Summer 2014

<i>Project title</i>	The integration of open e-assessment standards with question oriented systems for computer programming	<i>Director of Study</i>	Graham Alsop
<i>Second Supervisor</i>	Paul Neve	<i>School</i>	Computing and Infor
<i>Other members of supervisory team</i>	David Livingstone James Orwell	<i>Any requirements from applicant (eg degree in specific subject area)</i>	Computer Science degree or demonstrable equivalent
<b>Project summary</b> <b>(max 1,000 characters)</b>			
<p>QTI is a markup standard for e-assessment which can be delivered across different virtual learning environments. The Learning Technology Research Group (LTRG) with partners at other Universities have a body of research that has extended this standard and developed tools for content delivery that use these extensions. This work is used internationally to deliver maths resources with randomised characteristics, providing a unique challenge on each attempt.</p> <p>Tools exist for computer programming that do not make use of open standards. This limits interoperability thus resources developed cannot be easily shared and reused.</p> <p>The PhD programme will design new extensions to the QTI standard to support programming. The successful applicant will define a specification and develop prototype tools for the delivery of e-learning resources that utilise these extensions. They will develop exemplar resources and evaluate their effectiveness when deployed, drawing upon existing work by the LTRG.</p>			