

<b>Post Title:</b>	eLearning Software Engineer
<b>Grade:</b>	6

## **Job Description**

### **2.1. Purpose**

The eLearning Software Engineer will assist in the development, support and management of eLearning products and services deployed on behalf of the University Group.

The eLearning Software Engineer will assist in the design, creation, testing and documenting of new and amended eLearning products. This will be in accordance with agreed development and security standards and processes.

The post holder will have a good understanding of technology and technology trends within the field of eLearning systems. They will apply this insight to enable the business to innovate through the use of technology.

### **2.2. Main Duties and Responsibilities**

1. Designs, codes, verifies, tests, documents, amends and refactors complex programs/scripts and integration software services for eLearning systems. Contributes to selection of the software development approach for eLearning systems projects. Applies agreed standards and tools, to achieve well-engineered outcomes. Participates in reviews of own work and leads reviews of colleagues' work.
2. Assists with information gathering and requirements analysis. Use this to produce solution designs (including cost and time estimates); to develop and implement solutions; to ensure that unit tests are developed and maintained.
3. Undertakes complete design of moderately complex eLearning systems or components applying agreed standards, patterns and tools. Assists as part of a team in the design of components of larger eLearning systems. Specifies user and/or system interfaces. Creates multiple design views to address the concerns of the different stakeholders of the design and to handle separately functional and non-functional requirements. Assists in the evaluation of options and trade-offs. Collaborates in reviews of work with others as appropriate.
4. Provides and maintains technical documentation for new and existing solutions as a resource for colleagues within IT Services.
5. Actively maintains knowledge in eLearning systems. Provides detailed and specific advice regarding eLearning systems. Recognises and identifies the boundaries of their own

specialist knowledge. Collaborates with other specialists, where appropriate, to ensure advice given is appropriate to the needs of the University Group.

6. Applies data analysis, design, modelling, and quality assurance techniques. Uses them to establish, modify or maintain data structures and associated components (entity descriptions, relationship descriptions, attribute definitions). Advises database designers and other eLearning systems team members on the details of data structures and associated components.
7. Develops appropriate physical database or data warehouse design elements, within set policies, to meet business change or development project data requirements. Interprets installation standards to meet project needs and produces database or data warehouse component specifications.
8. Designs and develop users' digital interaction and interfaces for eLearning systems to meet agreed usability and accessibility requirements. Translates concepts into outputs and prototypes and captures user feedback to improve designs. Interprets and follows visual design and branding guidelines to create consistent and impactful user experience.
9. Applies standard techniques and tools to carry out analysis and performance monitoring activities for specified eLearning systems products. Supports problem resolution, resolves issues and acts on feedback and usage of in-life eLearning systems. Creates eLearning systems collateral.

Deputises for the eLearning Systems Manager as required.

**AND** such other duties as are within the scope of the spirit of the job purpose, the title of the post and its grading.

### **2.3. Supervision Received**

Line management is from the eLearning Systems Manager.

### **2.4. Supervision Given**

None.

### **2.5. Contacts**

- IT Services staff, including Executive Team.
- Staff and students in other Schools / Support Areas of the University Group.
- External Suppliers and other education institutions.

### 3. Person Specification

ATTRIBUTES	ESSENTIAL	ADVANTAGEOUS
<b><i>Education &amp; Qualifications</i></b>	<ul style="list-style-type: none"> <li>• Educated to HND level in a relevant discipline or substantial experience in related field in lieu of the above.</li> </ul>	<ul style="list-style-type: none"> <li>• Degree or professional qualification in a relevant discipline.</li> <li>• MCSD (App Builder).</li> <li>• OCM (Java SE Developer).</li> <li>• ZCE (PHP Certification)</li> <li>• ITIL.</li> <li>• CISSP.</li> </ul>
<b><i>Knowledge &amp; Experience</i></b>	<ul style="list-style-type: none"> <li>• Experience of eLearning systems.</li> <li>• Experience in eLearning system development.</li> <li>• Experience in PHP; SQL; HTML; CSS; JavaScript; AJAX.</li> <li>• Experience of Requirements gathering.</li> <li>• Understanding of OOP.</li> </ul>	<ul style="list-style-type: none"> <li>• Higher Education experience.</li> <li>• Moodle plugin development.</li> <li>• Writing scalable, globally distributed applications.</li> <li>• Working in a SCRUM environment.</li> <li>• Managing small project teams.</li> </ul>
<b><i>Job-related Skills, Abilities &amp; Competencies</i></b>	<ul style="list-style-type: none"> <li>• Proven analytical, planning and execution skills.</li> <li>• Takes responsibility and has strong sense of ownership.</li> <li>• Results oriented and a commitment to a high quality customer service</li> <li>• Knowledge of customer behaviours, needs and expectations.</li> <li>• Ability to work with colleagues to quickly resolve complex problems in the provision of IT services.</li> <li>• Good understanding of current and emerging technologies and how other enterprises are employing them to drive digital business support.</li> <li>• Software engineering principles and concepts.</li> <li>• Software engineering ecosystems.</li> </ul>	<ul style="list-style-type: none"> <li>• Public cloud infrastructure.</li> <li>• Microsoft Azure.</li> <li>• Amazon Web Services.</li> </ul>

	<ul style="list-style-type: none"> <li>• Cyber-security within application technologies.</li> </ul>	
<b><i>Interpersonal Skills</i></b>	<ul style="list-style-type: none"> <li>• Proven communication, and presentation skills.</li> <li>• Ability to forge effective relationships in a complex matrix management environment.</li> <li>• Results oriented, adaptive and decisive.</li> <li>• Ability to build trust and display integrity.</li> <li>• Ability to work collaboratively and be a key team player.</li> <li>• Creative and innovative thinking.</li> <li>• Can resolve conflicts and problems.</li> </ul>	
<b><i>Other Requirements</i></b>	<ul style="list-style-type: none"> <li>• A flexible approach to working hours and location, including a willingness to travel, locally, nationally or overseas, as required.</li> <li>• An appreciation of other cultures; the global reach of the University Group and its international agenda.</li> <li>• Ability to work flexibly and extended hours by agreement to meet tight, fixed deadlines or as required by service imperatives.</li> </ul>	