1. **Title of the module**

QUSU4005 Introduction to Measurement (Summer School)

1. **School or partner institution which will be responsible for management of the module**

Centre for Higher and Degree Apprenticeships

1. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**

 Level 4

1. **The number of credits and the ECTS value which the module represents**

15 credits (7.5 ECTS)

1. **Which term(s) the module is to be taught in (or other teaching pattern)**

This module, delivered as an intensive summer school event, is being taught as part of the BSc (Hons) Quantity Surveying being delivered through a part-time blended learning approach.

1. **Prerequisite and co-requisite modules**

N/A

1. **The programmes of study to which the module contributes**

BSc (Hons) Quantity Surveying, Certificate of Quantity Surveying.

1. **The intended subject specific learning outcomes.**

**On successfully completing the module students will be able to:**

1. Demonstrate a basic understanding of measurement, including how to record and process information.
2. Understand the methods and terminology used to measure various construction process and the requirements of mechanical and electrical engineering.
3. Demonstrate an introductory application of measurement and quantification of materials and the formulation of bill of quantities and work packages.
4. Evaluate the benefits and contexts for manual and automated measurement.
5. Evidence an awareness of and evaluate the importance of unmeasured items, provisional sums, day work and prime cost sums.
6. Access specification reference material (National Building Specification; [NBS]) alongside an awareness of New Rules of Measurement 2 (NRM2).
7. **The intended generic learning outcomes.
On successfully completing the module students will be able to:**
8. Evaluate contribution to team work.
9. Employ basic measurement skills.
10. Apply basic mathematical calculations and numeracy.
11. Engage in evaluation, analysis and comparative assessment.
12. **Synopsis of the curriculum**

The module introduces formal measurement methods, including recording and processing procedures and the formulation of bill of quantities and work packages and an awareness of mechanical and electrical engineering requirements. It introduces hands on surveying skills, set within a professional context, and evaluates the benefits and drawbacks of analogue and digital measurement whilst developing understanding of the terminology of measurement and its application. Mechanical and engineering considerations are introduced as it introduces NBS and the requirements of NRM2 and the ways in which projects are codified and reported.

1. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

Towey, D. (2017).*Construction Quantity Surveying: A Practical Guide for the Contractor's QS*. Wiley-Blackwell

Packer, A. (2016).*Building Measurement***.** Routledge

Ashworth, A. Hogg, K and Higgs, C.(2013).*Willis's Practice and Procedure for the Quantity Surveyor*. Wiley-Blackwell

1. **Learning and teaching methods**

*Preparation will be required prior to the summer school*

The total study time for this module is 150 hours incorporating online e-learning, work-based experience and private study.

Teaching is delivered as a blended learning approach. VLE-delivered E-activities, VLE-delivered work activities serve to reinforce material presented online and also relate directly to the learning objectives. Face-to-face teaching, via a summer school, serves to reinforce material presented on-line but also to teach concepts less suited to e-learning formats. These are specifically based on enabling students to relate their theoretical knowledge to the workplace.

 Work-based experience serves to reinforce and provide real-life context to the material being delivered in the module.

Private study encompasses the revising of all material presented in the above various forms of teaching and learning, together with the opportunity to explore and read more widely around specific topics.

1. **Assessment methods**
	1. Main assessment methods

 Written Report 40% - 1000 words

 Group Presentation 60% - 20 minutes

* 1. Reassessment methods

 Written assignment 100%

1. ***Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section12) and methods of assessment (section 13)***

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | *8.1* | *8.2* | *8.3* | *8.4* | *8.5* | *8.6* | *9.1* | *9.2* | *9.3* | *9.4* |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |  |
| **Private Study** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| *Teaching* | **x** | **x** | **x** | **x** | **x** | **x** |  |  **x** | **x** | **x** |
| *Work based experience* |  |  |  | **x** |  | **x** | **x** |  |  |  |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |
| *Written Assignment*  | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| *Group Presentation* | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |

1. **Inclusive module design**

The Centre recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

 a) Accessible resources and curriculum.

 b) Learning, teaching and assessment methods.

1. **Campus(es) or centre(s) where module will be delivered**

 University of Kent Medway Campus

1. **Internationalisation**

This module encourages students to develop a practical, conceptual and theoretical understanding of measurement. Although introductory, it raises questions about the nature of projects, the language of measurement and the communication of information to professional audiences providing a firm foundation for later international perspectives on the subject.

**FACULTIES SUPPORT OFFICE USE ONLY**

**Revision record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date approved | Major/minor revision | Start date of the delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
|  23 Jan 19 | New | Sept 19 | New |   |
|  |  |  |  |  |