

Summary Information

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| Module Code | 6209BEUG |
| Formal Module Title | Engineering Measurement |
| Owning School | Civil Engineering and Built Environment |
| Career | Undergraduate |
| Credits | 20 |
| Academic level | FHEQ Level 6 |
| Grading Schema | 40 |

Teaching Responsibility

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| LJMU Schools involved in Delivery |
| Civil Engineering and Built Environment |

Learning Methods

| Learning Method Type | Hours |
|----------------------|-------|
| Lecture | 10 |
| Workshop | 40 |

Module Offering(s)

| Display Name | Location | Start Month | Duration Number Duration Unit |
|--------------|----------|-------------|-------------------------------|
| JAN-CTY | CTY | January | 12 Weeks |

Aims and Outcomes

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| Aims | This module consolidates and builds upon the student's learning to date in the fields of measurement and BIM technologies and processes. Students will examine the most effective quantification techniques for complex construction and engineering projects through analysis of and comparison between available measurement protocols. |
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After completing the module the student should be able to:

Learning Outcomes

| Code | Number | Description |
|------|--------|--|
| MLO1 | 1 | Appraise and apply the rules of the standard method of measurement to prepare project documentation related to complex construction, building services and civil engineering projects. |
| MLO2 | 2 | Evaluate emerging practices of the Quantity Surveyor in relation to sustainable design, and environmental and performance considerations. |
| MLO3 | 3 | Critically evaluate the BIM protocols, processes and software appropriate to the role of the Quantity Surveyor/Estimator working in a collaborative environment throughout the project life cycle. |

Module Content

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| Outline Syllabus | Design economics Cost planning Benchmarking Value engineering Building services measurement Large scale and high rise construction projects measurement. Civil engineering measurement Tender documentation for a variety of different procurement options. BIM protocols BIM Processes Application and evaluation of BIM software applicable to the role of the Quantity Surveyor/ Estimator. Development of contract practice skills in relation to pre and post contract management |
| Module Overview | This module consolidates and builds upon your learning to date in the fields of measurement and BIM technologies and processes. You will examine the most effective quantification techniques for complex construction and engineering projects through analysis of and comparison between available measurement protocols. |
| Additional Information | This module will provide students with an understanding of BIM as it relates to the QS and engineering measurement. In this module, the knowledge learning outcomes are K2, K6, K14 and the skills learning outcomes are S10. |

Assessments

| Assignment Category | Assessment Name | Weight | Exam/Test Length (hours) | Module Learning Outcome Mapping |
|---------------------|--------------------|--------|--------------------------|---------------------------------|
| Portfolio | MEASUREMENT REPORT | 50 | 0 | MLO1, MLO3 |
| Test | IN-CLASS TEST | 50 | 0 | MLO2, MLO3 |

Module Contacts

Module Leader

| Contact Name | Applies to all offerings | Offerings |
|--------------|--------------------------|-----------|
| Duga Ewuga | Yes | N/A |

Partner Module Team

| Contact Name | Applies to all offerings | Offerings |
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