

Summary Information

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|----------------------------|---|
| Module Code | 4334BEUG |
| Formal Module Title | Professional and Digital Skills for Engineers |
| Owning School | Civil Engineering and Built Environment |
| Career | Undergraduate |
| Credits | 20 |
| Academic level | FHEQ Level 4 |
| Grading Schema | 40 |

Module Contacts

Module Leader

| Contact Name | Applies to all offerings | Offerings |
|----------------|--------------------------|-----------|
| Muhammad Ahmad | Yes | N/A |

Module Team Member

| Contact Name | Applies to all offerings | Offerings |
|----------------|--------------------------|-----------|
| Jeffrey Cullen | Yes | N/A |

Partner Module Team

| Contact Name | Applies to all offerings | Offerings |
|--------------|--------------------------|-----------|
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Teaching Responsibility

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

Learning Methods

| Learning Method Type | Hours |
|----------------------|-------|
| Online | 11 |
| Workshop | 33 |

Module Offering(s)

| Offering Code | Location | Start Month | Duration |
|---------------|----------|-------------|----------|
| SEP-CTY | CTY | September | 12 Weeks |

Aims and Outcomes

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|-------------|---|
| Aims | 1. Introduce software that can be used for professional engineering design and simulation. 2. Introduce professional behaviour requirements for engineers 3. Introduce academic and digital literacy skills necessary for further study |
|-------------|---|

Learning Outcomes

After completing the module the student should be able to:

| Code | Description |
|------|--|
| MLO1 | Develop skills and knowledge in the use of professional software for design |
| MLO2 | Generate simulation outputs based upon designed buildings/structures |
| MLO3 | Apply professional and ethical conduct to design, demonstrating knowledge of the professional codes of conduct. |
| MLO4 | Identify and reflect upon the following aspects of self-awareness in respect of personal development and career planning: strengths and weaknesses, motivations and values, ability to work with others. |

Module Content

| Outline Syllabus |
|---|
| Professional software packages for design, modelling and simulation of building services Coordination of Engineering Services and Construction Features Introduction to Professional bodies, Professional code of conduct and ethics Academic Support (report writing and referencing, research skills) |

Module Overview

This module introduces the software used for professional engineering design, modelling and simulation in the building industry. It also introduces the professional behaviour requirements for engineers alongside the academic and digital literacy skills necessary for further study.

Additional Information

Workshops in a PC-Lab On the Building Services Engineering Degree Apprenticeship programme, the knowledge learning outcomes are K2, K3, the skills learning outcomes is S1 and the behaviours learning outcome is B2.

Assessments

| Assignment Category | Assessment Name | Weight | Exam/Test Length (hours) | Learning Outcome Mapping |
|------------------------------|-------------------------------|--------|--------------------------|--------------------------|
| Centralised Exam | PORTFOLIO of software outputs | 90 | 0 | MLO4, MLO1, MLO2, MLO3 |
| Future Focus e-learning task | Report | 10 | 0 | MLO4 |