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| <b>Module</b>              | Intro to BIM                           |
| <b>Course code</b>         | BAIDO-BIM                              |
| <b>Credits</b>             | 5                                      |
| <b>Important notes</b>     | Available for semester abroad students |
| <b>Allocation of marks</b> | 100% Continuous assessment             |

### Module aims and objectives

The aim of the module is to enable the learner to develop skill in the use of 3D computer-aided design.

The objectives are to use BIM software (Revit) to produce 3D models to extract 2D drawings and documentations, and light and render interiors render to industry standards.

### Minimum intended module learning outcomes

On successful completion of this module, the learner will be able to:

1. Use Revit to construct basic 3D models in the built environment
2. Use Revit software to produce 2D Documentation plans, sections, elevations
3. Use Revit software to construct basic 3D models of interiors

### Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs

The module enables learners to develop skill in the use of 3D computer-aided design.

The learning outcomes of this module underpin a lot of the learning to be applied in other modules and so contribute to most of the Intended Programme Learning Outcomes. The module learning outcomes are aligned with Programme Learning Outcome no: 4, 7 and 11.

### Information provided to learners about the module

Learners will receive a module handbook to include module descriptor, module learning outcomes (MLO), class plan, assignment briefs, assessment strategy and reading materials etc.

### Module content, organisation and structure

| CLASS PLAN/ MODULE CURRICULUM |          |  |
|-------------------------------|----------|--|
| Semester 1 / Week no          | Topic No | Topic Name   |
| 1.1                           | 1        | Introduction to Module and Assignments<br>Introduction to Revit <ul style="list-style-type: none"> <li>• Introduction to BIM: Benefits of BIM, Role of BIM in Industry, Understanding of BIM concepts and work-flow, BIM vs Traditional</li> </ul> |

|      |     |  |
|------|-----|--|
|      |     | <p>CAD, Staff Structure/ responsibility, different BIM packages – what makes a BIM package</p> <ul style="list-style-type: none"> <li>• Project set-up: Explanation of how to start a project, project file structure, saving project and project backup.</li> <li>• Revit User Interface</li> <li>• Revit workflow</li> <li>• Revit Customization</li> <li>• Project files/ backup/ size</li> </ul> |
| 1.2  | 2   | <p>Starting a project</p> <ul style="list-style-type: none"> <li>• Project templates</li> <li>• Levels / Views /Datum elements</li> <li>• Project Browser</li> <li>• Property setting types</li> <li>• Visibility Settings</li> </ul>  |
| 1.3  | 3   | <p>Basic Modelling</p> <ul style="list-style-type: none"> <li>• Building Components</li> <li>• Circulation Components</li> <li>• Rooms / Areas</li> <li>• Massing / Site</li> </ul>  |
| 1.4  | 3   | <p>Basic Modelling</p> <ul style="list-style-type: none"> <li>• Building Components</li> <li>• Circulation components</li> <li>• Rooms / areas</li> <li>• Massing / Site</li> </ul>  |
| 1.5  | 4   | <p>Annotation</p> <ul style="list-style-type: none"> <li>• Dimensions</li> <li>• Details</li> <li>• Text</li> </ul>  |
| 1.6  | 4   | <p>Annotation</p> <ul style="list-style-type: none"> <li>• Dimensions</li> <li>• Text</li> <li>• Symbols</li> <li>• Tags / Notes</li> </ul>  |
| 1.7  | 5   | <p>Extracting Information: Plans, elevations, sections, details, 3D views, camera views, Call outs, Drafting views, schedules.</p>   |
| 1.8  | 5   | <p>Extracting Information: Plans, elevations, sections, details, 3D views, camera views, Call outs, Drafting views, schedules.</p>   |
| 1.9  | n/a | <p>Practical in class test</p>   |
| 1.10 | n/a | <p>Modelling Tasks</p>   |
| 1.11 | n/a | <p>Modelling Tasks</p>   |
| 1.12 | n/a | <p>Review</p>  |

### Module teaching and learning (including formative assessment) strategy

Teaching and learning methods for this module include delivering theory through lectures, expert guest speakers from the industry, using examples of standards, supported by demonstrations, in

class exercises and online supports on Moodle, the College VLE. Sample assignments are placed on Moodle for the learners' information. Learners are mentored during this module, with the emphasis on self-directed learning and independent development.

Strategies for this module are based on "Learning by doing", learner-centred learning and structured teaching methods.

The topical lectures and tutorials are a mix between passive and participatory teaching methods and involve promotion and enhancement of self-directed learning.

The assessment is based on Continuous Assessment (100%). The assignments constitute the overall grade achieved, and are based on each individual learner's work. The continuous assessments provide for ongoing feedback to the learner and relates to the module curriculum.

The subject is assessed through a practical in class test (40%) and the submission of an assignment (60%).