

# WORK-STUDY DIPLOMA IN ARCHITECTURAL BIM & DESIGN

## Core Modules

### Design Preliminary

On completion of the module, trainee should be able to outline the key work scope of architectural services, support architectural practice to obtain necessary project information from relevant authorities, and identify regulatory requirements applicable to the project

### Sketch Design

On completion of the module, trainee should be able to prepare the required drawings and 3D massing model based on the initial design proposed by the architectural office for design presentation to client. He/she will also require to check that the initial design is compliance to regulations.

### Schematic Design

On completion of the module, trainee should be able to produce design drawings and develop parametric BIM model to a suitable level of detail that can be used for design presentation, consultants' coordination and also further developed for submission to the relevant authorities at various stages of project. He/she will also be required to check that the design complies with regulatory requirements.

### Development Control Submission

On completion of the module, trainee should be able to produce required drawings and/or develop BIM model to sufficient level of detail required for Development Control Submissions, while ensuring that the design complies with regulatory requirements. He/she will also be equipped to prepare drawings for development control clearance with Frontline Technical Departments and submission plans to submit to URA for Written Permission.

### Building Plan Submission

On completion of the module, trainee should be able to produce required drawings and/or develop BIM model to sufficient level of detail required for Building Plan submissions while ensuring that the design complies with regulatory requirements. He/she will also be equipped to prepare drawings for BP clearance with Technical Departments and submission plans to submit to BCA for BP Approval

### Detail Design

On completion of the module, trainee should be able to prepare the detailed drawings of architectural elements and spaces along with material specifications, develop BIM families for standard architectural elements and generate schedules of architectural elements and spaces appropriate for pricing and inclusion in tender package

### Tender Drawings

On completion of the module, trainee should be able to produce a complete set of architectural tender package incorporating all required drawings, details, technical specifications and documentation necessary to enable pricing of products and services and calling of tender for an architectural project.

### BIM Simulation

On completion of the module, trainee should be able to integrate building services and structural systems with the architectural design using BIM modelling. They should be able to perform multi-disciplinary coordination and clash detection by performing simulations using BIM software and VR technology.

### TOP & CSC

On completion of the module, trainee should be able to produce architectural as-built drawings for submission to obtain clearances required for occupancy from relevant authorities. He/she should also be equipped to develop As-built BIM model for handing over the same to FM team.

### Integrated Assessment I

### Integrated Assessment II

### Company Project

On completion of the module, trainees should have applied their acquired competencies in an authentic project that would value-add to the company.