

FMT505 Integrated Digital Delivery in Built Environment

Level: 5

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JULY

Synopsis:

Digital Delivery of Projects in the Built Environment focuses on identification and application of relevant digital technologies to ensure smooth project delivery. This course provides a framework for project team to leverage on the digital trends to streamline work processes and improve collaboration to achieve better project outcome.

Through a series of classroom exercises, learners will be able to identify bottlenecks and constraints in their workflows, and subsequently be taught how to develop a digitalization roadmap specific to their organizations and work functions and apply them to address those constraints to achieve better project delivery. Expanding the knowledge gained through this course, the learners can hope to achieve a more sustained organisational transformation in project delivery approach.

The buildingSMART Singapore DDM Accreditation Scheme offers Tier 4 Provisional accreditation for the FMT505 course. Graduates of the course are eligible for exemption from assessment at the Tier 4 level after gaining 1-year experience.

Topics:

- Introduction to IDD, Workflows and Use Cases
- IDD implementation during project's verticals
- Data interoperability I: Use Between Different Software
- Data interoperability II: Data Quality Assurance and Common Data Environment.
- Common Data Environment (CDE) : project information management
- Roadmapping techniques Defining Problem Statements
- Defining Project Outcome Indicators to Monitor & Benchmark Project Performance
- Design Thinking I: Empathize and Define
- Design Thinking II: Ideate, Prototype and Test
- Team Collaboration Enablers
- Digital Technology Scanning and Application
- Agile Planning for BE Projects

Learning Outcome:

- Construct the IDD Framework for BE Projects
- Evaluate IDD use cases and implement available technological and process enablers
- Define key project outcome indicators
- Introduce change management for organisational digital transformation through development of roadmap for digital disruption
- Apply Design thinking and Agile planning on BE Projects
- Appraise Process Streamlining
- Examine Design Thinking
- Propose Outcome-based Change Management

Assessment Strategies - Regular Semester (Evening Class):

| Components | Description | Weightage Allocation (%) |
|-------------------------------|---------------------------|---------------------------------|
| Overall Continuous Assessment | QUIZ 1 | 10 |
| | GROUP BASED ASSIGNMENT 1 | 20 |
| | TUTOR-MARKED ASSIGNMENT 1 | 20 |
| Overall Examinable Components | ECA | 50 |
| Total | | 100 |

*The information listed is subject to review and change.