mttc COLLEGE

College Reg. No. L02455

REGISTERED HRD CORP TRAINING PROVIDER

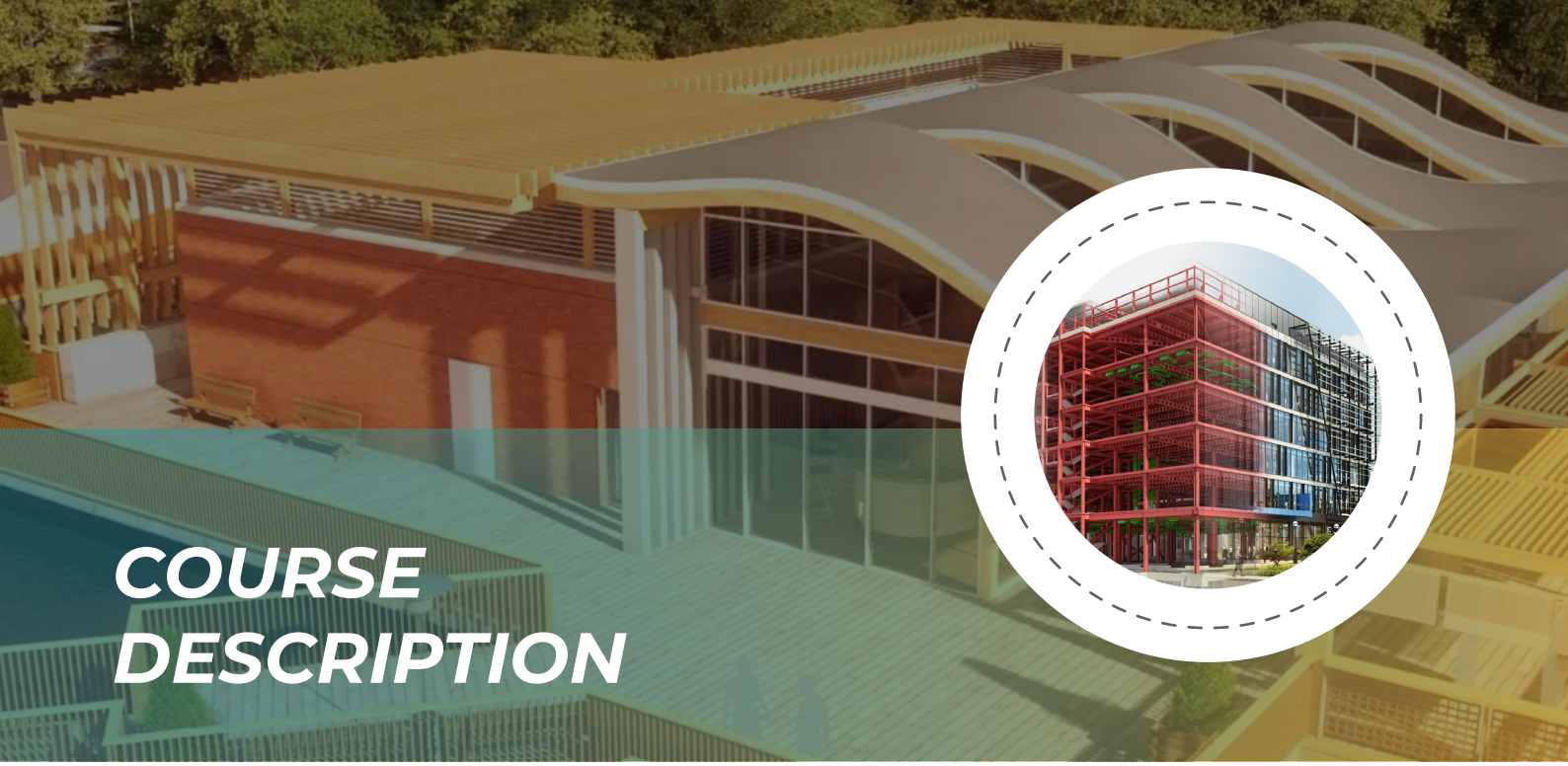
PROFESSIONAL CERTIFICATE IN

BUILDING INFORMATION MODELLING (PCBIM)

CERTIPORT A PEARSON VUE BUSINESS

AUTHORIZED TESTING CENTER

AUTODESK CERTIFIED PROFESSIONAL



COURSE DESCRIPTION

Building Information Modelling (BIM) is a process that involves the generation and management of the information about a facility. BIM allows for great integration and collaboration among different building professionals of various disciplines to explore digitally and can be used throughout the entire building process from design stage through construction stage and even post construction building management. This series of training programme is specialised for those who intended to implement and work in BIM projects. Individual participants or corporate participants are welcome to join the course to have a better understanding in BIM concept before the decision to implement BIM is made

1 ENTRY REQUIREMENT

- Fresh graduate, background in Architecture; Landscape Architecture; Interior Design; Civil/Structural Engineering; Urban Design; Building; Computing; Project Management; Construction Management; Quantity Surveying; Architectural Engineering; Architectural Technology; Design Management; Building Surveying or Facility/Asset Management. Substantial relevant professional experience will also be considered.
- Interest / Experiences in Construction Industry

2 COURSE DURATION

- 3 Months

3 TRAINING GUIDE

- Autodesk training guide, Essential handouts, notes and relevant case study.

4 SOFTWARE

- Autodesk Revit
- Autodesk Naviswork
- BIM A360

BIM PROGRAMME MODULE

MODULES (30 CREDITS)

Modules	Credits
BIM Methodoly & Guide	1
BIM Modelling Course (Architecture)	4
BIM Modelling Course (Structure)	4
BIM Modelling Course (Mechanical)	3
BIM Modeling Course (Electrical)	3
BIM Coordination	2
BIM Simulation (4D)	2
BIM For Project Quantification	2
BIM Collaboration (CDE)	1
BIM Process & Documentation	3
Final Project (Presentation)	3
Autodesk Certified User (ACU)	2

CERTIFICATIONS

Participants will receive the following:

1. Upon completion of course with full attendance:

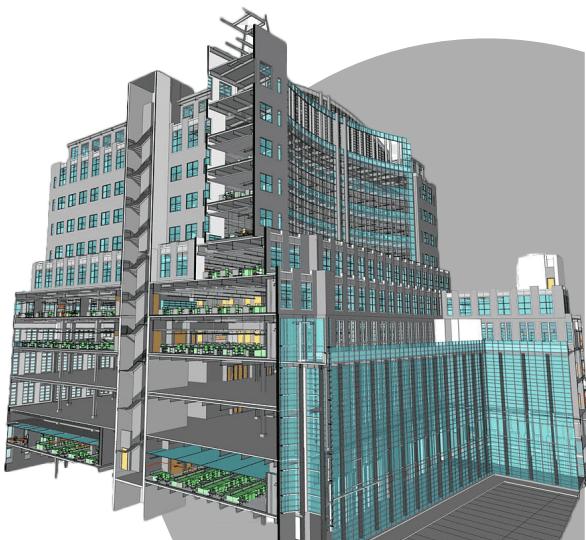
- Professional Certificate for Building Information Modelling Programme

2. Upon passing the Online Examination:

- Autodesk Certified User (ACU) - (Softcopy)
- Digital Autodesk badges showcase your skills & validate your abilities with potential employers in your resume & on professional networking sites

CAREER PATH

- BIM People : BIM Modeller, BIM Coordinator, BIM Trainer, BIM Project Manager, BIM Estimator



BIM METHODOLOGY & GUIDE (BMG)

Credits : 1
Contact Hours : 8
Instructor : Experienced Instructor
Material : Handouts & Notes

Description:

The course is designed to help you understand the overall picture of BIM, the concepts of BIM, the values that BIM brings to the different actors in the project life cycle from the project creation stage to the management of the project of the facility, factors influencing the process of BIM application in each enterprise, and receive BIM for an organization, analyze some of the actual BIM application in the world

Objectives:

Acquire and understanding of integrated process between design, construction, and management through digital tool

Learning Outcome:

Better understanding of the fundamental approach to construction players for the BIM adoption in Malaysia

BIM MODELLING COURSE - REVIT IN ARCHITECTURAL DESIGN

Credits : 4
Contact Hours : 40
Instructor : Autodesk Approved Instructor
Material : Training Guide

Description:

The Revit Architectural training course is designed to teach you the Revit functionality as you would work with it in the design process. Since building projects, themselves tend to be extremely complex. Revit Architecture is necessarily a complex program. The Objective of the training course is to enable students to create full 3D architectural project models and set them up in working drawings. This training course focuses on basic tools that most users need to work with Revit Architecture.

Objectives:

To provide users an understanding of the software's core functionality and features so that they can develop 3D Model for Architectural Design

Learning Outcome:

Possess modelling skills & develop 3D Model for Architectural Discipline

BIM MODELLING COURSE- REVIT IN STRUCTURAL DESIGN

Credits :4
Contact Hours : 40
Instructor : Experienced Instructor
Material : Training Guide

Description:

This training course is intended to introduce students to the software's user interface and the basic building components that make the Autodesk Revit Structure software a powerful & flexible structural modelling tool. Our goal is to familiarize you with the tools necessary to create, document, and print your parametric model. Examples & practices are designed to reflect as many different building types as possible. This course is designed for new users of Revit Structure

Objectives:

To provide users an understanding of the software's core functionality and features so that they can develop 3D Model for Structural Design

Learning Outcome:

Possess modelling skills and develop 3D Model for Structural Discipline

BIM MODELLING COURSE- REVIT IN MECHANICAL ELECTRICAL & PLUMBING (MEP)

Credits : 3 + 3
Contact Hours : 80
Instructor : Autodesk Approved Instructor
Material : Training Guide

Description:

The Revit MEP Essential training course is intended to introduce students to the software's user interface and the basic HVAC, electrical, and piping/plumbing components that make Revit MEP a powerful and flexible engineering modelling tool. The objective is to familiarize students with the tools necessary to create, document, and prints the parametric model. The examples and practices are designed to take you through the basics of full Revit MEP project, from linking in an architectural model to construction documents

Objectives:

To provide users an undersatnding of the software's core functionality and features so that they can develop 3D Model for Mechanical, Electrical & Plumbing Design

Learning Outcome:

Possess modelling skills and develop 3D for MEP Discipline

BIM COORDINATION

Credits : 2
Contact Hours : 8
Instructor : Experienced Instructor
Material : Training Guide

Description:

The Autodesk® Navisworks® essential training course instructs students in best approaches to combine 3D geometry from cross disciplines into one scene to enable effective model curriculum, students acquire the knowledge needed to review and markup the model, as well as the Clash Detective tools within the Autodesk Navisworks software

Objectives:

To provide users an understanding of the software's core functionality and features so that they can review the BIM Model in 3D visualization to perform clash analysis

Learning Outcome:

Possess coordination skills, hands-on, practice intensive curriculum, students acquire the knowledge needed to review and markup the model, as well as the Clash Detective tools within the Autodesk Navishwork software

BIM SIMULATION (4D)

Credits :2
Contact Hours : 8
Instructor : Experienced Instructor
Material : Training Guide

Description:

The Autodesk® Navisworks® Simulate and Manage features training course instructs students in best approached to combine 3D geometry from cross discipline into one scene to enable effective model reviews. Students will learn how to link to task-scheduling files and create 4D construction simulations

Objectives:

To provide users an understanding of the software's core functionality and features so that they can develop 4D Construction Simulation

Learning Outcome:

Possess create simulation modelling skills by using Time Liner for simulation task

BIM FOR PROJECT QUANTIFICATION (5D)

Credits :2
Contact Hours : 6
Instructor : Experienced Instructor
Material : Training Guide

Description:

This module's creation is rooted in practical methods and industry standards for extracting data from the intelligent BIM 3D Model for quantification purposes. Its focus lies in fostering hands-on technical skills, deepening BIM knowledge, and cultivating proactive problem-solving abilities, all customized to meet specific local needs. The objectives includes extracting information using 3D BIM models for smooth interaction and collaboration.

Objectives:

To provide users an understanding of fundamental functions and features of the software, enabling them to create 5D Quantification

Learning Outcome:

Possess create quantification skills by using Quantification Workbook tool in Autodesk Navisworks software and Microsoft Excel for quantification task

BIM COLLABORATION

Credits : 1
Contact Hours : 8
Instructor : Experienced Instructor
Material : Training Guide

Description:

Collaboration platform for construction stakeholders and focusing into integrated management system that allows 3D design, together with onsire construction and information that enables handover to operatinally manage the client's facility

Objectives:

To provide users an understanding of the collaboration platfrom which is Common Data Environment (CDE) in BIM working environment

Learning Outcome:

Better understanding of the CDE platform

BIM PROCESS & DOCUMENTATION

Credits : 3
Contact Hours : 24
Instructor : Experienced Instructor
Material : Handouts & Notes

Description:

This course focusing into integrated management system that allows 3D design, together with onsite construction and information that enables handover to operationally manage the client's facility. BIM Process & Documentation focus on the BIM Execution Plan (BEP) development, understand BIM manager roles, responsibilities, and job functions, expose more knowledge on BIM software and issues and undersatnd basic information on BIM Protocols, includibg the standards used

Objectives:

To provide users an undertanding of the BIM Management & Practice

Learning Outcome:

Better understanding of BIM Documents & its functions

FINAL PROJECT AND PRESENTATION

Credits :3
Contact Hours : 40

Description:

Presentation of work : Complete a 3D BIM Model and Document submission for Final Project and present in verbal presentation

EXAM 1 AUTODESK CERTIFIED USER (ACU)

Credits : 2
Revision : 16 Hours
Exam Duration : 2 Hours (Physical)
Material : Autodesk Official Training Guide ; Exam Preparration Roadmap