Advanced Diploma in Construction Management

OVERVIEW

Construction Management is the overall planning, coordination and control of a project from beginning to completion. It is aimed at meeting a client's requirement in order to produce a functionally and financially viable project. The construction industry is composed of five sections: Residential, commercial, heavy civil, industrial and environmental. A Construction Manager holds the same processes in each sector. All that separates a construction manager in one sector from one in another is the knowledge of the construction site.

PROGRAMME OBJECTIVES:

This Advanced diploma is designed to meet the needs of builders, including selecting contractors, overseeing the work and its quality, and liaising with the client. This programme also suitable for building professionals who coordinate the construction of a buildings where they are responsible for the overall completion of the job and senior managers within the large building, construction and service firms handling complex projects and process. The programme helps learners establish sound building development and construction skills that will meet the project criteria for time, cost and quality control.

ASSESSMENT METHODS:

70% Coursework & 30% Examination

(Excluding ADIA509 and ADIP509 is 100% Coursework)

DURATION COMPONENTS:

Classroom Training Hours: 30 Hours Per Module

MODULE SYNOPSIS:

SPM301 Site Planning and Management

This module is focus on familiar students with the construction site events which include site access/preparation., site requirement for temporary facilities and techniques used for planning and monitoring.

PC302 Procurement and Contracts

The theoretical aspects of contract administration, bidding and procurement processes had been covered in year 1 (Specialist Diploma Level).

This module aims to provide insight into the managerial perspectives and practices in assessing project contracts and procurement processes and exploring the stages of contracting and procurement in the project environment. The module will include skills and techniques designed to develop a procurement plan, contract statement of work, contract evaluation criteria, request proposals, project management plans, administration and closure.

CPB306 Cost Planning and Budgeting

The aim of this module is to give the student of quantity surveying an appreciation of the skill and practice of cost planning and the place of cost planning in the overall cost control process

PROGRAMME OUTCOMES:

Upon completion of this course, the student will able:

- to gain an understanding of the specialist skills and knowledge required to become a construction manager or construction project manager in a range of work contexts, including the project management environment
- to demonstrate how the practical application of construction management theory can deliver outstanding outcomes;
- to obtain up-to-date knowledge of current and future trends in construction management whilst developing the skills of critical evaluation and analysis that the learner needs in the construction and the built environment industry.
- to develop skill sets to effectively supervise and administer the many activities of a large commercial building development, ensuring all key activities & deliverables are successfully coordinated and managed throughout each stage of the project.

AWARDING BODIES:

Global School of Technology and Management

NUMBER OF MODULE:

9

TOTAL CONTACT HOURS:

240

HMBE307 Human Management in the Built Environment

The theoretical aspects of human resource management (HRM) had been covered in year 1 (Specialist Diploma Level).

This module aims to provide a managerial perspective of strategic human resource management and organisational performance and their applications in the construction and built environment sector.

PSC305 Project Supervision & Control

This module is focus on understanding of the processes of supervision of construction operations, site and HQ procurement, site material and waste management, Total Quality; Quality Assurance and control and safety in Construction; liability on contractors and procedures in the event of accidents

CT(1)303 Construction Technology 1

The module aims to enable students to begin a complete understanding of construction technology on the common building and civil engineering projects.

Topic covered the Project management; Building measurement; Structure; Concrete; Steel; Precast concrete; Walls; Windows & doors & staircase; Roof structures; and Long span roof construction

CT(2)308 Construction Technology 2

This Construction Technology 2 is a synoptic pair, and Construction Technology 1 took in an earlier module. Construction Technology 1 dealt with a general overview of construction aspects, and this module deals with the construction details for low rise domestic building.

The module aims to enable students to understand further and apply construction technology in the building, construction, and the built environment.

Topic covered the Site Investigation; Foundations; Deep Basement construction and its safety aspects; Portal Frames; Pre-stressed Concrete; Claddings; Types of formworks; Innovative Construction Technology and Building – Electrical Technology

SRM304 Safety and Risk Management

The health, safety and welfare legislation theme in the construction sector had been covered in year 1 (Specialist Diploma Level). This module aims to provide advanced knowledge of risk assessment techniques, the public and individual perception of risk, risk management and how decision are made in architectural-engineering-construction (AEC) projects.
Project Risk Management is an advanced-level module designed especially for construction students. The focus will be on identifying and managing risks at the project level – the project could be a major architectural-engineering-construction (AEC) project, a civil-infrastructure project, or even a new/innovative project technology. A variety of risk analysis concepts, tools and methodologies will be utilised. One major project will be prepared and presented by student groups. An examination will also be given to assess each student's understanding of basic risk analysis concepts and methodologies.

Modern, engineering-driven projects are often large, complex and risky. With a special emphasis on built facilities and infrastructure projects, this module develops tools and methodologies appropriate for decision making under uncertainty. The module will focus primarily on initial project delivery strategies (i.e., role of participants, type of contract, contract design, project financing approach, and distribution of risks). These strategies require the project sponsor/owner to understand and identify the risks, consider alternate contracting and financing options, and develop contingencies. Risk identification and decision-theory tools help select a best strategy and manage risks throughout the project. The current state-of-the-practice approaches are also discussed.

ADIA509 Industry Attachment

Industrial Attachment is an important aspect and a component of a students' development. As part of the course curriculum, students are expected to undertake a 24 weeks/ 6-month industrial attachment in the related industries. Students will take an internship programme with construction companies which related to their interest or area of specialisation.

GSTM will facilitate the arrangement and process of student's entire Industrial Attachment. Industrial Attachment applies to all students.

Throughout the six-month attachment, the program will facilitate student-learning opportunities outside the classroom. Different business organisations will have different modes of training, which would be typical in real-life environments

Industrial Attachment is an integral part of the course. In the unlikely event that a student cannot be placed for Industrial Attachment, due to circumstances beyond the control of the student or the college, like non-approval of the Training Work Permit by the Ministry of Manpower, the student will be required to complete an Industrial Project (5000 words) under the supervision of a lecturer from GSTM.

ADIP09 Industry Project

The industrial project applies only when a student is unable to secure an industrial attachment with any organisation. In the absence of an industrial attachment, the student has to complete an individual project lasting 2 months.

The industrial project (5000 words) topic must be relevant to the construction management industry and approved by the school. Students have a maximum of 2 months to complete the project after approval. The Industrial Project provides an opportunity for students to integrate their knowledge through application to a practical-based classroom project by selecting the student's choice of industry. Preferably, this project focuses on an identified management issues and/or opportunity of an organisation.

The project work involves students developing, managing and achieving the objectives of the construction management project and applying theories, topics and knowledge that the students have learned in a real case scenario. It encourages a holistic approach to managing the managerial aspects of a construction management project, using the multiple theories and topics that the students have learned.