Specialist Diploma in Computing and Information Technology

OVERVIEW

Computing and Information Technology plays a significant role in supporting a modern society that we live in today. Having a diploma in this field will provide students with a deep understanding of theories and merging technologies. The knowledge and experience will allow students to develop cutting-edge solutions that address today's challenges.

PROGRAMME OBJECTIVES:

Students equip with a solid foundation in computing and information technology, applied knowledge technology, understanding and skills for a career in the computing and information technology across any sector. It is also developing a wide range of skills and techniques, personal qualities and attributes essential for successful performance and immediate contribution to employment. This course is ideal for anyone at the beginning of their career or looking to improve their qualification or career prospect. It also prepares the students to progress their study to Advanced Diploma level in GSTM.

ASSESSMENT METHODS:

70% Coursework & 30% Examination

NUMBER OF MODULES:

8

PROGRAMME OUTCOMES:

Classroom Training Hours: 30 Hours Per Module

TOTAL CONTACT HOURS

240

MODULE SYNOPSIS:

SDMS401 Marketing for the Services Industry
This module provides students with an introduction to marketing and its role in the services industry. It gives students an overview of the principles underpinning marketing activities and is both an introduction to the subject area

SDFA404 Financial Accounting in the Service Industry
This module will provide opportunities for students to learn basic accounting and finance. Students will acquire the necessary accounting skills and knowledge for recording accounting transactions and preparation of financial statements for organisations. This module aims to provide students who are not majoring in accounting or finance to understand the accounting process and to develop skills necessary to evaluate an organisation's financial position, operating, investing and financing activities

SDCIT402 Programming Fundamentals
This module focuses on fundamental problem-solving techniques using a modern programming language. It is essential for students to learn the advanced datatypes and programming structuring techniques of object-oriented programming and how to develop programs from high-level design diagrams

SDCIT401 Foundation of Computing I
The module is designed to develop strong fundamental skills in logic, discrete mathematics, and aspects of computation that are essential in computer science and engineering.

PROGRAMME OUTCOMES:

Upon completion of the programme, the learners will be able to:

- develop an understanding of the fundamental of Computing and Information Technology in different sectors
- equip students with an analytical problem-solving mindset in Computing and Information Technology
- develop a good analytical ability in Computing and Information Technology
- demonstrate interpersonal, self-study, research and presentation skills through the course
- have adequate preparation for their careers or further studies in a related area.

KEY FEATURES:

The course has been developed to focus on:

- Build strong technical knowledge related to the computing and information technology
- Professional knowledge of computing and information technology the computer world
- Preparing individuals for a range of careers in the computing and information technology world.
- Equipping individuals with knowledge, understanding and skills for success in employment in the computing and information technology and its related industries.
- Providing a significant educational base for progression to Advanced Diploma in Computing and Information Technology

AWARDING BODIES:

Global School of Technology and Management

SDCIT404 Data Structures and Algorithms
The module focuses on the fundamental of problem-solving techniques using procedural abstraction, data abstraction, data structures, and various algorithmic approaches

SDCIT405 Foundations of Computing II
This module focuses on the theory behind the formal underpinnings of computing. Students will learn the essential concepts of differentiation/integration of a function, linear equations using matrix manipulation and a primer on statistics

SDCIT403 Web and Database Systems
The module focuses on the key technologies of the World Wide Web (WWW) and Database systems. The module will cover the most current tools available for developing rich web applications using HTML, CSS, PHP, JavaScript, JSON/XML and other related technologies. It also introduces students to basic concepts of database management systems, database connectivity to the front-end (e.g. web-based content management) and web security. Students will acquire systematic knowledge about web programming tools, framework and techniques used in web development. Throughout the module, students will work on small scale web applications to acquire knowledge about web application development processes.

SDCIT406 Software Engineering
The module focuses on the concepts and principles of software engineering. Students would learn the software development lifecycle, software requirements, software design, implementation, and testing. Also, practical tools and techniques and methodologies will be introduced. Throughout the module, software engineering methods will be put into practice, and Java programming skills will be consolidated.

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