Diploma (Specialized in Mechanical Engineering)

OVERVIEW

Mechanical Engineering is the discipline that applies the principles of engineering, physics, and materials science for the design, analysis, manufacturing, and maintenance of mechanical systems. It is the branch of engineering that involves the design, production, and operation of machinery. It is one of the oldest and broadest of the engineering disciplines.

PROGRAMME OBJECTIVES:

The Diploma (Specialized in Mechanical Engineering) is a recognized qualification for Mechanical engineering technicians and supervisors throughout Singapore and Malaysia and is supported by the industry. Learn to apply Mechanical engineering theory to practice and competently perform technical operations to the standards expected by the engineering profession.

ASSESSMENT METHODS:

100% Coursework

DURATION COMPONENTS:

Classroom Training Hours: 32 Hours Per Module

PROGRAMME OUTCOMES:

The Diploma Programme in Mechanical Engineering seeks to provide more accessible and quality education and training to manufacturing/ production personnel to meet the real work needs of manufacturing / production industry and prepare them for the changes in techniques, technologies, markets and employment patterns. This Programme has been designed to enhance quality and productivity of manufacturing /production personnel.

Upgrade and modernize the technical know-how of those will to engaged in the manufacturing/ production-related activities, of advancing their careers in manufacturing / production; and Provide better industry-education linkage by matching learner's educational needs while collaborating with professional bodies and technical institutions

AWARDING BODIES:

Global School of Technology and Management

NUMBER OF MODULE:

6

TOTAL CONTACT HOURS:

192

MODULE SYNOPSIS:

FWSH101 Fundamental of Workplace Safety and Health

The Fundamental of Workplace Safety and Health module provides students with the requisite knowledge of Health and Safety in the workplace. Upon completion of the module, students should be able to identify hazards in the workplace and state their possible effects and outline methods for creating a safe working environment and dealing with incidents.

MP102 Managing People

The Managing People module provides students with a solid grounding in the basics of managing people in the organization. Students are expected to identifying the various models and methods available to monitor tasks, explaining how orders are given and discuss the steps involved in ensuring that those orders are carried out.

DME103 Design of Mechanical Element

Upon completion of this module, the participants will be able to explain the joints and its types, the shafts, keys and couplings, flat and V-belt for power transmission, various types of bearings and their applications and the spur gear used for power transmission and types of Levers.

TMT104 Theory of Mechanical Testing

The Theory of Mechanical Testing module is focus on skills on different types of testing methods of metals, material testing on elasticity, hardness, bending, shear strength, non-destructive testing methodology to find fine cracks and flaws, microstructure of the metals and modules of rigidity of open spring and closed coil springs

EM105 Engineering Mechanics

The Engineering Mechanics module is equipped students with the solid understanding on importance of Statics and Dynamics in engineering. Students will be able to identify the machine members in which friction exists, comprehend the principals involved in Simple Mechanism and to explain the Geometric Properties of Sections and Basic Link Mechanism.

ME106 Material Engineering

The Material Engineering module is designed to equip students with understand the importance of engineering materials and its properties, destructive testing and non-destructive testing, heat treatment and Iron - Carbon Equilibrium Diagram, Ferrous, Non- Ferrous and their Alloys and powder metallurgy and primary manufacturing process.

Effective Date: 22 December 2017
Version: 1.1
GSTM-ACD-052