









# Executive Summary

Certified Healthcare Facility
Management - Manager Program (CHFM-M), a comprehensive program designed to equip participants with the necessary knowledge and skills to excel in healthcare facility management in accordance with Malaysia's laws and regulations. This program is specifically tailored for individuals seeking to enhance their managerial competencies in overseeing healthcare facilities.

It is led by expert trainers who hold MSQH certification, ensuring that participants receive top-notch instruction and guidance throughout the program.



This program has received endorsements from both MSQH (Malaysian Society for Quality in Health) and ASQUA (Asian Society for Quality in Health). This recognition speaks to the quality and credibility of our program, making it the premier choice for healthcare professionals seeking to enhance their skills in healthcare facility management.

The program consists of 10 modules that have been specifically tailored to cater to the needs of management staff, healthcare professionals, and liaisons overseeing external service providers. These modules cover a wide range of topics that are essential to healthcare facility management.

Over the course of 3 months, participants will delve deep into each module, gaining in-depth knowledge and practical insights. The program is designed to be completed within a 3-month period, with a total of 14 days of training. This allows participants to fully immerse themselves in the content and apply their learnings to real-world scenarios.

Throughout this program, participants will delve into various essential areas, including healthcare business and operations, regulatory requirements, hospital support services, building design, anatomy and physiology, electrical and IT systems, mechanical systems, asset and financial management, facility operation and management, and project management. By covering these diverse areas, participants will gain a well-rounded understanding of the intricacies of healthcare facility management in Malaysia.

The program outcome of CHFM-M is to enable participants to apply their knowledge and skills in hospital business and operations management, effectively manage and coordinate hospital support services, understand the relevance of human anatomy and physiology in the hospital working environment, apply asset and financial management principles in healthcare facilities, operate and manage hard and soft services in line with facility healthcare operation and management, and apply project management skills in undertaking healthcare projects.

In summary, our CHFM-M program, endorsed by both MSQH and ASQUA, offers healthcare engineers the opportunity to enhance their skills and excel in healthcare facility management. With a comprehensive curriculum, expert trainers, and a balanced framework, participants will gain the knowledge and skills necessary to thrive in the ever-evolving healthcare landscape.

### Program Outcome

Upon completion of the program, participants will be able to:

- Apply knowledge and skills in hospital business and operations management, including healthcare delivery, health IT, support services, and sustainability.
- Able to work within the regulatory requirement and standards set by MOH and MSQH.
- Effectively manage and coordinate hospital support services such as facility engineering, biomedical engineering, linen laundry, clinical waste management, cleaning services, and sustainability programs.
- Able to understand the relevance of human anatomy and physiology in relation to hospital working environment.
- Apply the principles of asset and financial management in healthcare facilities, including asset lifecycle management, types of asset management software, and financial management practices.
- Ability to operate and manage hard and soft services inline with their understanding of facility healthcare operation and management.
- Apply project management skills in undertaking healthcare projects, including planning, communication, execution, tracking progress, and problem-solving.



This Program requires individuals to have a minimum Bachelor's degree in an Engineering field and at least 6 months of working experience in the healthcare industry. This educational and experiential requirement ensures that participants have a strong technical foundation and practical understanding of healthcare facility management.

or

Also allow individuals with a CHFM-E competency certificate and a minimum of 2 years of experience in the healthcare industry. This inclusive approach recognizes the value of practical experience and encourages professionals with relevant backgrounds to contribute their expertise to the field of healthcare facility management. By welcoming individuals with CHFM-E certification and experience, the program promotes a diverse and skilled workforce, further enhancing the quality of healthcare facility management in Malaysia.

### **Certified By**



Eastwood Park Integrated Malaysia Sdn Bhd is an ISO 17024 accredited certified organization, accredited by the Department of Standards Malaysia. This certification and accreditation provide assurance of the organization's credibility and the value of their competency certificates in the industry.

#### CHFM CLINICAL

4 Days

• CHFM 01 - Healthcare Business and Operation

- CHFM 02 Healthcare Standards and Regulatory Requirement
- CHFM 04 Understanding of Hospital Building Design Requirement
- CHFM 05 Overview of Anatomy and Physiology

#### CHFM TECHNICAL

6 Days

- CHFM 03 Hospital Support Services
- CHFM 06 Hospital Electrical System and IT Infra
- CHFM 07 Hospital Mechanical System

#### CHFM MANAGEMENT

4 Days

- CHFM 08 Asset and Financial Management
- CHFM 09 Facility Operation and Management
- CHFM 10 Project Management



#### Lecture

Instructors will deliver lectures to provide participants with theoretical knowledge and concepts.

### **Case Study**

Real-life case studies will be presented to participants, allowing them to analyze and solve complex problems.

## **Group Discussions**

Participants will engage in group discussions to exchange ideas, share experiences, collaborate on solving challenges and self study.

### **CHFM** CLINICAL





#### CHFM 01 - Healthcare Business and **Operation**

This module equips participants with knowledge and skills related to hospital business and operation in Malaysia, including healthcare delivery, health IT, support services, healthcare facility management, medical devices, public and private sector hospital policy, and sustainability of hospital business operation management. It aims to provide insights and expertise to tackle current healthcare facility business operation challenges by employing thinking and practical skills. Participants will be able to expand on and discuss ideas, think critically, and manage relevant information from various sources.

#### **Learning Outcome**

This Module aims to equip participants with knowledge and techniques related to hospital business operations, an understanding of hospital management concepts, and awareness of managerial roles and responsibilities. Students will gain insights into the functions of hospitals and their healthcare context, as well as practical experience in handling operational hospital business issues.

#### CHFM 02 - Healthcare Standards and Regulatory Requirement

This module aims to educate about the significance of standards in hospital facilities in Malaysia. It covers regulations and government bodies, the role of compliance managers, and steps for ensuring regulatory compliance in hospitals. Participants gain knowledge and understanding of healthcare facility standards through the module.

#### **Learning Outcome**

This task requires identifying healthcare facility acts and requirements, describing governing laws and regulations for hospital development, and preparing to implement guidelines and practices that meet healthcare regulations.

#### CHFM 05 - Overview of Anatomy and Physiology

This module provides a study of various body systems with a focus on their structural and functional interrelationships. It covers basic medical terminologies and is adapted for nonmedical learners, making it suitable for individuals involved in healthcare industries.

#### **Learning Outcome**

Participants will gain an understanding of body systems, including their interrelationships and basic medical terminologies. This knowledge will enhance their ability to interpret medical reports, communicate effectively with medical professionals, and provide accurate support in healthcare industries.

#### **CHFM 04 - Understanding of Hospital Building Design Requirement**

The module will introduce the specialised aspects of hospital clinical design architectural requirements of healthcare facility in Malaysia. Topics covered include design requirements and construction planning strategies to create safe buildings. The module is designed to facilitate participants acquiring knowledge and understanding of hospital building requirements within healthcare facilities.

#### **Learning Outcome**

Participants will have a comprehensive understanding of the specialised aspects of hospital clinical design architectural requirements in Malaysia. They will be able to identify and apply design requirements and planning strategies to create safe buildings within healthcare facilities. Participants will also gain the knowledge and skills necessary to effectively contribute to the planning and development of hospital buildings, ensuring they meet the specific needs and regulations of healthcare facilities in Malaysia.



Prof Dato' Dr Hj Abdul **Rahim Bin Abdullah** 

Chief Executive Officer, Malaysian Society for Quality in Health



Associate Professor Dr. M.A. Kadar Marikar

Consultant. Malaysian Society for Quality in Health



Dr Ir Ts Yahaya Bin Hassan

Malaysian Society for Quality in Health

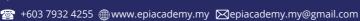


#### Dr Syafiqah Binti Saidin

Senior lecturer, School of Biomedical Engineering & Health Sciences, Universiti Teknologi Malaysia, Malaysia





















### **CHFM 03 - Hospital Support Services**

This module provides an overview of hospital support services in Malaysia, including facility engineering management, biomedical engineering services, linen laundry services, clinical waste management, cleaning services, and sustainability programs. It aims to help participants understand the standard requirements within healthcare facilities and develop practical skills.

#### **Learning Outcome**

- Understand the roles and regulation regrading support and utility services of a hospital
- Describing the functional requirements of individual departments
- Discussing the roles of managers and team management in healthcare organizations.

#### CHFM 06 - Hospital Electrical System & IT **Infrastructure**

This module is based on the Electricity Supply Act 1990, The Electricity Regulations 1994, MS IEC 60364:2003 Standard: Electrical Installations of Buildings, MS 1936:2006 Standard: Electrical Installations of Buildings - Guide To MS IEC 60364, MS 1979:2007 Standard: Electrical Installation of Buildings -Code of Practice. The module content is formulated through industrial practices as the base for the course that targeted electrical engineers and ICT personnel as a basic in understanding the electrical / ICT works in the healthcare industry.

#### **Learning Outcome**

- Familiar with the standards used in the design, supply and installation of electricity supply in the healthcare institution.
- Familiar with the ins
- pection and safety testing of electrical works, and the legal requirements
- Familiar with the standards and legal requirements associated with the ICT works in Healthcare
- Aware of the ICT design and ICT infra development management of telecommunication and infrastructure
- Familiar with the testing and commissioning of ICT infrastructure.



#### CHFM 07 - Hospital Mechanical System

The module will cover the mechanical systems present in hospital facilities, including healthcare facility set up, basic design principles, regulatory requirements, operating and maintenance requirements, and issues and challenges, including life cycle management. Each system will be discussed using a specific learning structure.

#### **Learning Outcome**

To acquire knowledge of mechanical systems in hospitals, including the ACMV system, hot and coldwater system, lift and pneumatic transfer system. They area able to monitor the maintenance and operations of these systems and evaluate compliance with medical gas and firefighting system requirements.



Ir Al-Khairi Mohd Daud

Managing Director, Faqeh Managemen



Dr Ir Ts Yahaya Bin Hassan

Surveyor, Malaysian Society for Quality in Health



ASSOCIATE PROF. IR. DR. **HAZLEE AZIL BIN ILLIAS** 

Associate Professor, Faculty of Engineering, Universiti Malaysia





















### **CHFM MANAGEMENT**

CHFM 08 - Asset and Financial Management

This module introduces the candidate to asset management in hospital. It will present principles of asset management and asset lifecycle. Candidates will be taught methods to manage asset, types of asset management software, and the impact of IR4 on hospital asset management. Candidate will be introduced to financial management in hospital and taught the principles of financial management

#### **Learning Outcome**

They are able to implement asset management and financial management principles in hospitals, including asset life cycle and financial management principles. Awareness of asset management software, types of software, and the impact of IR4.0.

#### **CHFM 09 - Facility Operation and Management**

This module provides knowledge and skills for healthcare facility management in Malaysia, covering a range of topics such as air-conditioning, ventilation, medical air systems, and fire safety. It aims to equip participants with practical skills and critical thinking abilities to efficiently manage hospital operations and provide better healthcare services to patients.

#### **Learning Outcome**

- To understand the roles and skills of facilities management in healthcare facilities
- Able to implement Strategies for improving operational maintenance in healthcare facilities
   Aware of Advantages and disadvantages of facility
- operation maintenance management.



#### CHFM 10 - Project Management

The module will guide you through the various phases of project management, beginning with project initiation and progressing through planning, execution, monitoring, and closing. Participants will gain a deep understanding of each phase and learn how to navigate the unique challenges that arise in healthcare projects.

Participants will acquire the ability to contribute to project management decisions and effectively mitigate changes, problems, and issues encountered during projects. By the end of this module, you will be equipped with the skills and knowledge to successfully manage healthcare projects, making a valuable contribution to the overall improvement of healthcare delivery.

#### **Learning Outcome**

- Apply concepts and terms commonly used in healthcare projects by discussing with stakeholders and project team.
- Able to execute various phases of managing a healthcare project from initiation to closing. Understand the importance of interpersonal aspects
- of managing a healthcare project.
- Contribute in project management decisions and mitigating changes, encountered in projects. problems and

#### **Master Trainer**



**Assoc Prof. Ts Zaharuddin Bin Saidon** 

Associate Professor, Strategy, Business and Management, UNIMY



Dr Ir Ts Yahaya Bin Hassan

Surveyor, Malaysian Society for Quality in Health



Professor Dr. Nooh bin Abu Bakar

Executive Chairman, UTM Sustainable Ind Rev &



















### Program Execution

The program offered is structured with a combination of classroom lessons (theory) and group discussion, which will take place at EPI ACADEMY. The training sessions will be conducted from 0900HRS-1700HRS on the scheduled days.

The program is divided into three sessions: Clinical, Technical, and Management. The Clinical session will span four days, the Technical session will span six days, and the Management session will span four days. These sessions will be spread out over a period of three months, with one session taking place each month.

After the completion of each session, participants will be given 14 days to engage in self-study and prepare for the online assessment. This gives participants the opportunity to review and reinforce their learning, ensuring a comprehensive understanding of the material covered in the program.

By providing a combination of classroom and group discussion, along with dedicated self-study time, EPI Academy aims to equip participants with both theoretical knowledge in healthcare facilities management. This structured approach allows participants to apply their learning effectively in real-world scenarios and enhances their overall learning experience.

#### Instructors and training assistants facilitation

Each course will be facilitated by qualified trainer and assisted by training assistants. The training assistants is responsible for collecting input on the course materials, both those that exist and potentially additions to be made, review that input with the current and desired objectives and outcome goals.

#### **Power Discussions**

Participants work closely with peers to learn and apply topics across each of their perspectives. This enables participants to dive more deeply and share in the exploration of them.

#### **Evaluation of Training**

To evaluate the progress of each trainee under the program, the participants will undergo a assessment upon completion of each module.





Our Certified Healthcare Facility Management - Manager program (CHFM-M) represents an innovative and transformative initiative that addresses the pressing needs and challenges faced by the healthcare facility management industry in Malaysia. With a strong focus on providing comprehensive education, practical skills, and recognized certification, this program is designed to empower professionals and elevate the standard of healthcare facility management.

By investing in the CHFM-M program, the organization will be supporting the development of a skilled and competent workforce that can effectively manage the complexities of healthcare facilities. This will result in improved operational efficiency, enhanced patient care, and ultimately, a stronger healthcare system in Malaysia.