

COURSE OVERVIEW GE0627
Facility Planning & Energy Management

Course Title

Facility Planning & Energy Management

Course Date/Venue

Session 1: July 07-11, 2025/Glasshouse Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE
 Session 2: November 09-13, 2025/Tamra Meeting Room, Al Bandar Rotana Creek, Dubai UAE



Course Reference

GE0627



Course Duration/Credits

Five days/3.0 CEUs/30 PDHs

Course Description



This practical and highly-interactive course includes real-life case studies and exercises where participants will be engaged in a series of interactive small groups and class workshops.

This course is intended to familiarize participant with the facility planning and management field. Emphasis is on understanding the different areas of responsibility of the Facility Planning and Management function in large organizations and how FPM can help the organization achieve its fundamental business objectives.



A major focus of the course is the ways in which large corporations are incorporating sustainability into their facility and in particular, the issues and challenges faced by facility managers responsible for managing and maintaining sophisticated green buildings over time and the ways they have addressed them.



Organizations that successfully manage energy have business processes to plan, monitor and control energy use, just as they do for other corporate priorities, such as labour, materials and other costs. For these organizations, energy management is “business as usual”.

An energy management system can help you cut your energy costs and reduce your environmental impact. This course is designed to help participants understand and implement an energy management system as saving energy makes perfect business sense; it saves money, enhances corporate reputation and helps everyone lead the fight against climate change.

Course Objectives

Upon the successful completion of this course, each participant will be able to:-

- Apply and gain an in-depth knowledge on facility planning and energy management
- Discuss the business enterprises, workshops, factories, product, processes and plants as well as the structure of production facilities and the demands placed on the production facility
- Employ planning models methods and tools and integrate facility planning model
- Create project planning development and proper project implementation
- Explain the material flow and logistics and building selection
- Assets investment appraisal and energy management
- Design energy management program and discuss the principles energy monitoring

Exclusive Smart Training Kit - H-STK®



Participants of this course will receive the exclusive “Haward Smart Training Kit” (H-STK®). The H-STK® consists of a comprehensive set of technical content which includes **electronic version** of the course materials conveniently saved in a **Tablet PC**.

Who Should Attend

This course covers systematic techniques on facility planning and energy management for business executives, workplace planners, business unit managers, planning administrators and space planners responsible for setting up, maintaining and performing strategic facility planning activities.

Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

- 30% Lectures
- 20% Practical Workshops & Work Presentations
- 30% Hands-on Practical Exercises & Case Studies
- 20% Simulators (Hardware & Software) & Videos


In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

Course Certificate(s)


Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours

Certificate Accreditations

Certificates are accredited by the following international accreditation organizations: -

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British Accreditation Council (BAC)

Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

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The International Accreditors for Continuing Education and Training (IACET - USA)

Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units (CEUs)** in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

Course Fee

US\$ 5,500 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:



Mr. Pete Du Plessis is a **Senior Energy & Management Consultant** with over **30 years** of extensive experience. His expertise lies extensively in the areas of Energy Management Systems (**EnMS**) **ISO 50001**, **Energy** Efficiency & Consumption, **Energy** Policy & Planning, **Energy** Performance Indicators (**EnPIs**), **Energy** Management & Implementation, Reducing **Energy Consumption** & Improving Energy Efficiency, **Energy Regulatory** Compliance, **Data Quality** Control & Assessment, **Creative Thinking & Problem-Solving** Techniques, **Change** Management, **Negotiation & Presentation** Skills, **Emotional Intelligence**, **Business Writing** Skills, **Leadership & Team Building**, **Coaching & Mentoring**, **Time & Stress** Management, **Human Resources** Management, **Customer Service** Excellence, **Training Needs & Evaluating Training**, **Contract** Management, **Tendering & Supplier** Selection, **Budgeting & Forecasting** Skills, **Cost Control**, **Financial Analysis & Reporting**, **Budget Preparation** Skills, **Business Process** Development, **Business Process** Optimization, **Business Process** Analysis, **Business Process** Improvement, **Business Continuity** Planning, Service Provider Performance & Monitoring, **Cash Flow** Fundamentals, **Business Finance** Fundamentals, **Business Continuity** Fundamentals, **Situational Analysis** Fundamentals, **SWOT** Analysis, **Gap** Analysis, **Change** Management, Human Resource Management (**HRM**), Human Resource Development (**HRD**), **HR Business Development**, **HR Practices & Strategy**, **Behaviour Based Interviewing & Recruitment**, **Learning & Development**, **Project** Management, **Financial** Management, **Planning, Budgeting & Cost Control** and **Risk** Management. Previously, he was the **Quality Manager** of **Benteler Automotive**, where he was responsible for implementing, controlling and managing quality and technical department processes and systems and mobilizing the quality control department, procedures and quality management system.

During his career life, Mr. Plessis has worked with several prestigious companies occupying numerous challenging managerial and technical positions such as being the **Financial Manager**, **Operations Manager**, **Technical & Quality Manager**, **Logistics & Purchasing Manager**, **Head Metrologist**, **Quality Engineer**, **Project Engineer**, **Materials & Warehouse Planner & Controller**, **Quality Control Inspector**, **Consultant**, **Fitter & Machinist**, **Apprentice Fitter** and **Part-time Instructor**. All throughout his career, he has mastered and specialized in the application of project management, warehouse & inventory control, value chain analysis, logistics & strategic planning, process flow analysis, business process evaluation & re-engineering, master-plan development, capacity planning and site space-planning & development.

Mr. Plessis has **Bachelor's** degree with **Honours** in **Industrial Engineering & Management**. Further, he has gained **Diploma** in **Quality & Production Management**. He is also a **Certified Assessor & Moderator** with the Manufacturing, Engineering & Related Services Education and Training Authority (MERSETA), a **Certified Trainer/Assessor** by the **Institute of Leadership & Management (ILM)** and a **Certified Instructor/Trainer** by the APICS. He has further delivered numerous trainings, courses, seminars, conferences and workshops internationally.

Course Program

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

Day 1

0730 – 0800	<i>Registration & Coffee</i>
0800 – 0815	<i>Welcome & Introduction</i>
0815 – 0830	PRE-TEST
0830 – 0930	Introduction <i>Business Enterprises, Workshops and Factories • Product, Processes and Plants • Structure of Production Facilities • Demands Placed on the Production Facility</i>
0930 – 0945	<i>Break</i>
0945 – 1100	Planning Models Methods & Tools <i>Systematic And Situation-Driven Planning Methods • Planning Process and Procedural Models • Views of the Planning Process Based on Planning Levels, Stages and Steps • Planning Models • Planning Tools and Methods of Evaluation</i>
1100 – 1230	An Integrated Facility Planning Model <i>The 0 + 5 + X Planning Model • Project Definition • Project Definition – (Complex I) • Specification of Input Variables • Specification of the Scope of Analysis and Corporate Objectives</i>
1230 – 1245	<i>Break</i>
1245 – 1420	An Integrated Facility Planning Model (cont'd) <i>Specification of Basic Planning • Specification of the Planning Phases, Objects and Instruments • Specification of Project Design Principles</i>
1420 – 1430	Recap
1430	<i>Lunch & End of Day One</i>

Day 2

0730 – 0930	Project Planning Development (Complex II) <i>Production and Performance Program • Preselection of Equipment • Technical, Functional and Ergonomic Aspects • Economic and Ecological Aspects • Dimensioning • Dynamic Dimensioning of Equipment and Workforce Requirements • Area Dimensioning • Global Area Dimensioning • Detailed Area Dimensioning • Determination of Functional Area • Trial Layout • Calculation of the Production Area AP (Rough Calculation) • Calculation of the Production Area AP (Rough Calculation)</i>
0930 – 0945	<i>Break</i>
0945 – 1115	Project Planning Development (Complex II) (cont'd) <i>Variant and Cost Evaluation • Structuring • Spatial Structure • Chronological Structure • External View of Structuring • Design • Layout Planning • Planning Approaches • Layout Planning is Executed on Three Levels • Pointers for Layout Design • Detailed Technical Planning • Foundation Planning (Installation, Mounting, Alignment and Insulation) • Direction of Action Towards the Machine System (b) • Direction of Action Towards the Building and Other Systems (c) • Ergonomic Workstation Design</i>



1115 – 1215	Project Implementation (Complex III) <i>Realization • Request for Quotation/Tender/Offer • Purchase Order/Contract • Technical Specifications / Execution Project</i>
1215 – 1230	<i>Break</i>
1230 – 1420	Project Implementation (Complex III) (cont'd) <i>Construction Design / Plant Production • Operation • Dismantling and Recycling • Documentation</i>
1420 – 1430	Recap
1430	<i>Lunch & End of Day Two</i>

Day 3

0730 – 0930	Material Flow & Logistics <i>Material Flow • Logistics Process</i>
0930 – 0945	<i>Break</i>
0945 – 1100	Material Flow & Logistics (cont'd) <i>Material Flow Planning Approaches • Transport • Picking</i>
1100 – 1215	Building Selection <i>Production Buildings and Structural Solutions</i>
1215 – 1230	<i>Break</i>
1230 – 1420	Building Selection (cont'd) <i>Building Selection – Case Study</i>
1420 – 1430	Recap
1430	<i>Lunch & End of Day Three</i>

Day 4

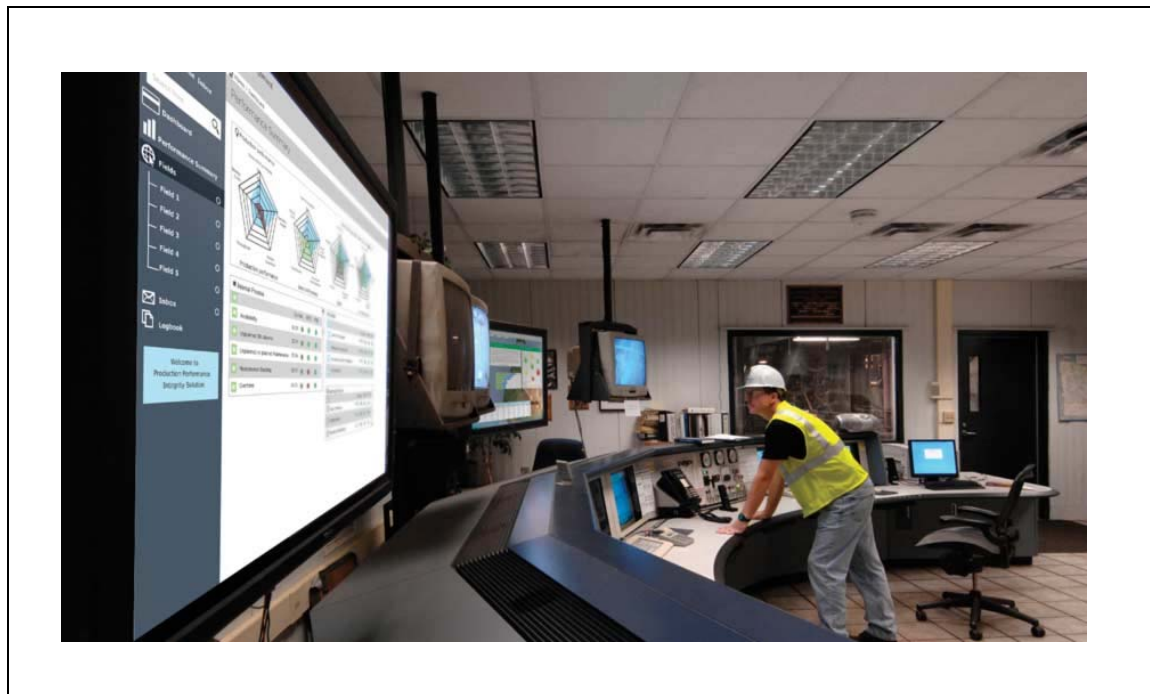
0730 – 0930	Investment Appraisal <i>Static Methods • Cost Comparison Method • Rate of Profit Method • Dynamic Methods</i>
0930 – 0945	<i>Break</i>
0945 – 1100	Investment Appraisal (cont'd) <i>Dynamic Methods • Net Present Value Method • Internal Rate of Return Method</i>
1100 – 1215	Energy Management <i>The Need for Energy Management • Energy Basics for Energy Managers • Energy Terminology, Units and Conversions</i>
1215 – 1230	<i>Break</i>
1230 – 1420	Energy Management (cont'd) <i>Energy Supply and Use Statistics • Energy Use in Commercial Businesses • Energy Use in Industry</i>
1420 – 1430	Recap
1430	<i>Lunch & End of Day Four</i>

Day 5

0730 – 0830	Designing an Energy Management Program Management Commitment • Backup Talent • Cost Allocation • Training • Starting an Energy Management Program • Management of the Program •
0830 – 0930	Break
0930 – 0945	Designing an Energy Management Program (cont'd) A Model Energy Management Program • Energy Accounting • Energy Cost Index • An Example Energy Accounting System • The GM System • Energy Monitoring, Targeting and Reporting • Energy Cost Center
0945 – 1200	Principles of Energy Monitoring Independent Variables • The Energy Audit Process
1200 – 1215	Break
1215 – 1345	Principles of Energy Monitoring (cont'd) Monitoring • Summary
1345 – 1400	Course Conclusion
1400 – 1415	POST-TEST
1415 – 1430	Presentation of Course Certificates
1430	Lunch & End of Course

Practical Sessions

This practical and highly-interactive course includes the following real-life case studies:



Course Coordinator

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