

Course Overview

As the world's first diploma to be accredited by the International Facility Management Association (IFMA) as an Associate Degree Programme, this course will give you a worldwide competitive edge. Equipped with many industry certifications like bizSAFE (levels 2 & 4) and the Fire Safety Manager certification, our graduates are ready for the world.

Our multi-disciplinary diploma will equip you with the knowledge and skill-sets in managing the amenities, aesthetics and functionality of some places like Jewel, Marina Bay Sands, Changi Airport and Gardens by the Bay. Identified as the biggest growth area in the built environment, the ever-growing Facilities Management industry is undergoing massive technological transformation, opening up rich and exciting career and further studies opportunities for you! Join us in this exciting journey!

To download a copy of our 4-page course brochure, click <u>here</u>.

Watch video

Entry Requirements

To be eligible for consideration for admission, applicants must obtain 26 points or better for the net ELR2B2 aggregate score (i.e. English Language, 2 relevant subjects and best 2 other subjects, including CCA Bonus Points) and meet the minimum entry requirements of this course. CCA cannot be used to meet the minimum entry requirements.

Subject	Grade
English Language (EL1)*	1-7
Mathematics (E or A)	1-6
Any one of the listed subjects^	1-6

2021 Planned Intake	100
Net ELR2B2 aggregate range (2021 JAE)	11 - 19

Note: Applicants should not be suffering from severe vision impairment.

* SPM / UEC holders must have a minimum of grade 6 for the Bahasa Inggeris (English Language) subject.

^ List of acceptable subjects: Biology, Biotechnology, Chemistry, Combined Science, Computing/Computer Studies, Design & Technology, Electronics/Fundamentals of Electronics, Physics/Engineering Science, Science (Chemistry, Biology), Science (Physics, Biology), Science (Physics, Chemistry)/Physical Science.

See also the minimum entry requirements for:

- ITE Certificate Holders
- International Students

What You'll Learn

YEAR 1

Kick start your facilities management journey by understanding the fundamentals of buildings and discover your competencies, interests and career aspirations through lab work, industrial visits and hands-on learning opportunities.

TP Fu	P Fundamentals (TPFun) Subjects			
	Subject Code	Subject	Credit Units	
^	ECS1005	Communication & Information Literacy	2	^
		In this subject, you will learn how to conduct research for relevant information and validate information sources. You will also learn to recognise and avoid plagiarism, and follow standard citation and referencing guidelines when presenting information. In the course of learning, you will be required to plan, prepare and present information appropriately in written and oral form. You will also be taught to consider the Message, Audience, Purpose and Strategy (MAPS) when writing and delivering oral presentations.		
^	ECS1007	Persuasive Communication In this subject, you will be taught how to use persuasive language in written documents. You will be required to use information to your advantage to verbally communicate and convince an audience about your idea, product or service. Skills such as persuasive vocabulary, language features, graphical illustrations, tone and style would also be covered. The Message, Audience, Purpose and Strategy (MAPS) will also be applied when engaging in verbal and written communication.	2	

^	EGS1002	Global Studies	3	^
		This subject provides essential skills and knowledge to prepare you for an overseas experience. You will examine the elements of culture and learn the key principles of cross-cultural communication. In addition, you will gain an appreciation and awareness of the political, economic, technological and social		
		landscape to function effectively in a global environment.		
^	EIN1001	Innovation & Entrepreneurship	2	^
		The Innovation & Entrepreneurship subject is designed for learners from all disciplines to embrace innovation in either their specialised fields or beyond. You will first learn the Design Thinking framework, where you will develop problem statements and ideate solutions. Next, you will discover the tools for prototyping and innovation, such as 3D printing and laser cutting, at TP's Makerspace+ facility. Finally, you will acquire commercial awareness through the LEAN Startup framework of idea crystallisation, prototype building, customer testing and validation, refinement of business model canvas, and crowdfunding or crowdsourcing avenues.		
^	GCC1001	Current Issues & Critical Thinking	2	^
		This subject presents you with a panoramic view of current local and global issues, which may have long term implications for Singapore. You will learn to apply critical thinking tools to examine current issues, support your views with relevant research and up-to-date data, articulate an informed opinion and mature as civic-minded individuals.		
^	LEA1011	Leadership: Essential Attributes & Practice 1	1	^
		LEAP 1, 2 and 3 are three fundamental subjects that seek to cultivate in you, the attitude, skills and knowledge for the development of your leadership competencies. This character-based leadership programme enables you to develop your lifeskills through establishing personal core values, which will become the foundation for your leadership credibility and influence.		
^	LSW1002	Sports & Wellness	2	^
		This subject will help you develop both the physical and technical skills in your chosen sports or fitness activities. Through a structured curriculum that facilitates group participation, practice sessions and mini competitions, you will learn to build lifelong skills such as resilience, leadership, communication and teamwork. Physical activity sessions will be supplemented by health-related topics to provide you with a holistic approach to healthy living.		
^	MCR1001	Career Readiness 1	1	^
		This Career Readiness programme comprises three core subjects - Personal Management, Career Preparation and Career Management. It seeks to help you understand your career interests, values, personality and skills for career success. It also equips you with the necessary skills for seeking and securing jobs, and to develop professional work ethics.		

	Subject Code	Subject	Credit Units	
	EGB2002	Air Conditioning & Mechanical Ventilation	4	/
		The Air Conditioning and Mechanical Ventilation (ACMV) system is one of the most important systems of a building and represents a significant portion of its total energy consumption. Hence, an understanding of the operating principles of a typical ACMV system is critical to maximizing the overall energy efficiency of a building.		
	EBD2009	Building Information Modelling Collaboration	3	/
		This subject emphasises the use of Building Information Modelling (BIM) software to design and develop building services systems that meet the intended objectives. You will learn the processes of incorporating established architectural models with Mechanical, Electrical, Plumbing (MEP) and Fire Protection systems and inter-disciplines collaboration work. The use of the as-built models and the information contained therein for BIM Facility Management (BIMFM) and other simulation tools such as energy modelling will also be discussed.		
^	EER1001	Electrical Services for Facilities	4	/
		This subject provides the basic theoretical and practical knowledge for the design of electrical distribution and installation in facilities. It also introduces the safety requirements and regulations governing electrical distribution and installation.		
	EMA1003	Engineering Mathematics 1	4	,
		This subject introduces the concepts in algebra and trigonometry that are fundamental to an engineering course. Topics include expressions and equations, functions and graphs, trigonometry, complex numbers, matrices and vectors. These also constitute pre-requisite knowledge for a course in Calculus.		
	EMA1002	Engineering Mathematics 2	4	/
		This subject introduces the basic concepts of calculus and statistical method to test a hypothesis. Basic concepts in calculus include limits, derivatives and integrals. Applications of the derivative and integrals in engineering will be discussed. Basic statistical method in hypothesis testing includes normal distribution, confidence interval of population mean and procedure to test hypothesis for a claim made about a population mean.		

^	EBT1003	Facility Operations & Maintenance	4	^
		Air-conditioning and ventilation, cold water distribution systems, electrical installations, lifts and escalators are the key systems in facilities operations. Knowledge of a system's operation and its maintenance requirements are essential to		
		facility management. Facility management is about the stewardship of existing facilities in a real estate to enable effective operation and better business performance, thus leading to a higher level of work satisfaction and increased productivity.		
^	EBD2005	Security & Surveillance	4	
		This subject gives an overview of security and surveillance, including the entire process of security and surveillance design and integration. The main emphasis is placed on applying scientific and engineering principles for the design of the system and the use of component performance measures to establish the effectiveness of such systems when applied across various business sectors.		
^	EBD1004	Virtual Design & Facility Planning	3	^
		This subject develops your skills to visualise facility design and planning. You will learn facility planning concepts with the use of digital tools for visualisation, simulation and documentation. The knowledge gained can be applied to create virtual design projects in the built environment sector.		
^	EFM1002	Workplace Safety & Health for Facility Management	4	^
		This subject gives you an overview of a safe working environment in the area of facilities management. You will be equipped with the skills of identifying and reducing workplace related risks at source, and you will also be exposed to common practices taken in the industry to ensure a safe workplace.		

Deepen your knowledge in building sciences and management. In addition to technology and spaces utilisation, you will also get the chance to venture into aviation or hospitality, expanding your career options.

	Subject Code	Subject	Credit Units	
^	ECS1006	Workplace Communication	2	^
		In this subject, you will be taught how to conduct effective		
		meetings while applying team communication strategies and		
		the skills for documenting meeting notes. You will be required		
		to write clear emails, using the appropriate format, language,		
		tone and style for an audience. You will also be taught to		
		communicate appropriately in and for an organisation when		
		using various platforms. In all aspects, the principles of		
		applying M essage, A udience, P urpose and S trategy (MAPS) will		
		be covered.		

^	EGS1003	Managing Diversity at Work*	3	^
		This subject explores the concepts of identity, diversity and inclusion at the workplace. It examines the relationship		
		between identity and diversity, the benefits and challenges of		
		diversity and the strategies that promote inclusion and inspire collaboration in a diverse workplace. Examples of the elements		
		of diversity covered in this subject include nationality,		
		generation, ethnicity and gender. A one week residential stay is		
		mandatory for this subject.		
^	EGS1004	Global Citizenship & Community Development*	3	/
		Students will examine the meaning and responsibilities of		
		being a Global Citizen, in order to contribute towards a more		
		equitable and sustainable world.? In addition, students will learn how sustainable solutions can support community		
		development, and, execute and critique a community action		
		plan that addresses the needs of a specific community/cause.		
\	EGS1005	Expressions of Culture*	3	/
		This subject provides a platform for an understanding of		
		culture and heritage through modes of expression. Students		
		will be introduced to global and local cultures via everyday objects, places and human behaviour seen through time and		
		space. Students will explore issues and challenges in culture		
		and heritage sustainability in community, national and global		
		contexts.		
^	LEA1012	Leadership: Essential Attributes & Practice 2	1	/
		LEAP 1, 2 and 3 are three fundamental subjects that seek to		
		cultivate in you, the attitude, skills and knowledge for the		
		development of your leadership competencies. This character- based leadership programme enables you to develop your life-		
		skills through establishing personal core values, which will		
		become the foundation for your leadership credibility and		
		influence.		
\	MCR1002	Career Readiness 2	1	/
		This Career Readiness programme comprises three		
		core subjects – Personal Management, Career Preparation and Career Management. It seeks to help		
		you understand your career interests, values,		
		personality and skills for career success. It also equips		
		you with the necessary skills for seeking and securing		
		jobs, and to develop professional work ethics.		
^	TGL1001	Guided Learning	3	
		The subject introduces students to the concepts and process		
		of self-directed learning in a chosen area of inquiry. The		
		process focusses on four stages: planning, performing, monitoring and reflecting. Students get to plan their individual		
		learning project, refine and execute the learning plan, as well		
		as monitor and reflect on their learning progress and project.		
		The learning will be captured and showcased through a		
		curated portfolio. The self-directed learning project will		
		broaden and/or deepen a student's knowledge and skills.		

Core	Subjects			_
	Subject Code	Subject	Credit Units	
^	ESE1006	Computer Programming for Problem Solving	4	^
		This subject covers the process of decomposing a problem into a sequence of smaller abstractions. The abstractions are implemented in software in a structured top-down approach. Software implementation includes the process of designing, writing, testing, and debugging program code.		
^	EFM2004	Contract Management	4	^
		This subject covers the knowledge of contract management that is aligned to the practices in the real estate industry. Students will learn all aspects of contract management which include administration, procurement procedures, evaluation of services and products, tenant management, and service delivery.		
^	ESE1008	Data Visualisation & Analytics	3	^
		This subject covers the data analytics lifecycle, including gathering, cleaning, processing and visualising of data. Exploratory data analysis methods, descriptive and predictive analytics, and the presentation of insights, will also be covered.		
^	EBM3005	Energy Management & Audit	4	^
		This subject covers two main areas: energy management and energy audit. For the former, the subject illustrates the intrinsic value and concept of energy management and the implementation consideration and steps involved. On Energy Audit, the emphasis is on energy audit methodology and procedures; and methods used to evaluate energy performance of buildings and its sub-systems. These will include use of energy performance benchmarks and comparison with acceptable practices and prevailing codes and regulations. Finally, the subject discusses the application of life cycle cost concept to evaluate the economic viability of proposals on improving energy performance.		
^	EBM2005	Fire & Life Safety Management	4	^
		This subject introduces the roles and responsibilities of a Fire Safety Manager for both commercial buildings and industrial premises. You will be exposed to the procedure adopted in running a fire command centre, the use of detection, protection and control systems, fire investigation and formulation of a fire emergency plan.		

^	EBM2004	Project Management	4	^
		This subject aims to provide an overview of the principles and concepts in project management and equip you with the		
		theoretical foundation and skills in using project management		
		tools. It emphasises the knowledge and practices which are		
		widely applied in project management. Topics covered include		
		the project management framework, project management		
		processes and project management knowledge areas.		
^	EFM3001	Sustainable Facility Management	4	^
		This subject covers the roles of Facility Management (FM) in		
		environmental sustainability. It will cover the integration of		
		both areas so that you can see a connection between reducing		
		carbon footprint and emission of the assets/properties under		
		effective and thoughtful FM. It will also examine the policies		
		and practices that FM should implement to achieve the said		
		goals. The subject will describe the framework and strategies for achieving 'greener' results at the inception, design,		
		construction to operational stage of a building. The subject will		
		also provide an overview of the standards or rating systems		
		that can be used to gauge the attainment of the sustainable		
		goals.		

Cluster Elective Subjects

#Students to choose three of these cluster elective subjects

Aviat	Aviation Facilities Elective Cluster —			
	Subject Code	Subject	Credit Units	
^	EAM3002	Airport Administration	4	^
		This subject covers the fundamental concepts and principles involved in the organisational, and administration of modern international airports. Topics include airport performance, productivity and feedback systems, and airport-related commercial management, public relations, corporate/business planning, organisational structures, financial and accounting strategies, as well as revenue and expense sources.		
^	EAM1001	Airport Operations & Management	4	^
		This subject introduces the fundamental concepts and principles involved in the management and operation of modern international airports. You will learn about the principles of airport management and the various aspects of airport operations, including, airport terminal layout and planning, terminal signage systems, gate and baggage belt assignments, terminal contingency planning, airport emergency systems, airport support services and equipment, estate management and terminal landscaping.		

This subject provides an overview of the key facilities and systems in both the landside and airside of an airport. Topics covered in landside will include passenger check-in systems, the Flight Information Display Systems (FIDS) and the various airport IT support systems. Other topics include the operation of the fully automated baggage handling system, the People Mover System (PMS) and the Passenger Loading Bridges system. On the airside, topics covered include the causes of wear and tear of aircraft pavements, methods of assessing the condition of aircraft pavements, the programming of maintenance works and techniques of repairs and their compliance to international operational standards and

requirements.

	Subject Code	Subject	Credit Units	
\	BHT2003	Club & Resort Business	4	,
		This subject provides you with good foundation knowledge of the Club, Resort and Spa Business. It is designed to give you a basic understanding of the organization and management of various types of private clubs, resorts and spa businesses. You will discuss issues concerning the successful marketing, management and development of the three types of businesses and will also get to appreciate the opportunities and challenges faced by these businesses.		
	BHT2005	Event Management	4	,
		The subject introduces the scope of events and their application in the context of the tourism industry. From this		
		macro perspective, you will build a foundation in event conceptualisation, development and production, covering		
		topics such as marketing of events, human resource		
		management and budgeting, and staging.		
	ВНТ1010	Introduction to Hospitality & Tourism	4	,
		This subject provides an overview of the multifaceted nature of		
		the hospitality and tourism industry. You will gain an insight into how the key sectors are organised and structured and		
		how they relate to each other as an industry. The concept of		
		tourism demands and tourism consumer behaviour will be		
		introduced. Lastly, you will explore trends, issues and challenges facing the industry.		

You are now ready to take on the world of facilities management by applying all the knowledge and skills you have learnt over the past two years. Get first-hand work experience in managing your preferred facility during your internship and let your innovative mind solve real world problems during your major project!

	Subject Code	Subject	Credit Units	
`	ESI3001	Student Internship Programme	12	/
		This structured programme is designed to link your learning with the real work environment. You will be placed in organisation(s) with opportunities to apply the concepts and skills acquired in the course of your study. Besides reinforcing technical concepts and mastering of skills in areas that you have been trained, the practical training will enable you to build important skills such as problem-solving, communication, teamwork, and to cultivate good attitude and a strong work ethic.		
^	LEA1013	Leadership: Essential Attributes & Practice 3	1	_
		LEAP 1, 2 and 3 are three fundamental subjects that seek to cultivate in you, the attitude, skills and knowledge for the development of your leadership competencies. This character-based leadership programme enables you to develop your life-skills through establishing personal core values, which will become the foundation for your leadership credibility and influence.		
^	MCR1003	Career Readiness 3	1	/
		This Career Readiness programme comprises three core		
		subjects – Personal Management, Career Preparation and		
		Career Management. It seeks to help you understand your		
		career interests, values, personality and skills for career		
		success. It also equips you with the necessary skills for seeking		
		and securing jobs, and to develop professional work ethics.		

Core Subjects —				
	Subject Code	Subject	Credit Units	
^	EMP3002	Major Project	8	^
		In this subject, you will work in teams to integrate and apply your skills and knowledge to implement your projects in a practical work-and-learn environment. Besides research, design, analytics, project management, communication and problem solving skills, the emphasis will also be on innovation, teamwork and self-learning.		

^	EBZ2006	Service Quality & Management	4	^
		This subject introduces the key concepts and principles of		
		Service Quality and Management. Topics covered include		
		concepts of quality services, essential skills in customer		
		services, principles and strategy of service management,		
		methods for service quality measurements and service		
		recovery.		
^	EGB3003	Total Building Performance	4	^
		This module provides an overview of the key factors that affect		
		the performance and efficiency of buildings. It introduces the		
		performance mandates of building and focuses on integrated		
		approaches to meet the building performance criteria. Topics		
		include spatial performance, thermal comfort and evaluation,		
		include spatial performance, thermal comfort and evaluation, air quality and acoustic performance, lighting aspects and building integrity performance.		

Special Electives

Students can opt to take Special Electives when offered. These optional subjects aim to stretch the students' potential to enable them to meet their aspirations. They are taken in addition to the diploma cluster elective subjects.

Special Electives				
	Subject Code	Subject	Credit Units	
^	EED3009	Special Project 1	2	^
		The focus of this subject is on the application of students' existing domain knowledge to develop a deliverable. The subject will introduce new skills and knowledge specific to the project, as and when required.		
^	EED3010	Special Project 2	2	/
		This subject provides opportunities for students to apply the acquired knowledge and skills, along with their fundamental and in-depth knowledge from different subjects to designing, developing, and implementing a well-engineered project solution.		
^	EED3011	Higher Engineering Skills 1	2	/
		Higher Engineering Skills 1 and 2 aim to impart some special design and hands-on skills that allow you to acquire knowledge and skills that are not normally incorporated into a diploma programme. These Special Elective subjects will equip you with the skills and knowledge to participate in competitions and enable you to tackle real challenges.		
^	EED3012	Higher Engineering Skills 2	2	/
		Higher Engineering Skills 1 and 2 aim to impart some special design and hands-on skills that allow you to acquire knowledge and skills that are not normally incorporated into a diploma programme. These Special Elective subjects will equip you with the skills and knowledge to participate in competitions and enable you to tackle real challenges.		

GRADUATION REQUIREMENTS

Cumulative Grade Point Average	min 1.0
TP Fundamental Subjects	36 credit units
Diploma Core Subjects	77 credit units
Diploma Cluster Elective Subjects	12 credit units
Total Credit Units Completed	min 125 credit units