

## **COURSE MODULES**

### **LEVEL 1.1**

#### **Business & Contract Law**

Students will study legal obligations relating to the management, use and operation of the built environment. The legal system introduces the nature and administration of law. The law of contract and commercial law involve a study of self-imposed obligation by individuals. The law of torts involves a study of state-imposed obligation on individuals for civil wrongs. Students will learn the concepts and principles of law through critical analysis, logical reasoning, and problem solving and management skills.

#### **Food & Beverage**

Food & Beverage (F&B) services play an important role in the product and service mix of hotels. It helps hotels capture additional revenue and add prestige and competitive advantage. In this module, students will learn the fundamental processes in typical F&B settings such as table service, service procedures, pre-opening activities and service recovery techniques. They will acquire knowledge on types of food & beverage menus and basic menu planning, information technology used in F&B, food sanitation, food nutrition, environmental health legislation as well as basic facility layout techniques.

#### **Front Office Management**

The primary responsibility of the Front Office is to provide the best service possible to hotel guests. Students will be introduced to the guest cycle of pre-arrival, arrival, stay-in and departure. Besides customer relations, the front office is also responsible for controlling costs, vital to the survival of any hospitality establishment and its revenue management. Topics covered in this module include services of front office, roles and functions of the front office manager as well as the service quality and pre-requisites of front office staff.

#### **Mechanical Facilities**

This module provides fundamental knowledge on the principles of operation of mechanical systems typically installed in modern high-rise buildings. Systems covered include water supply, sanitary plumbing and drainage, town gas supply, swimming pool water filtration and air-conditioning. Students will also learn operational and maintenance requirements of these systems.

#### **Principles of Accounting**

This module provides students with the knowledge to understand basic accounting theories, concepts and conventions. It will equip them with the skills to prepare simple financial statements and to appreciate the importance of understanding and analysing financial statements. Such domain knowledge plays a critical role in maintaining integrity, professionalism and ethics at work in the future.

### **LEVEL 1.2**

#### **Career & Professional Preparation I**

This first-year module helps to give students a foundational introduction to their three-year diploma course curriculum and how it prepares them for industry. It will help them to embark on their three-year course with the end in mind, through guided reflection of their personal characteristics, and producing an overall game plan for their future education and career goals. The module aims to deepen students' commitment to the sector that the course prepares them for.

#### **Customer Relationship Management**

This module focuses on the social aspects of customer relationship. It covers the three phases which include: needs analysis and planning, development and implementation, review and follow-up. In the process of going through these three phases, students will learn the appropriate tools to respond effectively to customers and stakeholders, and understand their rights and obligations as service professionals.

### Economics

This module equips students with basic knowledge of economic theory on individual decision-making (microeconomics) and social policy formulation (macroeconomics). Microeconomics examines how individuals, households and firms make economic decisions, how they interact to determine the quantity and price of goods and factors of production, and the allocation of resources. Macroeconomics explores the determination of real income, employment, price level and inflation in an economy, and the conduct of macroeconomic policy.

### Electrical Facilities

This module covers the different electrical facilities found in high-rise buildings. Topics covered include the electrical supply system, lifts and escalators. Emphasis will be placed on real-life applications in the operation and maintenance of these facilities in buildings.

### Executive Housekeeping

Housekeeping is an essential part of the effective and efficient operations of any hospitality establishment. Students will be introduced to the basic roles and functions of the housekeeping department, the prerequisites and tasks performed by the Housekeeping Manager, the importance of basic aesthetics in hospitality establishments, quality standards and guest satisfaction as well as the procurement functions and inventory control. This module aims to equip students with basic awareness of housekeeping operations, management principles and knowledge of materials that creates a clean and safe environment for guest enjoyment.

### Financial Resources and Statistics

This module covers the knowledge and skills required to handle financial resources and statistics related to the facilities management and hospitality industries. Topics include understanding maintenance cost analysis, cash flow analysis, budget preparation and the implications of interest rate, inflation, present value, future value, rate of return analysis and ownership cost. Examples in personal finance will also be used to bridge the gap related to corporate financial topics.

## COURSE CURRICULUM

Module Name	Credit Units
<b>YEAR 1</b>	
<b>Level 1.1 (27 hours per week)</b>	
Business & Contract Law	4
Food & Beverage	4
Front Office Management	4
Principles of Accounting	5
Innovation Toolkit ^	4
Sports & Wellness ^	2
<b>Level 1.2 (25.5 hours per week)</b>	
Career & Professional Preparation I	1.5
Customer Relationship Management	4
Economics	5
Electrical Facilities	5
Executive Housekeeping	4
Financial Resources & Statistics	2
Communication & Contemporary Issues ^	4

### Notes:

^ For more details on Interdisciplinary Studies (IS) electives, please log on to [www.np.edu.sg/is/](http://www.np.edu.sg/is/)

## **IS Modules**

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## **COURSE MODULES**

### **LEVEL 2.1**

#### **Building Elements**

In this module, students will study the various building elements of substructure, superstructure, floors, walls, roofs and building finishes. They will also be taught the principles and methods of simple building construction including the discussion of relevant case studies. Practical works include laboratory-based assignments and hands-on construction of building models.

#### **Computer Aided Design**

This module provides students with the principles and techniques of preparing computer aided design (CAD) drawings in Architectural, Engineering and Construction (AEC) projects. Students will also be trained to interpret and extract information from CAD drawings and prepare CAD drawings according to CP 83. Emphasis will be placed on preparing CAD drawings accurately so that information can be used electronically. AutoCAD is used in this module as it is widely adopted in the AEC industry.

#### **Green Building & Energy Management**

In this module, students will learn green building design and technologies and the role they play in the Sustainable Singapore Blueprint. This will include the study of the various Green Mark Listing Schemes, the passive and active designs of green buildings, the sustainable operation of services and the implementation of new green technologies when applied in new and existing buildings. Students will also learn about energy management and the effective steps to manage and reduce energy consumption in buildings.

#### **Marketing and Consumer Behaviour**

This module aims to provide students with an understanding of the fundamentals of marketing concepts and marketing mix as well as their implications and strategies for successful business operations in the service industry. Students will be exposed to the study of the psychology of consumer behavior and its impact on purchase behavior, which is one of the most challenging aspects of marketing that is subject to both internal and external influences. The use of case studies in this module delivery seeks to develop the students understanding of how smart, skillful, honest marketers use psychology legally, ethically, and respectfully to attract and engage consumers that ultimately persuades end consumers to buy through careful planning with informed decisions together with the strategic execution of the marketing mix and effective communication.

#### **Occupational Health and Safety**

Occupational health and safety includes the study of the various types of hazards found at the hospitality and facilities management industry and putting in place systematic and regulated methods of control to prevent these hazards from causing harm and losses. In addition, students will also have an overview of indoor air pollution sources, types of pollutants and the corresponding health impacts. Current methods of controlling indoor air quality and local guidelines on indoor air quality will also be introduced. Other area of studies include pests' ecologies and measures to control pests.

#### **Shopping Mall and Strata Management**

This module introduces students to the basic principles and practices of marketing and management of shopping malls. The module will provide students with adequate knowledge and problem solving skills to face the many challenges of the Shopping Mall and Strata Management profession.

## LEVEL 2.2

### Career & Professional Preparation II

This second-year module helps to equip students with skills necessary to seek and secure work. They will also be equipped to communicate their personal brand in a positive way. As students sharpen their communication skills, they will also learn how to market themselves effectively.

### Events Management

This module focuses on the whole event management process so as to give students an overview of facilities events management. It covers topics such as types of events, MICE management, proposals and contracts, event planning and logistics, stakeholders and partnerships, negotiations, staging and managing events and follow-ups. Students will learn the appropriate tools to collate information and co-ordinate with the various departments. Arrangements will also be made for students to be exposed to events management within the hospitality industry.

### Facilities Maintenance & Building Automation

This module covers the skills and knowledge required for entry-level jobs in facilities maintenance, and trains graduates to handle maintenance work as facilities owners, both by means of in-house staff and out-sourced management agents. Topics include maintenance works for different facilities, indoor air quality, selecting and managing contractors, maintenance contract specifications and performance-based contract. It also covers the intelligent systems of modern leisure buildings such as building automation, structural cables and broadband networks. In addition to their functions and applications, it also focuses on how these advanced features improve the productivity of occupants and add value to the business.

### Integrated Resort Amenities Management

This module provides students with an understanding of the various installations and amenities that are found within Integrated Resorts (IRs) such as hotels, resorts, theme parks, casinos, theatres, spas and aquatic centres. Students will also learn about the importance of cost-effectiveness in the management of such amenities and the creation of a positive ambience to the users.

### Principles of Management

The Principles of Management is an art of planning, organising, directing and controlling the various resources, including people, within an organisation. Students will be introduced to the basic concepts and philosophy of management, and the various motivational theories such as Maslow's Hierarchy of Needs and Herzberg's Theory of Needs. Organisational behaviour and culture will also be introduced as a focus towards human resource management within an organisation to achieve business objectives and the effective development of management and decision making strategies.

### Security Management & Business Continuity

This module consists of 2 main topics. The first topic serves to introduce students to understand the effects and impacts of disasters/ risks/ threats to the operations of facilities and businesses and the measures that can be adopted through business continuity strategies to ensure the survival and continuation of business operations. The 2nd part of the module deals with understanding the security risks to business and its facilities operations and how these risks can be mitigated through the implementation of effective management of security measures and strategies.

## COURSE CURRICULUM

Module Name	Credit Units
<b>YEAR 2</b>	
<b>Level 2.1 (26 hours per week)</b>	
Building Elements	4

Computer Aided Design	3
Green Building & Energy Management	4
Marketing & Consumer Behaviour	5
Occupational Health & Safety	3
Shopping Mall & Strata Management	5
Interdisciplinary Studies (IS) elective ^	2

### **Level 2.2 (25 hours per week)**

Career & Professional Preparation II	2
Events Management	4
Facilities Maintenance & Building Automation	5
Integrated Resort Amenities Management	4
Principles of Management	4
Security Management & Business Continuity	4
Interdisciplinary Studies (IS) elective ^	2

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## **COURSE MODULES**

### **PATHWAY 1**

#### **LEVEL 3.1**

#### **Building Maintenance & Asset Enhancement**

This module develops the students understanding of building defects and their rectification, which can impact building performance and result in higher repair and legal costs. Students will also be introduced to asset enhancement strategies to improve an existing building through upgrading. There are three main parts to the module. Part one provides the background to the need for maintenance and concomitant investigations associated with it as an on-going responsibility for personnel involved in the aftercare of buildings. Part two deals essentially with the study of building defects, including their causes, effects, remedies and prevention. Part three covers topics relating to the technologies used in asset enhancement when structural alterations, energy saving improvements, façade upgrading and aesthetic enhancements are proposed in an asset enhancement project.

#### **Fire Safety Management**

This module covers the Fire Safety Managers' scope of work and prepares students to be fire safety managers. Topics covered include a study of the requirements contained in the Fire Safety Act, fire command centre operations, evacuation procedures, fire safety planning and fire investigation. It also covers the active and passive fire protection systems in buildings such as fire extinguishers, wet and dry rising mains, fire sprinkler systems, fire alarm systems, smoke control systems and the protection of means of escape. Case studies will be used to illustrate the importance of fire protection systems.

#### **Hotel Operations & Management**

Hotel Operations & Management implies the organisation of a current business control over several key functions of a hotel like food production and hygiene, food and beverage service, housekeeping and front office operations. In this module, besides understanding the overall view of the key functions and departments in a hotel, students will learn the art and science of running a hotel, hotel organisation structure, conceptual framework of the hotel general manager's job, engineering and security, financial control and information management and human resource – driving hospitality into the future.

### **Interior Design and Aesthetics**

This module introduces drafting and illustration techniques of developing and presenting design. Students will learn the various principles of design, planning and drawing. Students will be able to apply knowledge gained from this and other building modules to manage the aesthetics and displays for hospitality, commercial and residential projects. They will be given the opportunity to apply computer aided design skills to demonstrate their creativity in studio sessions. Three-dimensional modelling will also be introduced in this module to prepare students for advanced applications.

### **Project Planning & Management**

This module introduces students to the functions and methods of project planning and management in the context of projects in the hotel and leisure programmes and events, as well as facilities maintenance and refurbishment works. It covers project planning and management process, budgeting and cash flow planning, logistic planning and human resource management.

## **LEVEL 3.2**

### **Option 1:**

#### **6-Month Internship**

In this module, students will be attached to organisations for a period of six months. This is to prepare them for future employment in their particular discipline of study. During their internship, they will undertake projects and tasks assigned by the organisations. This allows them the opportunity to take initiatives as well as to develop their self-confidence, interpersonal and adaptation skills.

### **Option 2**

#### **3-Month Internship**

This module provides students with the opportunity to gain experience and apply their knowledge and skills in a working environment relevant to their course. Students will be able to enhance their abilities in problem solving, communication and interpersonal skills. The internship may be conducted locally or overseas, depending on the availability of internship companies. Students are required to submit weekly reports, interim and final reports, and make an oral presentation of their experiences at the end of the internship.

### **Final-Year Project**

This module allows students to undertake a project related to their course of study. They are required to carry out applied research, design or development tasks. The nature of the project may vary from industrial collaborative projects such as continuing work from their internship attachment or working on industrial projects or even multidisciplinary projects that involve students from different courses.

## **PATHWAY 2**

### **LEVEL 3.1**

#### **FACILITIES MANAGEMENT INTERNSHIP**

##### **3-Month Internship**

The module provides students with the opportunity to gain experiences and apply the knowledge and skills learnt in a working environment relevant to the course. Students will enhance their abilities in problem solving, communication

and interpersonal skills in the module. The internship may be local or overseas, depending on the availability of internship companies. Students are required to submit weekly reports, interim and final reports, and present the internship experiences in an oral presentation at the end of the internship. During the internship, the students will also be required to return to campus one day a week to complete the remaining core modules.

### **Building Maintenance & Asset Enhancement**

This module develops the students understanding of building defects and their rectification, which can impact on building performance and result in higher repair and legal costs. Students will also be introduced to asset enhancement strategies to improve an existing building through upgrading. There are three main parts to the module. Part one provides the background to the need for maintenance and concomitant investigations associated with it as an on-going responsibility for personnel involved in the aftercare of buildings. Part two deals essentially with the study of building defects, including their causes, effects, remedies and prevention. Part three covers topics relating to the technologies used in asset enhancement when structural alterations, energy saving improvements, façade upgrading and aesthetic enhancements are proposed in an asset enhancement project.

## **HOSPITALITY INTERNSHIP**

### **3-Month Internship**

The module provides students with the opportunity to gain experiences and apply the knowledge and skills learnt in a working environment relevant to the course. Students will enhance their abilities in problem solving, communication and interpersonal skills in the module. The internship may be local or overseas, depending on the availability of internship companies. Students are required to submit weekly reports, interim and final reports, and present the internship experiences in an oral presentation at the end of the internship. During the internship, the students will also be required to return to campus one day a week to complete the remaining core modules.

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## **LEVEL 3.2**

### **6-Month Internship**

The module provides students with the opportunity to gain experiences and apply the knowledge and skills learnt in a working environment relevant to the course. Students will enhance their abilities in problem solving, communication and interpersonal skills in the module. The internship may be local or overseas, depending on the availability of internship companies. Students are required to submit weekly reports, interim and final reports, and present the internship experiences in an oral presentation at the end of the internship. During the internship, the students will also be required to return to campus one day a week to complete the remaining core modules.

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## **COURSE CURRICULUM**

Module Name	Credit Units
<b>YEAR 3</b>	
<b>PATHWAY 1</b>	
<b>Level 3.1 (24 hours per week)</b>	
Building Maintenance & Asset Enhancement	4
Fire Safety Management	6
Hotel Operations & Management	4
Interior Design & Aesthetics	3
Project Planning & Management	3
Interdisciplinary Studies (IS) elective ^	2
World Issues: A Singapore Perspective ^	2
<b>Level 3.2 (22 hours per week)</b>	
6-Month Internship	22
or	
3-Month Internship	12
Final-Year Project	10
<b>PATHWAY 2</b>	
<b>FACILITIES MANAGEMENT INTERNSHIP</b>	
<b>Level 3.1 (20 hours per week)</b>	
3-Month Internship	12
Building Maintenance & Asset Enhancement	4
Interdisciplinary Studies (IS) elective ^	2
World Issues: A Singapore Perspective ^	2
<b>HOSPITALITY INTERNSHIP</b>	
<b>Level 3.1 (20 hours per week)</b>	
3-Month Internship	12
Hotel Operations & Management	4
Interdisciplinary Studies (IS) elective ^	2
World Issues: A Singapore Perspective ^	2
<b>FOR BOTH INTERNSHIPS</b>	
<b>Level 3.2 (28 hours per week)</b>	
6-Month Internship	22
Fire Safety Management	6

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