

**Bachelor of Hospitality Technology Innovation**  
**Major Hospitality Technology Innovation**  
**Minor Enterprenuership**  
**(International Program)**  
**Suranaree University of Technology**  
**School of Social Technology**

**Program Overview**

School of Social Technology, Suranaree University of Technology, designed a bachelor degree in Hospitality Technology Innovation (B.H.T.I) (International Program) that emphasizes the ability to apply knowledge and skills in the development and use of technology in the hospitality industry with a global mindset.

The Hospitality Technology Innovation Program provides students with academic qualifications and a set of specialist knowledge and skills that are attractive to potential employers that can be applied to a range of sectors in the hospitality industry, especially; hotel, tourism, aviation, and M.I.C.E (Meeting, Incentive, Convention, Exhibition). Moreover, this program also provides a set of knowledge and skills of entrepreneurship which can be applied for hotel, tourism, aviation, and M.I.C.E. businesses.

The course applies a range of teaching methods to facilitate and encourage effective learning such as pair and group work, work projects, seminar, including interaction with the industry through site visit, guest speakers and practical work. Students will develop valuable work experience through enterprise cooperative education or enterprise incubation with the opportunity to work on entrepreneurial project under the supervision of a mentor from a workplace and the university.

## What opportunities might it lead to

Your specialist knowledge and skills of technology and innovation in hospitality industry could lead you to a career related to technology in the hotel, tourism, aviation, and M.I.C.E industries.

**Hotel:** Technology specialist in room service, food and beverage service, cost control, revenue management, facility management, and digital marketing for hotel business

**Tourism:** Technology specialist in operation and management in tour operators and travel agencies, tour operation, reservation and sales of tourism products and services, tourism management, tourism resource development, and digital marketing for tourism

**Aviation:** Technology specialist in passenger ground service, in-flight service, air cargo, and airport management

**M.I.C.E:** Technology specialist in strategic management, M.I.C.E project management, M.I.C.E organizing, technology and digital design in M.I.C.E industry, and digital marketing for M.I.C.E.

**Entrepreneur** of businesses in the hospitality industry; hotel, tourism, aviation, and M.I.C.E, that focuses on technology and innovation

**Duration:** 4 Years / 11 Terms (Trimester)

**Admission Requirement:**

**Fee, Funding, and Scholarship:**

**Course commencement Date:** August 2019

## Program Structure

<b>1</b>	<b>General Education</b>			<b>38</b>	<b>Credits</b>
	1.1 Core Courses	15	Credits		
	1.2 Foreign Language Courses	15	Credits		
	1.3 Elective Course	8	Credits		
<b>2</b>	<b>Specific Courses</b>			<b>119</b>	<b>Credits</b>
	2.1 Foundation Course of Technology	20	Credits		
	2.2 Major Hospitality Technology Innovation	63	Credits		
	2.3 Minor Entrepreneurship	21	Credits		
	- Work Placement	9	Credits		
	2.4 Foreign Languages for Business	15	Credits		
<b>3</b>	<b>Free Elective Courses</b>			<b>8</b>	<b>Credits</b>
	<b>Total</b>			<b>165</b>	<b>Credits</b>

<b>1. General Education Courses</b>	<b>38 Credits</b>
1.1 Core Courses	15 Credits
	(Lecture-Practice-Self Study)
202108 Digital Literacy	2(2-0-4)
202109 Use of Application Program for Learning	1(0-2-1)
202201 Life Skills	3(3-0-6)
202202 Citizenship and Global Citizens	3(3-0-6)
202203 Man, Social and Environment	3(3-0-6)
202207 Man, Economy and Development	3(3-0-6)
1.2 Foreign Language Courses	15 Credits
213101 English For Communication I	3(3-0-6)
213102 English For Communication II	3(3-0-6)
213203 English For Academic Purposes	3(3-0-6)
213204 English For Specific Purposes	3(3-0-6)
213305 English For Careers	3(3-0-6)
1.3 Elective Courses	8 Credits
202111 Thai for Communication	2(2-0-4)
202175 Art Appreciation	2(2-0-4)
202181 Holistic Health	2(2-0-4)
202222 Professional and Community Engagement	2(1-2-3)
202241 Law in Daily Life	2(2-0-4)
202324 Pluri-Cultural Thai Studies	2(2-0-4)
202331 Asean Studies	2(2-0-4)
202373 Design Thinking	2(2-0-4)

<b>2. Specific Courses</b>	<b>119 Credits</b>
2.1 Foundation Courses of Technology	20 Credits
211101 Computer Programming for Information System I	3(2-2-5)
211102 Information System Analysis	3(2-2-5)
211201 Database Design and Development	4(3-3-8)
211202 Web Technology	3(2-3-6)
211203 Animation and Multimedia Design and Development	3(2-3-6)
211301 Technology of Digital Media Production for Hospitality Industry	4(1-6-6)
2.2 Major Hospitality Technology Innovation	63 หน่วยกิต
1. Hotel Technology Innovation	14 หน่วยกิต
211121 Introduction to Hotel Business	3(3-0-6)
211125 Hotel Business Operation	3(2-2-5)
211223 Hotel Business Management	4(2-4-6)
211321 Technology and Innovation in Hotel Business	4(1-6-5)
2. Tourism Technology Innovation	14 หน่วยกิต
211122 Introduction to Tourism Industry	3(3-0-6)
211126 Operation in Tourism	3(2-2-5)
211224 Tourism Management	4(2-4-6)
211322 Technology and Innovation in Tourism	4(1-6-5)
3. Aviation Technology Innovation	14 หน่วยกิต
211123 Introduction to Aviation Industry	3(3-0-6)
211221 Operation in Aviation Industry	3(2-2-5)
211225 Management in Aviation Industry	4(2-4-6)
211323 Technology and Innovation in Aviation Industry	4(1-6-5)
4. M.I.C.E Technology Innovation	14 หน่วยกิต
211124 Introduction to M.I.C.E. Industry	3(3-0-6)
211222 Operation in M.I.C.E.	3(2-2-5)
211226 M.I.C.E. Management	4(2-4-6)
211324 Technology and Innovation in M.I.C.E.	4(1-6-5)

	5. Seminar and Project	7 Credits
211381	Seminar in Hospitality Technology Innovation	3(3-0-6)
211481	Project in Hospitality Technology Innovation	4(0-8-0)
	2.3 Minor Entrepreneurship	21 Credits
	1. Compulsory Courses	8 Credits
205305	Entrepreneurship and New Venture Creation	3(3-0-6)
205306	Go-to-Market Strategies for Innovative Product and Service	2(2-0-4)
205307	Business Plan and Financing	3(3-0-6)
	2. Elective Courses	4 Credits
205381	Business Model Innovation	2(1-2-3)
205382	Product and Service Design	2(1-2-3)
205383	Legal Aspects for Innovative Entrepreneurs	2(2-0-4)
205384	Intellectual Property Strategies for Innovative Business	2(2-0-4)
205385	Social Innovation Development	2(1-2-3)
205386	Social Entrepreneurship	2(1-2-3)
205387	Technopreneurship	2(1-2-3)
205388	Entrepreneurial Logistics	2(2-0-4)
	3. Work Placement	9 หน่วยกิต
205395	Pre-Enterprise Cooperative Education or Pre-Enterprise Incubation	1(1-0-2)
205492	Enterprise Cooperative Education	8 Credits
205493	Enterprise Incubation	8 Credits

## 2.4 Foreign Language for Business

15 Credits

Select 1 from 3 Languages

### 1. Business English

203322	English for Business Correspondence	3(3-0-6)
203324	English for Business Presentation	3(3-0-6)
203325	English for Business Meetings	3(3-0-6)
203326	English for Customer Service	3(3-0-6)
203323	English for Business Negotiation	3(3-0-6)

### 2. Chinese Language

203401	Chinese I	3(3-0-6)
203402	Chinese I	3(3-0-6)
203403	Chinese III	3(3-0-6)
203404	Business Chinese I	3(3-0-6)
203405	Business Chinese II	3(3-0-6)

### 3. Japanese Language

203411	Japanese I	3(3-0-6)
203412	Japanese II	3(3-0-6)
203413	Japanese III	3(3-0-6)
203414	Business Japanese I	3(3-0-6)
203415	Business Japanese II	3(3-0-6)

## 3. Free Elective Courses

8 Credits

Select any courses available in the university.

## Study Plan

Year 1 Term 1	Cr	Year 1 Term 2	Cr	Year 1 Term 3	Cr
202202 Citizenship and Global Citizens	3	202201 Life Skills	3	202108 Digital Literacy	2
213101 English For Communication I	3	213102 English For Communication II	3	202109 Use of Application Program for Learning	1
211121 Introduction to Hotel Business	3	211101 Computer Programming for Information System I	3	213203 English For Academic Purposes	3
211122 Introduction to Tourism Industry	3	211123 Introduction to Aviation Industry	3	211102 Information System Analysis	3
		211124 Introduction to M.I.C.E. Industry	3	211125 Hotel Business Operation	3
<b>Select 4 credits from the following courses</b>		<b>Select 2 credits from the following courses</b>		<b>Select 2 Credits from the following courses</b>	
202111 Thai for Communication	2	202111 Thai for Communication	2	202111 Thai for Communication	2
202175 Art Appreciation	2	202175 Art Appreciation	2	202175 Art Appreciation	2
202181 Holistic Health	2	202181 Holistic Health	2	202181 Holistic Health	2
202222 Professional and Community Engagement	2	202222 Professional and Community Engagement	2	202222 Professional and Community Engagement	2
202241 Law in Daily Life	2	202241 Law in Daily Life	2	202241 Law in Daily Life	2
202324 Pluri-Cultural Thai Studies	2	202324 Pluri-Cultural Thai Studies	2	202324 Pluri-Cultural Thai Studies	2
202331 Asean Studies	2	202331 Asean Studies	2	202331 Asean Studies	2
202373 Design Thinking	2	202373 Design Thinking	2	202373 Design Thinking	2
<b>Total</b>	<b>16</b>	<b>Total</b>	<b>17</b>	<b>Total</b>	<b>17</b>
Year 2 Term 1	Cr	Year 2 Term 1	Cr	Year 2 Term 1	Cr
213204 English For Specific Purposes	3	202203 Man, Social and Environment	3	202207 Man, Economy and Development	3
211201 Database Design and Development	4	213305 English For Careers	3	211203 Animation and Multimedia Design and Development	3
211221 Operation in Aviation Industry	3	211202 Web Technology	3	211225 Management in Aviation Industry	4
211222 Operation in M.I.C.E.	3	211223 Hotel Business Management	4	211226 M.I.C.E. Management	4
		211224 Tourism Management	4		
		<b>Select 3 credits from the following Courses</b>		<b>Select 3 credits from the following Courses</b>	
		English for Business Correspondence	3	English for Business Presentation	3
		Chinese I	3	Chinese II	3
Free elective course	3	Japanese I	3	Japanese II	3
<b>Total</b>	<b>16</b>	<b>Total</b>	<b>20</b>	<b>Total</b>	<b>17</b>



Year 3 Term 1	Cr	Year 3 Term 2	Cr	Year 3 Term 3	Cr	
205305 Entrepreneurship and New Venture Creation	3	205306 Go-to-Market Strategies for Innovative Product and Service	2	205307 Business Plan and Financing	3	
211301 Technology of Digital Media Production for Hospitality Industry	4	<b>Select 2 credits from elective courses of minor entrepreneurship</b>	2	205395 Pre-Enterprise Cooperative Education or Pre-Enterprise Incubation	1	
211321 Technology and Innovation in Hotel Business	4			<b>Select 2 credits from elective courses of minor entrepreneurship</b>	2	
211322 Technology and Innovation in Tourism	4	211323 Technology and Innovation in Aviation Industry	4	211324 Technology and Innovation in M.I.C.E.	4	
<u>Select 3 credits from the following Courses</u>		<u>Select 3 credits from the following Courses</u>		211381 Seminar in Hospitality Technology Innovation	3	
English for Business Meetings		English for Customer Service	3	<u>Select 3 credits from the following Courses</u>		
Chinese III	3	Business Chinese I	3		English for Business Negotiation	3
Japanese III	3	Business Japanese I	3		Business Chinese II	3
	3			Business Japanese II	3	
		Free elective course	3			
		Free elective course	2			
<b>Total</b>	<b>18</b>	<b>Total</b>	<b>16</b>	<b>Total</b>	<b>16</b>	
Year 4 Term 1	Cr	Year 4 Term 2	Cr	Year 4 Term 3	Cr	
204492 Enterprise Cooperative Education	8	211481 Project in Hospitality Technology Innovation	4			
or	8					
205493 Enterprise Incubation						
<b>Total</b>	<b>8</b>					

**\*Remark:** This study plan may change according to the needs of students based on the program structure.

## Instructors responsible for the program

Name	Position	Degree	Major	University / Institute	Grad Year
1. Associate Professor Dr. Kwankamol Donkwa	Associate Professor	Ph.D	Agricultural Economics	Kasetsart University, Thailand	1997
		M.Sci	Economics	Kasetsart University, Thailand	1984
		B.Econ	Quantitative Economics	Ramkhamhang University, Thailand	1981
2. Assistant Professor Dr. Napaporn Janchai	Assistant Professor	Ph.D.	Tourism Management	Oxford Brookes University, United Kingdom	2009
		M.A.	Cultural Management	Chulalongkorn University, Thailand	2003
		B.BA.	Hotel and Tourism Management	Khonkean University, Thailand	1999
3. Assistant Professor Dr. Chanisa Maneerungroj	Assistant Professor	Ph.D	Management	Suranaree University of Technology, Thailand	2017
		M.B.A.	Business Administration	Middle Tennessee State University, United State	1995
		B.BA.	Industry Management	University of Thai Chamber of Commerce, Thailand	1993
4. Dr.Wanna Naburana	Instructor	P.S.D.	Doctor of Professional Studies	Central Queensland University, Australia	2017
		M.I.S.	International Business	University of Wollongong, Australia	2010
		บธ.บ.	Hotel and Tourism Management	Khonkean University, Thailand	2005
5. Dr.Saranya Karnjanawatana	Instructor	Ph.D.	Functional Control Systems	Shibaura Institute of Technology, Japan	2017
		M.Eng	Computer Engineering	Asian Institute of Technology, Thailand	2011
		B.Eng	Computer Engineering	Suranaree University of Technology, Thailand	2008

## Course / Module Description

### 1. General Education

**38 Credits**

#### 1.1 Core Courses

15 Credits

#### **202108 Digital Literacy**

**2(2-0-4)**

**Prerequisite** : None

Selecting sources of information for research; using digital technology in information retrieval; collecting and evaluating information qualities; analyzing and synthesizing information; writing reports and referencing; security, effects, ethics, morals, and laws regarding media and digital technology using

#### **202109 Use of Application Programs for Learning**

**1(0-2-1)**

**Prerequisite** : None

Basics of computer programming; using application software for document management; presenting information; data management for calculation and creative database management; designing and developing a website for working in a daily life

#### **202201 Life Skills**

**3(3-0-6)**

**Prerequisite** : None

Knowing and understanding self and others; rational thinking and analyzing; systems and holistic thinking; creative decision-making and problem-solving; self-directed learning in a context of lifelong learning; work-life balance; sufficiency in living; self-care; stress and emotion management; solutions to life issues

#### **202202 Citizenship and Global Citizens**

**3(3-0-6)**

**Prerequisite** : None

Important characteristics of citizens; roles of Thai and global citizens; important concepts of international relations; international organizations; transboundary impacts; critique and lesson-learned from international phenomena

**202203** Man, Society and Environment **3(3-0-6)**

**Prerequisite** : None

Conditions of being human; cultural diversity; social order; ecological system; natural resources and environment; utilization of natural resources; sustainable development

**202207** Man, Economy and Development **3(3-0-6)**

**Prerequisite** : None

Economy and social development; trends of economic and social development; exclusive development; inclusive development; innovation- based development; creative economy; community engagement; social entrepreneurship

1.2 Foreign Lanaguage

15 Credits

**213101** English for Communication 1 **3(3-0-6)**

**Prerequisite** : None

Developing students' abilities for effective communication in social settings; focusing on integrated skills with the primary emphasis on listening and speaking; developing communication and language learning strategies; and promoting autonomous learning using various resources

**213102** English for Communication 2 **3(3-0-6)**

**Prerequisite** : 213101 English for Communication 1

Further developing students' abilities for effective communication in social and academic settings; focusing on integrated skills, particularly listening and speaking for academic purposes; further developing communication and language learning strategies; and reinforcing autonomous learning using various semi-academic materials from a variety of resources

**213203** English for Academic Purposes **3(3-0-6)**

**Prerequisite** : 213102 English for Communication 2

Course content dealing with English for academic purposes for effective communication in an academic field of study; text-based activities involving integrated language skills with an emphasis on reading; exposure to both authentic and semi-authentic materials from both printed and audiovisual materials, as well as online resources

**213204** English for Specific Purposes **3(3-0-6)**

**Prerequisite** : 213203 English for Academic Purposes

Further enhancement of students' language skills and ability in science and technology content; exposure to authentic language in science and technology from both printed and audiovisual materials, as well as online resources; focus on text-based tasks involving integrated skills with an emphasis on reading and writing

**213305** English for Careers **3(3-0-6)**

**Prerequisite** : 213204 English for Specific Purposes

Developing English skills needed for employment preparation, covering such topics as job search, resumes, cover letters, and job interviews; effective communication skills in the workplace; skills needed in preparing for the Test of English for International Communication (TOEIC)

1.3 Elective Courses

8 Credits

**202111** Thai for Communication **2(2-0-4)**

**Prerequisite** : None

Principles of Thai Language; skill of using Thai in speaking; listening; reading; and writing; composition in Thai for communication and work presentation

**202175 Art Appreciation****2(2-0-4)****Prerequisite** : None

Definition of art; artists' aspiration for art creation from various perspectives; values and aesthetic for soul; contexts of arts; visual culture towards art interpretation; roles and effects of arts in a society and world cultures through various perspectives; artwork creation valuable for self and others; arts and museums; public arts; music and art therapy; arts for sufficient life

**202181 Holistic Health****2(2-0-4)****Prerequisite** : None

Concepts regarding holistic health and health balance; weight control; sleep and relaxation; concentration and mental health; stress management; body strengthening; alternative healthcare

**202222 Professional and Community Engagement****2(1-2-3)****Prerequisite** : None

Projects and activities for building students' working experiences with a community or a professional group that enhance life skills and respond to visions and objectives of a community or a professional group

**202241 Law in Daily Life****2(2-0-4)****Prerequisite** : None

Basic principle of law; hierarchy of law; population registry law; useful law in daily life law concerning person; property, juristic act and contract; loan agreement; service contract; made-to-order contract; contract of sale; property rental contract; hire-purchase contract; surety ship agreement; mortgage contract; basic law of family and inheritance; consumer protection law; basic law of intellectual property

**202324** Pluri-Cultural Thai Studies **2(2-0-4)**

**Prerequisite** : None

Understanding of Thai society and cultural systems; plurality in Thai economic and political development; significance of plural folk wisdoms; concept of sufficiency economy in global trends

**202331** ASEAN Studies **2(2-0-4)**

**Prerequisite** : None

Origins and purposes of ASEAN community; unity based on a socio-cultural diversity; respects for rights, civic responsibility and human dignity under different types of governments in each ASEAN Member State; living together happily and peacefully with ASEAN friends; quality of life in education and working systems

**202373** Design Thinking **2(2-0-4)**

**Prerequisite** : None

Creative thinking; questioning and problem-solving; brainstorming and society need-based service design; prototyping; appropriate application of innovation; lesson-learned

**2. Specific Courses** **119 Credits**

2.1 Foundation Courses of Technology **20 Credits**

**211101** Computer Programming for Information System I) **3(2-2-5)**

**Pre-requisite** : None

Computer languages and syntax; computer program design and development; steps and procedures for programming using high level computer languages, such as C language; input and output; variable data type; expression; operators; control statements; array; programming to solve problems and for use in information systems

**211102 Information System Analysis****3(2-2-5)****Pre-requisite** : None

Definition, significance and components of information systems; objectives and benefits of information systems in organization; system development life cycle; organization structure, analysis and information circulation; analysis and conceptual design; the concepts of business processes; characteristics of a quality process; business process identification; framework for business process improvement; case studies on the topic of information system and business process analysis

**211201 Database Design and Development****4(3-3-8)****Pre-requisite** : None

Definition, types and significance of data and databases; database design techniques; software for developing and managing databases; relational database development; database administration with emphasis on data accuracy and data security; technology for database development; applications of database to information services

**211202 Web Technology****3(2-3-6)****Pre-requisite** : None

Fundamental Web technology: Web browsers, Web servers, Web site design and development; Web application programs; Web database; HTML; XML; Web service; Web Content Management System; CSS; Hypertext Transfer Protocol (HTTP); privacy; reliability; Web security

**211203 Animation and Multimedia Design and Development****3(2-3-6)****Pre-requisite** : None

Concepts of multimedia; principles of multimedia design; current technology for multimedia design and production; multimedia application in communication; techniques for data selection and special techniques for multimedia development such as still pictures and motion, animation, music, sound; testing, evaluation and utilization of communication systems and computer networks for multimedia development



**211301** Technology of Digital Media Production for Hospitality Industry **4(1-6-6)**

**Pre-requisite** : None

Digital media design and development for hospitality industry, using up-to-date technologies and applications for digital media design and production: visual, audio, and audiovisual media for hospitality industry, hands-on practice by using technologies and applications for digital media production for hospitality industry

2.2 Major Hospitality Technology Innovation 63 Credits

1. Hotel Technology Innovation 14 Credits

**21121** Introduction to Hotel Business **3(3-0-6)**

**Pre-requisite** : None

Definitions and importance of hotel business, types of hotel business, attributions and roles of hotel business in hospitality industry, structure of hotel business, situation and trends of hotel business in the national and global levels

**21125** Hotel Business Operation **3(2-2-5)**

**Pre-requisite** : None

Concept and principles of hotel business operations including room service, food and beverage preparation and service, spa and wellness service and other services, service quality and standard, current issues in operations and customer service, the use of technology in service and operations in the hotel business

**21123** Hotel Business Management **4(2-4-6)**

**Pre-requisite** : None

General management for hotel, the property management system (PMS) for hotel, trends and important issues in hotel management, human resource management, digital marketing and innovation in marketing for hotel business, financial control and accounting, cost control, revenue management, facility management, quality management, legal aspects, ethics, social and environmental responsibility of hotel business

**211321** Technology and Innovation in Hotel Business **4(1-6-5)**

**Pre-requisite** : None

Trends and directions of global change that affect the use of technology in the operation and management of hotel business, technology and innovation for operations, customer services, and management of hotel business, factors affecting the development of technology and innovation for operation, service and management of hotel business, practical implementation of technology in hotel business

2. Tourism Technology Innovation 14 หน่วยกิต

**211122** Introduction to Tourism Industry **3(3-0-6)**

**Pre-requisite** : None

Tourism system, definition, importance and components of tourism industry, attributions and roles of tourism in hospitality industry, tourist attractions, types of tourism, impacts and influence of tourism, concepts and principles of sustainable tourism, stakeholders in tourism, digital technology for tourism, situation and trends in national and global tourism

**211126** Operation in Tourism **3(2-2-5)**

**Pre-requisite** : None

Tourism products and services, tour operation, travel agency, transport network, tourism information, travel advice, online travel agency, current situation and trends in global change that affect the use of technology to generate innovative tourism products and services

**211224** Tourism Management **4(2-4-6)**

**Pre-requisite** : None

Tourist behavior and segmentation, cross cultural management, digital marketing and innovation in marketing for tourism, strategic planning and management for tourism, human resource management in tourism, legal aspects, ethics, social and environmental responsibility of tourism

**211322** Technology and Innovation in Tourism **4(1-6-5)**

**Pre-requisite** : None

Trends and directions of global change that affect the use of technology in tourism operations and management, development of technology and innovation for tourism operations and management, factors affecting the development of technology and innovation for tourism operations and management, practical implementation of technology in tourism

3. Aviation Technology Innovation 14 หน่วยกิต

**211123** Introduction to Aviation Industry **3(3-0-6)**

**Pre-requisite** : None

Definition, importance and components of aviation industry, environment related to aviation industry, organization and associations related to aviation and airline business, terms and vocabulary used in aviation industry, definition, scope, principles and general conditions of airline business, types of airplane and airport, current situation and global trends affecting the aviation industry

**211221** Operation in Aviation Industry **3(2-2-5)**

**Pre-requisite** : None

The operating system of the airline business, travel security system, flight schedules and routes, air traffic regulation, airline reservation system, rules and other conditions for air travel, types, methods and procedures for issuing tickets by airline, calculating price using International Air Transport Association (IATA) exchange rates, airport and ground passenger service system, in-flight passenger service system and process, supervising the safety of passenger on board, standards and measures in the operation of air cargo business, air logistics, air cargo regulations, e-commerce in air freight, air freight system, air cargo security management system, airport system, airport business, system and procedures of airport operations, passenger service by airline and airport

**211225** Management in Aviation Industry**4(2-4-6)****Pre-requisite** : None

Concept and principles of passenger ground service management, air cargo management, systematization of airport plan, airport management, structure in airport management and operation, organization of airport management, corporate responsibility, principles of security management, promotion of air travel safety, airline safety management system as per ICAO, operation management of air side and land side, principles of management and operation of cargo, airport facility, regulations related to airport, principles of airport safety management, risk management, human resource management in aviation industry and airline business, marketing innovation in aviation industry and airline business, ethics, social and environmental responsibility of aviation industry

**211323** Technology and Innovation in Aviation Industry**4(1-6-5)****Pre-requisite** : None

Digital technology in airport management, aviation information management including air traffic management, freight and the airport, digital technology in airline business, trends and directions of global change that affect the use of technology in aviation industry and airline business, factors affecting the development of technology and innovation in aviation industry and airline business, practical implementation of technology in aviation industry and airline business

## 4. M.I.C.E Technology Innovation

14 หน่วยกิต

**211124** Introduction to M.I.C.E. Industry**3(3-0-6)****Pre-requisite** : None

Definition and importance of M.I.C.E. industry, overview of M.I.C.E. industry in national and global levels, relationship among M.I.C.E., tourism and hospitality businesses, components of M.I.C.E. industry, stakeholders and value chain in M.I.C.E., Destination Management Company (DMC), Professional Conference Organizer (PCO), venue, M.I.C.E. standards and the importance of obtaining standards in M.I.C.E. industry, current situation and global trends affecting M.I.C.E industry

**211222** Operation in M.I.C.E. **3(2-2-5)**

**Pre-requisite** : None

Objectives of M.I.C.E. events, how to plan and conduct M.I.C.E. events, M.I.C.E. operations including customer service, food and beverage service, event set up and organization, venue selection, budgeting, accounting, determining the operating time frame, the use of technology in the design of various parts of M.I.C.E. events, ethics and social responsibility in M.I.C.E. industry

**211226** M.I.C.E. Management **4(2-4-6)**

**Pre-requisite** : None

Principles and processes of M. I. C. E event management, contracts and negotiations, relationship with relevant persons or organizations, finance and accounting, human resources management, organizational behavior, marketing in M.I.C.E. industry, facilities and services supply for M.I.C.E. events both domestically and internationally, planning strategy, management and operation of M. I. C. E. events, risk and crisis management, effective communication, teamwork, leadership, sustainable management system

**211324** Technology and Innovation in M.I.C.E. **4(1-6-5)**

**Pre-requisite** : None

Technology used in M.I.C.E. industry for example; smart venue, technology used for management in M. I. C. E. business ( e. g. registration system, communication technology), technology used for stage ( e.g. lighting, sounds, stage control, LED screen), technology used for creating event experiences for visitors ( e.g. VR technology, AI technology, hologram technology, interactive technology), trends and directions of the global change that affect the use of technology in M.I.C.E. industry, technology and innovation in operations and management of M.I.C.E. events, management of M.I.C.E. data systems, using technology to promote sustainability in M.I.C.E. events, factors affecting the development of technology and innovation in M.I.C.E. operations and management, practical implementation of technology in M.I.C.E. industry

## 5. Seminar and Project 7 Credits

**211381** Seminar in Hospitality Technology Innovation **3(3-0-6)**

**Pre-requisite** : None

Discussions on and analysis of issues related to hospitality technology innovation: hotel, tourism, aviation and M.I.C.E. , lectures by experts in selected topics, presentation and discussion by participants

**211481** Project in Hospitality Technology Innovation **4(0-8-0)**

**Pre-requisite** : None

Analysis, planning, and production of hospitality technology innovation on a selected topic related to hotel, tourism, aviation or M.I.C.E

## 2.2 Minor Enterprenuership 21 Credits

## 1. Compulsary Courses 8 Credits

**205305** Entrepreneurship and New Venture Creation **3(3-0-6)**

**Prerequisite** : None

Concepts of entrepreneurship, concepts and processes of business opportunity analysis, design thinking for innovation business idea development, identifying target customers, analysis of customer's problem and need, developing unique value position for product and service, business models and revenue model, legal aspects for innovative entrepreneur, business idea presentation

**205306** Go-to-Market Strategies for Innovative Product and Service **2(2-0-4)**

**Prerequisite** : None

Marketing for innovative product and service, market opportunity analysis and market assessment, unique value position analysis, go-to-market strategies of market entering for new product and service, digital marketing for new venture, brand creation, marketing performance evaluation

**205307 Business Plan and Financing** **3(3-0-6)**

**Prerequisite** : None

Business plan and financial principle for new entrepreneurs, business plan writing, revenue model, business operation and cost structure, return on investment, capital structure and sources of finance, sources of equity over business life cycle

2. Elective Courses

4 Credits

**205381 Business Model Innovation** **2(1-2-3)**

**Prerequisite** : None

Business model concept, business environmental analysis, business and product life cycle, current business model analysis, business model design and development, intellectual property strategies in business model, business model validation

**205382 Product and Service Design** **2(1-2-3)**

**Prerequisite** : None

New product and service design concepts and processes, idea generations of new product and service using design thinking, idea filtering and assessment, user experience design for product and service, universal design principles for product and service prototyping, product and service concept testing

**205383 Legal Aspects for Innovative Entrepreneurs** **2(2-0-4)**

**Prerequisite** : None

Fundamental laws related to juristic person and property, juristic acts, business registration, shareholding structure and shares contributions based on vesting, founders' agreement, employee stock ownership plan, principle of tax and labor laws

**205384 Intellectual Property Strategies for Innovative Business** **2(2-0-4)**

**Prerequisite** : None

Concept and principle of intellectual property management, types of intellectual property, analysis of intellectual asset and property, intellectual property laws and processes of protection, patent and trademark searching, intellectual property utilization and creating return on intellectual property

**205385 Social Innovation Development** **2(1-2-3)**

**Prerequisite** : None

Concept and important of social innovation development, environmental and social problems and challenge, design thinking for social problem solving, social impact assessment, case studies of social innovation development in different subjects

**205386 Social Entrepreneurship** **2(1-2-3)**

**Prerequisite** : None

Concepts of social entrepreneurship, social enterprise and social impact business, business model for social enterprise, marketing strategies for social enterprise, social return on investment, laws related to social enterprise, social enterprise sources of fund

**205387 Technopreneurship** **2(1-2-3)**

**Prerequisite** : None

Concept of technopreneurship, characteristics and motivation for technopreneurs, intrapreneurship, entrepreneurial mindset and process, opportunity analysis of technology business, technology business model design, sources of fund for technology business

**205388 Entrepreneurial Logistics** **2(2-0-4)**

**Prerequisite** : None

Concept of supply chain integration, value chain competitiveness, quick consumer response, supplier-producer coordination, supply chain management, roles of digital technology in supply chain integration, procurement logistics, reverse logistics, supply chain optimization, linkages of supply chain strategy aligned to an overall business strategy



## 3. Work Placement

9 Credits

**205395** Pre-Enterprise Cooperative Education or Pre-Enterprise Incubation **1(1-0-2)****Prerequisite** : None

Preparation for enterprise cooperative education or enterprise incubation, drafting of a brief business plan according to student's interest, development of soft skills for enterprise cooperative education or enterprise incubation students

**205492** Enterprise Cooperative Education**8 Credits****Prerequisite** : 8 units from compulsory courses and 4 units from elective courses

The student has to work on an entrepreneurial project according to his/her interest under the supervision of a mentor from workplace and an enterprise cooperative education coordinator from the university for a trimester following the requirements of the minor program in entrepreneurship; prior to the enterprise cooperative education placement, the student has to complete and present a draft of business plan to the mentor and the enterprise cooperative education coordinator; upon completion of the enterprise cooperative education placement, the student has to submit a final business plan, or new business model, or prototype and present to the mentor and the enterprise cooperative education coordinator; the evaluation results by the mentor and the enterprise cooperative education coordinator will be used to determine the success of the student

**205493** Enterprise Incubation**8 หน่วยกิต****Prerequisite** : 8 units from compulsory courses and 4 units from elective courses

The student has to work full-time on an entrepreneurial project according to his/her interest at the university incubation or work part-time at university incubation and part-time at the workplace under the supervision of a mentor from workplace and an enterprise coordinator from the university for a trimester following the requirements of the minor program in entrepreneurship; prior to the enterprise incubation placement, the student has to complete and present a draft of business plan to the mentor and the enterprise coordinator; upon completion of the enterprise incubation placement, the student has to submit a final business plan, or new business model, or prototype and present to the mentor and the enterprise coordinator; the evaluation results by the mentor and the enterprise coordinator will be used to determine the success of the student

## 2.4 Foreign Language for Business

15 Credits

## 1. Business English

**203322** English for Business Correspondence **3(3-0-6)****Prerequisite** : None

Development of knowledge and use of English efficiently and effectively in several types of business correspondence, such as business letters, memos, reports, fax and email messages, and projects/proposals in an organization

**203324** English for Business Presentation **3(3-0-6)****Prerequisite** : None

Development of data collection and content organization skills for business presentation as well as presentation and question handling skills in a professional manner

**203325** English for Business Meetings **3(3-0-6)****Prerequisite** : None

Development of skills in leading, participating and arranging business meetings, audience analysis, including cultural factors, final proposal which incorporates reasoning from multiple viewpoints

**203326** English for Customer Service **3(3-0-6)****Prerequisite** : None

Development of language skills in providing effective and efficient customer service; satisfying customers' needs, and handling customers' inquiries or solving problems with the emphasis on the use of effective communicative strategies and appropriate language

**203323 English for Business Negotiation** **3(3-0-6)**

**Prerequisite** : None

Development of English and communication strategies for effective negotiations in international settings, including awareness of cultural differences in negotiations

## 2. Chinese Language

**203401 Chinese I** **3(3-0-6)**

**Pre-requisite** : None

A basic Chinese language course designed for learners with no previous background to enable them to communicate accurately and appropriately in everyday social interactions, including greetings, introducing oneself and others, thanking, apologizing, complimenting, giving and asking for information, etc. with emphasis on listening and speaking skills. Introduction of Chinese phonetic system and basic Chinese grammatical concepts so as to enable the learners to monitor their own language production

**203402 Chinese II** **3(3-0-6)**

**Prerequisite** : 203401 Chinese I

Continuation of Chinese I for beginners, aiming at helping learners to acquire three language skills of listening, speaking, and reading needed for common social interactions in different situations, including telephoning, making appointments, asking for and giving directions, shopping, traveling, etc. Introduction of the structure and characteristics of the Chinese characters as well as more complicated grammatical concepts to enable the learners to comprehend simple reading texts and monitor their own language production

**203403 Chinese III** **3(3-0-6)**

**Prerequisite** : 203402 Chinese II

Continuation of Chinese II, aiming at helping learners to acquire the four language skills of listening, speaking, reading, and writing needed for common social interactions in different situations. Introduction of more Chinese characters and more complicated grammatical structures to enable the learners to comprehend simple reading texts and monitor their own language production

**203404 Business Chinese I** **3(3-0-6)**

**Prerequisite** : 203403 Chinese III or Consent of School

A course for intermediate level learners of Chinese who want to acquire linguistic skills in Chinese business communication and to improve their ability to use the language for business and trade interactions in different situations, including business contacts, business visits, business transactions, etc. by learning Chinese language structure, useful daily and common expressions in a business setting, background knowledge information about Chinese and international business culture and etiquette, etc.

**203405 Business Chinese II** **3(3-0-6)**

**Prerequisite** : 203404 Business Chinese I or Consent of School

Continuation of Business Chinese I, aiming at helping learners to acquire language skills needed for business and trade interactions in different situations, including business banquets, business trip-related activities, negotiating business transactions, business cooperation, international trade fairs, etc. Introduction to more complicated Chinese grammar, business culture and appropriate etiquette needed for effective and appropriate communication

### 3. Japanese Language

**203411 Japanese I** **3(3-0-6)**

**Prerequisite** : None

Basic communication in Japanese, practice in pronunciation, conversation using basic vocabulary and expressions, introduction to hiragana, katakana and kanji characters

**203412 Japanese II** **3(3-0-6)**

**Prerequisite** : 203411 Japanese I

Listening and speaking in Japanese, vocabulary and expressions used in daily life learning to read and write kanji characters

**203413** Japanese III

**3(3-0-6)**

**Prerequisite** : 203412 Japanese II

Communication in the workplace using polite forms, practice in reading writing short passages and further study of kanji characters

**203414** Business Japanese I

**3(3-0-6)**

**Prerequisite** : 203413 Japanese III or Consent of School

Japanese business communication with emphasis on the four skills, practice using Japanese in business simulations, development of vocabulary and skills in business English

**203415** Business Japanese II

**3(3-0-6)**

**Prerequisite** : 203414 Business Japanese I or Consent of School

Development of Japanese language use in business planning such as in marketing, production, organization and management, and finance, ability to read and write business materials