



UNDERGRADUATE PROSPECTUS 2003 - 2004

MAE FAH LUANG UNIVERSITY

Chiang Rai, Thailand

- School of Liberal Arts ● School of Science ● School of Management
- School of Information Technology ● School of Agro-Industry ● School of Law



MAE FAH LUANG UNIVERSITY

Chiang Rai, Thailand

UNDERGRADUATE PROSPECTUS 2003-2004

C CONTENTS

General Information	6
Supporting Units	11
Facilities and Services	16
Admission and Academic Information	18

Academic Programs	21
School of Liberal Arts	
■ Bachelor of Arts (English).....	25
School of Science	
■ Bachelor of Science (Biotechnology).....	31
School of Management	
■ Bachelor of Accounting	39
■ Bachelor of Economics.....	43
■ Bachelor of Business Administration (Tourism Management).....	47
■ Bachelor of Business Administration (Business Administration).....	50
School of Information Technology	
■ Bachelor of Science (Information Technology).....	57
■ Bachelor of Science (Computer Sciences).....	61
■ Bachelor of Engineering (Computer Engineering).....	65
■ Bachelor of Engineering (Information and Communication Technology).....	70
School of Agro-Industry	
■ Bachelor of Science (Food Technology).....	77
■ Bachelor of Science (Postharvest Technology and Package).....	81
School of Law	
■ Bachelor of Laws.....	89

Course Descriptions	95
Students Activities	137
MFLU MAP	139





Message from the President

(Dr. Vanchai Sirichana)

Mae Fah Luang University has now completed five years of operation and has already sent its first group of graduates into the community. The University is fulfilling its aim of offering education of an international standard while nurturing a growing, closely knit community of scholars and researchers.

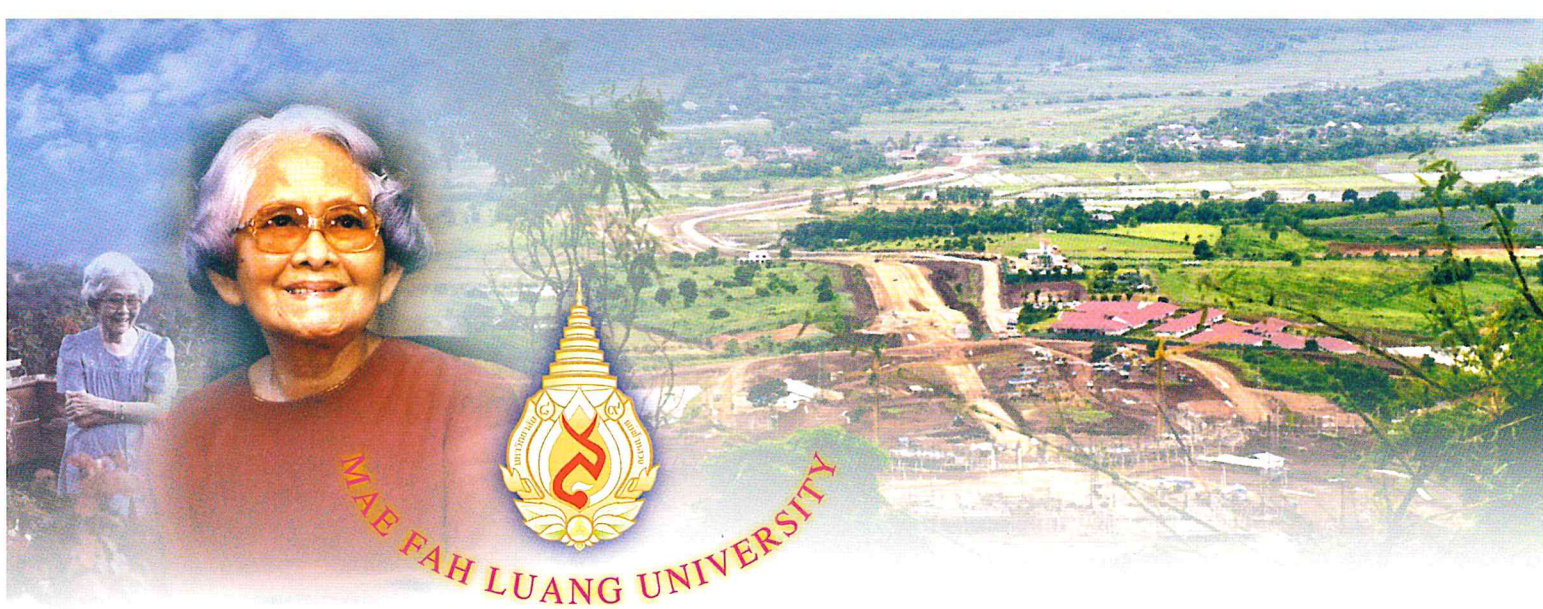
Mae Fah Luang University not only serves as a regional and national university but also provides educational services to people from neighboring countries in the Greater Mekong Subregion and Southeast Asia as a whole.

Thai culture and arts are integrated as an important dimension of our intellectual community to ensure that graduates are equipped not only with the knowledge and skill but also with the wisdom and ethics that enable them to become the leaders of tomorrow.

In addition, emphasis is placed on information technology and foreign languages, including English and Chinese, and the languages of our near neighbors.



General Information



Background

Mae Fah Luang University (MFLU) was established under the Royal Charter in September 1998, as a public autonomous university with the financial support of the Royal Thai Government. The establishment was in response to the needs of people in the North of Thailand and to commemorate the gracious contribution of the King's Mother. Mae Fah Luang University as a public university is fully accredited by the Ministry of Education of Thailand and has close collaboration with other leading institutes.

Mae Fah Luang University is located in Chiang Rai, the northernmost province, in the strategic location of the Greater Mekong Sub-region (GMS) covering Cambodia, Lao PDR, Myanmar, Thailand, Vietnam and the Yunnan Province (Southern China).

During the past five years, MFLU has been tremendously developed and renowned as the fastest growing university in Thailand. The buildings and grounds were carefully designed so as to conform to the northern culture and environment, with the whole campus being surrounded by mountains and pristine nature. Under the concept "*university in the park*", the university is decorated with gardens in appropriate locations, where more than 20,000 trees have been planted.

"In search of quality education and human resources development" is the benchmark of the university and all members. With the strict quality assurance process, it can be assured therefore that MFLU will be one of the quality institutions in the region.

Objectives of the University

1. To be a higher education institution where the intention of the King's mother on the improvement of environment and on human-resources development will be pursued
2. To provide quality higher education and research in response to the needs of the country and the region
3. To become a leading higher education institution and a center of higher education of the Greater Mekong Subregion
4. To generate competent human resources for the country and the region
5. To be think-tank of the society as well as of the country.



hilosophy

MFLU is the institution where the intention of the King's Mother on "*For-estation and Human Resources Development*" will be pursued with focuses on the promotion of environmental quality, the improvement of the disadvantaged through higher education, the building of human capacity, the search for resourceful knowledge and the promotion of culture and traditions of the country and the Greater Mekong Sub-region.

ision

MFLU is a higher education institution of high quality which meets international standards. It aims to excel in selected academic areas and to enhance the quality of graduates and human resources for the country and the region. It will be a source of knowledge origination and enrichment, with the capability of applying the knowledge to benefit the society and the private sector under synergetic cooperation with external agencies. Meanwhile, the promotion of national arts and culture will be emphasised so that the national identity is persistently retained.

issions

MFLU has a strong commitment to the following missions:

1. Teaching
2. Research
3. Academic services to society
4. Technology adaptation and modification
5. Arts and Cultural Promotion

esirable Graduates Attributes

MFLU graduates need to be competent and well rounded, particularly in language and in their respective areas of specialization. They ought to be creative, able to apply their knowledge to their professional lives, and persistent in improving themselves and their work. They should also demonstrate outstanding interpersonal skills and retain ethical values. Their perceptions of the world should be widened realistically in line with the international community. With such attributes, they will be able to perform their functions for the benefit of the society and country while being able to help retain the Thai identity.





The University Council was appointed by His Majesty the King so as to conform to the Royal Charter of the University. Members of the council are as follows:

Chairman

Police General Pow Sarasin

Deputy Chairman

Prof. Wissanu Krua-ngam, Ph.D.

Appointed Members

Secretary General, Commission on Higher Education
President of Mae Fah Luang University
Chairman of the University Activities Promotion Committee

Honorary Members

M.R. Disnadda Diskul
Mr. Sunthorn Arunanondchai
Mr. Songkram Cheevapratdamrong
Mr. Reab Naradisorn
Mr. Somchai Pongsatha
Prof. Naksitte Coovattanachai, Ph.D.
Prof. Tin Prachyapruit, Ph.D.
Mr. Maruey Phadoongsidhi, Ph.D.
Prof. Yodhathai Thebtaranonth, Ph.D.
Mr. Kamron Booncherd
Mr. Wanchai Chongsuttanamanee
Assoc. Prof. Trakool Aramraks, Ph.D.

Administrative Representatives

Asst. Prof. Pritana Pradipasen
Assoc. Prof. Gp. Cept. Yuthana Tra-ngarn
Asst. Prof. Lukkana Rujanakraikarn

Academic Representatives

Mr. Rungrote Nilthong, Ph.D.
Mrs. Maneerat Chuaychoowong
Miss Chutamat Niwat

Executive Secretary

Assoc. Prof. Dr. Ted Tesprateep

Consultants

Mr. Prachuab Chaiyasarn
Mr. Anek Sithiprasasana
Mr. Pornchai Nuchsuwan
Mr. Narin Panichkit



The Executives

President

Assoc. Prof. Vanchai Sirichana, Ph.D.

Advisor to the President

Prof. Sujin Jinahyon, Ph.D.

Vice President for Research and Academic Affairs

Assoc. Prof. Ted Tesprateep, Ph.D.

Vice President for Operation

Asst. Prof. Pritana Pradipasen

Assistant to the President, Research and Academic Affairs

Asst. Prof. Sunanta Fabre, Ph.D.

Dean, School of Liberal Arts

Assoc. Prof. Chakrapand Wongburanavart, Ph.D.

Dean, School of Science

Prof. Sujin Jinahyon, Ph.D.

Dean, School of Information Technology

Gp.Capt. Thongchai Yooyativong, Ph.D.

Dean, School of Management

Assoc. Prof. Chakrapand Wongburanavart, Ph.D.

Dean, School of Agro-Industry

Asst. Prof. Lakkana Rujanakraikarn

Dean, School of Law

Assoc. Prof. Chalor Wongwattanapikul, Ph.D.

Director, Center for Scientific and Technological Instrument

Assoc. Prof. Gannaga Satittada

Director, Center for Information Technology Services

Assoc. Prof. Gp.Capt.Yuthana Tra-Ngarn

Director, Center for Learning Resources and Educational Media

Miss Songsan Udomsilp

Director, Sirindhorn Chinese Language and Cultural Center

Assoc. Prof. Preecha Upayokin, Ph.D.

Director, Academic Service Center Project

Assoc. Prof. Preecha Upayokin, Ph.D.



10

Mae Fah Luang University





Supporting Units

The Center for Learning Resources and Educational Media

The Center offers a full range of library services and educational resources including books, journals and periodicals, newspapers, pamphlets, rare books, government publications and AV materials (CD-ROM, cassette tapes, diskettes, video cassettes and slides). Access to computers and electronic databases from the Thai Library Integrated System and subscription services are also available. The Center is fully equipped with the VTLS version of automated library system. There is also a Self-Access Learning Center, where on-line database terminals, internet access terminals, single and group multimedia rooms, group study rooms, a mini-theater and wireless internet access points are provided.

The Center offers lending services, inter-library loan facilities and on-line catalogues. Facilities are provided for individual and tutorial room instruction by users on request and include training programs for staff and students.

The Center for Scientific and Technological

The Center for Scientific and Technological Instrument is the unit that supports the instruction at Mae Fah Luang University by providing equipment for teaching, training and research. It facilitates bachelor's degree students and is in charge of some buildings for graduate students and research work.

There are sufficient laboratories for bachelor's degree students of biological sciences, microbiology, chemistry, physics, information technology in computer engineering, food technology, post-harvest and packaging. In addition, some are for graduate students, majoring in biotechnology science, material sciences, ceramics and environment sciences. All of the laboratories are well-equipped for instruction and research programs. Advanced scientific equipment is also available for testing and analysis services, in addition to plant tissue culture service and standard equipment calibration service.



The Center for Information Technology Services

The Center for Information Technology Services provides all IT services to support the academic, management and other operations in the university, including a computer service for instruction and research. Moreover, the IT center is responsible for the university's communication network and works together with the IT School for computer and software training, both inside and outside the university.

MFLU-IT network

MFLU operates the IT network to serve and support the university management in three ways as follows

1. Computer system
2. Internet / Intranet system
3. Teleconference system

1. Computer system

The university computer system is a high-speed network. Within the educational area, it is possible to set up groups of computers to work in a triangle with the internet/intranet at high speed. At the moment the internet / intranet system covers all buildings and students' dormitories 24 hours per day.

In the educational area, the university provides a wireless network to serve instructors and students not only in the classroom but anywhere in the entire area.

For the staff and the students to connect to the internet from home or outside university, additional 10 telephone lines are provided.

2. Internet / Intranet system

MFLU connects its internet network through the Uninet network established to serve all universities, at 1 Mbps speed over a Leased Line and one more extra reserve system through another Leased Line to the ISP of CAT at the speed of 128 Kbps.

3. Teleconference system

MFLU has 2 video conferencing facilities at the University pool center at Fortune Tower Bangkok and the educational area at the front building of MFLU Chiang Rai to support meetings and tele-education connected to the Uninet with inland universities. This enables the MFLU to conduct teleconferencing with all other universities within Uninet through the Leased Line at the speed of 1.5 Mbps.

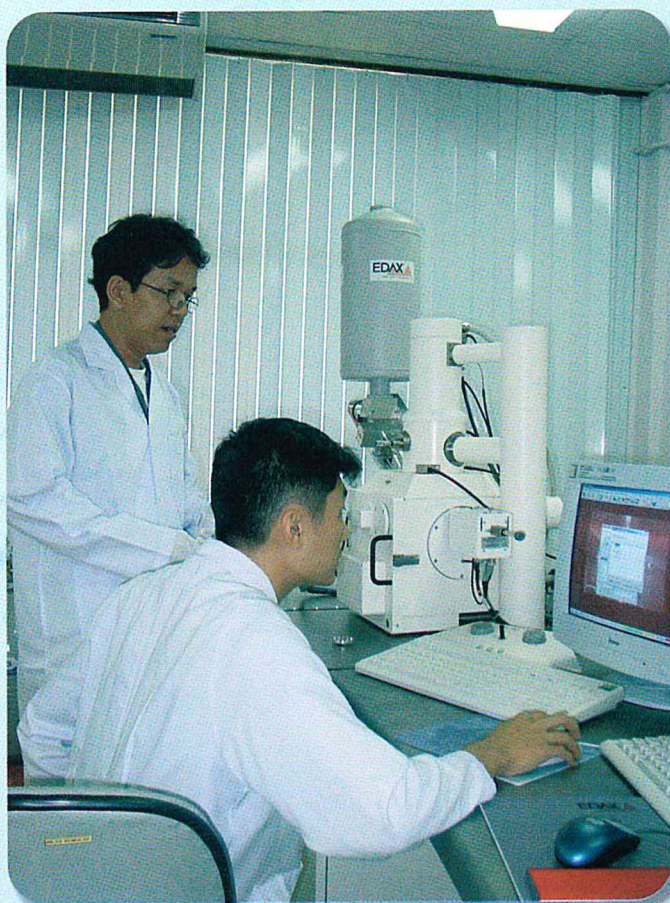


The Sirindhorn Chinese Language and Cultural Center

The Sirindhorn Chinese Language and Cultural Center, constructed in the typical Suzhou style, was established in 2002 as a center to study the Chinese language and culture. The Chinese government kindly donated funds to construct this center in order to signify the strong relationship between China and Thailand. In an area of 3500 square meters, buildings and gardens of Chinese style display the genuine Chinese identity. The Center has the following missions:

1. To serve as a center for Chinese language and cultural studies for Thailand and the Greater Mekong Subregion countries.
2. To serve as a center for teaching Chinese -language courses at all levels.
3. To serve as a center of Chinese Proficiency Test (HSK) in Thailand
4. To retain friendly relationships between Thailand and China







Facilities and Services

Dormitories

Dormitories are provided on campus. Among the basic facilities, accessible internet cable is readily available. Living on campus will give you an opportunity to socialize with local and foreign students as well as enjoying students' activities. Most dormitories are equipped with common rooms, TV rooms, study rooms and recreational areas. In addition, a sports complex is provided on campus to promote health consciousness.

Food Service and Cafeterias

Several catering facilities are available for staff and students on campus. Services are operated daily from 7.00 a.m. to 8.00 p.m.

Health Service

Doctors and nurses are on regular duty to give medical consultation and basic medical treatment. In case of emergency, the patient will be referred to the nearest qualified hospital.





Admission and Academic Information

Admission

MFLU is open to admission from students worldwide. Application can be made directly to the Director of Admissions. Students from universities which have been accredited by certified/authorized bodies are able to have their credits transferred to MFLU for continuing education.

1. Qualifications of Admission

- 1.1 High school certificate (M.6 / grade 12) or equivalent as certified by the Ministry of Education or as conforming to the university criteria

2. Documents for Application

- 2.1 A photocopy of high school (M. 6 / grade 12) certificate or equivalent
- 2.2 A photocopy of transcript
- 2.3 A photocopy of identity card or passport
- 2.4 Four photographs (2.5 X 3 cm.)

The application form can be downloaded from the [URL:www.mfu.ac.th](http://www.mfu.ac.th).
For more information please contact :

Division of International Affairs
Mae Fah Luang University
Chiang Rai, 57100 Thailand
Tel : (+66 53) 916 023, 916 026
Fax: (+66 53) 916 034
E-mail: inter@mfu.ac.th



Academic System

MFLU applies the semester system to all programs. The first semester runs from June to September while the second semester is from November to February. The University accepts new students and credit transfers in both semesters.



Grading System

Grade	Meaning	Grade point
A	Excellent	4.00
B ⁺	Very Good	3.50
B	Good	3.00
C ⁺	Fairly Good	2.50
C	Fair	2.00
D ⁺	Poor	1.50
D	Very Poor	1.00
F	Fail	0.00
I	Incomplete	-
M	Missing	-
P	In Progress	-
S	Satisfactory	-
U	Unsatisfactory	-
V	Visitor	-
W	Withdrawn	-
X	No Report	-



20

Fees

Approximate fees are as follows:

First Semester, Academic Year 2003			
No.	Details		Baht
1	Student registration fee	(paid only once)	1,000
2	Insurance fee for damage incurred	(returned upon graduating)	2,000
3	University fee	(per year)	5,000
4	Student activities fee	(per year)	200
5	Life insurance	(per year)	200
6	Tuition fee	(per semester)	10,800
	(18 credits at 600 baht per credit)		
7	Dormitory fee	(per semester)	3,600
	Total		22,800

Second Semester, Academic Year 2003			
No.	Details		Baht
1	Dormitory fee	(per semester)	3,600
2	Tuition fee	(per semester)	10,800
	(18 credits at 600 baht per credit)		
	Total		14,400

ACADEMIC PROGRAM



School of Liberal Arts

English Program

SCHOOL OF LIBERAL ARTS

Programs of Study Offered

DEGREE : Bachelor of Arts Program in English

Academic Staff

Assoc.Prof.Chakrapand Wongburanavart	Ph.D.(Political Science)
Assoc.Prof.Preecha Upayokin	Ph.D.(Medical Anthropology)
Asst.Prof. Sunanta Fabre	Ph.D.(Eastern Civilization / Public Opinion)
Miss Wanwalee Inpin	M.A.(Political and Justice Studies)
Mr. Yutthapong Chantarawarin	M.A.(Asian Studies)
Miss Pattira Vipavapinyo	M.Ed.(Teaching Thai)
Mr.Apisom Intralawan	M.S. (Ecological Economics)
Miss Wilailuck Boonklub	M.Ed.(Teaching Thai)
Mr. Pollavat Prapatpong	M.A. (Cultural Studies)
Mrs.Malee Poomiphak	M.Sc.(Sport Science)
Mr.Wang Wei Min	M.A.(History)

English Teacher Staffs

Miss Nittaya Chaimanee	Ph.D.(Linguistics)
Mr.Philip H Nicholls	Ph.D. (Environmental History)
Mr.Donald A Johnson	Ph.D. (Organizational and Quantitative Psychology)
Miss Sasima Charubusp	M.Ed.(TEFL)
Mrs. Maneerat Chuaychoowong	M.A. (Applied Linguistics)
Miss Niphattra Haritavorn	M.A.(Interdisciplinary Studies)
Miss Rugchanok Janevarakul	M.A.(Linguistics)
Mr. Abel Morales Cadies	M.A.(English as a Second Language)
Mr. Charles W Lichtenberger	Master of Divinity
Mr. Chaiyathip Katsura	M.A. (Linguistics)
Miss Supalak Marliam	M.A (Applied Linguistics)
Mr. Francis Mausley	M.A. (Teaching)
Mr.Jon Fernquest	M.S.(Applied Economics)
Mr.Cheung Nam Henry Lau	Master of Applied Linguistics
Mr. Fujita Shinsuke	B.A.(American and English Language)
Mr. Bobby Robinson	Special Course
Mr. Edward Charles Hulle	B.A.
Mr.Terry J Scarborough	B.S.(Business Administration)
Mr.Gregory A Smith	B.S.(Business Management)
Mrs.Lesley Houston	Bachelor of Adult and Vocational Education
Mr.Robert M Jones	Bachelor of Theology
Mr.Jason K Lubanski	B.A.(Psychology)
Ms.Yuko Watanabe	B.A.(Psychology)
Ms.Amanda Dennis	B.A.(Foreign Languages)
Mr.Jeffrey Tilley	B.A.(Linguistic)
Mr.Benjamin H Malcolm	B.A.(History and English)
Mr. Matthew R.ferguson	B.A.
	B.A.(Linguistic)



Program Structures

Bachelor of Arts Program in English

1. Program Title : Bachelor of Arts Program in English

2. Degree

Full Title : Bachelor of Arts (English)

Abbreviation : B.A. (English)

3. Total Credit Hours 135 Credits

4. Program Structure

4.1 General Education Courses 33 Credits

4.2 Specific Requirement Courses 90 Credits

4.2.1 Core Courses 30 Credits

4.2.2 Major Required Courses 48 Credits

4.2.3 Major Elective Courses 12 Credits

4.3 Free Elective Courses 12 Credits

5. List of Courses

5.1 General Education Courses 33 Credits

Course Code	Course Title	Credit Hours(Lec.-Lab.)
1001101	Man and Society	2 (2-0)
1001102	Environment and Development	2 (2-0)
1001103	Thai Language Skills	2 (2-0)
1001111	Cultural Studies	2 (2-0)
1001112	Logical Thinking	2 (1-2)
1001121	Recreation and Sport for Well-Being	1 (0-2)
1001122	Personal and Community Health	2 (2-0)
1001131	World Community	2 (2-0)
1006103	English 1	3 (3-0)
1006104	English 2	3 (3-0)
1006207	English for Business and Technology 1	3 (3-0)

Prerequisite : 1006104



25

Mae Fah Luang University



Course Code	Course Title	Credit Hours(Lec.-Lab.)
1006208	English for Business and Technology 2	3 (3-0)
	Prerequisite : 1006207	
1203141	Organization and Management	2 (2-0)
1301101	Information Technology 1	2 (1-2)
1301102	Information Technology 2	2 (1-2)
	Prerequisite : 1301101	

5.2 Core Courses

30 Credits

Course Code	Course Title	Credit Hours(Lec.-Lab.)
1001133	General Principle Jurisprudence	3(3-0)
1006151	Computer-Assisted Language Learning	3 (2-2)
1006182	Introduction to Sociolinguistics	3 (3-0)
1101100	Science for Life	3 (3-0)
1106100	Mathematics for Life	3 (3-0)
1202111	Introduction to Economics and Business	3 (3-0)
1301311	Principles and International Practice in Electronic Commerce	3 (3-0)
1301341	Office Automation Management	3 (2-2)
1301351	Computer and Information Network	3 (2-2)
1301912	Human and Information Technology Interaction	3 (3-0)

5.3 Major Required Courses

48 Credits

Course Code	Course Title	Credit Hours(Lec.-Lab.)
1006111	Basic Listening and Speaking	3 (3-0)
1006112	Listening and Speaking for Communication	3 (3-0)
	Prerequisite : 1006111	
1006181	English Phonetics	3 (3-0)
1006213	Presentation Skills	3 (3-0)
1006221	Academic Reading	3 (3-0)
1006222	Critical Reading	3 (3-0)

Course Code	Course Title	Credit Hours(Lec.-Lab.)
1006233	Prose Writing	3 (3-0)
	Prerequisite : 1006221	
1006241	Literature 1 (Poetry)	3 (3-0)
1006242	Literature 2 (Prose)	3 (3-0)
	Prerequisite : 1006241	
1006283	Introduction to Morphology	3(3-0)
1006331	Introduction to Translation	3 (3-0)
1006332	Business Translation	3 (3-0)
	Prerequisite : 1006331	
1006352	English for Job Application	3 (3-0)
1006353	English for The Greater Maekong Subregion (GMS)	3 (3-0)
1006354	Cooperative Training	3 (0-9)
1006434	Academic Writing	3 (3-0)
	Prerequisite : 1006233 and 1006242	

5.4 Major Elective Courses

12 Credits

Course Code	Course Title	Credit Hours(Lec.-Lab.)
1006355	English for Secretary 1	3 (3-0)
1006356	English for Secretary 2	3 (3-0)
	Prerequisite : 1006355	
1006357	English for Hotel Management 1	3 (3-0)
1006358	English for Hotel Management 2	3 (3-0)
	Prerequisite : 1006357	
1006359	English for Tourism 1	3 (3-0)
1006361	English for Tourism 2	3 (3-0)
	Prerequisite : 1006359	
1006362	English for Airline Business 1	3 (3-0)
1006363	English for Airline Business 2	3 (3-0)
	Prerequisite : 1006362	

5.5 Free Elective Courses

12 Credits



School of Science

Biotechnology Program

SCHOOL OF SCIENCE

Programs of Study Offered

DEGREE: Bachelor of Science Program in Biotechnology

Academic Staff

Assoc.Prof. Yuttana Smitasiri	M.Sc. (Biology)
Mrs. Darunee Vattanasiriweach	Ph.D. (Materials Science and Engineering)
Mr. Suthee Vattanasiriweach	Ph.D. (Materials Science and Engineering)
Mr. Sayamrat Panpoom	Ph.D. (Molecular Biology and Biochemistry)
Mr. Ekachai Chukeatirote	Ph.D. (Biochemistry)
Mr. Panom Winyayong	Ph.D. (Molecular Biology)
Mr. Trai Pekthong	Ph.D. (Biology)
Miss Chuleeporn Thanomsilp	Ph.D. (Composite Materials)
Miss Phunrawie Sroisuwat	Ph.D. (Chemistry)
Miss Prapassorn Domrongkool	Ph.D. (Genetics and Development Biology)
Mr. Ratna Thapa	Ph.D. (Biological Science)
Miss Sureeporn Nontachaiyapoom	M.Sc. (Gene Science)
Miss Jantrararuk Tovanonte	M.Sc. (Biology)
Miss Saranya Srisuwat	M.Sc. (Ecology)
Mrs. Piyanuch Siriwat	M.Sc. (Applied Mathematics)
Miss Patchara Punyamonwongsa	M.Sc. (Chemistry)
Mr. Amorn Owatworakit	M.Sc. (Biotechnology)
Mr. Tophan Thundorn	M.Sc. (Materials Science)
Miss Nattakan Soykeabkaew	M.Sc. (Polymer Science)



Program Structures

Bachelor of Science Program in Biotechnology

1. Program Title : Bachelor of Science Program in Biotechnology

2. Degree

Full Title : Bachelor of Science (Biotechnology)

Abbreviation : B.S. (Biotechnology)

3. Total Credit Hours 132 Credits

4. Program Structure

4.1 General Education Courses 33 Credits

4.2 Specific Requirement Courses 93 Credits

4.2.1 Core Courses 37 Credits

4.2.2 Major Required Courses 47 Credits

4.2.3 Major Elective Courses 9 Credits

4.3 Free Elective Courses 6 Credits

5. List of Courses

5.1 General Education Courses 33 Credits

Course Code	Course Title	Credit Hours(Lec.-Lab.)
1001101	Man and Society	2 (2-0)
1001102	Environment and Development	2 (2-0)
1001103	Thai Language Skills	2 (2-0)
1001111	Cultural Studies	2 (2-0)
1001112	Logical Thinking	2 (1-2)
1001121	Recreation and Sport for Well-Being	1 (0-2)
1001122	Personal and Community Health	2 (2-0)
1001131	World Community	2 (2-0)
1006103	English 1	3 (3-0)
1006104	English 2	3 (3-0)
1006205	English for Science and Technology 1	3 (3-0)

Prerequisite : 1006104





Course Code	Course Title	Credit	Hours(Lec.-Lab.)
1006206	English for Science and Technology 2 Prerequisite : 1006205	3	(3-0)
1203141	Organization and Management	2	(2-0)
1301101	Information Technology 1	2	(1-2)
1301102	Information Technology 2 Prerequisite : 1301101	2	(1-2)

5.2 Core Courses**37 Credits**

Course Code	Course Title	Credit	Hours(Lec.-Lab.)
1102101	General Chemistry 1	3	(2-3)
1102102	General Chemistry 2 Prerequisite : 1102101	3	(2-3)
1102210	Principles of Analytical Chemistry Prerequisite : 1102102	3	(2-3)
1102220	Principles of Physical Chemistry Prerequisite : 1102102	2	(2-0)
1102230	Principles of Organic Chemistry Prerequisite : 1102102	3	(2-3)
1102250	Principles of Biochemistry Prerequisite : 1102102 and 1103102	3	(2-3)
1103101	General Biology 1	3	(2-3)
1103102	General Biology 2 Prerequisite : 1103101	3	(2-3)
1104100	Principles of Physics	3	(2-3)
1105101	Introduction to Biotechnology	1	(1-0)
1105401	Bioinformatics Prerequisite : 1105101	1	(1-0)
1106103	Mathematics 1	3	(3-0)
1106104	Mathematics 2 Prerequisite : 1106103	3	(3-0)
1106282	Statistics and Experimental Design	3	(3-0)

5.3 Major Required Courses

47 Credits

Course Code	Course Title	Credit	Hours(Lec.-Lab.)
1103211	Microbiology	4	(3-3)
	Prerequisite : 1103102		
1103221	Genetics	4	(3-3)
	Prerequisite : 1103102		
1103231	Plant Physiology	3	(2-3)
	Prerequisite : 1103102		
1103321	Molecular Genetics	4	(3-3)
	Prerequisite : 1102250 and 1103221		
1105321	Plant Biotechnology	4	(3-3)
	Prerequisite : 1105101		
1105322	Algal Biotechnology	3	(2-3)
	Prerequisite : 1105101		
1105341	Medical and Pharmaceutical Biotechnology	2	(2-0)
	Prerequisite : 1105101		
1105351	Bioprocess Engineering	4	(3-3)
	Prerequisite : 1102220		
1105352	Industrial Biotechnology	3	(2-3)
	Prerequisite : 1105101		
1105361	Plant Biochemistry	4	(3-3)
	Prerequisite : 1102250		
1105396	Special Project	1	(0-3)
1105397	Industrial Visit	1	(0-3)
1105400	Biotechnology Business	1	(1-0)
1105497	Seminar	1	(0-3)
1105498	Special Problem	2	(0-6)
1105499	Cooperative Training	3	(0-9)
1202111	Introduction to Economics and Business	3	(3-0)



**5.4 Major Elective Courses****9 Credits**

Course Code	Course Title	Credit	Hours (Lec.-Lab.)
1103311	Environmental Microbiology	3	(2-3)
	Prerequisite : 1103211		
1103312	Industrial Microbiology	3	(2-3)
	Prerequisite : 1103211		
1103313	Microbial Physiology	3	(2-3)
	Prerequisite : 1103211		
1103322	Plant Genetics	3	(2-3)
	Prerequisite : 1103221		
1103323	Microbial Genetics	3	(3-0)
	Prerequisite : 1103211		
1103341	Plant Ecology	3	(2-3)
	Prerequisite : 1103102		
1103351	Plant Taxonomy	3	(2-3)
	Prerequisite : 1103102		
1105411	Economic Botany	3	(2-3)
	Prerequisite : 1103231		
1105412	Medicinal Plants	3	(2-3)
1105413	Orchidology	3	(2-3)
1105421	Plant Production Technology	3	(2-3)
	Prerequisite : 1103231		
1105431	Microbial Technology	3	(2-3)
	Prerequisite : 1103211		
1105432	Yeast Biotechnology	3	(2-3)
	Prerequisite : 1103211		
1105451	Immobilised Biocatalyst	3	(2-3)
	Prerequisite : 1102250		
1105461	Plant Secondary Metabolites	3	(2-3)
	Prerequisite : 1103231		

Course Code	Course Title	Credit	Hours(Lec.-Lab.)
1401332	Technology of Fruit and Vegetable Products	3	(2-3)
	Prerequisite : 1401201		
1401336	Technology of Cereal Products	3	(2-3)
	Prerequisite : 1401201		
1401337	Technology of Beverage Products	3	(2-3)
	Prerequisite : 1401201		
1401339	Technology of Food Fermentation	3	(2-3)
	Prerequisite : 1401201		
1402211	Food Microbiology	4	(3-3)
1402342	Waste Treatment and Utilization	3	(2-3)
	Prerequisite : 1401201		
1405331	Technology of Post-harvest	3	(2-3)
	Prerequisite : 1401201		

5.5 Free Elective Courses**6 Credits**

School of Management

- ◎ *Accounting*
- ◎ *Economics*
- ◎ *Tourism Management*
- ◎ *Business Administration*

SCHOOL OF MANAGEMENT

Programs of Study Offered

DEGREE: Bachelor of Accounting Program
Bachelor of Economics Program
Bachelor of Business Administration Program in
Tourism Mangement
Bachelor of Business Administration Program in
Business Administration

Academic Staff

Assoc.Prof.Chakrapand Wongburanavart	Ph.D.(Political Science)
Asst. Prof. Nattaphan Kecharananta	Ph.D.(Management and Organization Behaviors)
Miss Yalisa Tonsorn	Ph.D.(Business Management)
Mr. Khin Maung Nyunt	Ph.D.(Economics)
Miss Sangchan Kantabutra	M.B.A.(General)
Miss Nathapornpan Piyaareekul	M.Sc.(Economics)
Miss Isaree Baedcharoen	Master of Tourism
Miss Nattira Nondhichakorn	M.A.(Trainningand Human Resource Development)
Miss Treesara Nettagul	M.B.A.(General)
Mr. Suppasin Suriya	M.Acc.(Managerial Accounting)
Mr. Chaithawat Thongintr	M.B.A.
Miss Wiyada Sereewichyaswat	M.A.(Tourism Industry Management)
Mrs Sujitraba Phanwilai	M.A.(Tourism Industry Management)
Miss Chachaya Yodsuwan	Master of International Tourism and Hospitality Management
Mrs. Ratchadaporn Putjorn	Master of Applied Finance
Mr. Phathaithep Laopongsit	M.S.(Management and Information system)
Miss Orawan Jamphut	M.Acc.



Program Structures

Bachelor of Accounting Program

1. Program Title : Bachelor of Accounting Program

2. Degree

Full Title : Bachelor of Accounting

Abbreviation : B.Acc.

3. Total Credit Hours **135 Credits**

4. Program Structure

4.1 General Education Courses **33 Credits**

4.2 Specific Requirement Courses **96 Credits**

4.2.1 Core Courses 48 Credits

4.2.2 Major Required Courses 39 Credits

4.2.3 Major Elective Courses 9 Credits

4.3 Free Elective Courses **6 Credits**

5. List of Courses

5.1 General Education Courses **33 Credits**

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1001101	Man and Society	2 (2-0)
1001102	Environment and Development	2 (2-0)
1001103	Thai Language Skills	2 (2-0)
1001111	Cultural Studies	2 (2-0)
1001112	Logical Thinking	2 (1-2)
1001121	Recreation and Sport for Well-Being	1 (0-2)
1001122	Personal and Community Health	2 (2-0)
1001131	World Community	2 (2-0)
1006103	English 1	3 (3-0)
1006104	English 2	3 (3-0)
1006207	English for Business and Technology 1	3 (3-0)

Prerequisite : 1006104



39

Mae Fah Luang University



Course Code	Course Title	Credit Hours (Lec. - Lab.)
1006208	English for Business and Technology 2	3 (3-0)
	Prerequisite : 1006207	
1203141	Organization and Management	2 (2-0)
1301101	Information Technology 1	2 (1-2)
1301102	Information Technology 2	2 (1-2)
	Prerequisite : 1301101	

5.2 Core Courses

48 Credit

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1001133	General Principle of Jurisprudence	3 (3-0)
1106103	Mathematics 1	3 (3-0)
1201113	Elementary Accounting 1	3 (3-0)
1201114	Elementary Accounting 2	3 (3-0)
	Prerequisite : 1201113	
1202112	Microeconomics	3 (3-0)
1202113	Macroeconomics	3 (3-0)
1203103	Statistics and Research for Business	3 (3-0)
1203121	Principles of Marketing	3 (3-0)
1203201	Taxation	3 (3-0)
	Prerequisite : 1201113	
1203202	Business Laws	3 (3-0)
	Prerequisite : 1001133	
1203212	Business Finance	3 (3-0)
	Prerequisite : 1201114 or 1201211	
1203241	Organizational Behavior	3 (3-0)
	Prerequisite : 1203141	
1203252	Quantitative Analysis	3 (3-0)
1203253	Production and Operations Management	3 (3-0)
1203331	Business Research	3 (3-0)
	Prerequisite : 1203103 and 1203141	
1301342	Management Information Systems	3 (3-0)

5.3 Major Required Courses

39 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1201213	Intermediate Accounting 1 Prerequisite : 1201114	3 (3-0)
1201214	Intermediate Accounting 2 Prerequisite : 1201114	3 (3-0)
1201311	Managerial Accounting 1 Prerequisite : 1201213 and 1201214	3 (3-0)
1201312	Accounting Theory Prerequisite : 1201213 and 1201214	3 (3-0)
1201313	Managerial Accounting 2 Prerequisite : 1203141 and 1201311	3 (3-0)
1201321	Computer Accounting System Prerequisite : 1201311 and 1301342	3 (2-2)
1201331	Auditing Prerequisite : 1201213 and 1201214	3 (3-0)
1201411	Advanced Accounting 1 Prerequisite : 1201213 and 1201214	3 (3-0)
1201412	Advanced Accounting 2 Prerequisite : 1201213 and 1201214	3 (3-0)
1201413	Tax Accounting Prerequisite : 1201114 and 1203201	3 (3-0)
1201414	Financial Report Prerequisite : 1201213 and 1201214	3 (3-0)
1201421	Accounting Information Analysis Prerequisite : 1203212	3 (3-0)
1201497	Seminar in Accounting	3(3-0)

5.4 Major Elective Courses

9 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1201314	Profit Planning and Control Prerequisite : 1201313	3 (3-0)





Course Code	Course Title	Credit Hours (Lec. - Lab.)
1201315	International Accounting	3(3-0)
	Prerequisite : 1201214 and 1203212	
1201316	Hotel Accounting	3 (3-0)
	Prerequisite : 1201214 and 1203141	
1201317	Bank Accounting	3 (3-0)
	Prerequisite : 1201214 and 1203212	
1201318	Governmental Accounting	3 (3-0)
	Prerequisite : 1201214 and 1203212	
1201332	Internal Auditing and Control	3 (3-0)
	Prerequisite : 1201213 and 1201214	
1201415	Tax Planning	3 (3-0)
	Prerequisite : 1201413	
1201422	Business Information Communication	3 (2-2)
	Prerequisite : 1301102	
1201423	Accounting Information System Design	3 (2-2)
	Prerequisite : 1301221	
1201431	Computerized Accounting System Auditing	3 (2-2)
	Prerequisite : 1201331 and 1201321	
1201432	Problem in Auditing	3 (3-0)
	Prerequisite : 1201331	
1301221	Systems Analysis and Design	3 (3-0)
1302331	Database Systems 1	3 (2-2)

5.5 Free Elective Courses**6 Credits**

Program Structures

Bachelor of Economics Program

1. Program Title : Bachelor of Economics Program

2 Degree

Full Title : Bachelor of Economics

Abbreviation : B.Econ.

3. Total Credit Hours 135 Credits

4. Program Structure

4.1 General Education Courses 33 Credits

4.2 Specific Requirement Courses 96 Credits

4.2.1 Core Courses 45 Credits

4.2.2 Major Required Courses 39 Credits

4.2.3 Major Elective Courses 12 Credits

4.3 Free Elective Courses 6 Credits

5. List of Courses

5.1 General Education Courses 33 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1001101	Man and Society	2 (2-0)
1001102	Environment and Development	2 (2-0)
1001103	Thai Language Skills	2 (2-0)
1001111	Cultural Studies	2 (2-0)
1001112	Logical Thinking	2 (1-2)
1001121	Recreation and Sport for Well-Being	1 (0-2)
1001122	Personal and Community Health	2 (2-0)
1001131	World Community	2 (2-0)
1006103	English 1	3 (3-0)
1006104	English 2	3 (3-0)
1006207	English for Business and Technology 1	3 (3-0)

Prerequisite : 1006104





Course Code	Course Title	Credit Hours (Lec. - Lab.)
1006208	English for Business and Technology 2	3 (3-0)
	Prerequisite : 1006207	
1203141	Organization and Management	2 (2-0)
1301101	Information Technology 1	2 (1-2)
1301102	Information Technology 2	2 (1-2)
	Prerequisite : 1301101	

5.2 Core Courses

45 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1106103	Mathematics 1	3 (3-0)
1106281	Probability and Statistics	3 (3-0)
1201111	Principles of Accounting	3 (3-0)
1202112	Microeconomics	3 (3-0)
1202113	Macroeconomics	3 (3-0)
1202211	Mathematics for Economist	3 (2-2)
	Prerequisite : 1106103 and 1202112	
1202212	Economic Statistics	3 (3-0)
	Prerequisite : 1106281	
1202213	Microeconomic Theory	3 (3-0)
	Prerequisite : 1106103 and 1202112	
1202214	Macroeconomic Theory	3 (3-0)
	Prerequisite : 1106103 and 1202113	
1202241	International Economics	3 (3-0)
	Prerequisite : 1202111 or 1202112 and 1202113	
1202251	Economics of Money and Banking	3 (3-0)
	Prerequisite : 1202112 and 1202113	
1202252	Economics of Public Finance	3 (3-0)
	Prerequisite : 1202112 and 1202113	
1202301	Research Methodology	3 (3-0)
	Prerequisite : 1202112 and 1202113	

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1202311	Econometrics	3 (2-2)
	Prerequisite : 1202212	
1202361	Economic History	3 (3-0)
	Prerequisite : 1202112 and 1202113	

5.3 Major Required Courses

39 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1202302	Project Feasibility Analysis	3 (3-0)
	Prerequisite : 1202112 and 1202113	
1202331	Transportation Economics	3 (3-0)
	Prerequisite : 1202112 and 1202113	
1202362	Rural and Urban Economics	3 (3-0)
	Prerequisite : 1202112 and 1202113	
1202371	Agricultural Economics	3 (3-0)
	Prerequisite : 1202112 and 1202113	
1202372	Agribusiness and Agro-industry	3 (3-0)
	Prerequisite : 1202112 and 1202113	
1202381	Natural Resource and Environmental Economics	3 (3-0)
	Prerequisite : 1202112 and 1202113	
1202441	International Trade Theory	3 (3-0)
	Prerequisite : 1202241	
1202442	International Monetary Economics	3 (3-0)
	Prerequisite : 1202241	
1202443	International Economic Cooperation and Trade Negotiation	3 (3-0)
	Prerequisite : 1202241	
1202461	Thai Economy	3 (3-0)
	Prerequisite : 1202213 and 1202214	
1202462	Economics of the New Economy	3 (3-0)
	Prerequisite : 1202213 and 1202214	



45

Mae Fah Luang University



Course Code	Course Title	Credit Hours (Lec. - Lab.)
1202497	Seminar	3 (3-0)
	Prerequisite : 1202213 and 1202214	
1202498	Independent Study	3 (0-9)
	Prerequisite : 1202213 and 1202214	

5.4 Major Elective Courses**12 Credits**

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1202332	Globalization and Logistic Management	3 (3-0)
	Prerequisite : 1202112 and 1202113	
1202341	Economics and Laws	3 (3-0)
1202342	International Business in Practice	3 (3-0)
	Prerequisite : 1202241	
1202363	Sufficiency Economy	3 (3-0)
	Prerequisite : 1202112 and 1202113	
1202382	Human Resources Economics	3 (3-0)
	Prerequisite : 1202112 and 1202113	
1202421	Selected Greater Mekong Subregion Countries Economy	3 (3-0)
	Prerequisite : 1202213 and 1202214	
1202422	Cross Border Trade Economy	3 (3-0)
	Prerequisite : 1202213 and 1202214	
1202463	Economics of Good Governance	3 (3-0)
	Prerequisite : 1202213 and 1202214	
1202496	Special Topic in Economics	3 (3-0)
	Prerequisite : 1202213 and 1202214	
1301311	Principles and Practice of Electronic	3 (3-0)

5.5 Free Elective Courses**6 Credits**

Program Structures

Bachelor of Business Administration Program in Tourism Management

1. Program Title : Bachelor of Business Administration Program in Tourism Management

2. Degree

Full Title : Bachelor of Business Administration (Tourism Management)

Abbreviation : B.B.A. (Tourism Management)

3. Total Credit Hours 133 Credits

4. Program Structure

4.1 General Education Courses 33 Credits

4.2 Specific Requirement Courses 94 Credits

4.2.1 Core Courses 48 Credits

4.2.2 Major Required Courses 34 Credits

4.2.3 Major Elective Courses 12 Credits

4.3 Free Elective Courses 6 Credits

5. List of Courses

5.1 General Education Courses		33 Credits
Course Code	Course Title	Credit Hours (Lec. - Lab.)
1001101	Man and Society	2 (2-0)
1001102	Environment and Development	2 (2-0)
1001103	Thai Language Skills	2 (2-0)
1001111	Cultural Studies	2 (2-0)
1001112	Logical Thinking	2 (1-2)
1001121	Recreation and Sport for Well-Being	1 (0-2)
1001122	Personal and Community Health	2 (2-0)
1001131	World Community	2 (2-0)
1006103	English 1	3 (3-0)
1006104	English 2	3 (3-0)
1006209	English for Tourism 1	3 (3-0)
Prerequisite : 1006104		





Course Code	Course Title	Credit Hours (Lec. - Lab.)
1006210	English for Tourism 2 Prerequisite : 1006209	3 (3-0)
1203141	Organization and Management	2 (2-0)
1301101	Information Technology 1	2 (1-2)
1301102	Information Technology 2 Prerequisite : 1301101	2 (1-2)

5.2 Core Courses

48 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1103140	Fundamentals of Ecology	3 (3-0)
1106103	Mathematics 1	3 (3-0)
1201112	Principles of Accounting 1	2 (2-0)
1201211	Principles of Accounting 2 Prerequisite : 1201112	2 (2-0)
1202112	Microeconomics	3 (3-0)
1202113	Macroeconomics	3 (3-0)
1203101	Introduction to Laws	2 (2-0)
1203103	Statistics and Research Method for Business	3 (3-0)
1203121	Principles of Marketing	3 (3-0)
1203131	Principles of Business	2 (2-0)
1203201	Taxation Prerequisite : 1201112 and 1203101	3 (3-0)
1203209	Business Finance	3 (3-0)
1203251	Operations Management	3 (3-0)
1203341	Personal Management and Organizational Behavior	3 (3-0)
1203361	International Business Management Prerequisite : 1203141	2 (2-0)
1203431	Business Policy Prerequisite : 1301102	3 (3-0)
1301313	Electronic Commerce for Tourism Business	2(1-2)
1301342	Management Information Systems	3 (3-0)

5.3 Major Required Courses

34 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1006364	English for tourism	2 (1-2)
	Prerequisite : 1006210	
1201212	Managerial Accounting	3 (3-0)
1203302	Feasibility Study and Project Evaluation	3 (3-0)
1205111	Introduction to Tourism	1 (1-0)
1205201	Tourism Geography	2 (2-0)
1205202	Tourism Laws	2 (2-0)
	Prerequisite : 1203101	
1205211	Tourism Business Management	3 (3-0)
1205301	Ethics and Psychology for Service Industry	3 (3-0)
1205311	Ecotourism	3 (2-2)
1205312	Tourism Planning and Marketing Development	3 (3-0)
	Prerequisite : 1203121	
1205313	Conservation and Development of Tourist	3 (3-0)
	Prerequisite : 1103140	
1205411	Tourism Industry and State Policy	3 (3-0)
1205499	Cooperative training	3 (0-9)

5.4 Major Elective Courses

12 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1205302	Traditional Arts and Cultures	3 (2-2)
1205321	Introduction to Hotel Management	3 (2-2)
1205322	Food and Beverage Management	3 (2-2)
1205331	Tour Guide	3 (2-2)
1205332	MICE Management	3 (2-2)
1205333	Airlines and Cruiselines Business Management	3 (2-2)

5.5 Free Elective Courses

6 Credits



Program Structures

Bachelor of Business Administration Program

1. Program Title : Bachelor of Business Administration Program in Business Administration

2. Degree

Full Title : Bachelor of Business Administration (Business Administration)

Abbreviation : B.B.A. (Business Administration)

3. Total Credit Hours 135 Credits

4. Program Structure

4.1 General Education Courses 33 Credits

4.2 Specific Requirement Courses 96 Credits

4.2.1 Core Courses 48 Credits

4.2.2 Major Required Courses 39 Credits

4.2.3 Major Elective Courses 9 Credits

4.3 Free Elective Courses 6 Credits

5. List of Courses

5.1 General Education Courses 33 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1001101	Man and Society	2 (2-0)
1001102	Environment and Development	2 (2-0)
1001103	Thai Language Skills	2 (2-0)
1001111	Cultural Studies	2 (2-0)
1001112	Logical Thinking	2 (1-2)
1001121	Recreation and Sport for Well-Being	1 (0-2)
1001122	Personal and Community Health	2 (2-0)
1001131	World Community	2 (2-0)
1006103	English 1	3 (3-0)
1006104	English 2	3 (3-0)
1006207	English for Business and Technology 1	3 (3-0)

Prerequisite : 1006104



50

Mae Fah Luang University

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1006208	English for Business and Technology 2	3 (3-0)
	Prerequisite : 1006207	
1203141	Organization and Management	2 (2-0)
1301101	Information Technology 1	2 (1-2)
1301102	Information Technology 2	2 (1-2)
	Prerequisite : 1301101	

5.2 Core Courses

48 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1001133	General Principle of Jurisprudence	3 (3-0)
1106103	Mathematics 1	3 (3-0)
1201113	Elementary Accounting 1	3 (3-0)
1201114	Elementary Accounting 2	3 (3-0)
	Prerequisite : 1201113	
1202112	Microeconomics	3 (3-0)
1202113	Macroeconomics	3 (3-0)
1203103	Statistics and Research for Business	3 (3-0)
1203121	Principles of Marketing	3 (3-0)
1203201	Taxation	3 (3-0)
	Prerequisite : 1201112 and 1203101 or 1201113	
1203202	Business Laws	3 (3-0)
	Prerequisite : 1201113	
1203212	Business Finance	3 (3-0)
	Prerequisite : 1201114 or 1201211	
1203241	Organization Behavior	3 (3-0)
	Prerequisite : 1203141	
1203252	Quantitative Analysis	3 (3-0)
1203253	Production and Operations Management	3 (3-0)
1203331	Business Research	3 (3-0)
	Prerequisite : 1203103 and 1203141	
1301342	Management Information Systems	3 (3-0)



51

Mae Fah Luang University



5.3 Major Required Courses

39 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1201212	Managerial Accounting	3 (3-0)
1203242	Human Resources Management	3 (3-0)
1203302	Project Feasibility Study and Evaluation	3 (3-0)
1203311	Financial Management	3 (3-0)
	Prerequisite : 1203212	
1203321	Marketing Management	3 (3-0)
	Prerequisite : 1203121	
1203332	Business Venture and Entrepreneurship	3 (3-0)
	Prerequisite : 1203141	
1203342	Business Psychology	3 (3-0)
1203362	International Business Management	3 (3-0)
	Prerequisite : 1203141	
1203363	Cross-Culture Management	3 (3-0)
	Prerequisite : 1203141	
1203364	Business Negotiation	3 (3-0)
1203432	Strategic Management	3 (3-0)
	Prerequisite : 1203141	
1203497	Seminar on Business Administration	3 (3-0)
1301311	Principle and Practice of Electronic	3 (3-0)

5.4 Major Elective Courses

9 Credit

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1201315	International Accounting	3 (3-0)
	Prerequisite : 1201214 and 1203212	
1203312	Principles of Investment	3 (3-0)
	Prerequisite : 1203212	
1203313	Financial Planning and Control	3 (3-0)
	Prerequisite : 1203311	
1203314	Financial Report Analysis	3 (3-0)
	Prerequisite : 1203212	

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1203322	Consumer Behavior Prerequisite : 1203121	3 (3-0)
1203323	Service Marketing Prerequisite : 1203121	3 (3-0)
1203324	Retail Marketing Prerequisite : 1203121	3 (3-0)
1203325	Agricultural Marketing Prerequisite : 1202112 and 1203121	3 (3-0)
1203326	Industrial Marketing Prerequisite : 1203121	3 (3-0)
1203351	Business Logistics Management Prerequisite : 1203253	3 (3-0)
1203365	International Trade	3 (3-0)
1203366	International Finance Prerequisite : 1202113 and 1203212	3 (3-0)
1203367	Export - Import Management Prerequisite : 1203121	3 (3-0)
1203401	International Business Laws Prerequisite : 1203202 and 1203362	3 (3-0)
1203411	Securities Analysis Prerequisite : 1203312	3 (3-0)
1203412	Investment Banking Prerequisite : 1203311	3 (3-0)
1203421	Marketing Research Prerequisite : 1203103 and 1203322	3 (2-2)
1203461	International Marketing Prerequisite : 1203121	3 (3-0)

5.5 Free Elective Courses

6 Credits



School of Information Technology

- ◎ *Information Technology*
- ◎ *Computer Sciences*
- ◎ *Computer Engineering*
- ◎ *Information and Communication Technology*

SCHOOL OF INFORMATION TECHNOLOGY

Programs of Study Offered

DEGREE: Bachelor of Science Program in Information Technology
Bachelor of Science Program in Computer Sciences
Bachelor of Engineering Program in
Computer Engineering
Bachelor of Engineering Program in
Information and Communication Technology

Academic Staff

Gp.Capt. Thongchai Yooyativong
Assoc. Prof. Gp.Capt. Yuttana Tra-Ngarn

Mrs. Ternchit Suddhaluang
Mr. Surapong Utama
Mr. Piyasak Jeatrakul
Miss Ananchanok Watchaton

Miss Sirikan Choched
Miss Karanya Sitdhisanguan

Mr. Sukchatri Prasomsuk

Mr. Pruet Putjorn

Miss Watsamon Poowatanon
Miss Songsan Udomsilp
Mr. Sunthorn Puangchinda

Ph.D. (Electrical Engineering)
M.Sc. (Computer Science)
Dip.Computer Application (Computer)
M.S. (Applied Statistics)
M.Eng. (Structural Engineering)
M.B.A. (Operation Management)
M.Sc.(Management Information Systems)
M.Ed.(Higher Education Administration)
M.B.A. (Marketing)
M.Eng. (Electrical Engineering)
M.S. (Applied Computer Science and
Technology Telecommunications)
M.Eng.(Information Technology)
Diploma(Applied Information System)
Master of Information Communication
Technology
Master of Information and Technology
M.Sc. (Information Science)
Master of Information System



56

Program Structures

Bachelor of Science Program in Information Technology

1. Program Title : Bachelor of Science Program in Information Technology

2. Degree

Full Title : Bachelor of Science (Information Technology)

Abbreviation : B.S. (Information Technology)

3. Total Credit Hours **130 Credits**

4. Program Structure

4.1 General Education Courses **31 Credits**

4.2 Specific Requirement Courses **93 Credits**

4.2.1 Core Courses 35 Credit

4.2.2 Major Required Courses 46 Credit

4.2.3 Major Elective Courses 12 Credit

4.3 Free Elective Courses **6 Credits**

5. List of Courses

5.1 General Education Courses **31 Credits**

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1001101	Man and Society	2 (2-0)
1001102	Environment and Development	2 (2-0)
1001103	Thai Language Skills	2 (2-0)
1001111	Cultural Studies	2 (2-0)
1001112	Logical Thinking	2 (1-2)
1001121	Recreation and Sport for Well-Being	1 (0-2)
1001122	Personal and Community Health	2 (2-0)
1001131	World Community	2 (2-0)
1006103	English 1	3 (3-0)
1006104	English 2	3 (3-0)
1006205	English for Science and Technology 1	3 (3-0)

Prerequisite : 1006104



57

Mae Fah Luang University



Course Code	Course Title	Credit Hours (Lec. - Lab.)
1006206	English for Science and Technology 2	3 (3-0)
	Prerequisite : 1006205	
1203141	Organization and Management	2 (2-0)
1301103	Information Technology Concepts	2 (2-0)

5.2 Core Courses**35 Credits**

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1102100	Principles of Chemistry	3 (2-3)
1104100	Principles of Physics	3 (2-3)
1106103	Mathematics 1	3 (3-0)
1106104	Mathematics 2	3 (3-0)
	Prerequisite : 1106103	
1106111	Mathematical Logic and Proof Techniques	2 (2-0)
1106211	Discrete Mathematics	3 (3-0)
	Prerequisite : 1106102 or 1106104	
1106281	Probability and Statistics	3 (3-0)
1201111	Principles of Accounting	3(3-0)
1202111	Introduction to Economics and Business	3 (3-0)
1203211	Principles of Business and Finance	3 (3-0)
1302111	Computer Programming 1	3 (2-2)
1302211	Computer Programming 2	3 (2-2)
	Prerequisite : 1302111	

5.3 Major Required Courses**46 Credits**

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1202241	International Economics	3 (3-0)
	Prerequisite : 1202111 or 1202112 and 1202113	
1203302	Feasibility Study and Project Evaluation	3 (3-0)
1203371	Business System Design	3 (3-0)
	Prerequisite : 1201111	
1301211	Information Technology Marketing Management	3 (3-0)
1301221	Analysis and Design	3 (3-0)

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1301311	Principles and Practice of Electronic	3 (3-0)
1301312	Industrial Management	3 (3-0)
1301341	Office Automation Management	3 (2-2)
1301351	Computer and Information Networks	3 (2-2)
1301361	Business Modeling and Simulation	3 (3-0)
	Prerequisite : 1106281 and 1202111	
1301381	Introduction to Multimedia Technology	3 (2-2)
1301391	Senior Project 1	1 (0-3)
1301471	Information Technology Policy and Law	3 (3-0)
1301491	Seminar	1 (0-3)
1301492	Senior Project 2	2 (0-6)
	Prerequisite : 1301391	
1301493	Cooperative Training	3 (0-9)
1302331	Database Systems 1	3 (2-2)

5.4 Major Elective Courses

12 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1301281	Human and Information Technology Interaction	3 (3-0)
1301331	Information Retrieval	3 (2-2)
	Prerequisite : 1302211	
1301342	Management Information Systems	3 (3-0)
1301343	Decision Support Systems	3 (3-0)
1301352	Information Security	3 (3-0)
1302241	Operation Systems	3 (3-0)
1302311	Object-Oriented Programming	3 (2-2)
	Prerequisite : 1302111	
1302323	Software Engineering 1	3 (3-0)
1302332	Database Systems 2	3 (2-2)
	Prerequisite : 1302331	



Course Code	Course Title	Credit Hours (Lec. - Lab.)
1302341	Computer Networks and Data Communications	3 (2-2)
1302361	Introduction to Artificial Intelligence	3 (3-0)

5.5 Free Elective Courses

6 Credits



Program Structures

Bachelor of Science Program in Computer Sciences

1. Program Title : Bachelor of Science Program in Computer Sciences

2. Degree

Full Title : Bachelor of Science (Computer Sciences)

Abbreviation : B.S. (Computer Sciences)

3. Total Credit Hours 130 Credits

4. Program Structure

4.1 General Education Courses 31 Credits

4.2 Specific Requirement Courses 93 Credits

4.2.1 Core Courses 32 Credits

4.2.2 Major Required Courses 49 Credits

4.2.3 Major Elective Courses 12 Credits

4.3 Free Elective Courses 6 Credits

5. List of Courses

5.1 General Education Courses 31 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1001101	Man and Society	2 (2-0)
1001102	Environment and Development	2 (2-0)
1001103	Thai Language Skills	2 (2-0)
1001111	Cultural Studies	2 (2-0)
1001112	Logical Thinking	2 (1-2)
1001121	Recreation and Sport for Well-Being	1 (0-2)
1001122	Personal and Community Health	2 (2-0)
1001131	World Community	2 (2-0)
1006103	English 1	3 (3-0)
1006104	English 2	3 (3-0)
1006205	English for Science and Technology 1	3 (3-0)

Prerequisite : 1006104





Course Code	Course Title	Credit Hours (Lec. - Lab.)
1006206	English for Science and Technology 2	3 (3-0)
	Prerequisite : 1006205	
1301103	Information Technology Concepts	2 (2-0)

5.2 Core Courses**32 Credits**

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1102100	Principles of Chemistry	3 (2-3)
1103100	Principles of Biology	3 (2-3)
1104100	Principles of Physics	3 (2-3)
1106103	Mathematics 1	3 (3-0)
1106104	Mathematics 2	3 (3-0)
	Prerequisite : 1106103	
1106111	Mathematical Logic and Proof Techniques	2 (2-0)
1106211	Discrete Mathematics	3 (3-0)
	Prerequisite : 1106102 or 1106104	
1106221	Linear Algebra	3 (3-0)
1106281	Probability and Statistics	3 (3-0)
1106331	Numerical Methods	3 (3-0)
	Prerequisite : 1106104	
1202111	Introduction to Economics and Business	3 (3-0)

5.3 Major Required Courses**49 Credits**

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1301221	System Analysis and Design	3 (3-0)
1301351	Computer and Information Networks	3 (2-2)
1301391	Senior Project 1	1 (0-3)
1301491	Seminar	1 (0-3)
1301492	Senior Project 2	2 (0-6)
	Prerequisite : 1301391	
1301493	Cooperative Training	3 (0-9)
1301912	Human and Information Technology Interaction	3 (3-0)

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1302111	Computer Programming 1	3 (2-2)
1302211	Computer Programming 2	3 (2-2)
	Prerequisite : 1302111	
1302241	Operation Systems	3 (3-0)
1302251	Data Structures and Algorithms	3 (3-0)
1302271	Computer Architecture	3 (3-0)
1302322	Compiler Design and Programming Languages	3 (2-2)
1302311	Object - Oriented Programming	3 (2-2)
	Prerequisite : 1302111	
1302323	Software Engineering 1	3 (3-0)
1302331	Database Systems 1	3 (2-2)
1302381	Computer Graphics	3 (2-2)
	Prerequisite : 1106102 and 1302211	
1302412	Theory of Computation	3 (3-0)

5.4 Major Elective Courses**12 Credits**

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1203301	Project Feasibility Study and Management	3 (3-0)
1301311	Principles and International Practice in Electronic Commerce	3 (3-0)
1301331	Information Retrieval	3 (2-2)
	Prerequisite : 1302211	
1301342	Management Information Systems	3 (3-0)
1301381	Introduction to Multimedia Technology	3 (2-2)
1301471	Information Technology Policy and Law	3 (3-0)
1302321	Object - Oriented Design and Analysis	3 (2-2)
	Prerequisite : 1302311	
1302332	Database Systems 2	3 (2-2)
	Prerequisite : 1302331	
1302341	Computer Networks and Data Communications	3 (2-2)





Course Code	Course Title	Credit Hours (Lec. - Lab.)
1302342	Network Operation and Administration	3 (2-2)
	Prerequisite : 1302341	
1302343	Distributed Systems	3 (3-0)
	Prerequisite : 1302344	
1302361	Introduction to Artificial Intelligence	3 (3-0)
1302421	Software Engineering 2	3 (3-0)
	Prerequisite : 1302323	
1501342	Advanced Computer Networks	3 (2-2)
	Prerequisite : 1302341	
1501343	High Speed Computer Networks	3 (3-0)
	Prerequisite : 1302341	
1501344	Network System Security	3 (3-0)
	Prerequisite : 1302341	
1501362	Introduction to Natural Language Processing	3 (3-0)
1501363	Pattern Recognition and Vision	3 (3-0)
1501364	Image Processing	3 (3-0)
1501366	Neural Network	3 (3-0)
1501373	Advanced Computer Architecture	3 (3-0)
	Prerequisite : 1302271	
1501381	Computer Aided Design and Manufacturing	3 (2-2)
1502321	Network Operating Systems	3 (3-0)
	Prerequisite : 1302241 and 1302341	

5.5 Free Elective Courses**6 Credits**

Program Structures

Bachelor of Engineering Program in Computer Engineering

1. Program Title : Bachelor of Engineering Program in Computer Engineering

2. Degree

Full Title : Bachelor of Engineering (Computer Engineering)

Abbreviation : B.Eng. (Computer Engineering)

3. Total Credits Hours 130 Credits

4. Program Structure

4.1 General Education Courses 31 Credits

4.2 Specific Requirement Courses 93 Credits

4.2.1 Core Courses 27 Credits

4.2.2 Major Required Courses 45 Credits

4.2.3 Major Elective Courses 21 Credits

4.3 Free Elective Courses 6 Credits

5. List of Courses

5.1 General Education Courses 31 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1001101	Man and Society	2 (2-0)
1001102	Environment and Development	2 (2-0)
1001103	Thai Language Skills	2 (2-0)
1001111	Cultural Studies	2 (2-0)
1001112	Logical Thinking	2 (1-2)
1001121	Recreation and Sport for Well-Being	1 (0-2)
1001131	World Community	2 (2-0)
1006103	English 1	3 (3-0)
1006104	English 2	3 (3-0)
1006205	English for Science and Technology 1	3 (3-0)

Prerequisite :1006104



65

Mae Fah Luang University



5.2 Core Courses		27 Credits	
Course Code	Course Title	Credit Hours (Lec. - Lab.)	
1006206	English for Science and Technology 2	3 (3-0)	
1102100	Principles of Chemistry	3 (2-3)	
1103100	Principles of Biology	3 (2-3)	
Prerequisite :1006205			
1104101	General Physics I	3 (2-3)	
1104102	General Physics 2	3 (2-3)	
Prerequisite : 1104101			
1106103	Mathematics 1	3 (3-0)	
1106104	Mathematics 2	3 (3-0)	
Prerequisite : 1106103			
1106201	Mathematics 3	3 (3-0)	
Prerequisite : 1106104			
1106211	Discrete Mathematics	3 (3-0)	
Prerequisite : 1106102 or 1106104			
1106281	Probability and Statistics	3 (3-0)	
1106331	Numerical Methods	3 (3-0)	
Prerequisite : 1106104			
1403202	Engineering Drawing	1 (0-3)	
1501101	Basic Information and Communication Technology	1 (0-3)	
Laboratory 1			
1501102	Basic Information and Communication Technology	1 (0-3)	
Laboratory 2			
Prerequisite :1501101			
5.3 Major Required Courses		45 Credits	
Course Code	Course Title	Credit Hours (Lec. - Lab.)	
1302111	Computer Programming I	3 (2-2)	
1302241	Operating Systems	3 (3-0)	

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1302251	Data Structures and Algorithms	3 (3-0)
1302271	Computer Architecture	3 (3-0)
1302311	Object Oriented Programming	3 (2-2)
	Prerequisite : 1302111	
1302323	Software Engineering 1	3 (3-0)
1302331	Database Systems 1	3 (2-2)
1302341	Computer Networks and Data Communications	3 (2-2)
1501103	Electric Circuit Analysis	3 (3-0)
1501104	Fundamental Electronics	3 (3-0)
1501171	Digital Circuit and Logic Design	3 (3-0)
1501271	Microprocessor and Assembly language	3 (2-3)
	Prerequisite : 1501171	
1501391	Senior Project 1	1 (0-3)
1501491	Senior Project 2	2 (0-6)
1501492	Seminar in Computer Engineering	1 (0-3)
1502232	Measurements and Instrumentations in Communication Systems	2 (1-3)
1502493	Cooperative Training	3 (0-9)

5.4 Major Elective Courses

21 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1301221	Systems Analysis and Design	3 (3-0)
1301331	Information Retrieval	3 (2-2)
	Prerequisite : 1302211	
1301343	Decision Support Systems	3 (3-0)
1301471	Information Technology Policy and Law	3 (3-0)
1302321	Object-Oriented Design and Analysis	3 (2-2)
	Prerequisite : 1302311	
1302322	Compiler Design and Programming Languages	3 (2-2)
	Prerequisite : 1302211	





Course Code	Course Title	Credit Hours (Lec. - Lab.)
1302332	Database Systems 2	3 (2-2)
	Prerequisite : 1302331	
1302343	Distributed Systems	3 (3-0)
	Prerequisite : 1302344	
1302361	Introduction to Artificial Intelligence	3 (3-0)
1302381	Computer Graphics	3 (2-2)
	Prerequisite : 1106102 and 1302211	
1302421	Software Engineering 2	3 (3-0)
	Prerequisite : 1302323	
1302461	Theory of Computation	3 (3-0)
1501311	Parallel Programming	3 (2-2)
	Prerequisite : 1302111	
1501341	Network System Programming	3 (2-2)
	Prerequisite : 1302341	
1501342	Advanced Computer Networks	3 (2-2)
	Prerequisite : 1302341	
1501343	High Speed Computer Networks	3 (3-0)
	Prerequisite : 1302341	
1501344	Network System Security	3 (3-0)
	Prerequisite : 1302341	
1501361	Expert System	3 (3-0)
	Prerequisite : 1302361	
1501362	Introduction to Natural Language Processing	3 (3-0)
1501363	Pattern Recognition and Vision	3 (3-0)
1501364	Image Processing	3 (3-0)
1501365	Machine Learning	3 (3-0)
1501366	Neural Network	3 (3-0)
1501371	Microprocessor Applications	3 (2-3)
	Prerequisite : 1501271	

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1501372	Advanced Digital System Design	3 (2-3)
	Prerequisite : 1501171	
1501373	Advanced Computer Architecture	3 (3-0)
	Prerequisite : 1302271	
1501374	VLSI System Architecture and Design	3 (2-3)
	Prerequisite : 1501104 and 1501171	
1501381	Computer Aided Design and Manufacturing	3 (2-2)
1501382	Internet Programming Applications	3 (2-2)
	Prerequisite : 1302111	
1501481	Robotics	3 (2-3)
1501494	Selected Topics in Computer Engineering 1	3 (3-0)
1501495	Selected Topics in Computer Engineering 2	3 (3-0)
1502321	Network Operating Systems	3 (3-0)
	Prerequisite :1302241 and 1302341	

5.5 Free Elective Courses

6 Credits



Program Structures

Bachelor of Engineering Program in Information and Communication Technology

1. Program Title : Bachelor of Engineering Program in Information and Communication Technology

2. Degree

Full Title : Bachelor of Engineering (Information and Communication Technology)

Abbreviation : B.Eng. (Information and Communication Technology)

3. Total Credit Hours 131 Credits

4. Program Structure

- 4.1 General Education Courses 31 Credits

- 4.2 Specific Requirement Courses 94 Credits

4.2.1 Core Courses 27 Credits

4.2.2 Major Required Courses 58 Credits

4.2.3 Major Elective Courses 9 Credits

- 4.3 Free Elective Courses 6 Credits

5. List of Courses

- 5.1 General Education Courses 31 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1001101	Man and Society	2 (2-0)
1001102	Environment and Development	2 (2-0)
1001103	Thai Language Skills	2 (2-0)
1001111	Cultural Studies	2 (2-0)
1001112	Logical Thinking	2 (1-2)
1001121	Recreation and Sport for Well-Being	1 (0-2)
1001131	World Community	2 (2-0)
1006103	English 1	3 (3-0)
1006104	English 2	3 (3-0)



Course Code	Course Title	Credit Hours (Lec. - Lab.)
1006205	English for Science and Technology 1 Prerequisite : 1006104	3 (3-0)
1006206	English for Science and Technology 2 Prerequisite : 1006205	3 (3-0)
1102100	Principles of Chemistry	3 (2-3)
1103100	Principles of Biology	3 (2-3)

5.2 Core Courses**27 Credits**

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1104101	General Physics 1	3 (2-3)
1104102	General Physics 2 Prerequisite : 1104101	3 (2-3)
1106103	Mathematics 1	3 (3-0)
1106104	Mathematics 2 Prerequisite : 1106103	3 (3-0)
1106201	Mathematics 3 Prerequisite : 1006104	3 (3-0)
1106211	Discrete Mathematics Prerequisite : 1106102, 1106104	3 (3-0)
1106281	Probability and Statistics	3 (3-0)
1106331	Numerical Methods Prerequisite : 1106104	3 (3-0)
1403202	Engineering Drawing	1 (0-3)
1501101	Basic Information and Communication Technology Laboratory 1	1 (0-3)
1501102	Basic Information and Communication 2 Technology Laboratory 2 Prerequisite : 1501101	1 (0-3)



**5.3 Major Required Courses****58 Credits**

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1302111	Computer Programming 1	3 (2-2)
1302241	Operation Systems	3 (3-0)
1302251	Data Structures and Algorithms	3 (3-0)
1302271	Computer Architecture	3 (3-0)
1302331	Database Systems 1	3 (2-2)
1302341	Computer Networks and Data Communications	3 (2-2)
1501103	Electric Circuit Analysis	3 (3-0)
1501104	Fundamental Electronics	3 (3-0)
1501171	Digital Circuit and Logic Design	3 (3-0)
1501341	Network System Programming	3 (2-2)
	Prerequisite : 1302341	
1502231	Principles of Communication	3 (3-0)
1502232	Measurements and Instrumentations in	2 (1-3)
	Communication Systems	
1502241	Web Design	1 (0-2)
1502311	Information Theory and Coding	3 (3-0)
1502321	Network Operating Systems	3 (3-0)
	Prerequisite : 1302241 and 1302341	
1502391	Senior Project 1	1 (0-3)
1502431	Communication System Design	3 (3-0)
1502432	Digital Signal Processing	3 (3-0)
1502451	Introduction to Parallel Processing	3 (3-0)
1502491	Seminar	1 (0-3)
1502492	Senior Project 2	2 (0-6)
1502493	Cooperative Training	3 (0-9)

5.4 Major Elective Courses**9 Credits**

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1301331	Information Retrieval	3 (2-2)
	Prerequisite : 1302211	

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1301342	Management Information Systems	3 (3-0)
1301343	Decision Support Systems	3 (3-0)
1301471	Information Technology Policy and Law	3 (3-0)
1302323	Software Engineering 1	3 (3-0)
1302342	Network Operations and Administration	3 (2-2)
	Prerequisite : 1302341	
1302361	Introduction to Artificial Intelligence	3 (3-0)
1302381	Computer Graphics	3 (2-2)
	Prerequisite : 1106102, 1302211	
1501271	Microprocessor and Assembly Language	3 (2-3)
	Prerequisite : 1501171	
1501343	High Speed Computer Networks	3 (3-0)
	Prerequisite : 1302341	
1501344	Network System Security	3 (3-0)
	Prerequisite : 1302341	
1501362	Introduction to Natural Language Processing	3 (3-0)
1501364	Image Processing	3 (3-0)
1501382	Internet Programming Applications	3 (2-2)
	Prerequisite : 1302111	
1502312	Cryptography	3 (3-0)
1502331	Optical Communications	3 (3-0)
1502332	Communication Electronics	3 (3-0)
1502494	Selected Topics in Information and Communication Technology 1	3 (3-0)
1502495	Selected Topics in Information and Communication Technology 2	3 (3-0)
	Prerequisite : 1502494	



School of Agro-Industry

© *Food Technology*

© *Postharvest Technology and Package*

SCHOOL OF AGRO-INDUSTRY

Programs of Study Offered

DEGREE : Bachelor of Science Program in Food Technology
Beachelor of Science Program in Postharvest Technology

Academic Staff

Asst. Prof.Lakkana Rujanakraikarn	M.Sc.(Food Technology)
Miss Sailom Sampanvejsobha	Ph.D.(Chemical Engineering)
	M.App.Sc.(Food Engineering)
	M.Sc.(Food Sciences)
Miss Chutamat Niwat	M.Sc.(Food Sciences)
Miss Niramol Punbusayakul	M.Sc.(Food Sciences)
Miss Matchima Naradisorn	M.Agr.(Plant Pathology)
Mr. Weera Awikunprasert	M.Eng.(Food Engineering)
Miss Nattaya Konsue	M.Sc.(Food Science and Technology)
Mr. Pisist Kumnorkaew	M.Eng.(Chemical Engineering)
Miss Niramon Suntipabvivattana	M.Sc. (Postharvest Technology)
Miss Wantida Homthawornchoo	M.Eng.(Chemical Engineering)
Miss Nettra Somboonkaew	M.Sc.(Postharvest Technology)
Miss Piyaporn Muangprasit	M.Sc.(Product Development)



Program Structures

Bachelor of Science Program in Food Technology

1. Program Title : Bachelor of Science Program in Food Technology

2. Degree

Full Title : Bachelor of Science (Food Technology)

Abbreviation : B.S. (Food Technology)

3. Total Credit Hours 131 Credits

4. Program Structure

4.1 General Education Courses 31 Credits

4.2 Specific Requirement Courses 94 Credits

4.2.1 Core Courses 39 Credits

4.2.2 Major Required Courses 49 Credits

4.2.3 Major Elective Courses 6 Credits

4.3 Free Elective Courses 6 Credits

5. List of Courses

5.1 General Education Courses 31 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1001102	Environment and Development	2 (2-0)
1001103	Thai Language Skills	2 (2-0)
1001111	Cultural Studies	2 (2-0)
1001112	Logical Thinking	2 (1-2)
1001121	Recreation and Sport for Well-Being	1 (0-2)
1001122	Personal and Community Health	2 (2-0)
1001131	World Community	2 (2-0)
1006103	English 1	3 (3-0)
1006104	English 2	3 (3-0)
1006205	English for Science and Technology 1	3 (3-0)
	Prerequisite : 1006104	
1006206	English for Science and Technology 2	3 (3-0)
	Prerequisite : 1006205	





Course Code	Course Title	Credit Hours (Lec. - Lab.)
1203141	Organization and Management	2 (2-0)
1301102	Information Technology 2	2 (1-2)
	Prerequisite : 1301101	

5.2 Core Courses**39 Credits**

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1102101	General Chemistry 1	3 (2-3)
1102102	General Chemistry 2	3 (2-3)
	Prerequisite : 1102101	
1102210	Principles of Analytical Chemistry	3 (2-3)
	Prerequisite : 1102101	
1102220	Principles of Physical Chemistry	2 (2-0)
	Prerequisite : 1102102	
1102230	Principles of Organic Chemistry	3 (2-3)
	Prerequisite : 1102102	
1102250	Principles of Biochemistry	3 (2-3)
	Prerequisite : 1102102 and 1103102	
1103101	General Biology 1	3 (2-3)
1103102	General Biology 2	3 (2-3)
	Prerequisite : 1103101	
1103211	Microbiology	4 (3-3)
	Prerequisite : 1103102	
1104100	Principles of Physics	3 (2-3)
1106103	Mathematics 1	3 (3-0)
1106104	Mathematics 2	3 (3-0)
	Prerequisite : 1106103	
1106282	Statistics and Experimental Design	3 (3-0)

5.3 Major Required Courses**49 Credits**

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1202101	Introduction to Economics and Business	3 (3-0)

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1401101	Introduction to Food Technology	1 (1-0)
1401202	Food Processing 1	3 (2-3)
1401303	Food Processing 2	3 (2-3)
1401341	Food Quality Assurance	3 (2-3)
	Prerequisite : 1401202	
1401342	Food Plant Sanitation and Food Safety	3 (2-3)
	Prerequisite : 1401202	
1401497	Seminar	1 (0-3)
1401498	Special Problem	3 (0-9)
1401499	Cooperative Training	3 (0-9)
1402212	Food Microbiology	3 (2-3)
1402302	Food and Nutrition	2 (2-0)
	Prerequisite : 1102250	
1402321	Food Chemistry	3 (2-3)
	Prerequisite : 1102250	
1402322	Food Analysis	3 (2-3)
1403201	Food Engineering	3 (2-3)
	Prerequisite :(1104102 and 1106102) or (1104100 and 1106104)	
1403261	Engineering Drawing	1 (0-3)
1403333	Food Process Engineering	3 (2-3)
1403434	Instrument and Process Control	3 (2-3)
1403441	Process Design	3 (2-3)
1406201	Principles of Packaging	2 (2-0)

5.4 Major Elective Courses

6 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1401431	Fruit and Vegetable Technology	3 (2-3)
	Prerequisite : 1401202 or 1401102	
1401432	Technology of Meat and Egg Products	3 (2-3)
	Prerequisite : 1401202 or 1401102	
1401433	Dairy Products Technology	3 (2-3)
	Prerequisite : 1401202 or 1401102	





Course Code	Course Title	Credit Hours (Lec. - Lab.)
1401434	Bakery Technology Prerequisite : 1401202 or 1401102	3 (2-3)
1401435	Technology of Cereal Products Prerequisite : 1401202 or 1401102	3 (2-3)
1401436	Beverage Technology Prerequisite : 1401202 or 1401102	3 (2-3)
1401437	Confectionery of Technology Prerequisite : 1401202 or 1401102	3 (2-3)
1401438	Fermented Food Technology Prerequisite : 1401202 or 1401102	3 (2-3)
1402343	Waste Treatment and Utilization Prerequisite : 1401202 or 1401102	3 (2-3)
1403251	Physical Properties of Biomaterials	3 (2-3)
1404301	Food Product Development and Marketing Prerequisite : 1401202 or (1202111 and 1401301)	3 (2-3)
1405430	Technology of Post-Harvest	3 (2-3)
1405432	Minimally Processed Fruit and Vegetables Prerequisite : (1405102 and 1405211) or 1405430	3 (2-3)
1405433	Horticultural Crops for Industry Prerequisite : (1405102 and 1405211) or 1405430	3 (3-0)
1406251	Packaging Materials 1 Prerequisite :1406201	3 (3-0)
1406361	Packaging Design Prerequisite : 1403202 and 1406251	3 (2-3)
1406421	Packaging in Food Industry Prerequisite :1406201	3 (2-3)
1406455	Natural Materials for Packaging Prerequisite :1406201	3 (2-3)

5.5 Free Elective Courses**6 Credits**

Program Structures

Bachelor of Science Program in Postharvest Technology and Package

1. Program Title : Bachelor of Science Program in Postharvest Technology and Package

2. Degree

Full Title : Bachelor of Science (Postharvest Technology and Package)

Abbreviation : B.Sc. (Postharvest Technology and Package)

3. Total Credit Hours 133 Credits

4. Program Structure

4.1 General Education Courses 32 Credits

4.2 Specific Requirement Courses 95 Credits

4.2.1 Core Courses 44 Credits

4.2.2 Major Required Courses 42 Credits

4.2.3 Major Elective Courses 9 Credits

4.3 Free Elective Courses 6 Credits

5. List of Courses

5.1 General Education Courses 32 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1001102	Environment and Development	2 (2-0)
1001103	Thai Language Skills	2 (2-0)
1001111	Cultural Studies	2 (2-0)
1001112	Logical Thinking	2 (1-2)
1001121	Recreation and Sport for Well-Being	1 (0-2)
1001131	World Community	2 (2-0)
1001141	General Psychology	3 (3-0)
1006103	English 1	3 (3-0)
1006104	English 2	3 (3-0)
1006205	English for Science and Technology 1	3 (3-0)

Prerequisite : 1006104





Course Code	Course Title	Credit Hours (Lec. - Lab.)
1006206	English for Science and Technology 2	3 (3-0)
	Prerequisite : 1006205	
1203141	Organization and Management	2 (2-0)
1301101	Information Technology 1	2 (1-2)
1301102	Information Technology 2	2 (1-2)
	Prerequisite : 1301101	

5.2 Core Courses

44 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1102101	General Chemistry 1	3 (2-3)
1102102	General Chemistry 2	3 (2-3)
	Prerequisite : 1102101	
1102230	Principles of Organic Chemistry	3 (2-3)
	Prerequisite : 1102102	
1102250	Principles of Biochemistry	3 (2-3)
	Prerequisite : 1102102 and 1103102	
1103101	General Biology 1	3 (2-3)
1103102	General Biology 2	3 (2-3)
	Prerequisite : 1103101	
1103211	Microbiology	4 (3-3)
	Prerequisite : 1103102	
1103231	Plant Physiology	3 (2-3)
	Prerequisite : 1103102	
1104100	Principles of Physics	3 (2-3)
1105361	Plant Biochemistry	4 (3-3)
	Prerequisite : 1102250	
1106103	Mathematics 1	3 (3-0)
1106104	Mathematics 2	3 (3-0)
	Prerequisite : 1106103	
1106282	Statistics and Experimental Design	3 (3-0)
1405101	Principles of Crop Produces	3 (3-0)

5.3 Major Required Courses

42 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1202111	Introduction to Economics and Business	3 (3-0)
1403202	Engineering Drawing	1 (0-3)
1405102	Introduction to Postharvest Technology	2 (2-0)
	Prerequisite : 1405101	
1405211	Postharvest Physiology of Horticultural Crops	3 (2-3)
	Prerequisite : 1103231	
1405312	Postharvest Diseases and Insect Pests	3 (2-3)
	Prerequisite : 1103211	
1405332	Management of Quality System of Horticultural Produce	2 (2-0)
	Prerequisite : 1405101 or 1405102	
1405333	Postharvest Handling of Horticultural Crops	4 (3-3)
	Prerequisite : 1405102	
1405496	Seminar	1 (0-3)
1405497	Special Problem Proposal	1 (0-3)
1405498	Special Problem	3 (0-9)
1405499	Cooperative Training	3 (0-9)
1406201	Principles of Packaging	2 (2-0)
1406251	Packaging Materials 1	3 (3-0)
	Prerequisite : 1406201	
1406252	Packaging Materials 2	2 (2-0)
	Prerequisite : 1406251	
1406353	Packaging Systems and Testing	3 (2-3)
	Prerequisite : 1406251	
1406354	Dynamics of Packaging	3 (2-3)
	Prerequisite : 1406251	
1406361	Packaging Design	3 (2-3)
	Prerequisite : 1406251 and 1406251	



**5.4 Major Elective Courses****9 Credits**

Course Code	Course Title	Credit	Hours (Lec. - Lab.)
1203121	Principles of Marketing	3	(3-0)
1203131	Principles of Business	2	(2-0)
1203242	Human Resources Management	3	(3-0)
1203253	Production and Operations Management	3	(3-0)
1203332	Business Venture and Entrepreneurship Prerequisite : 1203141	3	(3-0)
1203342	Business Psychology	3	(3-0)
1203362	International Business Management Prerequisite : 1203141	3	(3-0)
1401102	Fundamental Food Technology Prerequisite : 1103211	3	(3-0)
1401332	Technology of Fruit and Vegetable Products Prerequisite : 1401201 or 1401102	3	(2-3)
1401335	Technology of Bakery Products Prerequisite : 1401201 or 1401102	3	(2-3)
1401339	Technology of Food Fermentation Prerequisite : 1401201 or 1401102	3	(2-3)
1402211	Food Microbiology Prerequisite : 1103211	3	(2-3)
1402341	Food Plant Sanitation & Environment Prerequisite : 1401201 or 1401102	3	(2-3)
1402342	Waste Treatment and Utilization Prerequisite : 1401201 or 1401102	3	(2-3)
1403203	Physical Properties of Biomaterials	3	(2-3)
1404302	Food Quality control and Assurance Prerequisite : 1401201 or 1401102	3	(2-3)
1405334	Postharvest Technology of Field Crops Prerequisite : 1405333	3	(2-3)

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1405403	Plant Growth Regulators Prerequisite : 1103231	3 (2-3)
1405432	Minimally Processed Fruit and Vegetables Prerequisite : 1405102 and 1405211 or 1405430	3 (2-3)
1405433	Horticultural Crops for Industry Prerequisite : 1405102 and 1405211 or 1405430	3 (3-0)
1406421	Packaging in Food Industry Prerequisite : 1406201	3 (2-3)
1406431	Package Printing Prerequisite : 1406353	3 (2-3)
1406441	Packaging Economics Prerequisite : 1202101 and 1406201	3 (3-0)
1406442	Packaging for Transportation Prerequisite : 1406354	3 (2-3)
1406454	Natural Materials for Packaging Prerequisite : 1406201	3 (2-3)

5.5 Free Elective Courses

6 Credits



85

Mae Fah Luang University

School of Law

Laws Program

SCHOOL OF LAW

Programs of Study Offered

DEGREE : Bachelor of Laws

Academic Staff

Assoc.Prof. Chalor Wongwattanapilu	Docteur en Droit
	LL.B.
Asst.Prof. Arthasit Chuensa-nguan	LL.M
Mr. Pisith Kuntatip	LL.M.
Mr.Woravut Leelavethapong	LL.M.
Mr.Chukeat Noichim	LL.M
Mr.Somchai Thamsutiwat	LL.M.
Mr. Natthakorn Wititanon	M.A.



88

Program Structures

Bachelor of Laws Program

1. Program Title : Bachelor of Laws Program

2. Degree

Full Title : Bachelor of Laws

Abbreviation : LL.B.

3. Total Credit Hours 143 Credits

4. Program Structure

4.1 General Education Courses 31 Credits

4.2 Prerequisite : Specific Requirement Courses 106 Credits

4.2.1 Core Courses 92 Credits

4.2.2 Major Elective Courses 14 Credits

4.3 Free Elective Courses 6 Credits

5. List of Courses

5.1 General Education Courses 31 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1001101	Man and Society	2 (2-0)
1001103	Thai Language Skills	2 (2-0)
1001112	Logical Thinking	2 (1-2)
1001132	Politics and Governments	3 (3-0)
1001141	General Psychology	3 (3-0)
1006103	English 1	3 (3-0)
1006104	English 2	3 (3-0)
1006207	English for Business and Technology 1	3 (3-0)
	Prerequisite : 1006104	
1006208	English for Business and Technology 2	3 (3-0)
	Prerequisite : 1006207	
1202111	Introduction to Economics and Business	3 (3-0)
1301101	Information Technology 1	2 (1-2)





Course Code	Course Title	Credit Hours (Lec. - Lab.)
1301102	Information Technology 2	2 (1-2)
	Prerequisite : 1301101	

5.2 Core Courses

92 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1601101	Introduction to Legal Principles	3 (3-0)
1601202	Legal Interpretation and Legal Reasoning	2 (2-0)
1601403	Thai and Foreign Legal System	2 (2-0)
1601407	Legal Philosophy	2 (2-0)
1601411	Legal Profession	2 (2-0)
1602101	Law of Persons	2 (2-0)
1602102	Property Law	3 (0-0)
1602203	Law of Juristic Acts and Contracts	4 (4-0)
1602204	Law of Obligations	4 (4-0)
1602205	Law of Delicts	3 (0-0)
1602206	Specific Contracts 1 : (Sales, Exchange, Gift, Hire, Hire-purchase and Hire of Work)	3 (3-0)
1602208	Law of Insurance	2 (2-0)
1602209	Law of Suretyships and Mortgage	2 (2-0)
1602307	Specific Contracts 2 : Agency, Brokers, Credit, Deposits, Compromise and Settlement	3 (3-0)
	Prerequisite : 1602206	
1602310	Law of Negotiable Instruments and Current Accounts	3 (3-0)
1602311	Family Law	3 (3-0)
1602312	Law of Succession	3 (3-0)
1602313	Law of Partnerships and Companies	3 (3-0)
1602414	Law of Intellectual Property	3 (3-0)
1603101	Criminal Law 1 : General Principles	3 (3-0)
1603202	Criminal Law 2 : Offenses	4 (4-0)
	Prerequisite : 1603101	
1604101	Constitutional Law	3 (3-0)

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1604202	Administrative Law	3 (3-0)
1604407	Labor and Social Security Laws	2 (2-0)
1604409	Taxation Law	3 (3-0)
1605401	Public International Law	3 (3-0)
1605402	Private International Law	3 (3-0)
1606301	Judicial System and Constitution of Courts of Justice	2 (2-0)
1606302	Law of Civil Procedure 1	3 (3-0)
1606303	Law of Civil Procedure 2	3 (3-0)
	Prerequisite : 1606302	
1606304	Criminal Procedure Law	3 (3-0)
1606305	Bankruptcy Law	3 (3-0)
1606307	Law of Evidence	2 (2-0)

5.3 Major Elective Courses

14 Credits

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1601404	Accounting for Lawyers	2 (2-0)
1601405	English for Lawyers 1	2 (2-0)
1601406	English for Lawyers 2	2 (2-0)
	Prerequisite : 1601405	
1601409	Principles of Islamic Law and Use of Islamic Law in Thailand	2 (2-0)
1601410	Law and Ethics of Mass Communication	2 (2-0)
1602415	Law of Securities Exchange	2 (2-0)
1602416	Settlement of Commercial Disputes and Arbitration	2 (2-0)
1602417	Principles of Contract Drafting	2 (2-0)
1602418	Real Estate Business Law	2 (2-0)
1602419	Competition Law	2 (2-0)
1602420	Seminar on Business Law	2 (2-0)
1602421	Seminar on Civil and Commercial Law	2 (2-0)
1602422	Land Law	2 (2-0)





Course Code	Course Title	Credit Hours (Lec. - Lab.)
1603403	Seminar on Criminal Law	2 (2-0)
1603404	Criminology and Penology	2 (2-0)
1603405	Business Crime	2 (2-0)
1604403	Administrative Court and Procedure	2 (2-0)
1604404	Administrative Procedure Law	2 (2-0)
1604405	State Contracts	2 (2-0)
1604406	Public Information Access and Rights of Privacy Law	2 (2-0)
1604408	Public Finance Law	2 (2-0)
1604410	Customs Law	2 (2-0)
1604411	Banking and Financial Institutions Law	2 (2-0)
1604412	Consumer Protection Law	2 (2-0)
1604413	Investment Law	2 (2-0)
1604414	Industrial Law	2 (2-0)
1604415	Environmental Law	2 (2-0)
1604416	Military Law and Laws on National Security	2 (2-0)
1604417	Seminar on Taxation Law	2 (2-0)
1605403	International Economic Law	2 (2-0)
1605404	International Trade Law	2 (2-0)
1605405	International Organization Law	2 (2-0)
1605406	European Union Law	2 (2-0)
1605407	ASEAN Law	2 (2-0)
1605408	Law of the Sea	2 (2-0)
1605409	Maritime Law	2 (2-0)
1605410	Air Law	2 (2-0)
1605411	Human Rights Law	2 (2-0)
1605412	International Criminal Law	2 (2-0)
1605413	Seminar on International Law	2 (2-0)
1606408	Seminar on Civil Procedure Law	2 (2-0)
1606409	Seminar on Criminal Procedure Law	2 (2-0)
1606410	Forensic Medicine	2 (2-0)

Course Code	Course Title	Credit Hours (Lec. - Lab.)
1606411	Criminal Investigation	2 (2-0)
1606412	Juvenile And Family Justice	2 (2-0)
1606413	Counseling and Advocacy	2 (2-0)
5.4	Free Elective Courses	6 Credits



COURSE DESCRIPTIONS

School of Liberal Arts

School of Science

School of Management

School of Information Technology

School of Agro-Industry

School of Law

Course Descriptions School of Liberal Arts

- | | | |
|----------------|---|---------------|
| 1001101 | <i>Man and Society</i>
Behavior and Role of Human in Relation to Natural and Social Environment | 2(2-0) |
| 1001102 | <i>Environment and Development</i>
Natural Resources and Environment as Affecting National Development and Quality of Life Social; Consciousness of Environment Problem; Social Awareness, Ethics and Decision Making on Environmental Problem Issues for Sustainable Development | 2(2-0) |
| 1001103 | <i>Thai Language Skills</i>
The Use of Contemporary Thai Language; Skill in Reading, Writing, Speaking and Listening for Developing Language Competency | 2(2-0) |
| 1001111 | <i>Cultural Studies</i>
Meaning and Concept of Culture; Geographical Background; Culture Areas, Ethnic Minorities, Characteristics of Thai Society and Culture, Assimilation and Acculturation in Thai Society | 2(2-0) |
| 1001112 | <i>Logical Thinking</i>
Thinking Process in Relation to Deductive and Inductive Reasoning, Creative Thinking and Language Expression Information Technology For Knowledge Acquisition | 2(1-2) |
| 1001113 | <i>Arts Appreciation</i>
Meaning, Concepts and Values of Aesthetics; Man in Relation to Arts Creativeness Including Visual Arts, Musics and Dramatics Arts; Form, Contents and Appreciation of Various | 3(3-0) |
| 1001115 | <i>Arts of Speech</i>
Principles and Arts of Speech in Various Studies; Speech Evaluation for Skill Development; Speech Training for Appropriateness and Social Norms in Different Situation | 3(3-0) |
| 1001116 | <i>Thai Language Writing Skill</i>
Fundamental Writing Skill for Composition, Article, Newsletter, Summary, Abstract Report, Correspondence and Pamphlet | 3(3-0) |
| 1001121 | <i>Recreation and Sport for Well-Being</i>
Introduction to Sport and Recreation; Testing of Physical Fitness; Selecting of Appropriate Methods of Exercise; Rule and Basic training of Certain Selected Sport, Recreational Activities and Exercises in Daily Life | 1(0-2) |
| 1001122 | <i>Personal and Community Health</i>
Health and Illness of Man and Community Factors Affecting Health Status; Healthy Life and Life and Life Style; Family Health Care; Health Care System; Community Health Prevention and Promotion | 2(2-0) |
| 1001131 | <i>World Community</i>
Key Actors in Current World Community; Economic Social and Political World Order, Relationships among Member of International Community; Globalization and Its Impacts on Asia and Thailand; Regional and Inter-Regional Cooperation, Relationship among ASEAN Member-State, Intra-Regional Relation, Particularly Northern Thailand and Its Neighbors | 2(2-0) |
| 1001132 | <i>Politics and Government</i>
Evolution of Political Theory and Administration; Structure of Political Systems ; International Relations; Constitution and Election Laws | 3(3-0) |
| 1001133 | <i>General Principle of Jurisprudence</i>
General Knowledge of Law; Including Meaning, Types, Drafting, Application, Abrogation, Interpretation and Justice; Introduction to Civil Law and Commercial Law, Criminal Law and Civil Procedural Law | 3(3-0) |
| 1001134 | <i>Peace Studies</i>
Conflict Analysis and Peaceful Solutions as Local and International Levels Reading to Social Justice and Human Rights; Integration Political, Social, Historical and Philosophical Issues | 3(3-0) |



1001141	General Psychology	3(3-0)
	Introduction to General Psychology, With Aspects of Cognitive Development and Its Significant Factors , Related to Human Behavior and Present Society; Background Psychology Including Human Brain Functions, Development of Memory, Role of Knowledge, Problem Solving and Thinking, Intelligence Quotient and Emotion Quotient	
1006103	English 1	3(3-0)
	Integrated Four Skill Practice of Listening, Speaking, Reading and Writing; Basic Grammar Structure and Vocabulary; Listening and Answering to Short Passage ; Correct Stress and Intonation; Reading for Main Ideas; Syntactic Writing Skill Development	
1006104	English 2	3(3-0)
	Integrated Four Skill Practice of Listening, Speaking, Reading and Writing; More Complex Utterance for Main Ideas; More Complicated Grammar Structure; Advanced Vocabulary and Idioms; Writing Skill of Short Paragraphs	
1006111	Basic Listening and Speaking	3(3-0)
	Everyday Listening and Speaking English in Various Settings and Situations	
1006112	Listening and Speaking for Communication	3(3-0)
	Listening and Not-Taking of Academic Lectures and Topics of Interest; Discussion and Suggestion; Asking and Answering	
1006131	Basic English Structure	3(3-0)
	English Grammar; Sentence Structure and Parts of Speech; Grammatical Problems for Thai Students	
1006151	Computer-Assisted Language Learning	3(3-0)
	Use of Computer to Facilitate Self Practice in English; Sources of Electronic Media; Internet, CD-ROM and DVD Included	
1006181	English Phonetics	3(3-0)
	English Pronunciation; Phonetic Symbols;	
1006182	Introduction to Sociolinguistics	3(3-0)
	Socio-cultural Factors English Language Use of Native English Speaking Countries Socio-cultural Factors Affecting Use of English Language	
1006205	English for Science and Technology 1	3(3-0)
<i>Prerequisite</i>	1006104	
	Integrated Four Skill Practice of Listening, Speaking, Reading and Writing for Science and Technology	
1006206	English for Science and Technology 2	3(3-0)
<i>Prerequisite</i>	1006205	
	Integrated Four Skill Practice of Listening, Speaking, Reading and Writing for Science and Technology; Presentation and Report of Experiment	
1006207	English for Business and Technology 1	3(3-0)
<i>Prerequisite</i>	1006104	
	Integrated Four Skill Practice of Listening, Speaking, Reading and Writing for Business and Technology	
1006208	English for Business and Technology 2	3(3-0)
<i>Prerequisite</i>	1006207	
	Integrated Four Skill Practice of Listening, Speaking, Reading and Writing for Business and Technology in More Complicated Business Situations	
1006209	English for Tourism 1	3(3-0)
<i>Prerequisite</i>	1006104	
	Integrated Four Skill Practice of Listening, Speaking, Reading and Writing for Tourism	
1006210	English for Tourism 2	3(3-0)
<i>Prerequisite</i>	1006209	
	Integrated Four Skill Practice of Listening, Speaking, Reading and Writing for Tourism in More Complicated Tourism Situations	





1006213	Presentation Skills	3(3-0)
	Effective Presentations; Topic Selection; Searching for Information; Documentation Techniques; Appropriate Audiovisual Aids	
1006221	Academic Reading	3(3-0)
	Reading for Main Ideas from Medias Including Newspapers and Articles; Reading Techniques Skimming, Scanning, Guessing Word Meanings from Contextual Clues	
1006222	Critical Reading	3(3-0)
	Critical Reading and Discussion of Content; Arguments and Citation	
1006233	Expository Writing	3(3-0)
	Article Writing Including Introduction, Body and Conclusion; Paraphrase and Summary; Various Style of Prose	
1006241	Literature 1(Poetry)	3(3-0)
	Elements of Poetry; Content, Theme; Rhetoric, Style and Literary Form; Famous Poets Work Including Emily Dickinson, Robert Frost, William Shakespeare and Robert Burns	
1006242	Literature 2(Prose)	3(3-0)
<i>Prerequisite</i>	1006241	
	Elements of Prose; Content, Theme, Rhetoric, Style and Literary Form; English Prose Writers Work Including ; Famous Prose Writer's Ralph Waldo Emerson, William Hemingway, Charles Dickens, Charlotte Emily Bronte	
1006283	Introduction to Morphology	3(3-0)
	Structure of Words, Including Prefix, Suffix, Root, Word Classes Including Nouns, Verbs, Adjective, Adverbs; Homonyms, Homographs	
1006331	Introduction to Translation	3(3-0)
	Principle of Translation; Prose, Short Passages	
1006332	Business Translation	3(3-0)
<i>Prerequisite</i>	1006331	
	Advanced Translation; More Complex Structures from Business Texts, Article and News	
1006352	English for Job Application	3(3-0)
	Employment Advertisements; Writing of Resume, Application Letters and Forms; Preparation for Job Interview	
1006353	English for The Greater Mekong Subregion (GMS)	3(3-0)
	English Version of Culture, Custom and People of Countries in The Greater Mekong Subregion; Laos, Cambodia, Vietnam, Myanmar, China and Thailand; Promoting Cooperation Among Organization in Those Countries	
1006354	Cooperative Training	3(0-9)
	Preparing Students for Future Career; Cooperative Training Organizations Included Government and Non-Government Sectors Under University's Supervision and Evaluation	
1006355	English for Secretary 1	3(3-0)
	Rhetoric, Terminology and Useful Phrase for Secretarial Work; Office Management; Coordination and Communication	
1006356	English for Secretary 2	3(3-0)
<i>Prerequisite</i>	1006355	
	Advanced English for Secretarial Work; Writing Skills Including Memorandums Business Letters, Agenda and Minutes of Meeting	
1006357	English for Hotel Management 1	3(3-0)
	Rhetoric, Terminology and Useful Phrase for Hotel Management; Office Management; Coordination and Communication	
1006358	English for Hotel Management 2	3(3-0)
<i>Prerequisite</i>	1006357	
	Advanced English for Hotel Management; Communication Skills; Problem Solving and Public Relations	

1006359	English for Tourism 1	3(3-0)
	Rhetoric, Terminology and Useful Phrase for Tourism Industry; Travel Information ; Coordination and Communication	
1006361	English for Tourism 2	3(3-0)
<i>Prerequisite</i>	1006359 Advanced English for Tourism Industry; Communication Skills; Problem Solvings and Public Relations	
1006362	English for Airline Business 1	3(3-0)
	Rhetoric, Terminology and Useful Phrase for Airline Business; Airline Business Information ; Coordination and Communication	
1006363	English for Airline Business 2	3(3-0)
<i>Prerequisite</i>	1006362 Advanced English for Airline Business; Communication Skills; Problem Solvings and Public Relations	
1006364	English for Tourism Major	2(1-2)
<i>Prerequisite</i>	1006204 Integrated Four Skill Practice of Listening, Speaking, Reading and Writing for Tourism; Management; Services; Transformation of Cultural Diversities to Commonality	
1006434	Academic Writing	3(3-0)
<i>Prerequisite</i>	1006233 and 1006242 Preparing Academic Documents; Structure and Outline; Information Acquisition and Edition	
1007101	Chinese 1	3(3-0)
Chinese	Integrated Four Skill Practice of Listening, Speaking, Reading and Writing for Beginning	
1007102	Chinese 2	3(3-0)
<i>Prerequisite</i>	1007101 Advanced Integration of Four Skills; Listening, Speaking, Reading and Writing of Chinese	
1008101	Japanese 1	3(3-0)
Japanese	Integrated Four Skill Practice of Listening, Speaking, Reading and Writing for Beginning	
1008102	Japanese 2	3(3-0)
<i>Prerequisite</i>	1008101 Advanced Integration of Four Skills; Listening, Speaking, Reading and Writing of Japanese	
1008111	Lao 1	3(3-0)
Lao	Integrated Four Skill Practice of Listening, Speaking, Reading and Writing for Beginning	
1008112	Lao 2	3(3-0)
<i>Prerequisite</i>	1008111 Advanced Integration of Four Skills; Listening, Speaking, Reading and Writing of Lao	
1008121	Burmese 1	3(3-0)
for Beginning Burmese	Integrated Four Skill Practice of Listening, Speaking, Reading and Writing	
1008122	Burmese 2	3(3-0)
<i>Prerequisite</i>	1008121 Advanced Integration of Four Skills; Listening, Speaking, Reading and Writing of Burmese	
1008131	Vietnamese 1	3(3-0)
for Beginning Vietnamese	Integrated Four Skill Practice of Listening, Speaking, Reading and Writing	



1008132	Vietnamese 2	3(3-0)
<i>Prerequisite</i>	1008131	
Vietnamese	Advanced Integration of Four Skills; Listening, Speaking, Reading and Writing of	
1008141	Cambodian 1	3(3-0)
Cambodian	Integrated Four Skill Practice of Listening, Speaking, Reading and Writing for Beginning	
1008142	Cambodian 2	3(3-0)
<i>Prerequisite</i>	1008141	
Writing of Cambodian	Advanced Integration of Four Skills; Listening, Speaking, Reading and Writing of	
1009101	French 1	3(3-0)
Beginning French	Integrated Four Skill Practice of Listening, Speaking, Reading and Writing for	
1009102	French 2	3(3-0)
<i>Prerequisite</i>	1009101	
of French	Advanced Integration of Four Skills; Listening, Speaking, Reading and Writing	
1009111	German 1	3(3-0)
German	Integrated Four Skill Practice of Listening, Speaking, Reading and Writing for Beginning	
1009112	German 2	3(3-0)
<i>Prerequisite</i>	1009111	
of German	Advanced Integration of Four Skills; Listening, Speaking, Reading and Writing	
1009121	Spanish 1	3(3-0)
Spanish	Integrated Four Skill Practice of Listening, Speaking, Reading and Writing for Beginning	
1009122	Spanish 2	3(3-0)
<i>Prerequisite</i>	1009121	
Spanish	Advanced Integration of Four Skills; Listening, Speaking, Reading and Writing of	



Course Descriptions

School of Science

1101100	Science for Life	3 (3-0)
	Chemicals Used in Daily Life; Harmful and Pollution to Human and Environment; Application and Precaution of Solar Radiation and Radioactive Compounds; Working System and Maintenance of Electrical Appliances	
1102100	Principles of Chemistry	3 (2-3)
	Elements and Periodic Table; Chemical Bonding and Intermolecular Forces; Chemical Nomenclatures; Chemical Stoichiometry; Kinetic Theory of Gas; Physical State of Matters; Heat of Reaction; Chemical Equilibria; Rate of Reaction; Redox Reactions; Introduction to Organic and Environmental Chemistry	
1102101	General Chemistry 1	3 (2-3)
	Atomic Structures; Periodic Table and Representative Elements; Chemical Bonding; Cases, Liquids, Solids and Solutions; Chemical Equilibria	
1102102	General Chemistry 2	3 (2-3)
<i>Prerequisite</i>	1102101	
	Chemical Kinetics; Ionic Equilibrium; Electrochemical Reactions; Thermodynamics; Transition Elements; Complex Compounds; Nuclear Chemistry	
1102210	Principles of Analytical Chemistry	3 (2-3)
<i>Prerequisite</i>	1102102	
	Stoichiometry; Analytical Techniques Including Titration, Weight, Spectroscopy and Chromatography	
1102220	Principles of Physical Chemistry	2 (2-0)
<i>Prerequisite</i>	1102102	
	Gases; Kinetic Theory of Gas; Thermodynamics and Thermochemistry; Solution and Phase Equilibria; Colligative Properties; Liquid Surface Tension and Viscosity; Adsorption of Solution and Solid	
1102230	Principles of Organic Chemistry	3 (2-3)
<i>Prerequisite</i>	1102102	
	Structures, Properties and Nomenclatures of Organic Compounds; Stereochemistry; Preparation and Characterization of Organic Compounds and Derivatives	
1102250	Biochemistry Principles	3 (2-3)
<i>Prerequisite</i>	1102102 and 1103102	
	Structures, Properties and Functions of Biomolecules; Mechanism, Metabolism and Application of Biochemistry to Genetics and Nutrition	
1103100	Principles of Biology	3 (2-3)
	Origin of Earth and Living Things; Evolution; Biodiversity; Ecology; Cell Divisions; Reproduction and Heredity of Microorganisms; Plants and Animals	
1103101	General Biology 1	3 (2-3)
	Origin and Evolution of Living Things; Reproduction and Heredity; Ecology	
1103102	General Biology 2	3 (2-3)
<i>Prerequisite</i>	1103101	
	Microbiology; Biology of Plants and Animals	
1103140	Fundamentals of Ecology	3 (3-0)
	Holistic Approach in Ecology; Interactions of Plants, Animals, Humans and Environments; Ecosystems; Adaptation to Environments; Resources Utilization	
1103211	Microbiology	4 (3-3)
<i>Prerequisite</i>	1103102	
	Prokaryotic and Eukaryotic Microorganisms; Cultivation; Growth; Metabolism, Genetics and Classification; Interrelationship of Other Organisms; Infections; Industrial Utilization; Bioremediation; Trends in Microbiology	





1103221	Genetics	4 (3-3)
<i>Prerequisite</i>	1103102 Gene Structure and Function; Mendelian Genetics; Mutations; Recombinant DNA; Genomics; Non-Mendelian Genetics; Sex Linkage, Human Heredity; Human Evolution; Quantitative Genetics	
1103231	Plant Physiology	3 (2-3)
<i>Prerequisite</i>	1103102 Structures of Plant Cells; Water and Nutrient Transport; Photosynthesis; Respiration; Growth and Development, Responses to Stimulants	
1103311	Environmental Microbiology	3 (2-3)
<i>Prerequisite</i>	1103211 Relationships of Microorganisms and Environments; Beneficial and Harzardous Microorganisms; Biochemical Processes of Matter Transportation; Biodegradation, Bioremediation	
1103312	Industrial Microbiology	3 (2-3)
<i>Prerequisite</i>	1103211 Commercial Exploitation of Microorganisms; Production of Chemical Compounds of Economic Values; Antibiotics; Enzymes; Amino Acids; Organic Acids; Trends and Prospects	
1103313	Microbial Physiology	3 (2-3)
<i>Prerequisite</i>	1103211 Types and Morphology of Microorganisms; Growth and Growth Factors; Energy Formation Processes; Metabolism; Intercellular Transport	
1103321	Genetics Molecular	4 (3-3)
<i>Prerequisite</i>	1102250 and 1103221 Biosynthesis; Structure and Function of DNA, RNA and Protein; Gene Action and Expression; DNA Manipulation	
1103322	Plant Genetics	3 (2-3)
<i>Prerequisite</i>	1103221 Fundamentals of Genetics and Their Application for Higher Plants; Probability Theories; Linkages; Chromosome Aberrations; Polyplidy; Intergeneric and Interspecific Gene Transfer; Tissue and Cell Culture; Modern Techniques for Crop Improvements; Trends and Prospects	
1103323	Microbial Genetics	3 (3-0)
<i>Prerequisite</i>	1103211 Molecular Genetics of Microorganisms; Genetic Engineering and Applications; Trends and Prospects	
1103341	Plant Ecology	3 (2-3)
<i>Prerequisite</i>	1103102 Plant Community and Population; Environmental Interactions; Roles of Human Affecting Plant Ecosystems; Biodiversity; Problems and Trends	
1103351	Plant Taxonomy	3 (2-3)
<i>Prerequisite</i>	1103102 History and Development of Plant Taxonomy; Classification; Identification; Nomenclature; Collection and Preservation of Specimen	
1104100	Principles of Physics	3 (2-3)
	Measurement; Motion; Force and Motion; Work and Energy; Temperature and Heat; Waves and Wave Properties; Electrical and Magnetic Properties; Atomic physics; Nuclear Physics	
1104101	General Physics 1	3 (2-3)
	Motion and Force; Gravity and Gravitational Field; Work and Energy; Rotational Motions; Simple Harmonic Motion; Oscillation; Sound; Thermodynamic Concepts	
1104102	General Physics 2	3 (2-3)
<i>Prerequisite</i>	1104101 Electricity and Magnetism; Electrical and Magnetic Properties of Matters; Alternating Current; Basic Electronics; Optics and Optical devices; Structure of Atoms	

1105101	Introduction to Biotechnology	1 (1-0)
	Background in Various Fields of Biotechnology; Historical Background, Application and Career Guidelines in Biotechnology	
1105220	Introduction to Plant Tissue Culture	3 (2-3)
	Theory; Methodology and Techniques of Plant Tissue Culture; Application and Trends	
1105321	Plant Biotechnology	4 (3-3)
<i>Prerequisite</i>	1105101	
	Application of Plant Biotichnology in Various Aspects of Life Quality; Foods and Agriculture; Pharmaceuticals; Conservation of Biodiversity; Safety Measures in Laboratorries and Field Experiments	
1105322	Algal Biothchnology	3 (2-3)
<i>Prerequisite</i>	1105101	
	Classification of Algae; Use of Algae in Agriculture; Industry; Aquaculture and Industry; Algal Cultivation Systems; Commercial Microalgae; Waste Treatment; Roles of Algae on the Environment; Current Genetic Engineering of Algae	
1105341	Medical and Pharmaceutical Biotechnology	2 (2-0)
<i>Prerequisite</i>	1105101	
	Gene Therapy; Antisense Technology; Tissue Engineering; Antibody Engineering; Biopharmaceutical Development and Production; Enzyme and Hormone Therapy; Forensic DNA Technology; Trends and Prospects	
1105351	Bioprocess Engineering	4 (3-3)
<i>Prerequisite</i>	1102220	
	Suspension and Immobilized Cell Cultures; Mixed Cultures; Bioreactors; Recovery and Purification of Products; Fluid Mechanics; Heat and Mass Transfer; Kinetics and Stoichiometry of Microbial Growth in Relation to Productivity; Suspension and Immobilized Cell Culture; Mixed Culture; Bioreactors; Down Stream Processes	
1105352	Industrial Biotechnology	3 (2-3)
<i>Prerequisite</i>	1105101	
	Commercial Production of Microorganisms; Biotransformation; Cell Immobilization; Applications in Industry, Pharmaceuticals and Environments; Current Issues and Trends	
1105361	Plant Biochemistry	4 (3-3)
<i>Prerequisite</i>	1102250	
	Molecular Structures of Plant Cells; Metabolisms of Biomolecules; Photosynthesis; Nitrogen Fixation; Secondary Metabolism; Gene Action and Expression; Genetic Modification Technology in Plants	
1105396	Special Project	1 (0-3)
	Laboratory or Field Experimentation under Guidance of Supervisor	
1105397	Industrial Visit	1 (0-3)
	Study Tour to Industrial Factories or Research Institutes of Biotechnology; Report, Presentation and Discussion of Visits	
1105400	Biotechnology Business	1 (1-0)
	Business Planning of Biotechnology; Innovation of Technology; Marketing; Management; Finance; Intellectual Property and Patents; Competition; Case Studies; Pilot Business Simulation	
1105401	Bioinformatics	1 (1-0)
<i>Prerequisite</i>	1105101	
	Data Search on Public Databases; Genome; DNA and Protein Sequences; Protein Structures; Applications and Trends	
1105411	Economic Botany	3 (2-3)
<i>Prerequisite</i>	1103231	
	Economic Plants as Foods, Medicines, Clothes, Ornaments, Cosmetics, Energy, Fertilizers and Bio-Compounds; Emphasis on Economic Plants of Northern Region; Application of Plant Biotechnology; Problems and Prospects	





1105412	Medicinal Plants	3 (2-3)
	Taxonomy; Botanical Characteristics; Sources and Distributions; Phytochemistry; Pharmacology; Clinical Trials; Emphasis on Medicinal Plants of Northern Region; Problems and Prospects of Traditional Medicines	
1105413	Orchidology	3 (2-3)
	Types and Characteristics; Cultivation; Nursing Methods; Propagation; Tissue Cultures; Cultivar's Improvement; Commercial Production; Problems and Trends	
1105421	Plant Production Technology	3 (2-3)
<i>Prerequisite</i>	1103231 Conventional Production; Environmentally Controlled Production; Hydroponics; Soil-less Cultivation; Organic Farming; Problems and Prospects	
1105431	Microbial Technology	3 (2-3)
<i>Prerequisite</i>	1103211 Industrial Microorganisms; Strain Improvements; Emphasis on Applications in Agriculture, Industry, Medicine and Environment; Field Trips; Current Issues and Prospects	
1105432	Yeast Biotechnology	3 (2-3)
<i>Prerequisite</i>	1103211 Physiology; Genetics; Applications in Foods, Beverages and Pharmaceutical Products; Beneficial and Harmful Effects; Current Issues and Prospects	
1105451	Immobilised Biocatalyst	3 (2-3)
<i>Prerequisite</i>	1102250 Industrial Enzymes; Enzyme and Cell Immobilization; Properties and stability of Immobilized Biocatalysts; Recombinant Enzymes; Applications and Trends	
1105461	Plant Secondary Metabolites	3 (2-3)
<i>Prerequisite</i>	1103231 Types and Roles; Synthesis Pathway; Extraction; Purification; Structural Analysis; Production of Drugs and Pharmaceuticals; Genetic Engineering Techniques; Current Issues and Trends	
1105497	Seminar	1 (0-3)
	Seminar on Theories, Practices and Application of Current Issues of Biotechnology	
1105498	Special Problem	2 (0-6)
	Undergraduate Research on Current Issues of Biotechnology under Guidance of Supervisor	
1105499	Cooperative Training	3 (0-9)
	Preparing Students for Future Careers; Cooperative Training Organizations Included Government and Non-Government Sectors under University's Supervision and Evaluation	
1106100	Mathematics for Life	3 (3-0)
	Mathematical Calculation for Everyday life; Statistical Methods for Decision Makings	
1106101	Calculus 1	4 (4-0)
	Limit and Continuity; Derivatives; Integrations; Improper Integration; Sequences and Series of Real Numbers; Power Series	
1106102	Calculus 2	4 (4-0)
<i>Prerequisite</i>	1106101 Vectors and Coordinate Geometry in Three Dimensional Space; Graph; Limit; Partial Derivatives; Differential Equation	
1106103	Mathematics 1	3 (3-0)
	Functions; Limit; Continuity; Derivatives and Applications; Integration; Application of Definite Integral; Introduction to Differential Equation; Linear Equations; Matrices	
1106104	Mathematics 2	3 (3-0)
<i>Prerequisite</i>	1106103 Sequences and Series; Vectors and Coordinate Geometry in Three Dimensional Space; Multiple Integrals; Partial Derivatives	

1106105	Basic Mathematics	2 (2-0)
	Sets; Vectors; Functions and Linear Equation Systems; Matrices; Complex Numbers; Limit and Continuity; Derivatives; Integrals; Introduction to Differential Equation	
1106111	Mathematical Logic and Proof Techniques	2 (2-0)
	Sets and Relationship; Logic of Proposition and Predicate; Mathematical Reasoning; Logical Reasoning; Proof by Techniques such as Contradiction, Induction and Deduction	
1106201	Mathematics 3	3 (3-0)
<i>Prerequisite</i>	<i>1106104</i>	
	Function of Vector; Calculus of Vector; Special Functions; Fourier Series; Complex Numbers	
1106211	Discrete Mathematics	3 (3-0)
<i>Prerequisite</i>	<i>1106102 or 1106104</i>	
	Logic; Sets; Functions; Contradiction and Predicate; Boolean Algebra; Graphic Theory; Matrices; Proof by Techniques; Combinatorics; Probability; Random Numbers	
1106221	Linear Algebra	3 (3-0)
	Linear Equations and Matrices; Analytical and Numerical Solution of Algebraic Equation; Least Square Methods; Eigenvalues; Determinants; Orthogonalization; Three Dimensional Vectors; Linear Transformation	
1106281	Probability and Statistics	3 (3-0)
	Descriptive Statistics; Probability and Probability Distribution; Samples Distribution; Estimation; Test of Hypothesis; Analysis of Variance; Regression and Correlation; Chi – Square Test; Nonparametric Statistics	
1106282	Statistics and Experimental Design	3 (3-0)
	Description Statistics; Probability; Analysis of Variance; Regression and Correlation; Chi – Square Test Experimental Designs; Data Analysis; Computer Software for Experimental Planning and Result Analysis	
1106331	Numerical Methods	3 (3-0)
<i>Prerequisite</i>	<i>1106104</i>	
	Numerical Procedure and Analysis; Iterative Methods for Finding Solutions for Science, Engineering and Mathematics; Computer Application for Real Numbers, Error Propagations; Numerical Integration Methods; Ordinary Differential Equations	



Course Descriptions School of Management

1201111	Principles of Accounting	3(3-0)
	Accounting Concepts and Objectives; Accounting Processes; Accounting Cycles; Merchandising Accounting; Bank Reconciliation; Preparation of Financial Statements and Reports; Manufacturing Accounting; System Planning for Inventory and Purchases Control	
1201112	Principles of Accounting 1	2(2-0)
	Accounting Principles and Objectives; Financial Accounting Principles for Merchandising, Manufacturing and Servicing Businesses; Using of Accounting Information; Accounting Cycles and Preparation of Financial Statements and Reports	
1201113	Elementary Accounting 1	3(3-0)
	Accounting Concepts and Principles; Accounting Processes; Accounting Cycles; Preparation of Financial Statements and Reports	
1201114	Elementary Accounting 2	3(3-0)
<i>Prerequisite</i>	1201113 Merchandising and Manufacturing Operations and Accounting Cycles; Stockholders' Equity Transactions; Preparation of Financial Statements from Incomplete Information; Preparation of Statement of Cash Flow; Accounting for Value-Added Taxes	
1201211	Principles of Accounting 2	2(2-0)
<i>Prerequisite</i>	1201112 Recording Business Transactions for Assets, Liabilities and Owners' Equity, Revenues and Expenses; Partnership; Corporations; Information Systems; Manufacturing Business	
1201212	Managerial Accounting	3(3-0)
	Importance and Usefulness of Financial Statements; Relation of Each Account in Financial Statements; Preparation of Budget and Reports for Management Level for Planning, Controlling and Making Decision; Financial Statement Analysis	
1201213	Intermediate Accounting 1	3(3-0)
<i>Prerequisite</i>	1201114 Accounting Recording; Classification, Presentation and Valuation of Financial Statements, Disclosure in Accordance with Accounting Standards of Assets	
1201214	Intermediate Accounting 2	3(3-0)
<i>Prerequisite</i>	1201114 Accounting Recording; Classification, Presentation and Valuation of Financial Statements, Disclosure in Accordance with Accounting Standards of Liabilities and Owners' Equity	
1201311	Managerial Accounting 1	3(3-0)
<i>Prerequisite</i>	1201213 and 1201214 Roles and Concepts of Cost Accounting; Cost Estimation; Standard Costing; Calculating and Recording Cost of Goods Sold and Services Cost; Process Costing; Job-Order Costing; Activity-Based Costing	
1201312	Accounting Theory	3(3-0)
<i>Prerequisite</i>	1201213 and 1201214 Concepts of Accounting Theory and Accounting Standards; Evolution, Basic Assumption and Framework; Revenue Expense Recognition; Performance Measurement and Reporting; Effects of Accounting Standard form Price Level Changes; Roles of Accounting Professional Institute	
1201313	Managerial Accounting 2	3(3-0)
<i>Prerequisite</i>	1201311 and 1203141 Roles of Managerial Accounting; Responsibilities Accounting; Performance Measurement; Cost-Volume-Profit Analysis, Absorption and Variable Costing for Decision Making; Pricing; Cost Behavior; Managerial Accounting	
1201314	Profit Planning and Control	3(3-0)
<i>Prerequisite</i>	1201313 Planning and Control Operation; Master Budget; Static Budget; Flexible Budget; Zero-Based Budget; Budgeting of Merchandising, Manufacturing and Servicing Companies; Profit Planning and Control in International Business	



1201315	International Accounting	3(3-0)
<i>Prerequisite</i>	1201214 and 1203212 System and Methods of Accounting for International Business; Effects of Changes in Foreign Currency; Collecting, Analysis and Reporting of International Accounting , International Management; Tariff Structure and Tax Collection; Future International Tax Standard	
1201316	Hotel Accounting	3(3-0)
<i>Prerequisite</i>	1201214 and 1203141 Features of Hotel Business; Hotel Accounting Systems; Processing Hotel Business Transactions	
1201317	Bank Accounting	3(3-0)
<i>Prerequisite</i>	1201214 and 1203212 Features of Commercial Bank Accounting Systems; Head Office and Branches Accounting Systems; Bank of Thailand Regulations and Internal Reporting Systems for Management	
1201318	Governmental Accounting	3(3-0)
<i>Prerequisite</i>	1201214 and 1203212 Thai Government Accounting Systems; Fund Management for Public Sectors	
1201321	Computerized Accounting Auditing System	3(2-2)
<i>Prerequisite</i>	1201311 and 1301342 Concepts of Accounting Information System (AIS); Principles of Systems Design for Accounting; Information Retrieval	
1201331	Auditing	3(3-0)
<i>Prerequisite</i>	1201213 and 1201214 Roles and Responsibilities of Auditors; Development of Auditing Systems; Professional Ethics; Auditing Standard; Audit Plan, Techniques and Procedures; Report and Disclosure	
1201332	Internal Auditing and Control	3(3-0)
<i>Prerequisite</i>	1201213 and 1201214 Principles of Auditing and Internal Control; Role and Responsibility of Internal Auditor; Internal Audit Standards of Public and Private Sectors; Techniques and Procedures of Internal Audit Practices; Reporting; Management of Internal Audit Office	
1201411	Advanced Accounting 1	3(3-0)
<i>Prerequisite</i>	1201213 and 1201214 Head Office and Branch Accounting; Accounting for Mergers; Preparation of Consolidated Financial Statement; Accounting for Investment in Associated Companies and Foreign Subsidiaries	
1201412	Advanced Accounting 2	3(3-0)
<i>Prerequisite</i>	1201213 and 1201214 Accounting for Installment Sales; Consignments; Leases; Joint Ventures; Fund Accounting; Accounting for Non-Profit Organizations	
1201413	Tax Accounting	3(3-0)
<i>Prerequisite</i>	1201114 or 1203201 Principle and Procedures of Accounting for Personal Income Tax, Corporate Income Tax, Value Added Tax and Specific Business Tax in Accordance with Revenue Codes and Financial Regulations	
1201414	Financial Report	3(3-0)
<i>Prerequisite</i>	1201213 and 1201214 Financial Statement Preparation; Elements and Forms of Financial Statements; Disclosures and Notes; Interim Financial Statements; Financial Statement of Financial Distress Companies and Liquidation Settlement Accounting; Segment Reports; Accounting Changes and Correction of Accounting Errors	
1201415	Tax Planning	3(3-0)
<i>Prerequisite</i>	1201413 Tax Planning; Decision Making of Types of Business for Tax Minimization; Double Tax Convention	





1201421	Accounting Information Analysis	3(3-0)
<i>Prerequisite</i>	1203212 Thailand Accounting Standards and Procedures; Techniques and Procedures for Interpretation and Evaluation of Financial Information	
1201422	Business Information Communication	3(2-2)
<i>Prerequisite</i>	1301102 Importance of Business Information; Basic Technology of Information Communication; Local Area Network; Application, Management and Trends	
1201423	Accounting Information System Design	3(2-2)
<i>Prerequisite</i>	1301221 Concept of Information System Design; Function of Accounting Information System; Transaction Cycle; Business Development Cycle; Case Study	
1201431	Computerized Accounting System Auditing	3(2-2)
<i>Prerequisite</i>	1201321 and 1201331 Concept of Computerized Analysis; Management and Application; Collection and Evaluation of Evidences; Computerized Thai Auditing Standards; Auditing Reports of Certified Public Accountants (CPA) and Internal Auditions	
1201432	Problem in Auditing	3(3-0)
<i>Prerequisite</i>	1201331 Problems Confronting Practices of Auditors; Professional Ethics of Auditors; Auditing Standards; Development of Problems on Auditing; Case Study	
1201497	Seminar in Accounting	3(3-0)
	Seminar on Theories; Practices and Application of Current Accounting Issues	
1202111	Introduction to Economics and Business	3 (3-0)
	Theories of Micro and Macro Economics; Economics Analysis of Supply, Demand, Market Equilibrium; Theories of Consumer Behaviors, Production and Cost; Market Structures and Competition; National Income Analysis; Public Finance; Financial Policies; International Economics and Development	
1202112	Microeconomics	3 (3-0)
	Introduction to Economics; Concepts and Theories of Demand and Supply; Price Mechanisms and Output Determination; Market Equilibrium; Consumer Behavior and Utility Maximization; Theories of Production and Cost; Determination of Price and Outputs in Various Product and Factor Markets	
1202113	Macroeconomics	3 (3-0)
	Introduction to Economics; National Income and Product; Money and Money Markets; Relationship Among Product, Money and Labor Markets; International Trade and Payments; Economic Problems and Macro Economic Policies	
1202114	Mathematics for Economist	3 (2-2)
<i>Prerequisite</i>	1202112 and 1160103 Intermediate Mathematics as Tools for Economics Analysis; Differentiation, Maximization and Minimization of Multivariate Function; Limit; Constrained Optimization; Integration; Definite and Indefinite Integrals; Differential Equations, Mathematical Programming	
1202212	Economic Statistics	3 (3-0)
<i>Prerequisite</i>	1106281 Basic Statistical Methods; Regression; Correlation; Multiple Regression; Prediction; Model Selection; Analysis of Variance; Time Series; Index Numbers; Application of Statistical Softwares	
1202213	Microeconomic Theory	3 (3-0)
<i>Prerequisite</i>	1106103 and 1202112 Theories of Consumer Behavior; Theories of Production and Cost; Analysis of Price and Output Determination in Various Types of Product and Factor Markets; Introduction to Welfare Economics	

1202214	Macroeconomic Theory	3 (3-0)
<i>Prerequisite</i>	1106103 and 1202113 Evolution of Concept and Theories on Macro Economics from Various Schools of Thought; Theories of National Income, Output, Employment and Price; Fiscal and Monetary Policies in Solving Deficit Budget and Balance of Payments; Theories of Economic Growth	
1202241	International Economics	3 (3-0)
<i>Prerequisite</i>	1106103 or (1202111 and 1202113) Principles of International Trade; Transaction Cost; Balance of Payment. Adjustments; Foreign Exchange Markets; International Trade Policy and Economic Organizations	
1202251	Economics of Money and Banking	3 (3-0)
<i>Prerequisite</i>	1202113 and 1202112 Roles of Money and Credits in Economic Systems; Money and Financial Market; Roles of Interest Rates; Functions of Commercial and Central Banks; Monetary and Balance of Payment Policy	
1202252	Economics of Public Finance	3 (3-0)
<i>Prerequisite</i>	1202113 and 1202112 Role of Government; Public and Private Sectors in Economic Systems; Structures of Public Expenditures and Revenues; Principles of Taxation; Impacts of Taxation; Fiscal Policy	
1202301	Research Methodology	3 (3-0)
<i>Prerequisite</i>	1202113 and 1202112 Concepts and Structures of Rationale Thinking; Scientific Approach and Logic of Fact Finding; Theoretical Foundation Related to Social and Economic studies; Methodologies Used in Setting Up Conceptual Framework	
1202302	Project Feasibility Analysis	3 (3-0)
<i>Prerequisite</i>	1202113 and 1202112 Concepts, Procedures and Methodologies in Analysis of Projects; Social and Economic Feasibilities; Cost-Benefit Analysis; Project Implementation; Cases Studies	
11202331	Transportation Economics	3 (3-0)
<i>Prerequisite</i>	1202112 and 1202113 Demand, Supply and Price Determination of Transportation; Planning and Policy; System Development; Application of E-Commerce to Transportation Economics; Trends	
1202332	Globalization and Logistic Management	3 (3-0)
<i>Prerequisite</i>	1202112 and 1202113 International Logistic Management; Transportation Network Changes; Shipping Management; Problems and Prospects	
1202341	Economics and Laws	3 (3-0)
	Relationship between Economic Systems and Laws; Impacts of Laws and Regulations on International Trade and Finance; Foreign Investment; International Technology Transfer; Trade Barriers; International Dispute Settlement; International Economic Organizations	
1202342	International Business	3 (3-0)
<i>Prerequisite</i>	1202241 Historical Background of International Business; Patterns of Joint Venture; International Investment; Import and Export Business; International Business in Practice; Legal Process and Custom Procedures; International Payments; National Policies of International Business Promotion; Trends	
1202361	Economic History	3 (3-0)
<i>Prerequisite</i>	1202112 and 1202113 Economic Evolution; Historical Background of Economic Phenomena and Thoughts; Economic Transition from Rural to Urban and Oldworld to New World and Central Planning System to Market System	
1202362	Economics of Urbanization	3 (3-0)
<i>Prerequisite</i>	1202112 and 1202113 Linkages between Rural and Urban Economics; Stability and Sustainability in Agriculture, Industry, Environment, Trading and Services; Role and Structure of Local Government Administration	





1202363	Sufficiency Economy	3 (3-0)
<i>Prerequisite</i>	1202112 and 1202113	
	Concepts of Sufficient Economy; Comparative Analysis to New World Economy; Strategic Planning of Sufficient Economy under Globalization Trends; Analysis of Opportunity and Risk of Economic Liberalization, Problems and Prospects	
1202371	Agricultural Economics	3 (3-0)
<i>Prerequisite</i>	1202112 and 1202113	
	Role of Agriculture in Economic Development; Theory of Production; Agricultural Products Pricing; Competitiveness; Factors of Production; Infrastructure Supporting Agriculture; Patterns and Systems of Production; Mechanization; Technology; Organization; Development Plans for Agricultural Economics and Agriculture in Thailand; Trends	
1202372	Agribusiness and Agro-industry	3 (3-0)
<i>Prerequisite</i>	1202112 and 1202113	
	Agribusiness Practices; Organization Theories and Methods; Creation of Value-Added Products for Domestic and International Markets; Problems and Prospects	
1202381	Natural Resource and Environmental Economics	3 (3-0)
<i>Prerequisite</i>	1202112 and 1202113	
	Natural Resources and Environmental Management for Balanced and Sustainable Development; Economic Impacts of Globalization on Environments; Current Issues	
1202382	Human Resource Economics	3 (3-0)
<i>Prerequisite</i>	1202112 and 1202113	
	Roles of Human Resource in Economic Development; Analysis of Human Resource Investment in Education, Training Labor Mobilization and Health; Roles of Human Capital in Economic Development; Policy Planning of Human Resource Development in Thailand; Trends	
1202421	Greater Mekong Subregion Economies	3 (3-0)
<i>Prerequisite</i>	1202113 and 1202114	
	Micro- Macro Economics; Political Economy and Development of Countries in the Greater Mekong Subregion (GMS); Economic Cooperation and Integration; Appropriated Policies and Agreements for Collaboration; Prospects	
1202422	Economics of Cross Border Trade	3 (3-0)
<i>Prerequisite</i>	1202113 and 1202114	
	Patterns of Cross Border Trade; Trade Barriers and Problems; Potentials and Opportunities of Cross Border Trade; Cases Studies	
1202441	International Trade Theory and Policy	3 (3-0)
	Principles of International Trade; Patterns, Agreements and Policies; Measures of Import Control; Export Promotion; Import Substitution; International Trade Organizations; International Trade Policy of Thailand	
1202442	International Monetary Economics	3 (3-0)
<i>Prerequisite</i>	1202241	
	Monetary Theories; Exchange Rate; Balance of Payment Problems; Analysis of Relationship between Macro Economics Variables and Balance of Payment; International Financial Systems; Internal and External Balances; Foreign Aids and Loans; Current Issues and Trends	
1202443	International Economic Cooperation and Trade Negotiation	3 (3-0)
<i>Prerequisite</i>	1202241	
	Historical Development of International Trade and Economic Cooperation; Trade Negotiation and Dialogues; International Economic Collaboration for Mutual Benefits; Current Issues and Trends	
1202461	Thai Economy	3 (3-0)
<i>Prerequisite</i>	1202113 and 1202114	
	Historical Development of Thai Economy; Economic Systems and Structures; Socio-economic Situations; Problems and Prospects	
1202462	Economics of the New World	3 (3-0)
<i>Prerequisite</i>	1202213 and 1202214	
	Concepts and Theories of Economic Development; Impacts of Advanced Technology on New Economy; Interaction between New Economy and Global Economic Systems; Appropriate Technology for Development; Policy and Strategy for Thailand	

1202463	Economics of Good Governance	3 (3-0)
<i>Prerequisite</i>	1202213 and 1202214 Development and Practice of Good Governance in Public and Private Sectors; Opportunity for Regional and International Economic Linkages and Globalization	
1202496	Special Topic in Economics	3 (3-0)
<i>Prerequisite</i>	1202213 and 1202214 Undergraduated Research Project in Economic Areas Under Supervision	
1202497	Seminar	3 (3-0)
<i>Prerequisite</i>	1202213 and 1202214 Seminar on Theories, Practices and Application of Current Economic Issues	
1202498	Independent Study	3 (0-9)
<i>Prerequisite</i>	1202213 and 1202214 Undergraduated Research Project in Economic Areas Under Supervision	
1203101	Introduction to Laws	2 (2-0)
	Principles of Civil and Commercial Code; Criminal Code Major Business Laws Including Intellectual Property, Bankruptcy; Enforcement of Laws	
1203103	Statistics and Research Method for Business	3 (3-0)
	Role of Statistics in Research; Data Collection and Presentation; Statistical Distribution, Sampling Methods; Statistical Methods for Analysis of Variance; Chi-Square Test; Regression and Correlation Estimation	
1203121	Principles of Marketing	3 (3-0)
	Meaning and Concept of Marketing; Importance of Marketing in Business and Economics; Marketing Mixed; Consumer Behavior; Segmentation and Targeting; Marketing Research	
1203131	Principle of Business	2 (2-0)
	Types and Characteristics of Business; Business Functions; Management Roles and Functions	
1203141	Organization and Management	2 (2-0)
	Meaning, Importance and Elements of Organization; Types and Structures of Organization Management; Modern Management Concept and Techniques	
1203201	Taxation	3 (3-0)
<i>Prerequisite</i>	1201113 or (1203101 and 1201112) Taxation Principle; Tax System Relation to Personal Income, Juristic Persons, Excise and Custom; Electronic Data Interchange	
1203202	Business Laws	3 (3-0)
<i>Prerequisite</i>	1001133 Books of Business Laws Covering, General Principles; Obligations, Specific Contracts, Property, Family and Succession; Other Laws Including Insurance, Labour, Intellectual Property, Public and Bills	
1203211	Principles of Business and Finance	3 (3-0)
	Structure of Financial System; Financial Control Mechanisms; Monetary and Financial Theories; Interest Rate Structure; Foreign Currency Exchanges; Business Modeling and Simulation	
1203212	Business Finance	3 (3-0)
<i>Prerequisite</i>	1201114 or 1201211 Principles of Financial Management; Time Value of Money; Financial Statement Analysis; Risk Management; Cost or Capital; Capital Structure; Asset Valuation Including; Allocations of Funds; Profit Share Analysis and Strategic Financial Planning	
1203231	Small Business Management	3 (3-0)
	Types of Small Business Ownership; Business Location; Appropriated Management; Causes of Failure; Problem-Solving Methods	
1203241	Organization Behavior	3 (3-0)
<i>Prerequisite</i>	1203141 Internal Organization Behavior; Job Design; Job Satisfaction; Organization Changes; Effective Management	





1203242	Human Resource Management	3 (3-0)
	Management of Human Resource, Interaction Between Environment and Functions of Human Resource Management; Problems and Current Issues	
1203251	Operations Management	3 (3-0)
	Function of Operations; Forecasting Techniques; Strategic Production Planning; Location and Layout; Product Design; Operation Planning and Control; Quality Management	
1203252	Quantitative Analysis	3 (3-0)
	Relationship Between Management Science and Decision Making Processes; Methodology in Quantitative Analysis; Mathematical Models and Application to Business; Problems and Current Issues	
1203253	Production and Operations Management	3 (3-0)
	Management of Operation Units in Industry; Strategy, Forecasting, Operation Processes, Inventory, Quality Assurance and Control; Production Management Under Uncertainties	
1203301	Project Feasibility Study and Management	3 (3-0)
	Project Management Processes and Techniques; Feasibility Studies in Economic, Finance, Marketing Technology Operation, Social and Physical Environments; Employment of Digital Control System; Software Development and Prospects	
1203302	Project Feasibility Study and Evaluation	3 (3-0)
	Mathematical Approach for Project Analysis in Feasibility and Return on Investment; Evaluation Process; Business Case Studies	
1203311	Financial Management	3 (3-0)
<i>Prerequisite</i>	1203212 Financial Policies; Financial Management Techniques and Procedures Under Various Situations; Case Studies of Effective Achievement in Business	
1203312	Principles of Investment	3 (3-0)
<i>Prerequisite</i>	1203212 Decision Making Techniques in Financial Investment; Factors Determining Price of Security and Rate of Return; Risk Management	
1203313	Financial Planning and Control	3 (3-0)
<i>Prerequisite</i>	1203311 Strategy for solving Financial Problems, Planning and Implementation	
1203314	Financial Report Analysis	3 (3-0)
<i>Prerequisite</i>	1203122 Techniques of Financial Analysis; Effective Use of Accounting Principles in Preparation of Financial Report	
1203321	Marketing Management	3 (3-0)
<i>Prerequisite</i>	1203121 Concept of Marketing Management; Marketing Strategies Towards Environments, Management Procedure, Marketing Information System and Marketing Mixed; Sales Forecasting	
1203322	Consumer Behavior	3 (3-0)
<i>Prerequisite</i>	1203121 Factors Influencing Decision Processes of Consumer such as Perception, Attitude, Motivation and Attraction; Consumer Behavior Theories	
1203323	Service Marketing	3 (3-0)
<i>Prerequisite</i>	1203121 Characteristics and Types of Service Industry; Marketing Strategies and Implementation; Integrated Marketing in Services; Assessment and Control; Marketing Ethics	
1203324	Retail Marketing	3 (3-0)
<i>Prerequisite</i>	1203121 Changes Influencing Sustainability of Retail Marketing; Opportunity and Management; Specific Retail Marketing Techniques such as Attractive Displays, Shelf Management and Sales Promotions	

1203325	Agricultural Product Marketing	3 (3-0)
<i>Prerequisite</i>	1202112 and 1203121 Characteristics and Problems of Major Agricultural Product of Thailand; Supportive Institution and Organization; Role and Policy of Government; Integrated Marketing Management of Agricultural Product; Development and Prospects	
1203326	Industrial Product Marketing	3 (3-0)
<i>Prerequisite</i>	1203121 Characteristics and Significance of Industrial Products; Industrial Supply Chain Management; Integrated Marketing Management; Development and Prospects	
1203331	Business Research	3 (3-0)
<i>Prerequisite</i>	1203103 and 1203141 Identification of Research Topics, Relevancy of Research Outputs to Business strategic Planning, Management and Development, Research Methodology	
1203332	Business Venture and Entrepreneurship	3 (3-0)
<i>Prerequisite</i>	1203141 Concept and Characteristics of Entrepreneurs; Types of Business Venture; New Business Planning and Development	
1203341	Personnel Management and Organization Behavior	3 (3-0)
	Organization Behavior; Individual, Group and Structure Affecting Organization System; Functions of Personnel Management; Leadership and Conflict Management	
1203342	Business Psychology	3 (3-0)
	Diversity of Individual Behavior; working Relationship; Working Attitude; Development of Personality; Leadership and Collective Behavior	
1203351	Business Logistic Management	3 (3-0)
<i>Prerequisite</i>	1203253 Transportation; Logistic Planning and Management; Capability of Suppliers; Materials Procurement; Distribution and Warehouse Management; Customer Satisfaction Factors; Current Problems and Issues	
1203361	International Business Management	2 (2-0)
<i>Prerequisite</i>	1203141 International Business Environment; Competitive Ability; Forms of International Trade and Services; Promotion; Investment and Integration; Current Problems and Issues	
1203362	International Business Management	3 (3-0)
<i>Prerequisite</i>	1203141 International Trade Theories; International Business and Environment; Trade Blocs and Barriers; Foreign Investment and Forms of International Business; Current Problems and Issues	
1203363	Cross-Cultural Management	3 (3-0)
<i>Prerequisite</i>	1203141 Cross-cultural Business Strategies; Influences of Cultural, Politics, Social and Economics on International Business Management; Cultural Diversities, Negotiation and Social Harmonization; Problems and Prospects	
1203364	Business Negotiation	3 (3-0)
	Planned Objectivity, Plat form, Agenda and Bargaining Issues; Status, Patterns and Practices of Business Negotiation; Positioning Under Uncertainty; Case Study	
1203365	International Trade	3 (3-0)
	Theories of International Trade; International Trade Organization and Multilateral Trade Agreement; Priviledges and Distortions; Trade and Development; Global Trends and Impacts	
1203366	International Finance	3 (3-0)
<i>Prerequisite</i>	1203212 and 1202113 International Finance Management; Characteristics and Functions of Foreign Exchange Markets; International Financial Systems and Impacts on Financial Management; Current Issues and Trends	
1203367	Export – Import Management	3 (3-0)
<i>Prerequisite</i>	1203121 Rules and Regulations of Export – Import Activities; Customs Procedure; Products and Markets Identification; Marketing, Transportation, Insurance and Trade Finance	





1203371	Business System Design	3 (3-0)
<i>Prerequisite</i>	1201111 Role of Information Technology on Modern Business Management; Analysis and Design of Business Information Systems; Enterprise Resource Planning and Management Including Transaction Processing, Management Information and Decision Support System; Software Application; Technology Trend	
1203401	International Business Laws	3 (3-0)
<i>Prerequisite</i>	1203202 and 1203362 International Business Laws in Relation to Processing, Trading Agreements, Agencies and Representatives, Insurance, Trade Documentation, Payment of Bills and Investment Contract, Trade Disputes Settlements.	
1203411	Securities Analysis	3 (3-0)
<i>Prerequisite</i>	1203312 Roles and Importance of Security Analysis; Macro – Economics Analysis in Relation to Security; Characteristics and Types of Financial Derivatives, Future Development	
1203412	Investment Banking	3 (3-0)
<i>Prerequisite</i>	1203311 Principles and Techniques of Investment Banking; Value and Wealth Establishment; Portfolio Management; Merger and Acquisition; Problems and Issues	
1203421	Marketing Research	3 (2-2)
<i>Prerequisite</i>	1203103 and 1203322 Roles and Importance of Marketing Research towards Marketing Management; Research Methodology; Application of Research Findings; Marketing Research Ethics; Field Practices	
1203431	Business Policy	3 (3-0)
	Relationship between Business Organization and Environments; Organization Analysis; Business Ethics; Policies for Business Responsibility of Stake - holders, Society and Environment; Case Study	
1203432	Strategic Management	3 (3-0)
<i>Prerequisite</i>	1203141 Concept and Process of Strategic Management; Decision Making on Strategic Alternatives; Effective Management of Organization; Case Study	
1203461	International Marketing	3 (3-0)
<i>Prerequisite</i>	1203121 Principles and Concept of International Marketing; Importance of National Economy; Global Marketing Concept; International Marketing Strategies; Problems and Issues	
1203497	Seminar on Business Administration	3 (3-0)
	Seminars on Theories, Practices and Application of Current Business Issues	
1205111	Introduction to Tourism	1(1-0)
	Scope of Tourism Industry Comprising Components, Attractions, History Nature and Future Trends; Impacts to Society, Economy and Environments	
1205201	Tourism Geography	2(2-0)
	Overview of World Geography and Geography of Thailand; Determinants of Tourism Attraction Management; Map Interpretation; Roles of Public and Private Sectors on Tourism Industry	
1205202	Tourism Laws	2(2-0)
<i>Prerequisite</i>	1203101 Origin, Importance and Issues in Tourism Business and Tourist Guide Act-1992; Laws Related to Tourism; Universal Laws in Tourism	
1205211	Tourism Business Management	3(3-0)
	Roles and Importance of Travel Agencies; Types of Tours Feasibility Study; Itinerary Planning; Coordination with Other Tourism Service Suppliers; Tourism Business Ethics	

- 1205301 Ethics and Psychology for Service Industry 3(3-0)**
Knowledge and Understanding of Types and Objectives of Service Provided, Basic Ethics and Psychology to Develop Personality; Attitude Relationship and Communication Conflict and Problem Alleviation
- 1205302 Traditional Arts and Cultures 3(2-2)**
Global Traditional Arts and Cultures; Thai Tradition and Cultural Festivals; Folk Play and Cultural Diversities among Ethnic Groups; National Heritage Preservation and Contribution to Tourism Industry
- 1205311 Ecotourism 3(2-2)**
Prerequisite 1103140
Concepts, Importance and Types of Ecotourism; Factors Determining Ecotourism; Principles of Sustainable Ecotourism Management; Laws Imposed; Ecotourism Analysis; Roles of Public and Private Sectors on Promotion
- 1205312 Tourism Planning and Marketing Development 3(3-0)**
Prerequisite 1203121
Introduction to Tourism Planning and Marketing; Market and Product Identification; Factors Affecting Growth; Marketing Research and Trend Analysis; Strategic Planning for Market Development
- 1205313 Conservation and Development of Tourist 3(3-0)**
Prerequisite 1103140
Impact of Tourism on Environment and Socio-Culture; Tourism Resources Preservation and Development; Tourism Carrying Capacity Consideration; Cooperation of Public and Private Sectors in Managing Resources and Environment for Sustainable; Tourism Micro-Macro Level Environmental Assessments
- 1205321 Introduction to Hotel Management 3(2-2)**
Hotel Organization Structure; Management and Operations; Hotel Chain Management; Laws Relating to Hotel Business; Role and Importance of Hotel Business on Economic and Society
- 1205322 Food and Beverage Management 3(2-2)**
Structure and Functions of Food and Beverage Department; Menu Engineering; International Gastronomy; Restaurant Design; Types of Beverage; Banquet and Catering
- 1205331 Tour Guide 3(2-2)**
Principles of Tour Guides; Ethics; Tourism Behaviors; Information and Recommendation of Tourist Attractions in Thailand
- 1205332 MICE Management 3(2-2)**
Meaning and Importance of MICE Meeting, Incentives, Conventions and Exhibitions; Marketing and Operation Plans for Various Types
- 1205333 Airlines and Cruiselines Business Management 3(2-2)**
Evolution and Components of Airline and Cruiseline Business; Domestic and International Route Planning Services and Fares; Reservation and Ticketing; International and Domestic Laws, Regulations Business Codes; Immigration and Customs Procedures; Cargo; Trends and Future Prospective
- 1205411 Tourism Industry and State Policy 3(3-0)**
Evolution, Importance and Impact of Tourism Industry on Society, Economy, Politics, Environment and Culture; Future Development Trends; International and National Travel Promotion Organization; National National Policy and Strategic Plan toward Tourism Industry Development
- 1205499 Cooperative Training 3(0-9)**
Preparing Students for Future Career; Cooperative Training Organizations Included Government and Non-Government Sectors Under University's Supervision and Evaluation



Course Descriptions

School of Information Technology

- 1301101 Information Technology 1 2 (1-2)**
An Overview of Information Technology; Importance, Evolution and Impacts; Introductory Computer Systems; Fundamental Hardware and Software; Information Communication and Network Systems; Computer Packages for Office and Internet Services
- 1301102 Information Technology 2 2 (1-2)**
Prerequisite 1301101
Data Processing; Introduction to Database; DBMS; Webpage Creation
- 1301103 Information Technology Concepts 2 (2-0)**
Information Technology Concepts; Importance, Evolution, Roles and Impacts; Computer Systems; Hardware and Software; Data Processing; Networks and Computer Communications; Flowchartings; Problem Solving Process
- 1301211 Information Technology Marketing Management 3 (3-0)**
Defining Policy and Introduction to Information Technology Marketing Strategy; Marketing Factors Including Economic Competition as well as Technology Development to Determine the Position of Products and Services, Price, Promotion, Marketing Channel; consumer behavior perception on both individuals and IT Organizations; It Market Shares; Development of Marketing Plans Including Sale Planing, Accessing to Consumer, Advertising Plan, Distribution Plan, Pricing and Continuous Product Development
- 1301221 System Analysis and Design 3 (3-0)**
Introductory Analysis; System Analysis Tools; System Plan; Decision Tree and Table; Feasibility Study; Investment Analysis, Input and Output; System Design and Maintenance; Computer Processing; Documentation, Implementation and Evaluation and Case Study
- 1301281 Man and Information Technology 3(3-0)**
Overview of Relationship between Man and Information Technology; Human Behavior of Information and Communication Systems; Application, Impact and Ethics;
- 1301311 Principles and Practice of Electronic Commerce 3(3-0)**
Development of Internet, Application and Impact on Trade and Business Systems; Internet for Customer On-Demand, Teleconferencing, On-line Banking; Regulations and Laws; Trends
- 1301312 Industrial Management 3(3-0)**
Industrial Production and Services Models; Structure and Historical Backgrounds of Industries; Industrial Management and Cost Control; Work System Analysis; Theory of Modern Factory Management; Development of Transportation Strategy; Total Quality Management System; Quality Control and Quality Assurance
- 1301313 Electronic Commerce for Tourism Business 2(1-2)**
Overview of Information Technology; Internet Technology; Application and Impact of Information Network on Trade, Business and Banking Systems; Regulations and Laws; Trends
- 1301331 Information Retrieval 3(2-2)**
Prerequisite 1302211
Data Structure for Information Storage; File Structure; Database System; Coding Technique; Information Retrieval; Online Query System; Selection of Data Structure for Computer System; Retrieval Logics; Search Technique; Problems and Prospects
- 1301341 Office Automation Management 3(2-2)**
Development of Office Design; Workflow Analysis and Design; Type and Characteristics of Office Equipments; Application, Testing, Evaluation and Maintenance; Concepts of Paperless and Cost Reduction on Application of Office Automation; Problems and Prospects
- 1301342 Management Information Systems 3(3-0)**
Characteristics of Modern Organization; Roles and Significance of Information on Decision Making; Data Application and Management; Relationship between Computer Technology and Development of Information System Management for Administration; Trends



- 1301343 *Decision Support Systems* 3(3-0)**
Human Decision Process; Types of Information System, Models and Types of Decision Support Systems; Development and Implementation of Decision Support System; Related Mathematical Methods, Formulas and Simulation Models; Case Studies
- 1301351 *Computer and Information Networks* 3(2-2)**
Fundamental Data Communication; Media; Transmission; Encoding; Processing; Error Detection and Handling; Link Control System; Network Architecture and Topology; Local and Wide Area Networks; Trends of Information Network
- 1301352 *Information Security* 3(3-0)**
Threats in Computer Security Systems; Planning and Managing Security Systems; Disaster Recovery; Database Security; Personal Security; Network Security; Physical Prevention; Risk Analysis; Law and Ethic Issues
- 1301361 *Business Modeling and Simulation* 3(3-0)**
Prerequisite: 1106281 and 1202111
Business and Economic Models and Simulation base on Hypothetical Variables; Effects and Correlations among Variables; Probability and Statistical Theories for Feasibility of Outcomes; Computer Application for Testing and Simulation
- 1301381 *Introduction to Multimedia Technology* 3(2-2)**
Application of multimedia for Communication, Acquisition, Production, Transmission, Perception and Presentation; Trends
- 1301391 *Senior Project 1* 1(0-3)**
Undergraduate Research on Current Issues of Information Technology under Guidance of Supervisor
- 1301471 *Information Technology Policy and Laws* 3(3-0)**
National Policy for Information and Communication Technology; Related Organizations; Regulations and International Agreements; Problems and Prospects
- 1301491 *Seminar* 1(0-3)**
Seminar on Theories, Practices and Application of Current Issues of Information Technology
- 1301492 *Senior Project 2* 2(0-6)**
Undergraduate Research on Current Issues of Information Technology under Guidance of Supervisor
- 1301493 *Cooperative Training* 3(0-9)**
Preparing Students for Future Careers; Cooperative Training Organization Included Government and Non-Government Sectors under University's Supervision and Evaluation
- 1302111 *Computer Programming 1* 3(2-2)**
Fundamental Computer Application; Steps and Methods for Problem Solving; Algorithm and Program Design; High Level Language; Control Structure; Array; Function; Input and Output
- 1302211 *Computer Programming 2* 3 (2-2)**
Prerequisite 1302111
Structural Program; Data Structure; Recursive Function; Sub-Function; Pointers; Programming Techniques; Program Editing ; Files; Structural Data; Data Encryption, Link Lists
- 1302241 *Operation System* 3 (3-0)**
Design Concept of Operation System; Thread and Process Management; Concurrent Process and Interprocess; Uniprocessor; Multiprocessor; Real-Time Process; Memory and Virtual Memory Managements; Input and Output(I/O); File Systems and Distributed Processing; Security; Case studies
- 1302251 *Data Structure and Algorithms* 3 (3-0)**
Scope of Design and Logical Data Structure; Stacks; Queues; Link List; Tree and Graph; Structure Control Algorithm; Basic Analytical Methods for Searching and Sorting Algorithms
- 1302271 *Computer Architecture* 3 (3-0)**
Logic Design for Digital Computer using Boolean Algebra; Combination and Sequential Circuits; Machine; Language; Memory; Integrated Circuit; Processor; Input - Output





1302311	Object Oriented Programming	3 (2-2)
Prerequisite	1302111	
	Object-Oriented Definition; Techniques and Concept of Object -Oriented Programming; Class Definition; Object – Oriented Programming Principles including Encapsulation, Characteristics Transfer, Polymorphism Process; Memory unit Management and Object Programming Design	
1302321	Object Oriented Design and Analysis	3 (2-2)
Prerequisite	1302311	
	System Development Cycle; Concepts of Object-Oriented Technology; Incremental System Development; Unified Modeling Language; Use-Cases Modeling Techniques; Analytical Modelling Design; Object Finding Concepts; Object-Oriented Design; Class Design; Class and Object Relationship; Cases Tools for Programming	
1302322	Compiler Design and Programming Languages	3 (2-2)
Prerequisite	1302211	
	Compiler for High Level Language Design; Relationship between Language Design and Compiler Design; Run-Time Organization; Syntactic and Lexical Analysis; User-Defined Types; Type Checking; Context Analysis; Code Generation and Optimization; Memory Management	
1302323	Software Engineering 1	3 (3-0)
	Concepts and Issues of Large Software Projects Development; Systematic Approaches for Analysis, Design, Costing, Implementation, Testing and Maintenance	
1302331	Database Systems 1	3 (2-2)
	Data Filing Management; Basic Database Concept and Architecture; Data Unit and File Structure; Types of Database Structure; Relational Database; Network Database; Hierarchical Database; Query Language; Database Design; Database Environment; Database Management System	
1302332	Database Systems 2	3 (2-2)
Prerequisite	1302331	
	Conceptual Level and Logical Level Database Designs; Object-Oriented Database; Relational Object Database; Query Processing; Concurrency Control; Data Recovery System; Distributed Database System	
1302341	Computer Networks and Data Communications	3 (2-2)
	Analysis, Design and Implementation of Computer Networks; Standard Network Model; Network Protocols; Wide Area Network	
1302342	Network Operations and Administration	3(2-2)
Prerequisite	1302341	
	Database Management Systems (DBMS); Standard Network Protocols; Network Management Programming; Network Administration for Ethernet, Transfer Control Protocol/ Interconnected Protocol(TCP/IP) and Asynchronous Transfer Mode(ATM) Current Network Administration Survey and Application	
1302343	Distributed Systems	3 (3-0)
Prerequisite	1302344	
	Distributed System Concept; Network Architecture; Client-Server System; Remote Object; Remote Object Service; Comparison of Various Types of Distributed System	
1302344	Introduction to Computer Networks	3 (2-2)
	Fundamentals of Data Communications; Media; Transmission; Encoding; Processing; Error Detection and Handling; Link Control; Multiplexing; Packet Switching; Network Architecture and Topology; Local and Wide Area Networks	
1302361	Introduction to Artificial Intelligence	3 (3-0)
	Concepts and Techniques of Artificial Intelligence; Reasoning Procedure under Uncertainty; Mechanical Learning; Neural Network; Image Processing; Robot; Natural Language; Intelligence Architecture; Artificial Intelligence Problems Solving	
1302381	Computer Graphics	3 (2-2)
Prerequisite	1106102 and 1302211	
	Computer Graphic Modelling; Rendering ; Animation; Geometric Transformations; Image Processing; Geometric Models for Curve and Surface	

1302382	Website Development	3 (2-2)
<i>Prerequisite</i>	1302111 and 1302331 Development of Web Server and Application using Hypertext Markup Language (HTML)	
1302391	Senior Project 1	1 (0-3)
	Undergraduate Research on Current Issues of Computer Science under Guidance of Supervisor	
1302421	Software Engineering 2	3 (3-0)
<i>Prerequisite</i>	1302323 Software Design and Implementation; Emphasis on Detailed Design, Pseudocode, Design Standards, Coding; Testing and Quality Control of Large Software Projects	
1302461	Theory of Computation	3 (3-0)
	Basic Concept and Computational Model; Finite State Automata; Regular Set; Pushdown Automata; Turing Machines; Undecidability	
1302491	Seminar	1 (0-3)
	Seminar on Theories, Practices and Application of Current Issues of Computer Science	
1302492	Senior Project 2	2 (0-6)
	Undergraduate Research on Current Issues of Computer Science under Guidance of Supervisor	
1302493	Cooperative Training	3 (0-9)
	Preparing Students for Future Careers; Cooperative Training Organization Included Government and Non-Government Sectors under University's Supervision and Evaluation	
1501101	Basic Information and Communication Technology Laboratory 1	1 (0-3)
	Basic Engineering Instruments; Basic Electrical and Electronic Measurement; Application of Electronic Devices; Circuit Wiring; Basic Laboratories for Digital Circuit	
1501102	Basic Information and Communication Technology Laboratory 2	1 (0-3)
<i>Prerequisite</i>	1501101 Computer Assembly; Computer Network System Configuration; Network Operation System Configuration; Unix Operation System	
1501103	Electric Circuit Analysis	3 (3-0)
	Electronic Circuit Modeling; Definitions and Rules; Signal Wave Form; Principles and Methods of Electric Circuit Analysis; Operational Amplifier (Op-Amps); Direct Current (DC) Analysis; Fundamental Circuits	
1501104	Fundamental Electronics	3 (3-0)
	Introduction and Development of Electronic Devices; Theory of Semiconductor; Basic Properties of P-N Junction, Diodes and Function of Diodes; Application of Bipolar Transistor; Biasing; Small and Large Signal Amplifiers Circuit Analysis; Hybrid- Model; High Frequency Amplifier Circuits; Properties and Basic Application of Field-Effect-Transistor (FET); Feedback Amplifiers; Differential Amplifiers; Active Filters; Stability and Reimbursement of Multi-Section Amplifiers; Fundamental of Integrated Circuits	
1501171	Digital Circuit and Logic Design	3 (3-0)
	Overview of Digital Circuit and Logic Design; Switching Circuit Theory; Boolean Algebra; Computer Machine Code; Truth Table; Karnaugh Map; Karnaugh Map, Gate Circuit, Flip-Flop Circuit; Counter Circuit; Register Circuit; Digital System; Introductory Microprocessor	
1501271	Microprocessor and Assembly Language	3 (2-3)
<i>Prerequisite</i>	1501171 Technology and Architecture of Microprocessors; Characteristics and Types; Connection Technique; Register; Arithmetic and Logic Unit (ALU); Control Unit; Standard Bus; High Speed Bus; System Clock; Interrupt System; Memory Design; Input - Output and Peripheral Design; Data Manipulation and Machine Instructions; Machine Code; Assembly Language and Programming; Application of Single Board Microcontroller	





1501311	Parallel Programming	3 (2-2)
Prerequisite	1302111 Introduction to Basic Design and System Development of Parallel Computers; Parallel Programming; Error Detection and Correction; Performance Evaluation	
1501341	Network Systems Programming	3 (2-2)
Prerequisite	1302341 Client/Server Model; Connection/Connectionless Server; Error Protocol and Recovering; Basic Socket; Transmission Control Protocol /User Datagram Protocol (TCP/UDP); Multiplexing; Socket Options; Advanced Socket Naming and Address Conventions; Non-Blocking Input and Output; Multicast and Broadcast; Out of Band Data; Raw Socket; Data Link Access; Design and Develop Network Programming; Interlink Process; Transport Layer Communication	
1501342	Advanced Computer Networks	3 (2-2)
Prerequisite	1302341 Co-Functions of Internet Protocol Versions 4 and 6 (IPv4/IPv6); Daemon Processes; Routing and Switching; Using and Implementing of Router; Mobile Wireless Protocol; Trends	
1501343	High Speed Computer Networks	3 (3-0)
Prerequisite	1302341 Definitions and Models of High Speed Computer Networks; Network Design and Administration; Optical Network; Switching Technology; Modern High Speed Network Technology	
1501344	Network System Security	3 (3-0)
Prerequisite	1302341 Security Techniques for Multi-User Computer and Distributed Computer System; Fundamental of Cryptography; Computer Virus; Firewall; Risk Management; Internet and Web Security	
1501361	Expert System	3 (3-0)
Prerequisite	1302361 Principles of Expert System; Structure of Expert Systems; Knowledge Representation Techniques; Rules and Meaning; Information Retrieval; Mechanism for Reasoning with Knowledge; Relationship to Natural Language System	
1501362	Introduction to Natural Language Processing	3(3-0)
	Principles of Mathematics for Basic Knowledge of Natural Language Processing; Syntactic and Lexical Analysis; Substitution for Meaning of Sentence; Analysis and Synthesis of Inter-Sentences Relation	
1501363	Pattern Recognitions and Vision	3 (3-0)
	Comparative Patterns of Masking; Alphabet Recognition Management; Binary Data Adaptation; Dimension Reduction; Linear Techniques for Clustering and Pattern Recognition; Bayesian Analysis; Automatic System of Vision Handling; Data Selection Methods; Integrated Processing; Hierarchical Data Structure; Graphic Processing; Three Dimensional Processing	
1501364	Image Processing	3 (3-0)
	Fundamental Image Processing; Visualization; Mathematical Image Modeling; Multidimensional Signal Processing; Sampling, Fourier Transformation; Image Property and Improvement; Image Compression Techniques; Image Color Processing	
1501365	Machine Learning	3 (3-0)
	Decision Algorithms; Base Learning and Case-Based Learning; Nearest Neighbor Classifiers; Genetic Algorithm; Inductive Logic Programming	
1501371	Microprocessor Application	3 (2-3)
Prerequisite	1501271 Switching Devices and Implementation; Signal Detection Devices; Signal Conversion; Automatic Control Systems; Microcomputer Interfacing Techniques; Microcontroller; Robotic Interfacing; Trends	
1501372	Advance Digital System Design	3 (2-3)
Prerequisite	1501171 Digital Circuit Designs; Synchronous and Asynchronous Serial Circuits; Combination and Sequential Circuits; Digital System Design with Integrated Circuits and Programable Logic Devics; Development of Computer Hardware; Very High Speed Integrated Circuit Hardware Description Language (VHDL)	

- 1501373 Advance Computer Architecture 3(3-0)**
Fundamental Computer Designs; Instruction Designs and Parallel Processor; Architectures of Single Instruction Single Device(SISD); Single Instruction Multiple Device(SIMD), Multiple Instruction Single Device(MIMD) and Multiple Instruction Multiple Device; Parallel Reduce Instruction Set Computer (RISC); Fault Tolerance; Multiprocessor System and Network Interconnection
- 1501374 VLSI Systems Architecture and Design 3(2-3)**
Prerequisite 1501104 and 1501171
Fundamental Techniques and Computer Tools for Digital System Designs; Very Large Scale Integrated Circuits (VLSI) Design and Implementation with NMOS and CMOS Technology; Computer Aided Design (CAD) Tools for Simulating and Testing; Architecture Subsystems; Hardware Descriptive Language; Hardware Compiler
- 1501381 Computer Aided Design and Manufacturing 3(2-2)**
Application and Advancement of Computer Aided Design (CAD) and Computer Aided Manufacturing (CAM); Design Theories; Mathematics for Graphic Design and Simulation; Design and Application of Computer Numerical Control (CNC) Machines
- 1501382 Internet Programming Application 3(2-2)**
Prerequisite 1302101
Web Development; Interactive Webpages; Java Script; Perl and Active Server Pages (ASP); Web Programming with Database
- 1501391 Senior Project 1 1 (0-3)**
Undergraduate Research on Current Issues of Computer Engineering under Guidance of Supervisor
- 1501481 Robotics 3(2-3)**
Fundamental Artificial Intelligence in Robotics; Philosophy and Historical Development of Robotics; Hardware Components and Subsystems; Sensory Measurement and Perception Systems; Architecture and Robotic System; Problems and Solutions; Learning Process, Motion Planning, Navigation, Obstacle Avoidance and Vision System of Robotics; Robotic Laboratory
- 1501491 Senior Project 2 2 (0-0)**
Undergraduate Research on Current Issues of Computer Engineering under Guidance of Supervisor
- 1501492 Seminar in Computer Engineering 1 (0-3)**
Seminar on Theories, Practices and Application of Current Issues of Computer Engineering
- 1501493 Cooperative Training 3 (0-9)**
Preparing Students for Future Careers; Cooperative Training Organization Included Government and Non-Government Sectors under University's Supervision and Evaluation
- 1501494 Selected Topics in Computer Engineering 1 3 (3-0)**
Study and Research Interesting Topic in Computer Engineering
- 1501495 Selected Topics in Computer Engineering 2 3 (3-0)**
Study and Research Interesting Topic in Computer Engineering
- 1502231 Principles of Communication 3 (3-0)**
Principles of Electromagnetic Wave; Transmission Line; Antenna; Modulation Theory; Principles of Communication Equipments; Wireless Communication; Communication Network Architectures
- 1502232 Measurements and Instrumentation in Communication System 2 (1-3)**
Measurement and Equipments for Computer Network Communication; Wire and Wireless Communication Systems; Computer Network Efficiency Assessment
- 1502241 Web Design 1 (0-2)**
Wave Design and Development using Tables and Frames as Web Components; Interactive Wave Designs
- 1502311 Information Theory and Coding 3 (3-0)**
Combinatorial Analysis and Probability Theory; Entropy and Memoryless Application; Limited Bandwidth, Encoding Components; Data Encoding Theory; Error Detection and Correction; Private Keys and Public Key System





1502312	Cryptography	3 (3-0)
	Classical and Contemporary Data Encryption Techniques; Private Key and Public Key, Digital Signature, Random Number; Encoding Performance Analysis and Evaluation	
1502321	Network Operating System	3 (3-0)
	Design and Implementation of Operating System for Stand Alone and Computer Network; Principles and Control Methods for Processor; Main Memory; Block Structure Data Storage; Unix Operating System; Performance Measurement	
1502331	Optical Communications	3 (3-0)
	Principle of Optical Communication; Structure, Production, Characteristics and Testing of Optical Fiber; Optical Transmitter and Receivers; Optical Equipments	
1502332	Communication Electronics	3 (3-0)
	Small Signal Amplifiers; Noise, Intermodulation Interference; Signal Converters; High-Frequency Signal Amplifiers; Hybrid Transformation; Transmission Lines; Oscillators; Frequency Synthesizer; Modulator and Demodulator	
1502391	Senior Project 1	1 (0-3)
	Undergraduate Research on Current Issues of Information and Communication Technology under Guidance of Supervisor	
1502431	Communication Systems Design	3 (3-0)
	Symbols and Charts in Communication System; Communication Components and Their Function; Security System; Communication System Design for Business; Demand Forecast; Cost Estimation; Feasibility Study	
1502432	Digital Signal Processing	3 (3-0)
	Time-varying Signal; Z-Transformation; Discrete Fourier Transformation; Fourier Analysis for time-varying signal; Digital Filter Design; Random Signal; Homomorphic Signal Processing; Power Spectrum Estimation	
1502451	Introduction to Parallel Processing	3 (3-0)
	Parallel Processing Fundamental; Application of Continuity; Particles and graphs; Synchronization and Location of Parallel Processing; Models of Parallel Processor; Data Compilation; Memory Sharing, Synchronization, Cache Coherence; Multithreading; Instruction Set; Design and Evaluation of System; Instruction Set and Compiler Technology	
1502491	Seminar	1 (0-3)
	Seminar on Theories, Practices and Application of Current Issues of Information and Communication Technology	
1502493	Cooperative Training	3 (0-9)
	Preparing Students for Future Careers; Cooperative Training Organization Included Government and Non-Government Sectors under University's Supervision and Evaluation	
1502494	Selected Topics in Information and Communication Technology 1	3 (3-0)
	Study and Research on Interesting Topic in Information and Communication Technology	
1502495	Selected Topics in Information and Communication Technology 2	3 (3-0)
	Study and Research on Interesting Topic in Information and Communication Technology	

Course Descriptions

School of Agro-Industry

1401101	Introduction to Food Technology	1(1-0)
	Importance and Source of Food; Raw Material Sorting; Postharvest Transformation; Principles of Food Preservation and Processing; Roles of Microorganism; Current Development; Food Legislation	
1401102	Fundamental Food Technology	3(3-0)
Prerequisite	1103211	
	Raw Materials; Importance of Microorganism; General Methods of Food Processing; Current Topics in Food Technology; Regulations and Laws	
1401201	Food Processing 1	3(2-3)
Prerequisite	1102102 and 1103102	
	Preparation of Raw Materials for Food Processing; Fermentation; Low and High Temperature Processing; Compound Separation; Study Tour	
1401202	Food Processing 1	3(2-3)
Prerequisite	1102102 and 1103102	
	Preparation of Raw Materials for Food Processing; Fermentation; Low and High Temperature Processing; Compound Separation; Study Tour	
1401301	Food Processing 2	3(2-3)
Prerequisite	1401201	
	Concentration; Dehydration; Baking and Frying; Irradiation; Microwave Heating; Extrusion; Stability and Storage Life; Other Processing Technology; Problems and Current Issues; Study Tour	
1401303	Food Processing 2	3(2-3)
Prerequisite	1401202	
	Concentration; Dehydration; Baking and Frying; Irradiation; Microwave Heating; Extrusion; Stability and Storage Life; Other Processing Technology; Problems and Current Issues; Study Tour	
1401331	Principles of Packaging	2(2-0)
	Principles of Packaging; Packaging Materials; Designs, Forming, Functions and Importance; Packaging Systems; Impact of Packages to Environments; Standard and Regulations; Current Issues and Trends	
1401332	Fruit and Vegetable Technology	3(2-3)
Prerequisite	1401102 or 1401201 or 1401301	
	Compositions and Nutritional Value of Fruits and Vegetables; Postharvest Changes in Physical, Chemical and Nutritional Values; Storage; Principles of Preservation and Processing; Problems and Prospects; Study Tour	
1401333	Technology of Meat and Egg Products	3(2-3)
Prerequisite	1401102 or 1401201 or 1401301	
	Chemical and Physical Composition of Muscle Food; Slaughtering; Carcass Dressing; Storage; Pre and Post Mortem Changes; Factors Affecting Muscle Quality; Muscle Food Products Processing; Quality Control; Egg and Egg Products Processing; Problems and Prospects; Study Tour	
1401334	Dairy Products Technology	3(2-3)
Prerequisite	1401102 or 1401201 or 1401301	
	Chemical Composition and Nutritional Values of Milk and Milk Product; Processing and Quality Control; Packaging; Problems and Prospects; Study Tour	
1401335	Bakery Technology	3(2-3)
Prerequisite	1401102 or 1401201 or 1401301	
	Structure and Chemical Composition of Starch; Characteristics of Ingredients; Processing and Quality Control; Packaging; Problems and Prospects; Study Tour	





1401336	Technology of Cereal Products	3(2-3)
Prerequisite	1401102 or 1401201 or 1401301 Structure and Chemical Composition of Cereal; Processing and Quality Control; Storage; Utilization of Waste Materials; Problems and Prospects; Study Tour	
1401337	Beverage Technology	3(2-3)
Prerequisite	1401102 or 1401201 or 1401301 Raw Materials Selection; Various Types of Beverage ; Processing and Quality Control; Standards and Labelling; Problems and Prospects; Study Tour	
1401338	Confectionery of Technology	3(2-3)
Prerequisite	1401102 or 1401201 or 1401301 Types of Confectionery; Characteristics of Ingredients; Processing and Quality Control; Storage; Problems and Prospects; Study Tour	
1401339	Fermented Food Technology	3(2-3)
Prerequisite	1401102 or 1401201 or 1401301 Food Preservation by Fermentation; Industrial Microbiology ; Favorable Factors for Growth and Fermented Activities Processing and Quality Control; Problems and Prospects; Study Tour	
1401341	Food Quality Assurance	3(2-3)
Prerequisite	1401202 Principles of Quality Control and Assurance; Quality Factors and Measurement; Quality Assurance System; Statistics for Quality Control	
1401342	Food Plant Sanitation and Food Safety	3(2-3)
Prerequisite	1401202 Good Manufacturing Practice (GMP); Plant Sanitation Management System Including Controlling, Monitoring, Risk Analysis and Assessment; Waste Management of Agro-Industry; Environmental Laws; Problems and Current Issues; Study Tour	
1401431	Fruit and Vegetable Technology	3(2-3)
Prerequisite	1401102 or 1401202 Compositions and Nutritional Value of Fruits and Vegetables; Postharvest Changes in Physical, Chemical and Nutritional Values; Storage; Principles of Preservation and Processing; Problems and Prospects; Study Tour	
1401432	Technology of Meat and Egg Products	3(2-3)
Prerequisite	1401102 or 1401202 Chemical and Physical Composition of Muscle Food; Slaughtering; Carcass Dressing; Storage; Pre and Post Mortem Changes; Factors Affecting Muscle Quality; Muscle Food Products Processing; Quality Control; Egg and Egg Products Processing; Problems and Prospects; Study Tour	
1401433	Dairy Products Technology	3(2-3)
Prerequisite	1401102 or 1401202 Chemical Composition and Nutritional Values of Milk and Milk Product; Processing and Quality Control; Packaging; Problems and Prospects; Study Tour	
1401434	Bakery Technology	3(2-3)
Prerequisite	1401102 or 1401202 Structure and Chemical Composition of Starch; Characteristics of Ingredients; Processing and Quality Control; Packaging; Problems and Prospects; Study Tour	
1401435	Technology of Cereal Products	3(2-3)
Prerequisite	1401102 or 1401202 Structure and Chemical Composition of Cereal; Processing and Quality Control; Storage; Utilization of Waste Materials; Problems and Prospects; Study Tour	
1401436	Beverage Technology	3(2-3)
Prerequisite	1401102 or 1401202 Raw Materials Selection; Various Types of Beverage ; Processing and Quality Control; Standards and Labelling; Problems and Prospects; Study Tour	

1401436	Beverage Technology	3(2-3)
<i>Prerequisite</i>	1401102 or 1401202 Raw Materials Selection; Various Types of Beverage ; Processing and Quality Control; Standards and Labelling; Problems and Prospects; Study Tour	
1401437	Confectionery of Technology	3(2-3)
<i>Prerequisite</i>	1401102 or 1401202 Types of Confectionery; Characteristics of Ingredients; Processing and Quality Control; Storage; Problems and Prospects; Study Tour	
1401438	Fermented Food Technology	3(2-3)
<i>Prerequisite</i>	1401102 or 1401202 Food Preservation by Fermentation; Industrial Microbiology ; Favorable Factors for Growth and Fermented Activities Processing and Quality Control; Problems and Prospects; Study Tour	
1401497	Seminar	1(0-3)
	Seminar on Theories, Practices and Application of Current Food Technology Issues	
1401498	Special Problem	3(0-9)
	Undergraduated Research Project in Food Technology Areas Under Supervision	
1401499	Cooperative Training	3(0-9)
	Preparing Students for Future Career; Cooperative Training Organizations Included Government and Non-Government Sectors Under University's Supervision and Evaluation	
1401499	Cooperative Training	3(0-9)
	Preparing Students for Future Career; Cooperative Training Organizations Included Government and Non-Government Sectors Under University's Supervision and Evaluation	
1402211	Food Microbiology	3(2-3)
<i>Prerequisite</i>	1103211 Role and Importance of Food Microorganism; Factors Affecting Growth; Food Spoilage; Food Borne Disease ; Utilization in Food Industries; Principles of Hazard Analysis Critical Control Points (HACCP); Standards and Determination Techniques	
1402301	Food Analysis and Sensory Evaluation	2(2-0)
<i>Prerequisite</i>	1402321 Chemical Analytical Techniques; Instrumentations; Determination for Diversified Raw Materials and Products; Interpretation; Accordance to Standards; Laws and Regulations	
1402302	Food and Nutrition	2(2-0)
<i>Prerequisite</i>	1102250 Functions and Requirement Nutrients; Diet Foods; Nutraceutical and Functional Foods; Food Toxicology; Malnutrition; Nutrient Changes during Processing; Nutritional Labelling; Problems and Current Issues	
1402321	Food Chemistry	3(2-3)
<i>Prerequisite</i>	1102250 Chemical Composition of Food; Functional and Chemical Properties; Biochemical Reaction Affecting Quality during Processing and Storage; Food Additives and Pigments	
1402322	Food Analysis	3(2-3)
<i>Prerequisite</i>	1402321 Chemical Analytical Techniques; Instrumentations; Determination for Diversified Raw Materials and Products; Interpretation; Accordance to Standards; Laws and Regulations	
1402341	Food Plant Sanitation and Environment	3(2-3)
<i>Prerequisite</i>	1401102 or 1401201 Good Manufacturing Practice (GMP); Plant Sanitation Management System Including Controlling, Monitoring, Risk Analysis and Assessment; Waste Management of Agro-Industry; Environmental Laws; Problems and Current Issues; Study Tour	
1402342	Waste Treatment and Utilization	3(2-3)
<i>Prerequisite</i>	1401102 or 1401201 Types and Problem of Waste from Industrial Plants; Characteristics and Waste Quality Analysis; Waste Treatments and Disposal; Principles and Utilization of Waste and By-Products for Foods and Non-Foods ; Study Tour; Prospects	





1402343	Waste Treatment and Utilization	3(2-3)
<i>Prerequisite</i>	1401102 or 1401202	
	Types and Problem of Waste from Industrial Plants; Characteristics and Waste Quality Analysis; Waste Treatments and Disposal; Principles and Utilization of Waste and By-Products for Foods and Non-Foods ; Study Tour; Prospects	
1403201	Food Engineering	3(2-3)
<i>Prerequisite</i>	1104102 and 1106103 or (1104102 and 1106102)	
	Dimension and Units; Thermodynamics Application in Food Processing; Mass and Energy Balances; Fluid Mechanics; Heat Transfer and Mass Transfer	
1403202	Engineering Drawing	1(0-3)
	Basic Drawings for Engineering Work; Shop Drawing; Computer Aided Design (CAD)	
1403203	Physical Properties of Biomaterials	3(2-3)
	Principles and Measurements of Physical Properties of Biomaterials Including Mechanical, Thermal, Electrical and Optical for Processing Systems in Engineering; Trends	
1403251	Physical Properties of Biomaterials	3(2-3)
	Principles and Measurements of Physical Properties of Biomaterials Including Mechanical, Thermal, Electrical and Optical for Processing Systems in Engineering; Trends	
1403261	Engineering Drawing	1(0-3)
	Basic Drawings for Engineering Work; Shop Drawing; Computer aided Design (CAD)	
1403301	Unit Operation	3(2-3)
<i>Prerequisite</i>	1403201	
	Handling and Transport of Materials, Drying, Mechanical Separation, Size Reduction and Screening, Mixing, Refrigeration and Heat Exchange	
1403331	Food Process Engineering	3(2-3)
<i>Prerequisite</i>	1403201 and 1401301	
	Thermal Food Processing; Food Freezing; Size Reduction and Screening; Mixing; Mechanical Separation; Contact Equilibrium Separation Process	
1403333	Food Process Engineering	3(2-3)
<i>Prerequisite</i>	1403201	
	Thermal Food Processing; Food Freezing; Size Reduction and Screening; Mixing; Mechanical Separation; Contact Equilibrium Separation Process	
1403431	Process Design	3(2-3)
<i>Prerequisite</i>	1401301 and 1403331	
	Characteristics and Functions of Process Design; Concepts and Criteria of Projects; Engineering Layouts of Processing Line; Specification and Design of Specific Equipment; Scale-Up Concept; Economic Analysis	
1403432	Instrument and Process Control	3(2-3)
<i>Prerequisite</i>	1401301 and 1403331	
	Fundamental Theories and Mathematics Approaches for Analysis and Design of Control System; Proportional - Integral -Differential (PID) Control; Sensors and Measurement Instruments; Design of Control System for Food Processes	
1403434	Instrument and Process Control	3(2-3)
<i>Prerequisite</i>	1401303 and 1403333	
	Fundamental Theories and Mathematics Approaches for Analysis and Design of Control System; Proportional - Integral -Differential (PID) Control; Sensors and Measurement Instruments; Design of Control System for Food Processes	
1403441	Process Design	3(2-3)
<i>Prerequisite</i>	1401303 and 1403333	
	Characteristics and Functions of Process Design; Concepts and Criteria of Projects; Engineering Layouts of Processing Line; Specification and Design of Specific Equipment; Scale-Up Concept; Economic Analysis	

1404301	Food Product Development and Marketing	3(2-3)
<i>Prerequisite</i>	1401202 or (1202111 and 1401301) Product Development System and Process; Product Idea Generation and Screening; Forecast of Needs and Trends of New Products; Marketing Management System; Problems and Current Issues	
1404302	Food Quality Control and Assurance	3(2-3)
<i>Prerequisite</i>	1401102 or 1401201 Principles of Quality Control and Assurance; Quality Factors and Measurement; Quality Assurance System; Statistics for Quality Control	
1405101	Principles of Crop Produces	3(3-0)
	General Principles of Crop Production; Growth and Development; Growth Regulations and Hormones; Pests and Pest Controls; Plant Propagation and Varied Improvement; Production of Horticultural and Field Crops; Postharvest Handlings; Agricultural Extension; Good Agricultural Practices	
1405102	Introduction to Postharvest Technology	2(2-0)
<i>Prerequisite</i>	1405101 Importance of Postharvest Treatments for Horticultural Produces; Postharvest Loss and Loss Assessment; Factors Affecting Loss; Postharvest Treatments	
1405211	Postharvest Physiology of Horticultural Crops	3(2-3)
<i>Prerequisite</i>	1103231 Characteristics of Horticultural Produces; Chemical Compositions; Development; Respiration; Postharvest Hormonal Changes; Ethylene and Fruit Ripening; Morphological and Chemical Changes; from Marturity to Senescence	
1405312	Postharvest Diseases and Insect Pests	3(2-3)
<i>Prerequisite</i>	1103211 Importance of Postharvest Diseases and Insect Pests; Infection and Infestation; Preharvest Factors Affecting Postharvest Produces; Relationships of Postharvest Diseases and Physiology of Produces; Host-Parasite Relationships; Epidimiology; Bacteria and Fungi as Causal Agents; Mycotoxins ; Physical; Chemical and Biological Controls; Importance Postharvest Diseases and Insect Pests of Economic Horticultural Crops	
1405332	Management of Quality System of Horticultural Produces	2(2-0)
<i>Prerequisite</i>	1405101 or 1405102 Physical and Chemical Qualities of Horticultural Produces; Regulations and Quality Standards; Quality Evaluation and Management for Domestic and International Markets; Management Systems and Product Quality Assurance	
1405333	Postharvest Handling of Horticultural Produces	4(3-3)
<i>Prerequisite</i>	1405102 Types of Horticultural Produces; Preharvest Factors Affecting Postharvest Quality; , Harvest Index; Harvest Postharvest Handling and Tranportation	
1405334	Postharvest Technology of Field Crops	3(2-3)
<i>Prerequisite</i>	1405333 Importance and Development of Postharvest Technology for Fields in Thailand; Postharvest Loss and Problem Solving; Preharvest Management; Harvest; Postharvest Handling; Storage and Transportation; Current Issues	
1405403	Plant Growth Regulations	3(2-3)
<i>Prerequisite</i>	1103231 Types of Plants Growth Regulator; Chemical and Physical Properties; Advantages and Harmful Effects; Current Issues	
1405430	Postharvest Technology	3(2-3)
	Importance of Postharvest Technology; Primary Agricultural Produces; Postharvest Loss and Physiological Changes; Handing; Packaging and Transportation; Problems and Prospects	
1405432	Minimally Processed Fruits Vegetables	3(2-3)
<i>Prerequisite</i>	1405102 and 1405211 or (1405430) Preparation of Perishable Fruits and Vegetables from Fresh Consumption; Physiological and Biochemical Changes; Microbial Spoilage; Quality and Safety Controls	





1405433	Horticultural Crops for Industry	3(3-0)
<i>Prerequisite</i>	1405102 and 1405211or (1405430) Horticultural Produces for Industrial Purposes; Factors Affecting Yield and Quality; Storage of Produces; Preparation of Produces for Processing; Business Planning and Management; Problems and Prospects	
1405496	Seminar	1(0-3)
	Seminar on Theories, Practices and Application of Current Postharvest Technology Issues	
1405497	Special Problem Proposal	1(0-3)
	Undergraduated Research Project in Postharvest Technology Areas Under Supervision	
1405498	Special Problem	3(0-9)
	Undergraduated Research Project in Postharvest Technology Areas Under Supervision	
1405499	Cooperative Training	3(0-9)
	Preparing Students for Future Career; Cooperative Training Organizations Included Government and Non-Government Sectors Under University's Supervision and Evaluation	
1406201	Principles of Packaging	2(2-0)
	Principles of Packaging; Packaging Materials; Designs, Forming, Functions and Importance; Packaging Systems; Impact of Packages to Environments; Standard and Regulations; Current Issues and Trends	
1406241	Packaging Material 1	3(3-0)
<i>Prerequisite</i>	1406201 Types of Packaging Materials; Structures; Physical and Chemical Properties; Relationship Between Structures and Properties Relative to Applications; Processing of Packaging Material	
1406252	Packaging Materials 2	2(2-0)
<i>Prerequisite</i>	1406251 Choices of Suitable Packing Materials Relative to Utilization; Analysing Innovations of Packaging Materials	
1406353	Packaging Systems and Testing	3(2-3)
<i>Prerequisite</i>	1406251 Systems of Packaging Technology and Testing; Processing and Forming of Packages; Packaging Testing Including Laboratory Instruments	
1406354	Dynamics of Packaging	3(2-3)
<i>Prerequisite</i>	1406251 Elementary Mechanics Including Dropping, Bumping and Vibration; Conditions and Effect of Transportation and Distribution; Structural Packaging Design; Problems and Prospects	
1406361	Packaging Design	3(2-3)
<i>Prerequisite</i>	(1403202 or 1403261) and 1406251 Principles of Packaging Design; International Package Design in Relation to Thailand Global Requirements; Structural Design for Engineering Applications; Graphic Design; Use of Color; Logo Design; Cost Evaluation; Prospects	
1406421	Packaging in Food Industry	3(2-3)
<i>Prerequisite</i>	1406201 Food Contamination from Packaging; Choices of Packaging Materials Related to Safety of Consumers; Various Types of Food Packaging; Current Issues and Trends	
1406431	Package Printing	3(2-3)
<i>Prerequisite</i>	1406353 Types of Printing Systems; Methods and Systems for Specific Materials; Converting Processes of Materials; Coloring Techniques in Printing	

1406441	Packaging Economics	3(3-0)
<i>Prerequisite</i>	1202101 and 1406201 Economic Analysis of Packaging; Cost; Price; Investment; Marketing; Relationship Between Economic Policy and Industrial Demand; Current Issues and Prospects	
1406442	Packaging for Transportation	3(2-3)
<i>Prerequisite</i>	1406354 Types of Packaging and Transportation; Packaging for Wholesale and Retail Markets; Management; Custom Regulations and Clearance Procedures; Delivery; Damages and Insurance; Problems and Trends	
1406454	Natural Materials for Packaging	3(2-3)
<i>Prerequisite</i>	1406201 Types and Properties of Natural Materials; Natural Coating Materials; Edible Films and Coatings; Preparation of Raw Materials; Production and Applications; Trends	



Courses Descriptions

School of Law

- 1601101 *Introduction to Legal Principles* 3 (3-0)**
 Origin and Evolution of Law; Legal Theories and Nations; Relationship between Law and Other Sciences; Application; Drafting; Interpretation; Elimination of Legal Loopholes; Rights; Duties; Excess over Rights; Other Important Principles of Law
- 1601202 *Legal Interpretation and Legal Reasoning* 2 (2-0)**
 Principles of Legal Interpretation in Various Countries; Legal References; Legal Interpreters; Tools for Legal Interpretation; Types and Nature of Legal Interpretation; Interpretation of Treaties and Private Contracts; Legal Reasoning
- 1601403 *Thai and Foreign Legal System* 2 (2-0)**
 History, Evolution, Legal Principles and World Juridical Systems; Development of Thai Legal and Juridical Systems from Sukhothai Period Including Laws of Lanna and Mangrai; Legal and Juridical Reform of King Rama V; Civil Code
- 1601404 *Accounting for Lawyers* 2 (2-0)**
 Application of Accounting Principles and Criteria to Legal Exercise; Relationship Between Accounting Principles and Company Law, and Taxation
- 1601405 *English for Lawyers 1* 2 (2-0)**
 Legal Terminology Including Definitions and English Usage for General Principles of Law
- 1601406 *English for Lawyers 2* 2 (2-0)**
Prerequisite 1601405
 Vocabulary and English Legal Terminology in Several Areas of Law
- 1601407 *Legal Philosophy* 2 (2-0)**
 Evolution of Legal Philosophy; Fundamental Problems in Law
- 1601409 *Principles of Islamic Law and Use of Islamic Law in Thailand* 2 (2-0)**
 Koran-Based Legislation; Islamic Principles on Economics, Bank and Interest Rates; Legal Implementation of Business Management for Islam in Thailand; Islamic Law Applicable on Peace and Harmony Basis for family and Estate-Related Lawsuits With Muslims in Satun, Yala, Patani and Narathiwat Provinces; Comparison to Civil and Commercial Code, Book 5 and 6
- 1601410 *Law and Ethics of Mass Communication* 2 (2-0)**
 Legal Philosophy and Development of Press in Thailand; Rights and Freedom of Public and Press under Constitution; Criminal Law of Libel; Civil Law on Defamation; Press Act; Law on Organization Allocating Frequency Waves and Supervising Radio/Television Broadcasting; Movie Laws; Advertisement Laws; Copyright Laws; Other Electronics Media Laws; Law of Government Information; Authorities of Public Officers; Professionals Ethic
- 1601411 *Legal Profession* 2 (2-0)**
 Analysis of Legal Profession; Judges, Public Prosecutors and Attorneys; Qualification and Training; Ethics and professional Responsibilities
- 1602101 *Law of Persons* 2 (2-0)**
 Beginning and Extinction of Status of Ordinary Persons; Domicile; Disappearance; Principles of Capacity to Exercise Rights; Laws of Juristic Persons
- 1602102 *Property Law* 3 (3-0)**
 Meaning and Categories of Things and Property; Acquisition of Rights in Property; Ownership; Extent and Exercise of Ownership; Possessory Rights; Other Real Rights
- 1602203 *Law of Juristic Acts and Contracts* 4 (4-0)**
 Meanings, Characteristics and Forms of Juristic Acts; Declaration of Intentions; Validity; Conditions and Time; Periods of Time; Prescription; Formation of Contracts; Types of Contracts; Effect of Contracts; Default of Contracts; Cancellation of Contracts; Earnest; Penalties; Claim for Damages; Law of Unfair Contract Terms



130

- 1602204 *Law of Obligations* 4 (4-0)**
Meanings, Types, Sources, Subjects, Performance and Effects of Obligations; Exercising Debtor's Claims; Cancellation of Fraudulent Acts; Plurality of Creditors and Debtors; Transfer of Claims; Extinction of Obligations
- 1602206 *Specific Contracts 1* 3 (3-0)**
(Sales, Exchange, Gift, Hire, Hire-Purchase and Hire of Work)
Law of Sales; Characteristics, Types and Systems of Sales Contracts; Duties and Liabilities of Contracting Parties; Consumer Protection; Specific Types of Sales and Guidelines of Practice in Business Transactions; Law of Hire; Characteristics and Forms of Hire; Rights and Liabilities of Contracting Parties; Extinction of Contract of Hire; Law of Hire-Purchase and Hire of work
- 1602208 *Law of Insurance* 2 (2-0)**
Types of Insurance; Insurance against Loss; Insurance on Carriage; Guarantee Insurance; Life Insurance
- 1602209 *Law of Suretyships and Mortgage* 2 (2-0)**
Guarantee of Debt by Person or by Property; Suretyships; Mortgage; Pledge; Other Types of Guarantees; Enforcement; Extinction
- 1602307 *Specific Contracts 2 : Agency, Brokers, Credit, Deposits, Compromise and Settlement* 3 (3-0)**
Agency Contracts; Characteristics; Types; Duties; Liabilities of Agents and Principals as well as Third Persons; Extinction; Agency Commissions. Law of Loans for Use and for Consumption; Deposit; Warehousing; Law of Compromise; Gambling and Betting
- 1602310 *Law of Negotiable Instruments and Current Account* 3 (3-0)**
Bills of Exchange; Promissory Notes; Cheques; Criminal Offenses to the Use of Cheques; Commercial Business Related to Bills; and Current Accounts
- 1602311 *Family Law* 3 (3-0)**
Betrothal; Marriage; Relationship of Husband and Wife; Property of Husband and Wife; Validity of Marriage; Dissolution of Marriage; Rights and Duties of Parent and Child; Guardianship; Adoption and Maintenance
- 1602312 *Law of Succession* 3 (3-0)**
Devolution of An Estate; Heirship; Statutory Rights of Inheritance; Distribution of Portions to Statutory Heirs; Representation for Receiving Inheritances; Legatees; Forms of Wills; Effects and Interpretation of Wills; Validity of Wills; Clauses in Wills; Administration and Distribution of Estate; Vacant Estates; Prescription
- 1602313 *Law of Partnerships and Companies* 3 (3-0)**
Contracts of Partnerships; Ordinary Partnership and Limited Partnership; Limited and Public Companies; Notions; Nature; Formation; Management; Dissolution; Amalgamation; Liquidation
- 1602414 *Law of Intellectual Property* 3 (3-0)**
Legal Concepts; Principles; Economic Notions; International Agreements; Intellectual Property Law of Thailand Including The Copyright Act, The patent Act, The Trademark Act and The Act of Establishment; Procedures of Intellectual Property and International Trade Court; Other Related Laws
- 1602415 *Law of Securities Exchange* 2 (2-0)**
Historical Background; Structure and managerial Work of the Securities Exchange Market; Institutions of Securities Business Control; Trade of Securities Under Security Exchange and Security Market Act of B.E.2535; Other Laws of Related to Security Exchange and Security Markets
- 1602416 *Settlement of Commercial Disputes and Arbitration* 2 (2-0)**
Importance and Impacts of Commercial Disputes; Models, Rationale and Choices of Methods to Settle Commercial Disputes; Theories, Principles and Techniques for Settlement of Various Types of Commercial Disputes; Evolution, Concept, Advantages and Disadvantages of Arbitration; Consideration in Negotiation; Drafting Arbitration Contract; Choice of Law and Place for Arbitration; National and International Laws of Arbitration





- 1602417** **Principles of Contract Drafting** **2 (2-0)**
Methods and Problems in Drafting of Contracts; Contract Forms; Legal Forms; Contract Samples
- 1602418** **Real Estate Business Law** **2 (2-0)**
Kinds and Characteristics of Land Use for Business Exploitation of Private Sector; Legal Custody; Laws Related to Residence, Commercial Building, Condominium, Shopping Center and Resort; Practice and Contracts of Real Estate Business
- 1602419** **Competition Law** **2 (2-0)**
Legal Analysis in Terms of Economics; Fair Competition for Optimum Social Benefits; Protection of Fair Competition; Analysis of Other Laws on Competition
- 1602420** **Seminar on Business Law** **2 (2-0)**
Seminar on Theories, Practice and Application of Current Issues on Business Law
- 1602421** **Seminar on Civil and Commercial Law** **2 (2-0)**
Seminar on Theories, Practice and Application of Current Issues on Civil and Commercial Law
- 1602422** **Land Law** **2 (2-0)**
Law of Management and Exploitation of Land; Issuance of Title Deeds and Documents; Land Law and Land Reform Act
- 1603101** **Criminal Law 1 (General Principles)** **3 (3-0)**
General Characteristics; Theory of Criminal Liability; Jurisdiction; Attempts; Principals and Supporters; Concurrence Offenses; Criminal Punishment and Petty Offenses; Theories of Criminology and Penology
- 1603202** **Criminal Law 2 (Offenses)** **4 (4-0)**
Types of Criminal Offenses; Security of The Kingdom; Government; Justice; Religion; Public Policy and Trade; Counterfeiting and Alteration; Sexual Offenses; Offenses Against Life; Liberty; Reputation; Property; Petty Offenses; and, Offenses under Business Acts.
- 1603403** **Seminar on Criminal Law** **2 (2-0)**
Seminar on Theories, Practices and Application of Current Issues on Criminal Law
- 1603404** **Criminology and Penology** **2 (2-0)**
Relationship between Criminological Theories and Criminal Law; Criminal Procedure; Development of Theories of Criminology; Classification of Crimes and Criminal; Scope of Legal Enforcement; Social Philosophies of Punishment and Treatment of Offenders; Trends
- 1603405** **Business Crime** **2 (2-0)**
Definition of Business Crime; Criminal Offenses Relating to Business; State Preventive Measures and Mechanisms for Business Crime; Money Laundering Law; Problems and Prospects
- 1604101** **Constitutional Law** **3 (3-0)**
History; Meaning; Types; Making Processes; Sovereignty; Political Institutions; Legislative Processes; Rights; Freedom and Duties of The People; Constitutional Conformity; Comparison of Thai Constitution with Those of Other Countries
- 1604202** **Administrative Law** **3 (3-0)**
Thai Administrative System; The Relationship Among political Government Organizations, Rights of The Public and Private Sectors, i.e. Public Service Management and Concessions
- 1604403** **Administrative Court and Procedure** **2 (2-0)**
Judicial Control of State Power; Jurisdiction of Administrative Court; Organization of Administrative Court; Procedure of Administrative Court; Execution of Administrative Judgement
- 1604404** **Administrative Procedure Law** **2 (2-0)**
Substantive and Procedural Principles of Administrative Law; Administrative Acts; Administrative Procedure; Discretionary Power; Interlocutory Appeal of Administrative Acts; Revocation of Administrative Acts; Request for Retrial; Administrative Execution; Committee of Administrative Procedure

- 1604405 *State Contracts* 2 (2-0)**
 Legal Principles of State Contracts; Components, Process and Forms of State Contracts; State Contracts in Accordance to Civil Law; Administration Contracts; Significant Issues in Negotiating State Contracts; Case Studies; Contracts with Foreign Elements
- 1604406 *Public Information Access and Rights of Privacy Law* 2 (2-0)**
 Theories and Concepts of Information and Freedom; Balance between Freedom of Expression and Protection of Private Rights and Liberty; Computerized Information Store and Individual Rights; Computer Control Law
- 1604407 *Labor and Social Security Laws* 2 (2-0)**
 Principles; History; Labor Protection; Labor relations; Labor management; Alien workers; Consideration and Interpretation of Labor problems and Social Security Law
- 1604408 *Public Finance Law* 2 (2-0)**
 Sources, Theories and Basic Concepts of Public Finance Law; State's Monetary and Finance Policies; State Organizations for Public Finance; State Revenue; Public Loans and Expenditures; Process in State Budgeting; Examining Budget Spending; Forms of State Monetary and Public Finance
- 1604409 *Taxation Law* 3 (3-0)**
 Principles, Policies and Theories on Taxation; Fundamental Principles of Income Tax; Income Tax of Natural and Juristic Persons; Value Added Tax; Special Business Tax
- 1604410 *Customs Law* 2 (2-0)**
 Nature, Objectives, Evolution and Source of Customs Law; Liability of Customs Fees; Customs Procedures; Officials under Customs Law; Powers and Duties of Customs Officials; Litigation; Rules on Tariffs; Exemption; Interpretation; Investment Promotion; Customs Law and Industrial Estates
- 1604411 *Banking and Financial Institutions Law* 2 (2-0)**
 Roles of Commercial Banks; Control and Promotion Policies; Legal Norms of Organization and Operation; Major Activities and Profit; Impacts of International Financial Conditions
- 1604412 *Consumer Protection Law* 2 (2-0)**
 Definition of Consumer; Protection of Consumer and Trade Business; Consumer Protection Act of B.E. 2522; Consumer Rights Including Laws of Foods, Drugs; Cosmetics; Printing; Radio and Television; Law of Price Fixing and Antitrust Law
- 1604413 *Investment Law* 2 (2-0)**
 Importance of Investments; Thai Economic Structure; Policies and Laws of Investment in Developing Countries; Investment Law; Portfolio Investment Law; Financial Institutional Law of Investment; Other Laws affecting Investment
- 1604414 *Industrial Law* 2 (2-0)**
 General Principles of Industrial Law; Rules and Regulations for Application of Licenses; Legal Control of Plants; Laws and Plants Safety; Laws and International Standard of Industries
- 1604417 *Seminar on Taxation Law* 2 (2-0)**
 Seminars on Theories, Practice and Application of Issues on Taxation Laws
- 1604415 *Environmental Law* 2 (2-0)**
 Causes of Environmental Problems; Impacts on Life, Society and Country; Governmental Control Measures; State Policies; Responsible Agencies; Laws Related to Environmental Conservation and Protection of Airs, Water and Wildlife; Litigation Procedures for Damages and Compensation
- 1604416 *Military Law and Laws on National Security* 2 (2-0)**
 Power Authorization of Military and Civilian Security Offices under Constitutional Law; Roles and Authorities of Offices of the National Security Council, National Intelligence Office and National Police Office; Limitation of Power of Administrative and Civilian Bodies during War or Turbulent Time; Military Criminal Code; Law of Military Court; Law on Defense Administration Procedures; Martial Law; Law on Emergency Situations; Military Conscription Law; National Security Laws; Regulations on Armed Civilian Forces





- 1605401 *Public International Law* 3 (3-0)**
General characteristics; Sources; Relationship between International and National Laws; Subjects of International Laws; Rights and Duties of States; Sovereignty; High Sea; Treaties; Settlement of International Disputes; War and Neutrality
- 1605402 *Private International Law* 3 (3-0)**
General Principles; Action Conflicts of Law; Nationality Act; Acquisition of Rights or Status of Aliens; Agreement on Choice of Law in Contracts
- 1605403 *International Economic Law* 2 (2-0)**
Establishment, Structure, Role and Function of World Trade Organization (WTO); Legal Principles and Major Issues of General Agreement on Trade in Service (GATS); Agreement on Trade in Intellectual Property Rights (TRIPS); Recent Major Issues of Multilateral Trade Negotiation
- 1605404 *International Trade Law* 2 (2-0)**
Evolution and Sources of International Trade Law; International Economic Regulations Affecting International Trade; Law of International Trade Contracts; Uniform Law of International Trade; International Trade Terms; Execution of International Sales Agreement; Carriage and Insurance of Goods; International Balance Payments; Dispute Settlement in International Trade
- 1605405 *International Organization Law* 2 (2-0)**
Development of International Organizations; Structures, Authority and Duties of League of Nations and United Nations (UN); Roles of General Assembly, Security Council; Economic and Social Council; Trusteeship Council; Secretariat and International Court of Justice; Powers and Duties of Specialized Agencies; Roles of International Labor Organization (ILO); United Nations Educational, Scientific and Cultural Organization (UNESCO); and World Health Organization (WHO); Regional Organizations such as European Community (EU); Association of South-East Asian Nations (ASEAN); Organization of American States and Organization for African Unity
- 1605406 *European Union Law* 2 (2-0)**
General Legal Principles of European Union; International Law and European Union; Institutions of European Union; Rights and Duties of Member States of European Union; Jurisdiction of European Court of Justice; Problems and Prospects
- 1605407 *ASEAN Law* 2 (2-0)**
Establishment of Association of South East Asia Nations (ASEAN); Historical Background; Legal Instrument; Structure; Subsidiary Organizations; Cooperation among Members States of ASEAN; Cooperation of ASEAN and Other Countries in the Region and Outside the Region; Emphasis on Activities between Thailand and Member Countries; Trends
- 1605408 *Law of the Sea* 2 (2-0)**
State Maritime Jurisdiction; Maritime Delimitation; Exploration and Exploitation of Living and Non-Living Maritime Resources; Problems and Trends
- 1605409 *Maritime Law* 2 (2-0)**
Laws on Water Transport; Ships; Agreements on Carriage of Goods by Sea; Collision at Sea; Salvage at Sea; Laws of Towage; Laws of Sea Zone for Vessels; Problems and Prospects
- 1605410 *Air Law* 2 (2-0)**
Legal Principles of International and National Air Frontier; State Sovereign Right over Air Space and Freedoms; Regulations of International Aviation and Air Transportation; International Civil Aviation Organization (ICAO); Responsibility of International Air Carriers; Trends
- 1605411 *Human Rights Law* 2 (2-0)**
Definition and Philosophy of Human Rights; Protection of Human Rights by International Organizations such as League of Nations and United Nations; Protection of Human Rights at Regional Level; Protection of Human Rights under Thai Law; Problems and Prospects
- 1605412 *International Criminal Law* 2 (2-0)**
Definition of International Criminal Law; Criminal Jurisdiction in International Law; Territorial and Personal Jurisdiction; Universal Jurisdiction on Punishment; International Crime; Extradition; Conflict of Criminal Laws; International Cooperation in Criminal Matters; Problems and Trends
- 1605413 *Seminar on International Law* 2 (2-0)**
Seminars on Theories, Practice and Application of Current Issues on International Law

1606301	Judicial System and Constitution of Courts of Justice	2 (2-0)
	Constitution of Court of Justice; Judiciary; Court Jurisdictions; Judicial Powers in Trial; Judicial system	
1606301	Judicial System and Constitution of Courts of Justice	2 (2-0)
	Constitution of Court of Justice; Judiciary; Court Jurisdictions; Judicial Powers in Trial; Judicial system	
1606302	Law of Civil Procedure 1	3 (3-0)
	General Provisions on Civil Procedure; Procedures at the Trial Court Level	
1606303	Law of Civil Procedure 2	3 (3-0)
<i>Prerequisite</i>	1606302	
	Principles of Appeals; Provisional Measures; Execution of Judgment or Order	
1606304	Criminal Procedure Law	3 (3-0)
	Powers and Competency of the Inquiry Officials and Courts; Prosecution; Civil and Penal Actions; Summons; Criminal Warrants; Arrest and Detention; Imprisonment; Search and Bail; Inquiry; Criminal Prosecution; Preliminary Examination; Hearing Judgements; Orders in the Appeals Court and Supreme Court; Execution; Fees; Pardons; Commutation and Reduction of Punishment; Criminal Procedure in District Courts	
1606305	Bankruptcy Law	3 (3-0)
	Bankruptcy Proceedings; Management of Debtor's Assets; Powers and Duties of Receiver; Proceeding of Reorganizing Business of Debtor	
1606307	Law of Evidence	2 (2-0)
	General Principles of Evidence; Hearing; Weighing; Provisions of Evidence under Civil Procedure Code and Criminal Procedure Code; Investigation and Discovery	
1606408	Seminar on Civil Procedure Law	2 (2-0)
	Seminar on Theories, Practices and Application of Current Issues on Civil Procedure Law	
1606409	Seminar on Criminal Procedure Law	2 (2-0)
	Seminar on Theories, Practices and Application of Current Issues on Criminal Procedure Law	
1606410	Forensic Medicine	2 (2-0)
	Relationship between Medical Science and Law; Purpose of Investigation and Inquiry in Criminal Cases; Verification of Evidences for Adjudication in Court; Trends	
1606411	Criminal Investigation	2 (2-0)
	Criminal Investigation of Officers and Legal Operation Persons; Scientific Investigations; Evidence Finding; Interrogation; Proof and Examination of Evidence and Witnesses; Trends	
1606412	Juvenile and Family Justice	2 (2-0)
	Child Rights; Protection of Children; Juvenile Offenses; Judicial System; Court Procedure of Juvenile and Family Cases; Trends	
1606413	Counseling and Advocacy	2 (2-0)
	Legal Advice to Public; Consultation for Hypothetical Problems; Drafting of Contracts; Complaints; Replies; Motions; Petitions; Establishment and Management of Law Firms; Trends	



STUDENT ACTIVITIES



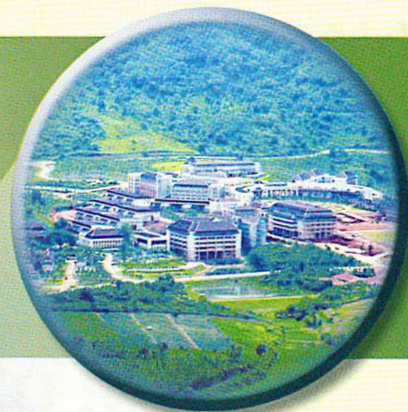


STUDENT ACTIVITIES

MAE FAH LUANG UNIVERSITY

Chiang Rai, Thailand

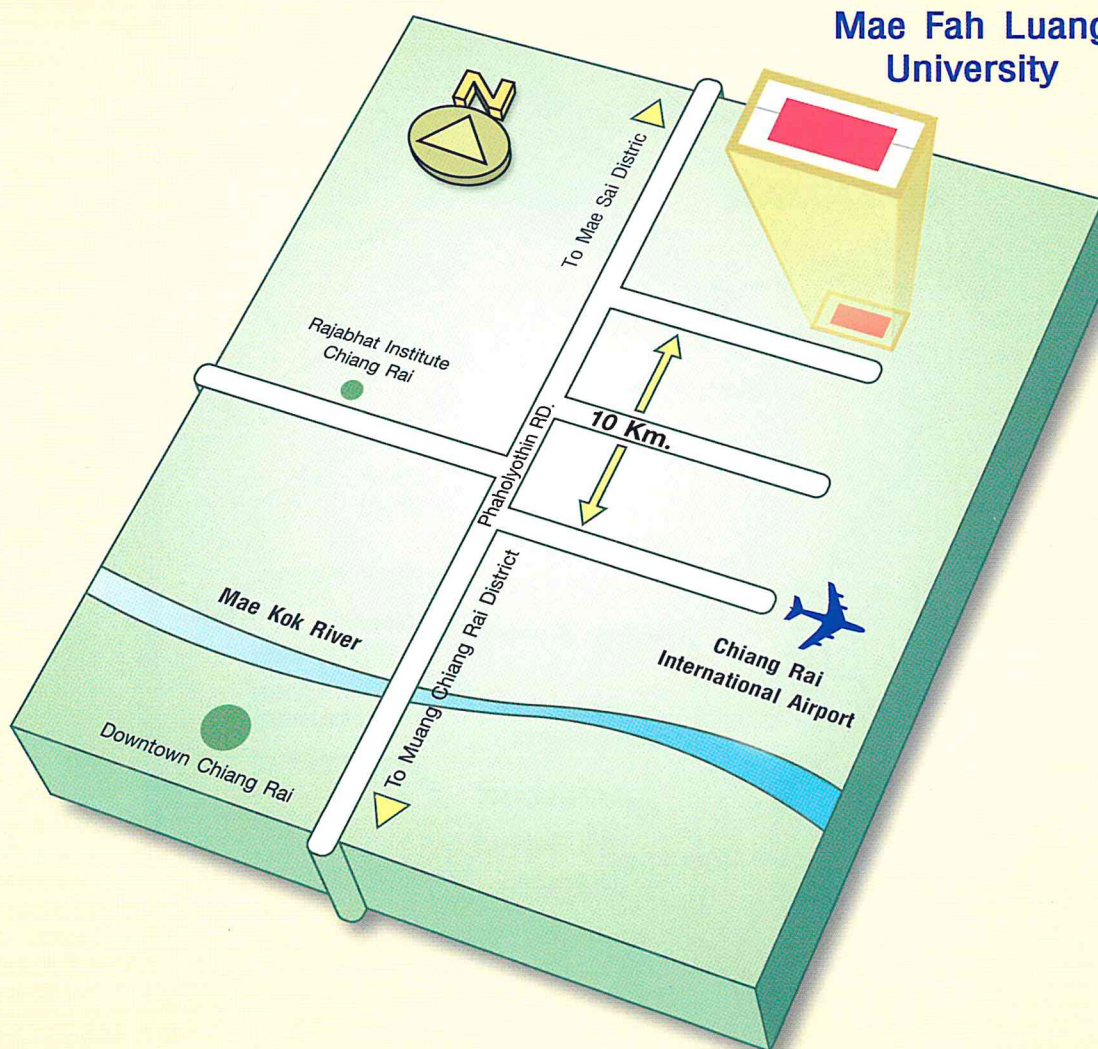
"Where Civilizations Meet"



MFLU MAP



**Mae Fah Luang
University**



Information :

Distance from Downtown to MFLU : 17 Km.

Distance from BKK to Chiang Rai : 860 Km.

Temperature : Summer 26-35 C

Winter 15-26 C

Communication : Air/Bus/Road



UNDERGRADUATE SCHOOL

School of Liberal Arts
English

School of Science
Biotechnology

School of Management
Accounting
Economics
Tourism Management
Business Administration

School of Information Technology
Information Technology
Computer Sciences
Computer Engineering
Information and Communication Technology

School of Agro-Industry
Food Technology
Postharvest Technology and Package

School of Law
Laws

Mae Fah Luang University

333 Moo 1, Tasud, Muang,
Chiang Rai 57100 THAILAND
Phone : 66 53 916023, 916026
Fax : 66 53 916034

Mae Fah Luang University Coordination Unit

1 Floor 22nd (Zone B), Forturn Tower,
Ratchadapisek Road,
Dindeang, Bangkok 10320 THAILAND
Phone: 66 2 6410823
Fax: 66 2 6410824

www.mfu.ac.th
E-mail: inter@mfu.ac.th