

# Bachelor of Technology Program in Energy Technology

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## General Information

**Degree Designation** : Bachelor of Technology Program in Energy Technology

**Total Credits** : 138 credits

**Graduate** : 4 years

## Academic Year

The academic calendar mostly consists of two semesters (Two-semester system). Each semester is not less than 15 weeks. The summer session is scheduled to meet the requirements of each

- 1 st semester : June - September
- 2 nd semester : November – February
- Summer semester : March – May

## Course Structure

A : General Education Course

B : Major Course

C : Free Elective Course

## A : General Education (30 credits)

### 1. Language and Communication (9 credits)

- Fundamental Course (6 credits) :

Course ID	Course name	Credits
1551001	Fundamental English	3(3-0-6)
1551002	English for Communication	3(3-0-6)

- Free Elective (3 credits) :

1541001	Thai Language Usage Skills	3(3-0-6)
1541002	Language and Communication for Specific Purposes	3(3-0-6)
1561001	Japanese for Communication	3(3-0-6)
1571001	Chinese for Communication	3(3-0-6)
1571002	Fundamental Chinese for Tourism	3(3-0-6)
1661001	Korean for Communication	3(3-0-6)
1691001	Fundamental Burmese	3(3-0-6)
1691002	Burmese for Communication	3(3-0-6)

## 2. Humanities (6 credits)

Course ID	Course name	Credits
1001003	Human Behavior and Self-Development	3(3-0-6)
1001005	Thinking and Decision Making Skill	3(3-0-6)
1511001	Ethics and Human Beings	3(3-0-6)
1511002	Facts of Life	3(3-0-6)
1521001	Buddhism	3(3-0-6)
1631001	Information for Study and Research	3(3-0-6)
2011001	Aesthetics of Visual Arts	3(3-0-6)
2051001	Aesthetics of Performing Arts	3(3-0-6)
2061001	Music Appreciation	3(3-0-6)
3501001	Leadership Development	3(3-0-6)
3501003	Personality Development and the Arts of Socializing	3(3-0-6)

## 3. Social Sciences (6 credits)

Course ID	Course name	Credits
2501001	History of Thai Society and Culture	3(3-0-6)
2501003	Public Mind and Civic Social Engagement	3(3-0-6)
2501004	Interdisciplinary Social Science for Development	3(3-0-6)
2501005	Kamphaeng Phet Studies	3(2-2-5)
2521001	Globalization and Localization	3(3-0-6)
2521002	ASEAN Studies	3(3-0-6)
2541001	Human Beings, Community, and Environment	3(3-0-6)
2541002	Local Resource Management	3(3-0-6)
2551002	Fundamental Knowledge on Thai Politics and Government	3(3-0-6)
2561001	Introduction to Laws	3(3-0-6)
3501004	Business Initiation	3(3-0-6)
3531001	Finance in Daily Life	3(3-0-6)
3541001	Entrepreneurship	3(3-0-6)
3591002	Sufficiency Economy	3(3-0-6)

#### 4. Mathematics, Science, and Technology (6 credits)

Select courses in subjects 1. - 4. (3 credits)

Course ID	Course name	Credits
1161001	Sports and Recreation for Quality of Life	3(2-2-5)
1161002	Exercise for Health	3(2-2-5)
4001002	Science and Technology for Daily Life	3(3-0-6)
4001003	Environments and Natural Resources Conservation	3(3-0-6)
4071001	Health and Health Care	3(3-0-6)
4091001	Mathematics in Daily Life	3(3-0-6)
4091003	Mathematics and Decision Making	3(3-0-6)
4121001	Computer and Information Technology	3(2-2-5)
4121005	Website Design and Development	3(2-2-5)
4121006	Package Software for Application	3(2-2-5)
5001001	Agriculture in Daily Life	3(3-0-6)
5071001	Food for Health	3(3-0-6)
5501001	Technology in Daily Life	3(3-0-6)

#### B : Major Course (102 credits)

Major Requirement (36 credits)

Course ID	Course name	Credits
5751101	Renewable Energy	3(2-2-5)
5751102	Instruments and Measurement of Energy	3(2-2-5)
5751103	English for Communication and Search	3(2-2-5)
5751104	Industrial Safety	3(2-2-5)
5751301	Energy and Environmental Impact	3(2-2-5)
5751401	Information Technology	3(2-2-5)
5752201	Energy Conversion	3(2-2-5)
5752202	Energy Storage System	3(2-2-5)
5753104	English for Energy	3(2-2-5)
5753302	Energy Economics	3(2-2-5)
5753303	Community Energy Development	3(2-2-5)
5754305	Research and Development of Energy Technologies	3(2-2-5)

**Major Elective Course (60 credits)**

<b>Course ID</b>	<b>Course name</b>	<b>Credits</b>
5752107	Materials for Energy	3(3-0-6)
5752108	Electrical Apply for Energy Management	3(2-2-5)
5752203	Biomass Energy Technology	3(2-2-5)
5752204	Solar Energy Technology	3(2-2-5)
5752205	Wind and Hydro Energy Technology	3(2-2-5)
5752207	Bio Fuels Energy Technology	3(2-2-5)
5752210	Alternative Energy Technology	3(2-2-5)
5753103	Heat Transfer	3(3-0-6)
5753105	Energy Audit and Energy Conservation	3(2-2-5)
5753106	Basic Research	3(2-2-5)
5753208	Photovoltaic System	3(2-2-5)
5753209	Drying Technology	3(2-2-5)
5753304	Industrial Energy Management	3(2-2-6)
5753306	Energy Management in Agriculture	3(2-2-5)
5753401	Smart Grid Technology	3(2-2-5)
5753402	Computer Aided Design of Energy Systems	3(2-2-5)
5754109	Energy Seminar	3(2-2-5)
5754111	Energy Business	3(2-2-5)
5754307	Fuels Energy Management	3(3-0-6)
5754309	Software Application for Industrial Technology	3(2-2-5)
5754310	Introduction to Electricity and Electronic	3(2-2-5)
5754311	Mathematics for Energy	3(3-0-6)
5754312	Technical Maintenance for Energy	3(2-2-5)

**Professional Experience or Cooperative Education (6 credits)**

Select a plan

<b>Course ID</b>	<b>Course name</b>	<b>Credits</b>
5754701	Preparation of Training Experience	1(90)
5754702	Field Experience	5(450)
or		
5754703	Cooperative Education	6(540)

### **C: Free Elective Course (6 credits)**

Freely choose any courses provided by the university. The courses chosen must not have been taken before by the student and must not be the compulsory non-credit courses.