

Bachelor of Science Program in Environmental Science

General Information

Degree Designation : Bachelor of Science Program in Environmental Science

Total Credits : 144 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 (108 credits)

Core subjects (26 credits)

| Course ID | Course name | Credits |
|-----------|------------------------------------|----------|
| 4011103 | Principles of Physics | 4(3-3-7) |
| 4021101 | Chemistry and Laboratory 1 | 4(3-3-7) |
| 4021102 | Chemistry and Laboratory 2 | 4(3-3-7) |
| 4031101 | Biology and Experiments 1 | 4(3-3-7) |
| 4031102 | Biology and Experiments 2 | 4(3-3-7) |
| 4091401 | Calculus and Analytical geometry 1 | 3(3-0-6) |
| 4092401 | Calculus and Analytical geometry 2 | 3(3-0-6) |

Major Requirement (49 credits)

| Course ID | Course name | Credits |
|-----------|---|----------|
| 4002251 | English for Sciences | 3(2-2-5) |
| 4061201 | Environmental Science Foundation | 3(2-2-5) |
| 4061202 | Environmental Ecology | 3(2-2-5) |
| 4062201 | Environmental Chemistry | 3(2-2-5) |
| 4062202 | Environmental Survey and Quality Analysis | 3(2-2-5) |

| | | |
|---------|--|----------|
| 4062203 | Water Pollution | 3(2-2-5) |
| 4062204 | Air and Noise Pollution | 3(2-2-5) |
| 4063201 | Solid Waste Management | 3(2-2-5) |
| 4063202 | Geographic Information Technology for Environment | 3(2-2-5) |
| 4063203 | Principles of Watershed Management | 3(2-2-5) |
| 4063204 | Wastewater Treatment Technology | 3(2-2-5) |
| 4063205 | Management of Natural Resources and Environment | 3(2-2-5) |
| 4063207 | English for Environmental Sciences | 3(2-2-5) |
| 4063208 | Seminar in Environment | 1(0-2-1) |
| 4064201 | Basic Environmental Impact Assessment | 3(2-2-5) |
| 4064202 | Health Approach and Environmental Safety | 3(2-2-5) |
| 4064203 | Environmental Research | 3(1-2-4) |

Major Elective Course (12 credits)

| Course ID | Course name | Credits |
|------------------|--|----------------|
| 4061301 | Environmental Earth Science | 3(2-2-5) |
| 4061302 | Environmental Microbiology | 3(2-2-5) |
| 4062301 | Energy and Environment | 3(2-2-5) |
| 4062302 | Tropical Ecology | 3(2-2-5) |
| 4062303 | Environmental law and Policy | 3(3-0-6) |
| 4062304 | Environmental Economics | 3(3-0-6) |
| 4062305 | Land Use Planning | 3(2-2-5) |
| 4062306 | Environmental Science for Camping Management | 3(2-2-5) |
| 4063301 | Ping Watershed Study | 3(2-2-5) |
| 4063302 | Eco-Tourism | 3(2-2-5) |
| 4063303 | Environmental Extension | 3(2-2-5) |
| 4063304 | Principle of Environmental Education | 3(3-0-6) |
| 4063305 | Environment and Development | 3(3-0-6) |
| 4063306 | Biodiversity Conservation | 3(2-2-5) |
| 4063307 | Natural and Cultural Heritage Conservation | 3(2-2-5) |
| 4063308 | Soil Pollution | 3(2-2-5) |
| 4063309 | Environmental Pollution | 3(2-2-5) |
| 4063310 | Toxicity and Environmental Impact | 3(2-2-5) |

| | | |
|---------|---|----------|
| 4063311 | Environmental Toxicology and Laboratory | 3(2-2-5) |
| 4063312 | Environmental Pollution Control Technology | 3(2-2-5) |
| 4063313 | Environmental Sanitation | 3(2-2-5) |
| 4063314 | Fundamentals of Environmental | 3(2-2-5) |
| 4063316 | Soil and Water Conservation | 3(2-2-5) |
| 4063317 | Water Resources and Management | 3(2-2-5) |
| 4064301 | Wastewater Treatment Engineering | 3(2-2-5) |
| 4064302 | Solid Waste Management Engineering | 3(2-2-5) |
| 4064303 | Environment Remote Sensing | 3(2-2-5) |
| 4064304 | Application of GIS for Natural Resource Management | 3(2-2-5) |
| 4064305 | Urban Planning and Management | 3(2-2-5) |
| 4064318 | Forest Resources and Management | 3(2-2-5) |

Language and Communication Skills Science (15 credits)

| Course ID | Course name | Credits |
|------------------|--|----------------|
| 4022301 | Organic Chemistry and Laboratory 1 | 4(3-3-7) |
| 4022501 | Biochemistry and Laboratory 1 | 4(3-3-7) |
| 4023601 | Analysis Chemistry and Laboratory | 4(3-3-7) |
| 4063206 | Statistics in Environmental Science Research | 3(2-2-5) |

Professional Experience or Cooperative Education (7 credits)

Select a plan

| Course ID | Course name | Credits |
|------------------|--|----------------|
| 4064401 | Preparation for Professional Experience Practice in Environmental Science | 1(90) |
| 4064402 | Professional Experience Practice in Environmental Science | 5(450) |
| or | | |
| 4064404 | 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.