**Bachelor of Science Program in Environmental Science**

**Name of Degree:** Bachelor of Science (Environmental Science)

**Abbreviation:** B.Sc. (Environmental Science)

**Curriculum**

**Total Credits** at least **130 Credits**

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| **First Year , 1st Semester** | **Number of Credit** |
| **Course Number** | **Course Title** |
| 000 101 | English for Communication | 3(3-0-6) |
| 000 130 | Information Literacy Skills | 3(3-0-6) |
| (or) 000 168 | Critical Thinking and Problem Solving  | 3(3-0-6) |
| 000 xxx \*\* | Electives in Analytical and Critical Thinking | 3(3-0-6) |
| 311 101 | Biology I | 3(3-0-6) |
| 311 102 | Biology Laboratory I | 1(0-3-2) |
| 312 101 | General Chemistry I | 3(3-0-6) |
| 312 102 | General Chemistry Laboratory I | 1(0-3-0) |
| 314 123 | Calculus for Biological Science I | 3(3-0-6) |
| 315 106 | Introductory Physics | 3(3-0-0) |
| **Total credits** | **23** |

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| **First Year , 2nd Semester** | **Number of Credit** |
| **Course Number** | **Course Title** |
| 000 102 | English for Academic Purposes I  | 3(3-0-3) |
| 311 103 | Biology II | 3(3-0-6) |
| 311 104 | Biology Laboratory II | 1(0-3-2) |
| 312 103 | General Chemistry II | 3(3-0-6) |
| 312 104 | General Chemistry Laboratory II  | 1(0-3-2) |
| 314 124 | Calculus for Biological Science II  | 3(3-0-6) |
| 319 101 | Ecology | 3(3-0-6) |
| 319 101 | Ecology Laboratory | 1(0-3-2) |
| **Total credits** | **18** |

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| **Second Year , 1st Semester** | **Number of Credit** |
| **Course Number** | **Course Title** |
| 000 103 | English for Academic Purposes II | 3(3-0-3) |
| 312 112 | Basic Organic Chemistry | 3(3-0-6) |
| 312 113 | Basic Organic Chemistry Laboratory | 1(0-3-2) |
| 316 202 | Basic Statistics | 3(3-0-6) |
| 319 201 | Biodiversity Conservation and Classification | 3(3-0-6) |
| 319 202 | Biodiversity Conservation and Classification Laboratory | 2(0-6-4) |
| 319 231 | Environmental Science | 3(3-0-6) |
| 319 232 | Environmental Science Laboratory | 1(0-3-2) |
| **Total credits** | **19** |

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| **Second Year , 2nd Semester** | **Number of Credit** |
| **Course Number** | **Course Title** |
| 050 108 | English for Sciences | 3(3-0-6) |
| 000 146 | Happiness of Life | 3(3-0-6) |
| (or) 000 155 | Civic Engagement  | 3(3-0-6) |
| 000 xxx \*\* | Electives in Moral, Ethics, Value of Life in Society  | 3(3-0-6) |
| 317 211 | General Microbiology | 3(3-0-6) |
| 317 212 | General Microbiology Laboratory  | 1(0-3-0) |
| 318 305 | Biochemistry | 3(3-0-6) |
| 318 306 | Biochemistry Laboratory | 1(0-3-2) |
| 319 241 | Chemicals and Equipment Usage  | 2(2-0-4) |
| 319 242 | Chemicals and Equipment Usage Laboratory  | 1(0-3-2) |
| **Total credits** | **20** |

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| **Third Year , 1st Semester** | **Number of Credit** |
| **Course Number** | **Course Title** |
| 000 132 | Life and Aesthetics | 3(3-0-6) |
| (or) 000 156 | Multiculturalism | 3(3-0-6) |
| 319 341 | Environmental Pollution | 3(3-0-6) |
| 319 342 | Environmental Pollution Laboratory | 1(0-3-2) |
| 319 351 | Principles of Economics for Environmental Scientists | 2(2-0-4) |
| xxx xxx\*\* | Electives | 3 |
| xxx xxx | Free Electives | 3 |
| **Total credits** | **15** |

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| **Third Year , 2nd Semester** | **Number of Credit** |
| **Course Number** | **Course Title** |
| 316 231 | Biometrics | 3(3-0-6) |
| 319 311 | Land Ecology and Remote Sensing Technique  | 2(2-0-4) |
| 319 312 | Land Ecology and Remote Sensing Technique Laboratory | 1(0-3-2) |
| 319 343 | Environmental and Health Impact Assessment  | 3(3-0-6) |
| 319 391 | Preparation for Co-operative Education in Environmental Scienceb | 1(0-3-2) |
| 319 392 | Research Methodology in Environmental Science a | 1(0-3-2) |
| 319 491 | Seminar in Environmental Science  | 1(0-3-2) |
| xxx xxx | Free Electives | 3 |
| xxx xxx\*\* | Electivesb | 3 |
| **Total credits** | **14** |

Note: a for students taking a Research Project plan, b for students selecting a Co-operative Education plan

**Summer**

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| **Third Year , Summer** | **Number of Credit** |
| **Course Number** | **Course Title** |
| 319 099 | Practical Training | 0(0-0-0) |
| **Total credits** | **-** |

**aResearch Project Plan**

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| **Fourth Year , 1st Semester** | **Number of Credit** |
| **Course Number** | **Course Title** |
| 319 492 | Research Project | 2(0-6-4) |
| xxx xxx\*\* | Electives  | 9 |
| **Total credits** | **11** |

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| **Fourth Year , 2nd Semester** | **Number of Credit** |
| **Course Number** | **Course Title** |
| 000 145 | Leadership and Management | 3(3-0-6) |
| (or) 000 157 | Citizenship and Globalization | 3(3-0-6) |
| 319 441 | Environmental Management | 3(3-0-6) |
| 319 442 | Environmental Management Laboratory | 1(0-3-2) |
| 322 232 | Introduction to Geographic Information System | 3(2-3-0) |
| **Total credits** | **10** |

**bCo-operative Education Plan**

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| **Fourth Year , 1st Semester** | **Number of Credit** |
| **Course Number** | **Course Title** |
| 319 495 | Cooperative Education in Environmental Science | 6(0-18-9) |
| **Total credits** | **6** |

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| **Fourth Year , 2nd Semester** | **Number of Credit** |
| **Course Number** | **Course Title** |
| 000 145 | Leadership and Management 3(3-0-6) | 000 145 |
| (or) 000 157 | Citizenship and Globalization | 3(3-0-6) |
| 319 441 | Environmental Management | 3(3-0-6) |
| 319 442 | Environmental Management Laboratory | 1(0-3-2) |
| 322 232 | Introduction to Geographic Information System | 3(2-3-0) |
| xxx xxx | Electives | 2 |
| **Total credits** | **12** |

**Program Lecturers**

1. Asst. Prof. Dr. Pisit Chareonsudjai
2. Asst. Prof. Dr. Penprapa Petcharaburanin
3. Asst. Prof. Dr. Lamyai Neeratanaphan
4. Asst. Prof. Dr. Sarun Keithmaleesatti
5. Asst. Prof. Dr. Adcharaporn Pagdee
6. Dr. Wangworn Sankamethawee
7. Dr. Thotsapol Chaianunporn
8. Dr. Pornsawai Praipipat
9. Asst. Prof. Turenjai Dooljindachabaporn
10. Miss Wirongrong Mongkonthum