

# Course Description



## I. Course Work

A. Oriented courses (3 subjects : 9 credits)	Credits
Any relevant courses from Master programs to the PhD topic of the candidate	9
<b>B. Supplementary courses (2 subjects: 6 credits)</b>	
Biodiversity conservation and management	3
Sustainable and economic development	3
<b>C. Advanced training course (2 subjects: 6 credits)</b>	
Machine learning	3
Research methodology	3
<b>Total (A + B + C)</b>	<b>21</b>
<b>II. Research Work</b>	
a). Research proposal	3
b). Publication	6
c). Conference	3
d). Workshop	3
e). Thesis writing	18
<b>Total (a + b + c + d + e)</b>	<b>33</b>
<b>TOTAL (I + II)</b>	<b>54</b>

## Research Area

The research area of the program is broad as listed below:

- Biodiversity
- Disturbance ecology
- Conservation sciences
- Climate change adaptation and mitigation
- Socio economy, livelihood and governance
- Sustainable development
- Environmental economy and policy development
- Ecological modeling and decision support
- GIS and remote sensing

## Southeast Asia University Partners



## European University Partners



## Enrollment

- Institution: University of Battambang (UBB)
- Duration: 36 months – Full time
- Credits number to be achieved: 54
- Language: English
- Supervision: 1 Asian supervisor & 1 or 2 European co-supervisors

## Candidate Profile

All candidates who are currently holding the PhD or Master of Sciences or equivalent degree in biology, mathematics, geography, agriculture, ecosystem management, community development, environmental economy or relevant master programs.

## Admission

First of all, all interested candidates are invited to send his/her CV to the scientific coordinators or drop it at Post-Graduate School to confirm their candidature. The selection of candidate will be done through research proposal defense. Interested candidates are suggested to find from now on the supervisors or come to Post-Graduate School for information both on the program and supervisors.

## Important Dates:

- Deadline of CV submission: **30<sup>th</sup> September 2017**
- Proposal defence to select PhD candidate : **25<sup>th</sup> September 2017**
- Registration: **25<sup>th</sup> September to 15<sup>th</sup> October 2017**
- Start semester: **15<sup>th</sup> October 2017**

## Further Information:

### Scientific Coordinators

Dr. Chea Ratha, Tel: 012 319 045 | Email: chearatha@ubb.edu.kh  
 Dr. Seng Ratha, Tel: 095 429 647 | Email: ratha.seng@ubb.edu.kh

### Administrators

Mr. Thach Bunroeun, Tel: 012 526 203 | Email: thach\_bunroeun@ubb.edu.kh  
 Ms. Tan Solida, Tel: 017 39 59 79 | Email: solidatan@ubb.edu.kh  
 Mr. Man Fazy, Tel: 096 633 0644 | Email: fazyman@ubb.edu.kh  
*Post-Graduate School is at your disposal for any query or information.*



Co-funded by the Erasmus+ Programme of the European Union



# Ph.D Program Sustainable Ecosystem Management (SEM Ph.D)

Registration Fee USD1500/Year







## Overview of the Program

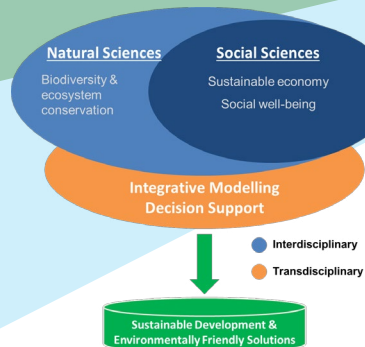
The today's challenge is to manage ecosystem in such a way that they can sustainably deliver an optimal combination of ecosystem services both today and into the future with resilience to environmental and social changes. Thus, the SEM Ph.D. is developed to address the current challenges of scientific community as well as to address the urgent need for biodiversity conservation and management in the Mekong River Basin facing rapid global environmental. The SEM Ph.D. brings together social sciences, natural sciences and sophisticated modeling techniques to figure out the social and environmental issues as well as to develop the decision support tools that could be used remotely, regionally or internationally by providing an appropriate developing scenarios to stakeholders (government, private sector and civil society) in response to the present and future need of people.

SEM Ph.D. is developed under the support of European Project - Erasmus+ Programme (CONSEA) within the consortium of 4 European university partners: University of Toulouse (France), University of Girona (Spain), University of Ghent (Belgium) and University of Natural Resources and Life Sciences (Austria), and 4 South East Asia university partners: University of Battambang (Cambodia), Royal University of Phnom Penh (Cambodia), Can Tho University (Vietnam) and An Giang University (Vietnam). The programme has been divided into two main parts: Course work and Research work, for a total of 54 credits, which is required by the Cambodian Ministry of Education, Youth and Sport. All students are required to complete minimum 21 credits of course work and 33 credits of research work to fulfil the requirements of the Doctor of Philosophy (Ph.D.) in Sustainable Ecosystem management.

## Objectives

The PhD programme aims at building up the research capacity and upgrades the existing skills of Cambodian students, researchers and lecturers by integrative approaches that can be

applied to enhance the sustainability of ecosystem in the face of climate change. Indeed, PhD candidates will be coached to conduct independently research and be able to design research protocols in response to problems. The program is designed to answer as well as to provide the key solution to current trade-off for biodiversity conservation and socio-economic development in the SEA region. Therefore, candidates will be equipped with solid background of sciences, and then trained with sophisticated modelling technics to develop the decision supports tools that could be answered and mitigated the current impacts. Besides, the program wishes to contribute all Cambodian research findings to the world scientific community. Finally, it aims at developing the research network and structure in the SEA region to address regionally the environmental issues.



## Learning Outcomes

The PhD program in SEM educates the scientists of the future and the practical problem solvers in the context of global change. Graduate will be able to:

- Have broad knowledge and perspectives on sustainable development facing global environmental change
- Conduct or lead independently their research program
- Supervise undergraduate and graduate students effectively with high scientific levels

- Develop decision support tools for ecosystem management and sustainable development
- Convey the knowledge and research to different stakeholders (government, private sector and civil society)
- Publish articles in international peer reviewed journals

## Job Opportunities

- Researcher, lecturer, trainer in academic and research institutions
- Model and decision support developer
- Environmental manager, policy maker and planner
- National and international freelance consultant
- Sustainable ecosystem management expert
- Postdoctoral research fellow
- Principle investigator of various development projects
- Entrepreneur and manager in consultation agency

## Mobility to Europe

Enrolled PhD candidates could have possibility to stay one month or longer in European university partners to work closely with their European supervisors. Candidate could have chance to get double degree from both Asian and European universities; however, it is mainly case by case and depend on the academic performance of candidate.

## International cooperation - Associate partners

Under the framework of Erasmus+ CONSEA project, the SEM Ph.D. is connected to several Associate Partners in Cambodia, Thailand, China and France. Within this framework, PhD candidate could have possibility to stay working and conducting their research in these associate partners through the support or scholarship of different funding agencies:

- Thailand International Cooperation Agency (TICA)
- Chinese Scholarship Council (CSC)
- Chinese Academic of Sciences (CAS)
- French Embassy in Cambodia
- Région Occitanie, France
- Agence Universitaire de la Francophonie (AUF)