

# MASTER OF SCIENCE IN ENVIRONMENTAL SCIENCE



Department of Biology  
and Environmental Science  
College of Science  
University of the Philippines Cebu

## PROGRAM OVERVIEW

The Master of Science in Environmental Science (MSES) program offers advanced scientific and quantitative perspectives from the natural sciences in the study of the environment. It adopts a rigorous academic and scientific approach, anchored on the principles, concepts and techniques of environmental science, to prepare students for post-graduate studies and careers as researchers, educators, planners, and managers in the discipline. As an interdisciplinary program, students will acquire high-level competencies to critically examine environmental drivers and find innovative solutions to complex challenges, while still maintaining an appreciation of the human-environment interaction.

## COURSE REQUIREMENTS

The program requires all students (full-time and part-time) to complete the following:

- 20 units of core courses;
- 6 units of MS thesis; and,
- 6 units elective course.

## WHO CAN APPLY

Successful applicant must:

- hold a bachelor's degree in the sciences or engineering from any recognized academic institution; for other bachelor's degree holders, remedial course/s to be taken prior to admission as determined by the admissions committee;
- have a general weighted average of 2.25 or better in the undergraduate degree; and,
- pass the panel interview.

## COURSES UNDER THE MSES PROGRAM

### Core Courses

Course Num	Course Title	Units
ENS 201	Ecosystem Structure and Dynamics	3
ENS 210	Environmental Data Analysis and Visualization	3
ENS 220	Institutions and the Environment	3
ENS 251	Environmental Chemistry and Physics	3
ENS 292	Directed Readings	1
ENS 293	Research Techniques	2
ENS 290	Environmental Impact Assessment	4
ENS 297	Graduate Seminar	1

### M. S. Thesis

Course Num	Course Title	Units
ENS 300.1	M.S. Thesis I	3
ENS 300.2	M.S. Thesis II	3

### Elective Courses

Course Num	Course Title	Units
ENS 232	Landscape Ecology	3
ENS 233	Advanced Aquatic Ecology	3
ENS 236	Restoration Ecology	3
ENS 237	Sustainable Pollination in Changing Landscapes	3
ENS 240	Natural Resource Economics	3
ENS 242	Environmental Valuation of Environmental and Natural System	3
ENS 253	Industrial Ecology	3
ENS 254	Solid and Hazardous Waste	3
ENS 255	Water and Wastewater Treatment	3
ENS 256	Air Pollution Meteorology and Dispersion	3
ENS 274	Gender and Environment	3
ENS 281	Geographic Info System and Remote Sensing	3
ENS 282	Climate and Geologic Hazards	3
ENS 295	Special Topics	3

## STUDY PLAN (full-time students)

	First Semester		Second Semester	
	Subject	Units	Subject	Units
First Year	ENS 201	3	ENS 210	3
	ENS 220	3	ENS 293	2
	ENS 251	3	ENS 290	4
	ENS 292	1	Elective 2	3
	Elective 1	3		
Second Year	ENS 297	1	ENS 300.2	3
	ENS 300.1	3		

Full-time students are eligible to apply for DOST Scholarship.

## POTENTIAL ADVISOR AND AREAS OF SPECIALIZATION

1. **Hazel Arceo, DSc** | marine fishes, marine ecology, coastal resource management
2. **Geofe Cadiz, PhD** | plant ecophysiology, vegetation dynamics, invasive plant ecology
3. **Brisneve Edullantes, PhD** | microalgal ecophysiology, environmental change biology
4. **Florence Evacitas, PhD** | marine trophodynamics, marine mammals, stable isotopes
5. **Mary Joyce Flores, PhD** | natural resources management, biodiversity conservation
6. **Ellen Grace M. Funesto, PhD** | bivalve physiology, aquaculture, interactions with climate change, heatwaves and toxic algal blooms
7. **Ritchelita Galapate, DEng** | water quality, wastewater treatment, environmental chemistry
8. **Fleurdeliz Maglangit, PhD** | natural products, black soldier fly, water quality
9. **Patricia Anne Nazareno, PhD** | utilization of underutilized natural products, solid waste management
10. **Jonnifer Sinogaya, PhD** | air quality monitoring, air pollution studies and modelling

## SCHEDULE OF FEES

Tuition (per unit)	Php	600.00
Miscellaneous fees		1355.00
Student fund		46.50
Entrance		30.00
Deposit		100.00
ID		60.00
Education development fee for foreign student	USD	
Non-resident		500.00
Resident		250.00

## STUDY PLAN (part-time students)

	First Semester		Second Semester	
	Subject	Units	Subject	Units
First Year	ENS 201	3	ENS 210	3
	ENS 251	3	ENS 293	2
	ENS 292	1		
Second Year	ENS 220	3	ENS 290	4
	Elective 1	3	Elective 2	3
Third Year	ENS 297	1	ENS 300.2	3
	ENS 300.1	3		

## REQUIREMENTS

The applicant must accomplish the [online application form](#) and attach the following documents.

1. Original copy of the official transcript of records.
2. Recommendation letters from at least two former professors or immediate supervisors.
3. Certification of proficiency in English (TOEFL) if English is not the medium of instruction in the country of origin.
4. A non-refundable application fee of Php 250.00 for Filipino citizens or US\$25 for foreign nationals. Contact Camille Caputol (personal or through email: cecaputol@up.edu.ph) for instructions.

## IMPORTANT TO NOTE

- Deadline of application for program admission is set by the department, usually 2-3 weeks before registration period of the first semester of the academic year (no second semester admission).
- Refer to the [UP Cebu Academic Calendar](#) for the registration schedule.
- Successful applicants will receive a Notice of Qualification for Admission to the Program.

## CONTACT US

For inquiries, please write or call:

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