Environment : Management and Technologies - M1 level, 2nd semester

The program is entirely taught in English

Video presenting the program (complete - 25 min, in French) : Complete video

Video presenting the program (beginning : general presentation - 15 min, in French) : Beginning

Video presenting the program (end : detailed presentation of the courses - 13 min, in French) : End

More detailed information can be found on Moodle - Centrale Méditerranée

For the projects, the most recent subjects (April-May 2021 and April-May 2022) are the following ones :

Acoustic impedance of a micro-perforated plate
Tiny Houses - A New approach to the concept and the eco-responsibility of constructions
Environmental impact of remote teaching : production and recycling of digital equipment
Wind energy availability predictions using GIS data and land use information
Life Cycle Analysis of the environmental impact of the IRPHE laboratory
Assessment of waste reduction in the cosmetics industry
Design and implementation of a weather station at Centrale Méditerranée
Air pollution monitoring in Marseille
CO_2 valorisation as C1 synthon
Pesticide monitoring by fluorescence spectroscopy
Solar PV systems eco-conception and end of life / Second life usage and economic model
Experimental study of a low head hydraulic turbine

Context, objectives and positioning of the program

Context: The societal challenge

Preserving water quality for future populations, air quality and, more generally, the quality of our environment is one of humanity's major challenges. The concept of sustainable development, “a mode of development that aims to meet the needs of the present without compromising the ability of future generations to meet their own needs” (Bruntland Report, 1987), has highlighted the finite nature of land resources and the resulting environmental challenge.

Objectives of the program

Resource conservation requires the development of sustainable solutions to complex environmental problems, taking into account societal, regulatory and economic aspects. It calls for technical solutions to limit pollution and recycle, as do natural ecosystems, it is also a matter of governance.

The objective of the program is to provide the future engineer with tools to understand and identify the different levels of action, and to develop technical solutions.

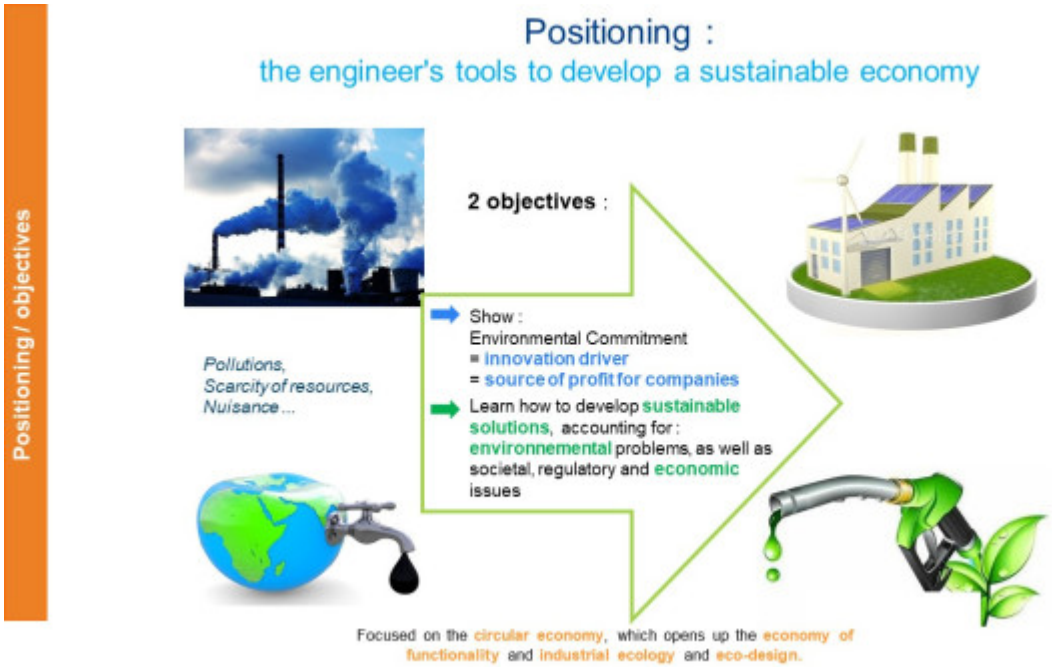
S8 Environment at Centrale Marseille : layout

Teaching Units (TU)	Hours	ECTS	Hours		
			Courses, conferences	Exercises, training	Practical work, visits, projects
Languages - International Culture 4	40	3		40,0	
Effluents and pollutions (semester 1st half)	48	4	26	16	6
Environmental management	35	3	29	6	
Green chemistry	46	4	27,5	10,5	8
Circular Economy (semester 2nd half)	47	4	19	10	18
Monitoring of the environmental Quality	46	4	26	6	14
Project	38	2			38
Internship 2nd year (2A)	-	6		-	-
TOTAL	300	30	127,5	88,5	84



1

Positioning: the engineer's tools for developing a sustainable economy



Details of the pedagogical content: courses and project

The semester is organized in 2 halves, with the following courses :

February - March

- Effluents and pollutions, *coordinator: Nelson Ibaseta*, ≈50 hours
- Environmental management, *coordinator: Nicolas Clootens*, ≈35 hours
- Green chemistry, *coordinator: Damien Hérault*, ≈45 hours

April - May

- Circular economy, *coordinator: Christian Jalain*, ≈50 hours
- Monitoring of the environmental quality , *coordinator: Antoine Roueff*, ≈45 hours
- Project, *coordinator: Mitra Fouladirad*, ≈35 hours



**More details and documents for the courses are available on the Moodle page of the program : **

https://moodle.centrale-marseille.fr/course/index.php?categoryid=27

The detailed presentation of the program is available here (pdf file)

For additional information, contact the head of the program :

Mitra Fouladirad mailto:mitra.fouladirad@centrale-marseille.fr

Last updated : November 16, 2023

Back to the S8 Environment main page in French :
https://wiki.centrale-marseille.fr/S8Environnement/start

From:
https://wiki.centrale-med.fr/S8Environnement/ -

Permanent link:
https://wiki.centrale-med.fr/S8Environnement/en:an_english_version_of_the_page_is_available_here

Last update: **2024/06/28 15:18**