



Ministero degli Affari Esteri
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Vietnam - 2021, April 16th – 24th

Frontier research and careers' opportunities in Environmental sciences

The revision of University Master Courses in Vietnamese Higher Education Institution for climate change management and adaptation

Daniele La Rosa, Cristina Satriano
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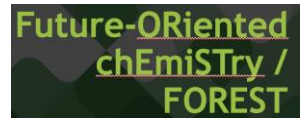
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What is the aim of ERASMUS+ Capacity Building projects?

Capacity-building projects in the field of higher education are transnational cooperation projects, based on multilateral partnerships, primarily between higher education institutions from [Programme and eligible Partner Countries](#).

The aim of these projects is to support eligible [Partner Countries](#) to:

- modernise, internationalise and increase access to higher education
- address the challenges facing their higher education institutions and systems
- increase cooperation with the EU
- voluntarily converge with EU development in higher education, and
- promote people to people contacts, intercultural awareness, and understanding.



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What is MARE?

ERASMUS+ project on Capacity Building in Higher Education aimed at reforming the system of higher education in the area of sustainable management of coastal areas in Vietnam and Malaysia to comply with the Bologna Declaration.

A specific focus and emphasis on Climate Change related issues

<https://blogs.uni-bremen.de/mare>

3 years project (2020-2023)

Total funded costs: 967.788 €

13 partners from 5 countries



Key figures

The revision of University Master Courses in Vietnamese Higher Education Institution for climate change management and adaptation



Main objectives

- New curriculum contents
 - new and revised courses, revised curricula of existing BSc/BA & MSc/MA courses, revised PhD agenda and research training guidelines
- E-learning suite
 - eMARE – learning management system, e-modules, MOOC-like contents
- Stakeholder engagement
 - Sectoral collaborative platforms (SCPs)
- Capacity development and sustainability
 - Training in subject areas, teaching and curriculum development methodology, ICT, stakeholder engagement; development of business plan; hard- and software purchases and development, exploitation of MARE products
- Dissemination
 - MARE www & social media, features in corporate and mass media, conference talks, newsletters and news updates, stakeholder seminars, open-call training events, international conferences, research & educational publications, open access e-learning materials



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Marine Coastal and Delta Sustainability for Southeast Asia

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New courses

- Tropical Ocean and Climate (Masters of Science (by Research))
- Marine Pollution and Management (Bachelor of Science (Marine Science))
- Control of marine pollution - 3 ECTS (Bachelor Marine environment and resource management-HCMUNRE)
- Management of marine resources and environment - 3 ECTS (Bachelor Marine environment and resource management-HCMUNRE)
- Ocean Environmental Management - 4.5 ECTS (Bachelor - Global Maritime Affairs, VMU).
- Environmental Law - 4.5 ECTS (Bachelor - Global Maritime Affairs, VMU).
- Management and Control of marine pollution - 6 ECTS (Bachelor - Environmental Engineering, VMU).
- Port and Marine constructions - 3 ECTS (Bachelor - Marine environment and resource management, HCMUNRE)
- Adapting building construction to the effects of climate change - 4.5 ECTS (Master, VMU).

Revised courses

- Environment: Global Issues and Perspective (Bachelor of Science (Marine Science))
- Modeling the marine environment (Bachelor of Marine environment and resource management-HCMUNRE)
- Fundamentals of climate change and natural disasters - 3 ECTS (Master of Climate change and Delta Management)
- Watershed management - 3 ECTS (Master of Climate change and Delta Management)
- Watershed and coastal zone management - 3 ECTS (Master of Environment and Natural Resources Management)
- Principles of Climate change mitigation and adaptation - 4.5 ECTS (Master of Climate change and Delta Management)
- Hydrological Modelling - 3 ECTS (Master of Engineering)



Erasmus+
capacity building
in higher education

li.u LINKÖPING
UNIVERSITY



Novosibirsk State
Technical University

Future-ORiented chEmiSTry / FOREST

Coordinator – Prof. Janerik Lindquist

Kick-off meeting 01-02 March 2021

3 years project (2021-2024)
Total funded costs: 948.322 €
9 partners from 6 countries



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Future-ORiented
chEmiSTry /
FOREST

Brief description of FOREST

Chemistry has an important role to play in **helping to mitigate climate change** by developing green technologies. Different regions in Russia and Vietnam have specific problems and needs in this area: long droughts, strong floods, air pollution, permafrost melting, Arctic sterility and so on.

Specific project objectives:

1. To develop a new interdisciplinary high-quality multi-track Master's program in Future-oriented Chemistry in line with the Bologna provisions and while adapting the EU best practice
2. To upgrade the teaching staff skills in T&L&A
3. To set up centres of excellence in future-oriented chemistry
4. To raise awareness of local communities of climate change impact and chemical solutions for its mitigation

Vietnam – Challenges:

- Specialists, able to solve current multi-faceted environmental and sustainability problems; inadequate performance of most graduates of current chemistry programs;
- state-of-the art programs corresponding to current trends in chemistry developments and in line with Bologna provisions;
- mobility schemes and interdisciplinary programs.

- Qualified teachers equipped with the –state-of-the art T&A methods and module-based curriculum design;
- teacher development programs.

- Business-university partnerships aimed at developing regional economy;
- science-based expertise to make decisions on climate change mitigation.
- Need in policy and capacity instrument to advance research and technological development in chemistry;
- Need in platform for interdisciplinary research/studies/collaboration with business and authorities.

- Awareness of climate change impact;
- science-based behaviour in environment protection.



Main outcomes of new master program

- New 5 multi-track Master's ECTS and module-based curricula
- 90 teachers, engaged in the program, with new skills;
- 5 centres of excellence;
- a community of experts on chemical solutions for mitigating climate change
- 60 trained community and industry representatives
- QA mechanisms embedded into the programs
- Communities' raised awareness of solutions to mitigate climate change impact

Impact of the project:

- a raised awareness of climate change impact on environment, health and economy among various stakeholders
- local and regional policies and decision-making adapted to mitigate climate change effects
- business plans adapted to mitigate climate change effects
- technical solutions to climate change effects
- a pool of experts and specialists on mitigating climate change impact





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Thank you!

University of Catania @
UniSmartItaly Vietnam

Wednesday, 21 April 2021,
20.00-22.00 (VN time), 15.00-
17.00 (CET)

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