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Marine Coastal and Delta Sustainability
for Southeast Asia



MARE teaching and learning materials

Available from the project management platform

A presentation



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MARE consortium has produced a vast amount of teaching and learning materials. This includes lecture notes prepared for each MARE course, new or revised, and a brand new e-book in Vietnamese on coastal management and policies that aims to fill the gap in the subject matter in Vietnamese and to disseminate MARE expertise in an inclusive manner.

List of the lecture notes:

- Control of marine pollution [TLM presentation](#)
- Marine resources and environment management [TLM presentation](#)
- Modeling the marine environment [TLM presentation](#)
- Port Introduction & classification [TLM presentation](#)
- Sustainability in coastal construction [TLM presentation](#)
- Ocean Environmental management [TLM presentation](#)
- Environmental Law and Policy [TLM presentation](#)
- Control and Management of marine pollution [TLM presentation](#)
- Hydrometeorology [TLM presentation](#)
- Fundamentals of climate change and natural disasters [TLM presentation](#)
- Watershed management [TLM presentation](#)
- Environmental modelling [TLM presentation](#)
- Principles of Climate change mitigation and adaptation [TLM presentation](#)
- Hydrological Modelling [TLM presentation](#)
- River-sea interactions [TLM Presentation](#)
- Fisheries Oceanography [TLM presentation](#)
- Marine Ecology
- Maritime and Offshore Safety Analysis [TLM presentation](#)
- Integrated Marine Pollution and control [TLM presentation](#)
- Oceanography [TLM presentation](#)
- Law of the Sea and Ship Operation [TLM presentation](#)
- Marine and Coastal Environment [TLM presentation](#)



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- Marine Environment and Renewable Energy [TLM presentation](#)
- Marine Environment [TLM presentation](#)
- Environmental Management and Sustainability [TLM presentation](#)
- Water Quality Assessment and Management [TLM presentation](#)
- Introduction to Oil & Gas Industry and Sustainable Development [TLM presentation](#)
- Physical Geology [TLM Presentation](#)
- Ocean and Coastal Engineering [TLM Presentation](#)
- Coastal Planning and Management [TLM Presentation](#)
- Pipeline and Risers [TLM Presentation](#)
- Deepwater Maintenance [TLM presentation](#)
- Tropical Oceanography [TLM presentation](#)
- Marine Resources Management [TLM presentation](#)
- Environment: Issue and Global Perspective [TLM presentation](#)

Natural resources and Environment in the Coastal areas of Vietnam (Text book in Vietnamese) [eBook presentation](#)



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University
of Bremen



Eesti Maaülikool
Estonian University of Life Sciences



National
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Teaching and learning materials for MARE project

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Lecture notes for courses taught at the following universities:

➤ [HCMUNRE](#)

➤ [VMU](#)

➤ [CTU](#)

➤ [VNIO](#)

➤ [UNIKL](#)

➤ [UTM](#)

➤ [UTP](#)

➤ [UMT](#)

➤ [eBook](#)



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First pages of dedicated pages by partner universities:

[TLM](#) > [HCMUNRE](#)



Ho Chi Minh City University of Natural Resources and Environment

Control of marine pollution – 3 ECTS (Bachelor Marine environment and resource management-HCMUNRE)

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

[Lecture notes: Control of marine pollution](#)

Marine resources and environment management – 3 ECTS (Bachelor Marine environment and resource management-HCMUNRE)

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

[Lecture notes: Marine resources and environment management](#)

[Videlectures](#)

Modeling the marine environment 3,5 ECTS (Bachelor of Marine environment and resource management-HCMUNRE)

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

[Lecture notes: Modeling the marine environment](#)

[Video lectures](#)

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Vietnam Maritime University

Control and management of marine environment – 6 ECTS (Bachelor – Environmental Engineering, VMU).

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

➤ [Control and management of marine environment](#)

Ocean Environmental Management – 4.5 ECTS (Bachelor – Global Maritime Affairs, VMU).

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

➤ [Ocean Environmental Management](#)

Port and Marine constructions – 3 ECTS (Bachelor – Marine environment and resource management, HCMUNRE)

[Syllabus](#), [Course presentation](#), [Course summary](#), [TLM presentation](#), [E-learning presentation](#)

➤ [Port and Marine constructions](#)

Hydro-meteorology – 3 ECTS (Bachelor -Maritime Safety Engineering & Port and Waterway Engineering. VMU).

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

➤ [Hydro-meteorology](#)

Environmental Law and Policy – 4.5 ECTS (Bachelor – Global Maritime Affairs, VMU).

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

➤ [Environmental Law and Policy](#)

Sustainability in coastal construction – 3 ECTS (Master- Construction project management VMU).

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

➤ [Sustainability in coastal construction](#)

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[TLM](#) > [CTU](#)



Can Tho University

Fundamentals of climate change and natural disasters – 3 ECTS (Master of Climate change and Delta Management)

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

➤ [Fundamentals of climate change and natural disasters](#)

Watershed management – 3 ECTS (Master of Climate change and Delta Management)

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

➤ [Watershed management](#)

Environmental modelling – 3 ECTS (Master of Environment and Natural Resources Management)

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

➤ [Environmental modelling](#)

Principles of Climate change mitigation and adaptation – 4.5 ECTS (Master of Climate change and Delta Management)

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

➤ [Principles of Climate change mitigation and adaptation](#)

Hydrological Modelling – 3 ECTS (Master of Engineering)

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

➤ [Hydrological Modelling](#)

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[TLM](#) > **VNIO**



Vietnam Institute of Oceanography

River-sea interactions – 4,5 ECTS (Bachelor of Marine environment and resource management-HCMUNRE) provided with HCMURE

[Syllabus](#), [Course summary](#), [course presentation](#), [TLM Presentation](#), [E-learning presentation](#)

📁 [River-sea interactions](#)

Fisheries Oceanography – 3 ECTS (Bachelor of Marine environment and resource management-HCMUNRE) provided with HCMURE

[Syllabus](#), [course summary](#), [course presentation](#), [TLM presentation](#), [E-learning presentation](#)

📁 [Fisheries Oceanography](#)

Marine Ecology 4,5 ECTS (Bachelor of Marine environment and resource management-HCMUNRE) provided with HCMURE

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University of Kuala Lumpur

Maritime and Offshore Safety Analysis – 5 ECTS (Bachelor of Maritime Operations)

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

[Maritime and Offshore Safety Analysis](#)

Integrated Marine Pollution and control – 5 ECTS (Bachelor of Maritime Operations)

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

[Integrated Marine Pollution and control](#)

Oceanography – 5 ECTS (Bachelor of Maritime Operations)

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

[Oceanography](#)

Law of the Sea and Ship Operation – 5 ECTS (Bachelor degree)

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

[Law of the Sea and Ship Operation](#)

Marine and Coastal Environment – 5 ECTS (Master of Maritime Operations and Management)

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

[Marine and Coastal Environment](#)

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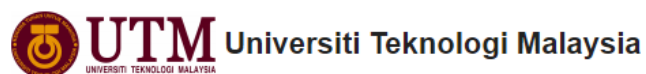
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[TLM](#) > [UTM](#)



Marine Environment and Renewable Energy – 4 ECTS (Master of Science (Mechanical Engineering)),

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

➤ [Marine Environment and Renewable Energy](#)

Marine Environment – 3 ECTS (Bachelor of Engineering (Naval Architecture and Offshore Engineering))

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-Learning presentation](#)

➤ [Marine Environment](#)

Environmental Management and Sustainability – 4 ECTS (Master of Engineering (Environmental Management))

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

➤ [Environmental Management and Sustainability](#)

Water Quality Assessment and Management – 4 ECTS (Master of Engineering (Environmental Management))

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➤ [Water Quality Assessment and Management](#)

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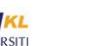
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[TLM](#) > [UTP](#)



Universiti Teknologi PETRONAS

Introduction to Oil & Gas Industry and Sustainable Development – 3 ECTS (Bachelor of Petroleum Engineering with Honours)

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

➤ [Introduction to Oil & Gas Industry and Sustainable Development](#)

Physical Geology – 4 ECTS (Bachelor of Mechanical Engineering with Honours)

[Syllabus](#), [Course presentation](#), [TLM Presentation](#), [E-learning presentation](#)

➤ [Physical Geology](#)

Ocean and Coastal Engineering – 4 ECTS (Bachelor of Civil and Environmental Engineering with Honours)

[Syllabus](#), [Course presentation](#), [TLM Presentation](#), [E-learning presentation](#)

➤ [Ocean and Coastal Engineering](#)

Coastal Planning and Management – 4 ECTS (Bachelor of Civil and Environmental Engineering with Honours)

[Syllabus](#), [Course presentation](#), [TLM Presentation](#), [E-learning presentation](#)

➤ [Coastal Planning and Management](#)

Pipeline and Risers – 4 ECTS (Bachelor of Civil and Environmental Engineering with Honours)

[Syllabus](#), [Course presentation](#), [TLM Presentation](#), [E-learning presentation](#)

➤ [Pipeline and Risers](#)

Deepwater Maintenance – 5 ECTS (MSc in Asset Maintenance and Management)

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

➤ [Deepwater Maintenance](#)

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[TLM](#) > [UMT](#)



University Malaysia Terengganu-Institute of Oceanography and Environment

Tropical Oceanography – 4 ECTS (Masters of Science (by Research))

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

[Tropical Oceanography](#)

Marine Resources Management – 4 ECTS (Bachelor of Science (Marine Science))

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

[Marine Resources Management](#)

Environment: Issue and Global Perspective – 4 ECTS (Bachelor of Science (Marine Science))

[Syllabus](#), [Course presentation](#), [TLM presentation](#), [E-learning presentation](#)

[Environment: Issue and Global Perspective](#)

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Examples of lecture notes prepared for MARE courses (new and revised):

[TLM](#) > [HCMUNRE](#) > Lecture notes: Control of marine pollution



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[TLM](#) > [VMU](#) > Port and Marine constructions

Công trình cảng

1 / 77

53%

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MODULE 5:
SHIP-PORT INTERFACE
AND ENERGY
EFFICIENCY



Dr. Tran Duc Phu
Vietnam Maritime University



Port & Marine Construction

Joint Course between VMU
and HCMUNRE

2021

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PORT & MARINE CONSTRUCTION

Dr. Trần Đức Phú

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TLM > CTU > Environmental modelling

Slide 1

1 / 84

65%

ENVIRONMENTAL MODELLING

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Model definition

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ENVIRONMENTAL MODELLING

Lecturer:
Dr. Huynh Vuong Thu Minh

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TLM > UTM > Marine Environment and Renewable Energy

MEMO 2003 MARINE ENVIRONMENT A... 1 / 42 53% + -

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TLM Note

MEMO 2003
MARINE ENVIRONMENT
AND RENEWABLE
ENERGY

MASTER OF SCIENCE (MECHANICAL ENGINEERING)

SHIP TECHNOLOGY / OFFSHORE TECHNOLOGY

UTM 2021

FARAH ELIYZA HASHIM, Ph.D.

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SYNOPSIS

This course is designed to give students an understanding of the science of marine environment particularly waves and tides, and how this affects efforts to exploit energy from these resources. Students will first be introduced to fundamentals of oceanography and marine meteorology. It explains the fluid physical characteristics and movement on the earth surface. As such, the student will have a clear understanding of the weather that results from the interaction between the atmosphere and the sea surface. Student will then learn on marine environmental issues related to ship and offshore structure. This course also introduces the main forms of marine renewable energy particularly wind, wave and tidal, focusing on the technology and resource assessment associated with each

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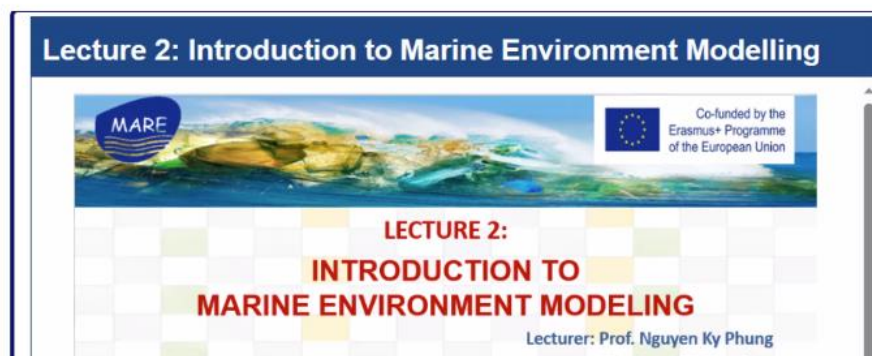
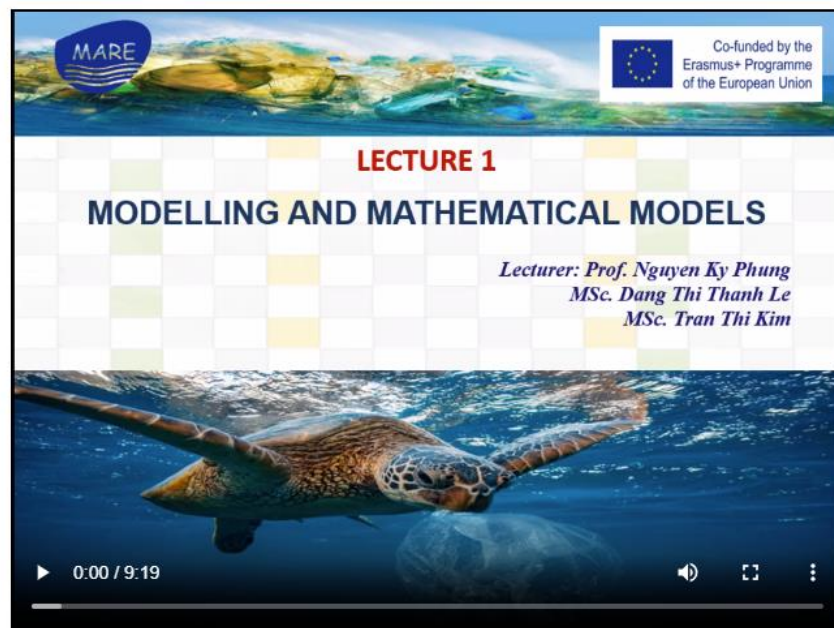
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[TLM](#) > [HCMUNRE](#) > [Video lectures](#)



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Natural resources and Environment in the Coastal areas of Vietnam (Text book in Vietnamese):

