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**MARE -Marine Coastal and Delta
Sustainability for Southeast Asia**



Bachelor's course Ocean Environmental Management

Introduction

Description: The marine environment is becoming increasingly stressed by growing global populations and industries. The world population has witnessed spectacular growth in the twentieth century, and may double in size by the middle of the twenty-first. This growth, combined with economic development and modernization, places extreme stress on all-natural resources, ocean resources included. In this class, we will look at environmental issues such as maritime pollution; ocean oil, gas, and natural resource exploration; coastal dynamics and shoreline protections. We will also explore and analyze the various solutions proposed to deal with them. Designed for students with little or no scientific background, the course provides basic science education integrated with major international environmental concerns, offshore energy, waste management, sustainable development, coastal dynamics and shoreline protections.

Contents: The course consists of 11 main topics as follows:

1. The world oceans
2. How climate change alters the ocean chemistry
3. Climate change impacts on marine ecosystems
4. Living resource and medical knowledge from the sea
5. Marine minerals and energy, and maritime highways
6. Polluting the seas
7. Oil spill
8. Pollution cleanup
9. Coastal processes and classification
10. Coastal erosion and flooding
11. Coastal protection and shoreline management

