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COURSE PRESENTATION

VEB4233

Coastal Planning and Management



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energising futures



- Coastlines and the coastal areas are not only becoming increasingly important for economic development, but they are also very dynamic zones which are subject to threats caused by environmental and anthropogenic influences. Thus, the knowledge in coastal planning and management is important especially in ensuring the sustainability of the coastal zone. This course aims at providing a framework of knowledge required for the proper planning and management of coastal zone in respecting the principles of sustainability. The course covers the factors leading to coastal erosion, marine pollution, coastal reclamation, planning concept in coastal zones, coastal protection and stabilization measures, and shoreline management.
- Coastal Planning and Management is a subject that requires interactive discussions, sharing of exciting examples and case studies for enhanced understanding and appreciation. This skill is developed through series of lectures/modules, discussion related to case studies during execution of project assigned. Transferred skills to be assessed by assignment, project report, test and extended assignment. A problem-based learning will be implemented in the class. An adjunct lecture and a virtual field trip will also be conducted to expose the students to the real coastal management projects in Malaysia.



Upon completion of this course, students will be able to:

1. Assess the influencing environmental factors and related coastal processes, and analyze causes of coastal erosion/sedimentation
2. Develop skills and knowledge for the planning and management of coastal zone in respecting the principles of sustainability.
3. Evaluate application of different coastal stabilization schemes and the governing factors for their selection and impacts





TOPIC AREA	TOPIC
Introduction to CPM	<ul style="list-style-type: none"> Coastal nomenclature Introduction to coastal hydrodynamic and transport processes
Coastal Classification and Causes of Coastal Erosion	<ol style="list-style-type: none"> Classification of coastal features and shoreline response Impacts of meteomarine and natural processes to coastal morphology
	1 Impacts of development to coastal processes
Planning Concept in the Coastal Zone	2 Implementation of sustainable development
	3 Integrated coastal zone management
	<ul style="list-style-type: none"> Shoreline management plan
Coastal/Shore Protection and Coastal Stabilization	4 Guidelines for development in coastal areas
	<ul style="list-style-type: none"> Overview of types of coastal stabilization scheme Applications and impacts
Hydraulic Study For Shoreline Management	<ul style="list-style-type: none"> Management solutions Basic cost components and environmental concerns in the design and implementation of the protection scheme Dredging and land reclamation Marine pollution and control
	<ul style="list-style-type: none"> Guidelines and requirements Field investigations and surveys
	<ul style="list-style-type: none"> Impact assessment and monitoring Numerical models as support for shoreline management
Case Simulation	<ul style="list-style-type: none"> Simulation session – Case study