

## See- und Hafengebäude

### Maritime and Port Coastal Engineering

Prüfungs-/Studienleistungen K / unbenoteter Vortrag	Art/SWS 2V / 2Ü	Sprache E	LP 6	Semester SS
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**Ziel des Moduls**

The module imparts knowledge about the planning, management and maintenance of ports and harbours. Furthermore, external speakers share their practical experiences in the field of Maritime and Port Engineering.

After the successful participation in this course the students are able to:

- Assess the role and development of maritime navigation and logistical concepts
- Plan and classify harbour structures
- Understand the management and maintenance of ports and port infrastructure
- Recognize/estimate hydraulic processes within ports and their interactions with vessels
- Estimate the importance of economical and ecological aspects for ports
- Classify different dredging technologies
- Understand, describe and assess relevant scientific literature

**Inhalt des Moduls**

- Planning, layout and logistics of ports and harbours
- Economical aspects of Maritime and Port Engineering
- Infrastructure and management of ports and harbours
- Ecological aspects in regard of maintenance and operation
- Cross-shore and lateral sediment transport
- Design and maintenance of breakwaters and piers, seawalls and jetties
- Dredging technologies; Small harbours and sport boat marinas
- Practical examples of Maritime and Port Engineering

<b>Workload</b>	180 h (60 h Präsenz- und 120 h Eigenstudium einschl. Prüfungs-/Studienleistung)
<b>Empf. Vorkenntnisse</b>	Wasserbau und Küsteningenieurwesen
<b>Literatur</b>	BRUUN, P., Port Engineering. Vol. 1 & 2, Gulf Publishing Company, Fourth Edition, 1990 TSINKER, G.P., Port Engineering – Planning, Construction, Maintenance and Security, John Wiley & Sons, 2004. CEM, 2002. Coastal Engineering Manual. United States Army Corps of Engineers (USACE), <a href="http://140.194.76.129/publications/eng-manuals/">http://140.194.76.129/publications/eng-manuals/</a> EAK: Empfehlungen für die Ausführung von Küstenschutzbauwerken, Die Küste, 65, 2002
<b>Medien</b>	PPT, Matlab-Übungen
<b>Besonderheiten</b>	Big hydraulic engineering excursion (Pentecost week)

<b>Modulverantwortlich</b>	Schlurmann, Torsten
<b>Dozenten</b>	Schlurmann, Torsten; Paul, Maike; Visscher, Jan
<b>Betreuer</b>	Taphorn, Mareike
<b>Verantwortl. Prüfer</b>	Schlurmann, Torsten
<b>Institut</b>	Ludwig-Franzius-Institut für Wasserbau, Ästuar- und Küsteningenieurwesen, <a href="http://www.lufi.uni-hannover.de">http://www.lufi.uni-hannover.de</a> Fakultät für Bauingenieurwesen und Geodäsie

<b>Studiengangsspezifische Informationen</b>	<b>P/W und Kompetenzbereich in Abhängigkeit von Vertiefungsrichtung</b>			
	Konstruktiver Ingenieurbau	Wasser- und Küsteningenieurwesen	Windenergie-Ingenieurwesen	Baumanagement
	W FSV	W FSV	W ÜI	W FSV