



BUKU PEDOMAN MATA KULIAH COURSES MODULE HANDBOOK

KADASTER LAUT LANJUT
ADVANCED MARINE CADASTRE

DEPARTEMEN TEKNIK GEOMATIKA
Fakultas Teknik Sipil, Perencanaan, dan Kebumian

*DEPARTMENT OF GEOMATICS ENGINEERING
Faculty of Civil Engineering, Planning, and Geo Engineering*

INSTITUT TEKNOLOGI SEPULUH NOPEMBER

28. Kadaster Laut Lanjut / Advanced Marine Cadastre

Nama modul <i>Module name</i>	Kadaster Laut Lanjut <i>Advanced Marine Cadastre</i>
Tingkatan <i>Module level</i>	Pasca Sarjana (S2) <i>Master Degree</i>
Kode <i>Code</i>	CM235805
Mata kuliah <i>Course</i>	Kadaster Laut Lanjut <i>Advanced Marine Cadastre</i>
Semester <i>Semester</i>	III (tiga) atau IV (empat) <i>III (three) or IV (four)</i>
Penanggung jawab mata kuliah <i>Person responsible for the module</i>	Danar Guruh Pratomo, S.T., M.T., Ph.D.
Dosen <i>Lecturer</i>	Danar Guruh Pratomo, S.T., M.T., Ph.D.
Bahasa <i>Language</i>	Bahasa Indonesia dan Bahasa Inggris <i>Indonesian and English</i>
Relasi pada kurikulum <i>Relation to curriculum</i>	Mata kuliah pilihan untuk Program Master Teknik Geomatika <i>Elective Courses for Master of Geomatics Engineering</i>
Tipe pertemuan, jam tatap muka <i>Type of teaching, contact hours</i>	Kuliah, 1.67 jam x 16 minggu per semester <i>Lecture, 1.67 hours x 16 weeks per semester</i>
Beban belajar <i>Workload</i>	Kuliah: 1.67 jam x 14 minggu = 23.38 jam Penugasan terstruktur: 2 jam x 14 minggu= 28 jam Kegiatan mandiri: 2 jam x 14 minggu = 28 jam Ujian: 1.67 jam x 2 kali = 3.34 jam Paper review: 2.83 jam x 14 = 39.62 Studi Case-based: 2.83 jam x 14 = 39.62 Total = 161.96 jam <i>Lecture: 1.67 hours x 14 weeks = 23.38 hours</i> <i>Structured exercises and assignments: 2 hours x 14 weeks = 28 hours</i> <i>Independent activities: 2 hours x 14 weeks = 28 hours</i> <i>Exam: 1.67 hours x 2 time = 3.34 hours</i> <i>Paper review: 2.83 jam x 14 = 39.62</i> <i>Case-based study: 2.83 jam x 14 = 39.62</i> <i>Total = 161.96 hours</i>
Kredit <i>Credits</i>	2 SKS + 2 SKS tambahan beban <i>2 credits + 2 credits additional activities</i>
Persyaratan sesuai dengan peraturan ujian	Minimum 80% kehadiran untuk mengikuti ujian tertulis

<i>Requirements according to the examination regulations</i>	<i>Minimum 80% attendance in this course in order to take the exams</i>
Deskripsi Mata Kuliah	Pada mata kuliah ini mahasiswa akan mempelajari tentang kadaster kelautan dan aplikasinya. Pengertian, ruang lingkup dan metode pengumpulan data serta berbagai jenisnya dibahas di kelas dan dalam tugas kelompok, untuk memberikan pengalaman kepada mahasiswa dalam mengumpulkan dan memperoleh jenis data yang digunakan dalam kadaster pesisir dan kelautan. Selain itu, jenis data dan metode pemilihannya berdasarkan pengelolaan lahan di wilayah laut juga dibahas. Selain itu, studi kasus penggunaan data lapangan untuk membentuk basis data spasial dan nonspasial wilayah laut untuk penggunaan lahan dan proses pendaftaran/ persil juga sedang dipelajari.
<i>Description of Course</i>	<i>In this course, students will learn about the marine cadastre and its application. The definitions, scope and methods of data collection and its various types are discussed in the classroom and in group tasks, in order to give students experiences in collecting and obtaining types of data utilized in coastal and a marine cadastre. In addition, types of data and their selection methods based on land management in the sea area are also being discussed. Moreover, case studies on the use of field data to form spatial and nonspatial database of marine areas for land use and registration process / land plots are also being studied.</i>
Capaian Pembelajaran / Course Learning Outcomes	<ol style="list-style-type: none"> 1. Mampu menjelaskan mengenai konsep dasar dan aplikasi kadaster kelautan 2. Mampu menjelaskan berbagai ruang lingkup dalam kadaster kelautan 3. Mampu menentukan jenis data yang digunakan dalam kadaster pesisir dan kelautan 4. Mampu menentukan metode yang diaplikasikan dalam pengelolaan wilayah laut 5. Mampu memberikan solusi pada permasalahan kadaster laut melalui suatu studi kasus menggunakan baik data spasial maupun nonspasial
<i>Module objectives/ Course learning outcomes</i>	<ol style="list-style-type: none"> 1. <i>Able to explain the basic concepts and applications of marine cadastral</i> 2. <i>Able to explain various scopes in marine cadastre</i> 3. <i>Able to determine the type of data used in coastal and marine cadastre</i> 4. <i>Able to determine the method applied in the</i>

	<p><i>management of marine areas</i></p> <p>5. Able to provide solutions to marine cadastre problems through a case study using both spatial and non-spatial data</p>																																																												
CPMK dan hubungan dengan CPL Prodi <i>Learning outcomes and their corresponding to PLOs</i>	<table border="1"> <thead> <tr> <th></th> <th>PLO.1</th> <th>PLO.2</th> <th>PLO.3</th> <th>PLO.4</th> <th>PLO.5</th> <th>PLO.6</th> <th>PLO.7</th> <th>PLO.8</th> <th>PLO.9</th> </tr> </thead> <tbody> <tr> <td>CLO.1</td><td></td><td></td><td></td><td>✓</td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td>CLO.2</td><td></td><td></td><td></td><td>✓</td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td>CLO.3</td><td></td><td></td><td></td><td>✓</td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td>CLO.4</td><td></td><td></td><td></td><td></td><td></td><td>✓</td><td></td><td></td><td></td></tr> <tr> <td>CLO.5</td><td></td><td></td><td></td><td></td><td></td><td></td><td>✓</td><td></td><td></td></tr> </tbody> </table>		PLO.1	PLO.2	PLO.3	PLO.4	PLO.5	PLO.6	PLO.7	PLO.8	PLO.9	CLO.1				✓						CLO.2				✓						CLO.3				✓						CLO.4						✓				CLO.5							✓		
	PLO.1	PLO.2	PLO.3	PLO.4	PLO.5	PLO.6	PLO.7	PLO.8	PLO.9																																																				
CLO.1				✓																																																									
CLO.2				✓																																																									
CLO.3				✓																																																									
CLO.4						✓																																																							
CLO.5							✓																																																						
Mata kuliah wajib prasyarat <i>Mandatory prerequisites</i>	-																																																												
Pokok Bahasan	<ol style="list-style-type: none"> 1. Definisi kadaster laut 2. Metode delineasi batas laut 3. Pengembangan metode pemetaan kadaster laut. 4. Pasang surut air laut 5. Jenis data dalam kadaster laut. 6. Peraturan perundang-undangan kelautan 7. Kompilasi Database Kadaster Laut 																																																												
<i>Content</i>	<ol style="list-style-type: none"> 1. <i>Definition of maritime cadastre</i> 2. <i>Maritime boundary delineation method</i> 3. <i>Development of marine cadastral mapping methods</i> 4. <i>Sea tides</i> 5. <i>Types of data used in marine cadastre</i> 6. <i>Maritime legislation</i> 7. <i>Compilation of Marine Cadastral Database</i> 																																																												
Pembelajaran dan Persyaratan Ujian <i>Study and examination requirements and forms of examination</i>	<table border="1"> <thead> <tr> <th>Rencana Evaluasi</th> <th>Bobot Weight</th> </tr> </thead> <tbody> <tr> <td>Kuis 1 <i>Quiz 1</i></td> <td>15%</td> </tr> <tr> <td>Tugas 1 <i>Assignment 1</i></td> <td>15%</td> </tr> <tr> <td>Evaluasi Tengah Semester <i>Middle Term Examination</i></td> <td>30%</td> </tr> <tr> <td>Kuis 2 <i>Quiz 2</i></td> <td>5%</td> </tr> <tr> <td>Tugas 2 <i>Assignment 2</i></td> <td>5%</td> </tr> <tr> <td>Evaluasi Akhir Semester <i>Final Term Examination</i></td> <td>30%</td> </tr> </tbody> </table>	Rencana Evaluasi	Bobot Weight	Kuis 1 <i>Quiz 1</i>	15%	Tugas 1 <i>Assignment 1</i>	15%	Evaluasi Tengah Semester <i>Middle Term Examination</i>	30%	Kuis 2 <i>Quiz 2</i>	5%	Tugas 2 <i>Assignment 2</i>	5%	Evaluasi Akhir Semester <i>Final Term Examination</i>	30%																																														
Rencana Evaluasi	Bobot Weight																																																												
Kuis 1 <i>Quiz 1</i>	15%																																																												
Tugas 1 <i>Assignment 1</i>	15%																																																												
Evaluasi Tengah Semester <i>Middle Term Examination</i>	30%																																																												
Kuis 2 <i>Quiz 2</i>	5%																																																												
Tugas 2 <i>Assignment 2</i>	5%																																																												
Evaluasi Akhir Semester <i>Final Term Examination</i>	30%																																																												

Media yang digunakan <i>Media employed</i>	Classical teaching tools with white board and power point presentation
Daftar Pustaka <i>Reading list</i>	<ol style="list-style-type: none"> 1. Barry M and Fourie C 2002 Evaluating Cadastral Systems in Uncertain Situations: A Conceptual Framework based on Soft Systems Theory. International Journal of Geographical Information Science 16(1) 23-40 2. Collier P A, Leahy F J and Williamson, I P 2001. Defining a Marine Cadastre for Australia. Proceedings of the 42nd Australian Surveyors Congress, Brisbane. 3. Fowler C and Tremi E 2001. Building a Marine Cadastral Information System for the United States – a case study. Computers, Environment and Urban Systems, 25, 493-507 4. Grant D and Williamson I 1999. Report of the Workshop on Land Tenure and Cadastral Infrastructures for Sustainable Development – Bathurst 18-22 October 1999, International Conference on Land Tenure and Cadastral Infrastructures for Sustainable Development, Melbourne. 9. IHO 2014, TALOS, Edisi ke-5, Monaco