



BUKU PEDOMAN MATA KULIAH
COURSE MODULE HANDBOOK

ANALISA CITRA SATELIT
PENGINDERAAN JAUH
ANALYSIS OF REMOTE SENSING
SATELLITE IMAGERY

DEPARTEMEN TEKNIK GEOMATIKA
Fakultas Teknik Sipil, Perencanaan, dan Kebumihan

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

INSTITUT TEKNOLOGI SEPULUH NOPEMBER

| | <p><i>geodynamics and environment, geospatial, geomarin, and land.</i></p> <p>2. <i>Have skills in processing remote sensing image data and the development of state-of-the-art geospatial information science and technology in the fields of geodesy and surveying, geodynamics and environment, geospatial, geomarin, and land.</i></p> <p>3. <i>Have skills in processing remote sensing image data and the development of state-of-the-art geospatial information science and technology in the fields of geodesy and surveying, geodynamics and environment, geospatial, geomarin, and land.</i></p> <p>4. <i>Able to interpret and classify satellite imagery and the development of the latest /latest geospatial information science and technology in the field of geodesy and surveying, geodynamics and environment, geospatial, geomarin, and land.</i></p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|-------|---|---|---|---|--|--|--|--|--|--|--|--|-------|---|---|---|---|--|--|--|--|--|--|--|--|-------|---|---|---|---|--|--|--|--|--|--|--|--|-------|---|---|---|---|--|--|--|--|--|--|--|--|
| <p>CPMK dan hubungan dengan CPL Prodi <i>Learning outcomes and their corresponding to PLOs</i></p> | <table border="1" data-bbox="695 891 1439 1122"> <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> <th>PLO.10</th> <th>PLO.11</th> <th>PLO.12</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> <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> <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> <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> <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 | PLO.10 | PLO.11 | PLO.12 | CLO.1 | ✓ | ✓ | ✓ | ✓ | | | | | | | | | CLO.2 | ✓ | ✓ | ✓ | ✓ | | | | | | | | | CLO.3 | ✓ | ✓ | ✓ | ✓ | | | | | | | | | CLO.4 | ✓ | ✓ | ✓ | ✓ | | | | | | | | |
| | PLO.1 | PLO.2 | PLO.3 | PLO.4 | PLO.5 | PLO.6 | PLO.7 | PLO.8 | PLO.9 | PLO.10 | PLO.11 | PLO.12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CLO.1 | ✓ | ✓ | ✓ | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CLO.2 | ✓ | ✓ | ✓ | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CLO.3 | ✓ | ✓ | ✓ | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CLO.4 | ✓ | ✓ | ✓ | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Mata kuliah wajib prasyarat <i>Mandatory prerequisites</i></p> | <p>-</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Pokok Bahasan</p> <p><i>Content</i></p> | <ul style="list-style-type: none"> • Konsep dasar Landasan Sejarah, Prinsip Dasar, Fisika Gelombang Elektromagnetik, Wahana Pengangkut, Geometrik Satelit. Jenis dan Spesifikasi Citra, Pengertian Satelit Penginderaan Jauh Pasif, Karakter Reflektan pada Obyek di Permukaan Bumi. Interpretasi analog Penginderaan Jauh: <i>Pengertian Dasar, Landasan Interpretasi, Kunci Interpretasi, Macam, Cara/Metode, Proses, Alat, Data/Dokumen Interpretasi.</i> Interpretasi digital Penginderaan Jauh (Remote Sensing Interpretation). • Pengertian Dasar, Landasan Interpretasi, Kunci Interpretasi, Macam, Cara/Metode, Proses, Alat, Data/Dokumen Interpretasi. Peralatan dasar Penginderaan Jauh (pengolahan citra) untuk menghitung dan menginterpretasi citra satelit. kegiatan informasi geospasial metode Penginderaan Jauh dengan membuat persyaratan pekerjaan, membuat orbit satelit. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | <ul style="list-style-type: none"> • <i>Basic concepts of Historical Platform, Basic Principles, Physics of Electromagnetic Waves, Rides of Transporters, Geometric Satellites. Image Types and Specifications, Understanding Satellite Remote Sensing Passive, Reflectant Characteristics on Objects on Earth's Surface. Interpretation of analog Remote Sensing: Basic Definition, Basis of Interpretation, Key Interpretation, Kinds, Methods / Methods, Processes, Tools, Data / Document Interpretation. Remote Sensing Interpretation (Digital).</i> • <i>Basic Definition, Interpretation Basis, Key Interpretation, Kinds, Methods / Methods, Processes, Tools, Data / Document Interpretation. Remote Sensing basic equipment (image processing) to calculate and interpret satellite imagery. the geospatial information activities of Remote Sensing methods by making job requirements, making satellite orbit.</i> | | | | | | | | | | |
|---|---|------------------|--------------|-----------------------------------|-----|-----------------------------------|-----|--|-----|---|-----|
| <p>Pembelajaran dan Persyaratan Ujian <i>Study and examination requirements and forms of examination</i></p> | <table border="1"> <thead> <tr> <th data-bbox="711 943 1315 1010">Rencana Evaluasi</th> <th data-bbox="1315 943 1426 1010">Bobot Weight</th> </tr> </thead> <tbody> <tr> <td data-bbox="711 1010 1315 1077">Presentasi <i>Presentation</i></td> <td data-bbox="1315 1010 1426 1077">28%</td> </tr> <tr> <td data-bbox="711 1077 1315 1144">Studi Kasus <i>Case Method</i></td> <td data-bbox="1315 1077 1426 1144">22%</td> </tr> <tr> <td data-bbox="711 1144 1315 1211">Evaluasi Tengah Semester <i>Mid Semester Exam</i></td> <td data-bbox="1315 1144 1426 1211">20%</td> </tr> <tr> <td data-bbox="711 1211 1315 1279">Evaluasi Akhir Semester <i>Final Examination</i></td> <td data-bbox="1315 1211 1426 1279">30%</td> </tr> </tbody> </table> | Rencana Evaluasi | Bobot Weight | Presentasi <i>Presentation</i> | 28% | Studi Kasus <i>Case Method</i> | 22% | Evaluasi Tengah Semester <i>Mid Semester Exam</i> | 20% | Evaluasi Akhir Semester <i>Final Examination</i> | 30% |
| Rencana Evaluasi | Bobot Weight | | | | | | | | | | |
| Presentasi <i>Presentation</i> | 28% | | | | | | | | | | |
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| Evaluasi Akhir Semester <i>Final Examination</i> | 30% | | | | | | | | | | |
| <p>Media yang digunakan <i>Media employed</i></p> | <p>Media pengajaran secara klasik dengan papan tulis dan presentasi power point <i>Classical teaching tools with white board and power point presentation</i></p> | | | | | | | | | | |
| <p>Daftar Pustaka <i>Reading list</i></p> | <ol style="list-style-type: none"> 1. Church VA, <i>Manual of Remote Sensing</i>, American Society of Photogrametry, New York, USA, 1983. 2. Lillesand-Kiefer, <i>Remote Sensing and Image Interpretation</i>, John Wiley & Sons, 1979 3. Paul J. Curran, <i>Principle of Remote Sensing</i>, John Wiley & Son, New York, 1985 4. Shrestha, D.P., <i>Remote Sensing Techniques And Digital Image Processing</i>, International Institute for Aerospace Survey and Earth Sciences, 1994 5. Coleman, Diane, and Tennant, Keith, <i>Intermap's Significant Upgrade Investments takes Radar Upscale into finer resolution territory</i>, <i>Intermap Article</i>, September 2002 6. CP Lo, Penterjemah Bambang Purbowaseso, <i>Penginderaan Jauh Terapan</i>, UI Press, 1996. | | | | | | | | | | |

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| | <ol style="list-style-type: none">7. Ford, <i>Remote Sensing and Image Interpretation</i>, Jhon Willey and Sons, New York, 1979.8. Gonzales, R.C. and Wintz, P., <i>Digital Image Processing</i>, Addison Wesley Publishing, Massachusetts, 19879. Jhon RJ and Jensen, <i>Introduction Digital Image Processing, A Remote Sensing Perspective</i>, USA, 199610. Jonathan Williams, <i>Geographic Information From Space, Processing, and Applications of Geocoded Satellite Images</i>, Wiley-Praxis Series in Remote Sensing, Chichester, 1995. |
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