# Geoinformatics

|  |  |  |  |
| --- | --- | --- | --- |
|  | Common subjects | Semesters | Type/ Credits |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 15 weeks | 15 weeks | 15 weeks | 15 weeks | 15 weeks | 15 weeks |
| 1 | Economy | 2+2 v |  |  |  |  |  | B/4 |
| 2 | Phisics | 2+2 v |  |  |  |  |  | A/4 |
| 3 | Informatics I., II. | 2+2 f | 2+5 v |  |  |  |  | A/4, 6 |
| 4 | Geometry I., II. | 2+2 f | 2+2 v |  |  |  |  | A/4, 4 |
| 5 | Mathematics I., II. | 2+2 v | 2+2 v |  |  |  |  | A/4, 4 |
| 6 | Environmental studies | 2+0 v |  |  |  |  |  | A/2 |
| 7 | Mapping | 1+2 f |  |  |  |  |  | A/3 |
| 8 | Surveying I., II. | 2+4 v | 3+4 v |  |  |  |  | A/6, 6 |
| 9 | Legal basics |  | 2+0 b |  |  |  |  | A/2 |
| 10 | Physics I. |  | 1+2 f |  |  |  |  | A/2 |
| 11 | Projections |  | 1+2 f |  |  |  |  | A/3 |
| 12 | Control network |  |  | 2+3 v |  |  |  | A/5 |
| 13 | Communications |  |  | 0+2 f |  |  |  | B/2 |
| 14 | EU CAP |  |  | 2+0 b |  |  |  | B/2 |
| 15 | Photogrammetry I., II. |  |  | 2+2 v | 2+3 v |  |  | A/4, 4 |
| 16 | Geoinformatics I. |  |  | 2+3 v |  |  |  | A/5 |
| 17 | Topography |  |  |  | 2+2 v |  |  | A/4 |
| 18 | Land registry I. |  |  |  | 2+2 v |  |  | A/4 |
| 19 | Management I., II. |  |  |  | 2+2 f | 2+2 v |  | B/4, 4 |
| 20 | Large scale mapping I. |  |  |  | 2+3 v |  |  | A/5 |
| 21 | Water management |  |  |  |  | 2+2 f |  | B/3 |
| 22 | Engineering Surveying I. |  |  |  |  | 2+2 v |  | A/4 |
| 23 | Land use planning |  |  |  |  |  | 2+4 v | B/4 |
|  | Credits | 31 | 27 | 18 | 21 | 11 | 4 | 112 |

**Specialisation**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24 | Physics II. |  |  |  | 2+2 f |  |  | B/3 |
| 25 | Informatics III. |  |  | 1+2 f |  |  |  | B/3 |
| 26 | Mathematics III. |  |  | 2+2 v |  |  |  | A/4 |
| 27 | Adjustment II. |  |  | 2+2 v |  |  |  | A/3 |
| 28 | Geoinformatics II. |  |  |  | 2+2 v |  |  | A/4 |
| 29 | Large scale mapping II. |  |  |  |  | 3+3 v |  | A/5 |
| 30 | Engineering Surveying II. |  |  |  |  |  | 2+2 v | B/3 |
| 31 | GIS applications I. |  |  |  |  | 2+3 v |  | B/5 |
| 32 | Cartography |  |  |  |  | 2+2 f |  | B/3 |
| 33 | Remote sensing |  |  |  |  |  | 2+2 v | B/3 |
| 34 | GNSS |  |  |  |  |  | 2+2 v | B/3 |
| 35 | Geodesy |  |  |  |  |  | 3+1 v | B/4 |
|  | Credits |  |  | 10 | 7 | 13 | 13 | 43 |

**Electives**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 51 | Engineering ethics |  | 2+0 b |  |  |  |  | C/2 |
| 52 | Rural development |  |  | 2+0 b |  |  |  | C/2 |
| 53 | Quality management |  |  |  | 2+0 b |  |  | C/2 |
| 54 | GI management |  |  |  |  | 2+2 f |  | C/2 |
| 55 | GIS applications II. |  |  |  |  |  | 2+2 f | C/2 |
|  | Credits |  | 2 | 2 | 2 | 2 | 2 | 10 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Thesis |  |  |  |  | 6 | 9 | 15 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Total** | **31** | **29** | **30** | **30** | **31** | **29** | **180** |

|  |  |
| --- | --- |
|  | **total** |
| **Hours per week** | **31** | **32** | **31** | **32** | **31** | **26** | **2745** |
| **lectures** | **15** | **15** | **15** | **16** | **15** | **13** | **1335** |
| **practicals** | **16** | **17** | **16** | **16** | **16** | **13** | **1410** |
| **Exam** | **5** | **4** | **5** | **5** | **4** | **5** | **28** |
| **Practicals** | **3** | **2** | **2** | **2** | **3** | **1** | **13** |
| **Signature** |  | **2** | **2** | **1** |  |  | **5** |
| **Foreign language** | **-** | **60** | **60** | **60** | **60** |  | **240** |

Surveying field course 3 weeks after semester 2 7 credits

Networks and Land Surveying field course 3 weeks after semester 4 7 credits

Topography field course 1 week before semester 5 2 credits

Practicals 4+4 weeks after semester 2 and 4 7+7 credits

# Land management

|  |  |  |  |
| --- | --- | --- | --- |
|  | Common subjects | Semesters | Type/ Credits |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 15 weeks | 15 week | 15 week | 15 week | 5 week | 15 weeks |
| 1 | Economy | 2+2 v |  |  |  |  |  | B/4 |
| 2 | Phisics | 2+2 v |  |  |  |  |  | A/4 |
| 3 | Informatics I., II. | 2+2 f | 2+5 v |  |  |  |  | A/4, 6 |
| 4 | Geometry I., II. | 2+2 f | 2+2 v |  |  |  |  | A/4, 4 |
| 5 | Mathematics I., II. | 2+2 v | 2+2 v |  |  |  |  | A/4, 4 |
| 6 | Environmental studies | 2+0 v |  |  |  |  |  | A/2 |
| 7 | Mapping | 1+2 f |  |  |  |  |  | A/3 |
| 8 | Surveying I., II. | 2+4 v | 3+4 v |  |  |  |  | A/6, 6 |
| 9 | Legal basics |  | 2+0 b |  |  |  |  | A/2 |
| 10 | Physics I. |  | 1+2 f |  |  |  |  | A/3 |
| 11 | Projections |  | 1+2 f |  |  |  |  | A/2 |
| 12 | Control network |  |  | 2+3 v |  |  |  | A/5 |
| 13 | Communications |  |  | 0+2 f |  |  |  | B/2 |
| 14 | EU CAP |  |  | 2+0 b |  |  |  | B/2 |
| 15 | Photogrammetry I., II. |  |  | 2+2 v | 2+3 v |  |  | A/4, 4 |
| 16 | Geoinformatics I. |  |  | 2+3 v |  |  |  | A/5 |
| 17 | Topography |  |  |  | 2+2 v |  |  | A/4 |
| 18 | Land registry I. |  |  |  | 2+2 v |  |  | A/4 |
| 19 | Management I., II. |  |  |  | 2+2 f | 2+2 v |  | B/4, 4 |
| 20 | Large scale mapping I. |  |  |  | 2+3 v |  |  | A/5 |
| 21 | Water management |  |  |  |  | 2+2 f |  | B/3 |
| 22 | Engineering Surveying I. |  |  |  |  | 2+2 v |  | A/4 |
| 23 | Land use planning |  |  |  |  |  | 2+4 v | B/4 |
|  | Credits | 31 | 27 | 18 | 21 | 11 | 4 | 112 |

**Specialisation**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24 | Physics II. |  |  |  | 2+2 f |  |  | A/3 |
| 25 | Informatics III. |  |  | 1+2 f |  |  |  | A/3 |
| 26 | Mathematics III. |  |  | 2+2 v |  |  |  | A/4 |
| 27 | Adjustment II. |  |  | 2+2 v |  |  |  | A/3 |
| 28 | Geoinformatics II. |  |  |  | 2+2 v |  |  | A/4 |
| 29 | Large scale mapping II. |  |  |  |  | 3+3 v |  | A/5 |
| 36 | Photointerpretation and remote sensing |  |  |  |  | 2+2 v |  | B/3 |
| 37 | Land management |  |  |  |  | 2+1 f |  | B/2 |
| 38 | Land consolidation I., II. |  |  |  |  | 2+2 v | 3+4 v | B/3, 5 |
| 39 | Urban development I., II. |  |  |  |  | 2+0 b | 2+2 v | B/2, 3 |
| 40 | Rural development |  |  |  |  |  | 3+1 v | B/3 |
|  | Credits |  |  | 10 | 7 | 15 | 11 | 43 |

**Electives**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 51 | Engineering ethics |  | 2+0 b |  |  |  |  | C/2 |
| 56 | Sociology |  |  | 2+0 b |  |  |  | C/2 |
| 53 | Quality management |  |  |  | 2+0 b |  |  | C/2 |
| 57 | Agrar and forestry issues |  |  |  |  | 2+0 f |  | C/2 |
| 58 | Land valuation |  |  |  |  |  | 2+1 b | C/2 |
|  | Credits |  | 2 | 2 | 2 | 2 | 2 | 10 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Thesis |  |  |  |  | 6 | 9 | 15 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Total** | **31** | **29** | **30** | **30** | **34** | **26** | **180** |

|  |  |
| --- | --- |
|  | **total** |
| **Hours per week** | **31** | **32** | **31** | **32** | **33** | **24** | **2745** |
| **lectures** | **15** | **15** | **15** | **16** | **19** | **12** | **1380** |
| **practicals** | **16** | **17** | **16** | **16** | **14** | **12** | **1365** |
| **Exam** | **5** | **4** | **5** | **5** | **5** | **4** | **28** |
| **Practicals** | **3** | **2** | **2** | **2** | **3** |  | **12** |
| **Signature** |  | **2** | **2** | **1** | **1** | **1** | **7** |
| **Foreign language** | **-** | **60** | **60** | **60** | **60** |  | **240** |

Surveying field course 3 weeks after semester 2 7 kredit

Networks and Land Surveying field course 3 weeks after semester 4 7 credits

Topography field course 1 week before semester 5 2 credits

Practicals 4+4 weeks after semester 2 and 4 7+7 credits

# Other electional subjects (2-2 credits):

History of law, Itroduction to business life, AutoCad, Meteorology, Basics of land development Intergraph GeoMedia, Programming, Application development, Precision farming, Data integration Spatial decision support, Webmapping, Proposal writing, Professional law