



Univerza v Ljubljani / University of Ljubljana
Fakulteta za gradbeništvo in geodezijo
Faculty of Civil and Geodetic Engineering

University education in geodesy in Slovenia

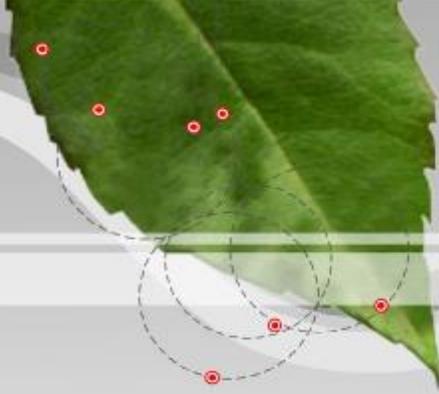
Dr. Dušan Petrovič

Assistant Professor for Cartography

Vice-dean for students' affairs

Head of Chair of Cartography, Photogrammetry and Remote Sensing

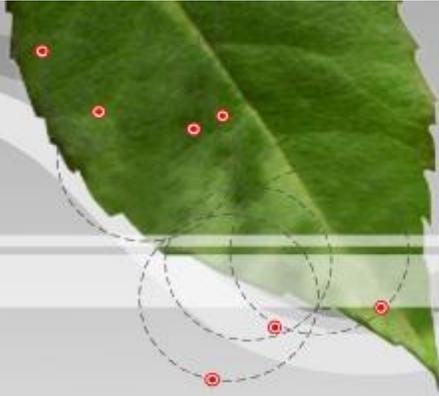
email: dusan.petrovic@fgg.uni-lj.si



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Universities in Slovenia

- University of Ljubljana (26 members)
- University of Maribor (13 members)
- University of Primorska (5 members)
- Independent high schools (11)



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Historical development

Beg. 18th cent: school for cave surveyors
and map-makers at Hg mine in Idrija

1768: land surveying course at Gruber's
school in Ljubljana

1919: University of Ljubljana

1919 – 1928: land surveying course (2 years)

1928 – 1931: cultural geodesy (4 years)

1945 – 1957: Technical faculty (4 years)

1957 – 1996: Faculty of Architecture, Civil and Geodetic Engineering
(2 and 4 years)

1996 – Faculty of Civil and Geodetic Engineering (3 and 4 years)

1999 - **Phare-Tempus S-JEP 11001-96 project**



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Faculty of **Civil and Geodetic Engineering**

Faculty of Civil and Geodetic Engineering in numbers

study programs

- **5** graduated study programs
- **4** postgraduated study programs

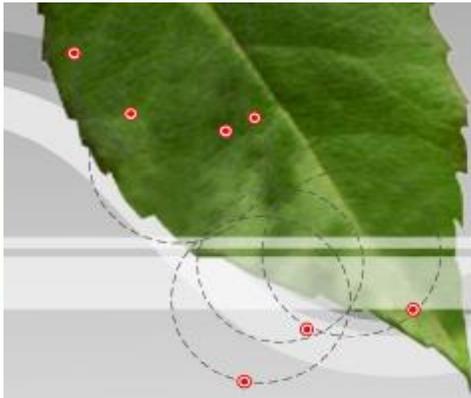
personel

- **188** employed;
- **95** teaching staff

students

- **1660** regular students
- **223** students “from work”
- **141** postgraduated students





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Faculty of Civil and Geodetic Engineering

Department of Civil Engineering

Municipal
Economics
Institute

...13

Department of Geodetic Engineering

Chair of Geodesy

Chair of Mathematic
and Physical Geodesy
and Navigation

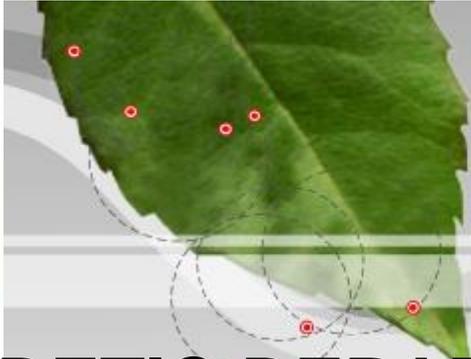
Chair of Engineering
Geodesy

Chair of Mathematics and Physics

Chair of Geodetic
Information Technology and
Real Estate Cadastres

Chair of Cartography,
Photogrammetry and
Remote Sensing

Chair of Spatial Planning



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GEODETIC DEPARTMENT in numbers

study programs

- 2 graduated study programs (university, high technical study)
- 2 postgraduated study programs with some specializations (geodesy, urban and regional planning)

teaching staff

- 15 professors, 11 assistants members of Geodetic Department
- 9 professors, 3 assistants members of other chatedras
- 7 professional collaborators
- 5 professionals from practice

students

- 438 regular students - 251 on univesity study
- 66 students "from work" - 187 on high technical study
- 52 postgraduated students



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HIGH TECHNICAL STUDY OF GEODETIC ENGINEERING

6 semesters

- 2250 hours (1125 lectures 120 seminars, 1005 exercises)
- 375 hours/semester - 25 hours/week
- practice 1 month after 4th semester, 4 months after 6th semester
- 36/37 courses
 - 31 common
 - 7 oriented (3 or 4 per course)
 - 4 selective (2 common)

Student has to pass 36/37 examinations.

STRUCTURE

- 1st, 2nd, 3th and 4th semester common
- 4th and 5th semester - common courses
 - two orientations - Engineering Survey
 - Spatial Informatics
 - selective courses



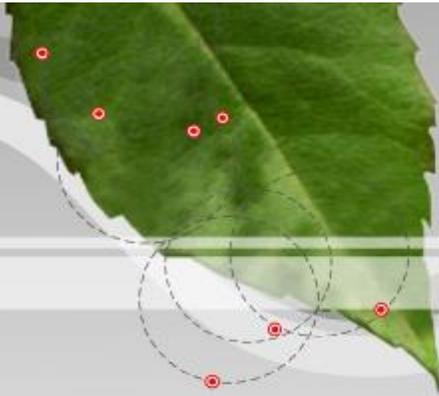
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UNIVERSITY STUDY OF GEODETIC ENGINEERING

- 8 semesters
 - 3600 hours (1950 lectures, 90 seminars, 1560 exercises)
 - 450 hours/semester - 30 hours/week
 - practice 1 month after 4th semester, 1 month after 6th semester
 - 51 courses
 - 37 common
 - 14 oriented
- Student has to pass 44 examinations.*

STRUCTURE

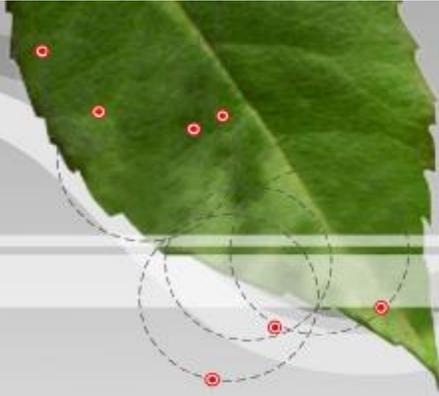
- 1st, 2nd, 3th, 4th, 5th and 6th semester common
- 7th and 8th semester - common subjects
 - two courses
 - Geodetic course
 - Spatial course



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HIGH TECHNICAL STUDY

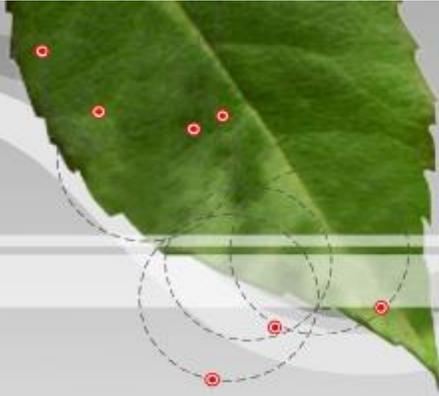
year	places	applied	accepted
2000	40	98	42
2001	40	98	45
2002	40	109	47
2003	40	75	40
2004	40	75	42
2005	40	76	44
2006	40	109	



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UNIVERSITY STUDY

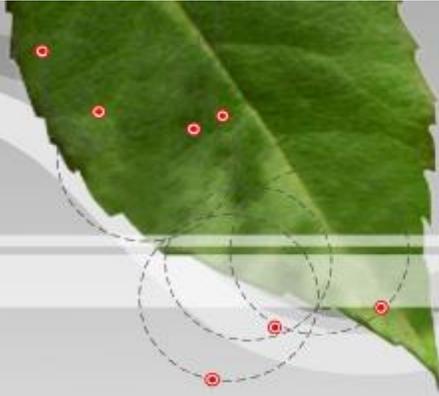
year	places	applied	accepted
2000	40	68	60
2001	40	80	42
2002	40	80	42
2003	40	58	40
2004	40	58	52
2005	40	88	45
2006	40	103	



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STUDENTS in 2005 / 2006

year	HIGH TECHNICAL STUDY	UNIVERSITY STUDY
1st	70	60
2nd	35	36
3rd	43	46
4th		42



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Cadastral & Land Management

Department of Geodetic Engineering

Chair of Geodesy

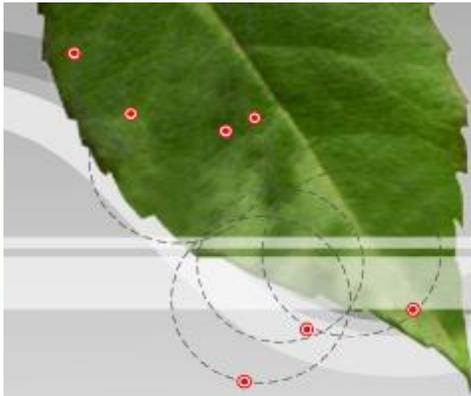
Chair of Mathematic
and Physical Geodesy
and Navigation

Chair of Engineering
Geodesy

Chair of Geodetic
Information Technology and
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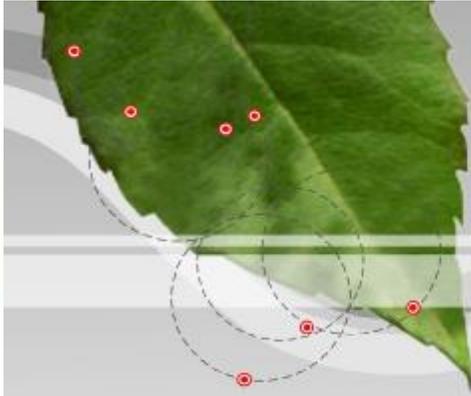


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Chair of Geoinformation and Real Estates Cadastres

Fields of educational and research work:

- establishment, maintenance, protection, standardisation and presentation of spatial data,
- application of GIS technology for the development and maintenance of geoinformation systems,
- establishment and maintenance of real estates cadastres,
- study of the economic, social, legal and political role of real estates cadastres

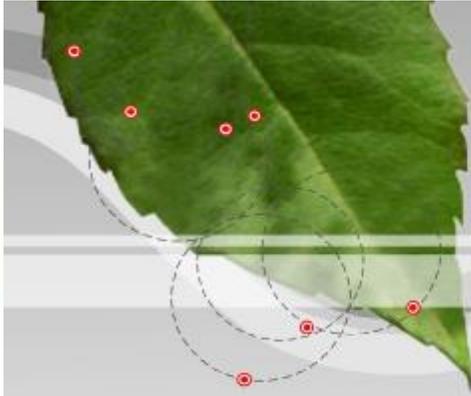


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Chair of Geoinformation and Real Estates Cadastres

Undergraduate courses:

- Computer programming
- Statistics with elements of informatics
- Seminar of computer applications
- **Geodetic legislation**
- **Land cadastre**
- GIS technology
- Spatial data structures and analyses
- GIS

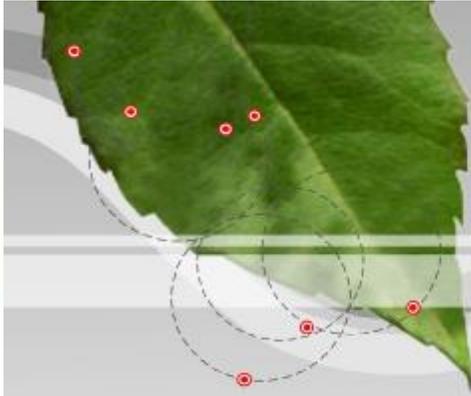


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Chair of Geoinformation and Real Estates Cadastres

Postgraduate courses:

- Informatics
- **Land cadastre as a base of geodetic data**
- Connection and updating of geodetic databases
- **Real estate legislation**
- Spatial analyzes in GIS
- Conceptual modelling in GIS
- Legally and economical problems of GIS
- Standardization in GIS

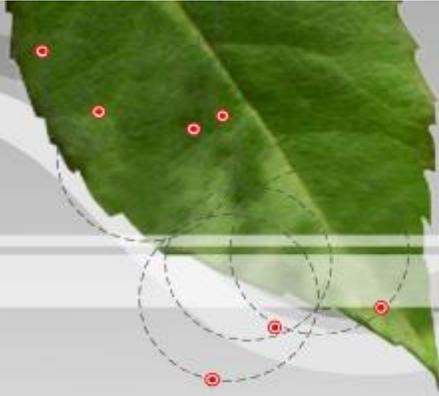


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Chair of Spatial Planning

Fields of educational and research work:

- conceptual, theoretic, methodological, professional-technical, legal and organisational foundations for the field of spatial planning in different planning levels (state, regional and local level),
- development of urban and rural settlements and professional bases for their systematic development and renewal,
- land regulation based on urbanisation and sectorial plans and methods of land development,
- development of agricultural and forest real estates using the methods of agrarian operations,
- introduction of GIS technology into spatial planning and real estate development

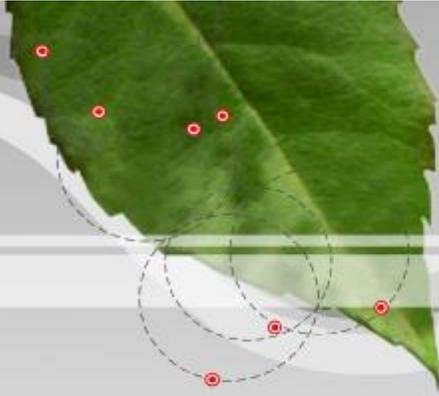


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Chair of Spatial Planning

Undergraduate courses:

- Land use planning
- Rural planning and land consolidation
- Rural development and rural ecology
- Settlement planning
- Urban planning and land readjustment
- Regional planning
- Organisation of geodetic works
- Spatial planning seminar



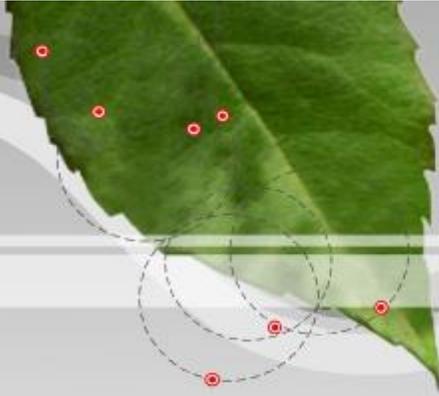
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Postgraduate courses

- Land use planning and legislation
- Complex land use planning with regulation works
- Technologies of cadastre valuation
- Legal fundamentals and public participation

Interdisciplinary graduate course of urban and regional planning



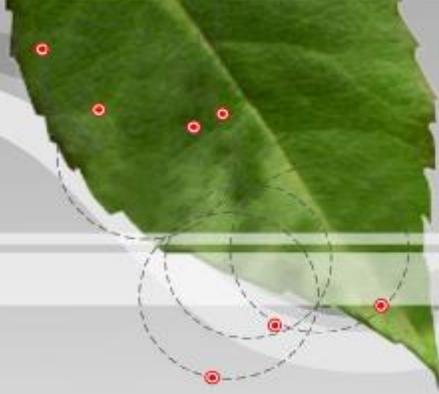
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Bologna process in Slovenia

2004 – Law on High School Education

2005 – 5 Faculties started renewed programmes

2006 – renewed law expected...



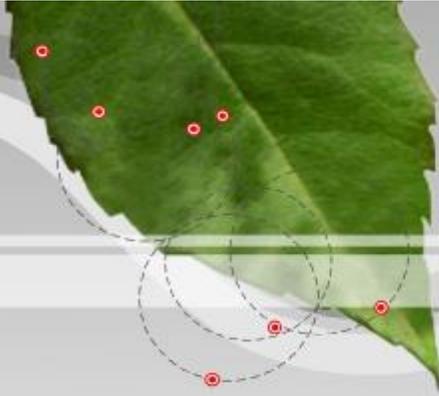
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Bologna process at

Faculty of Civil and Geodetic Engineering

2004 – Starting activities

April 2006 – first “draft” version of new study programmes



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BA level
3 years
180 ECTS

Geodesy and
Geoinformatics

Spatial
Planning

Geodetic
Engineering

MA level
2 years
120 ECTS

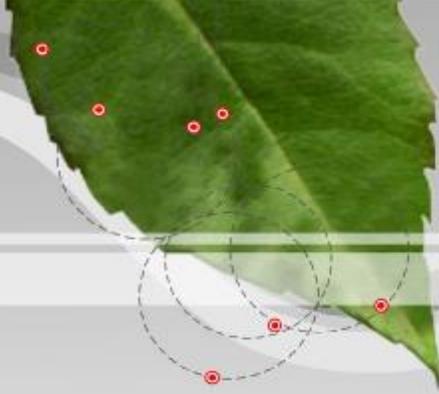
Geodesy

Land
Management

Geoinformatics

Urban and
Regional
Planning

PHD level
3 years
180 ECTS



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Bologna process at

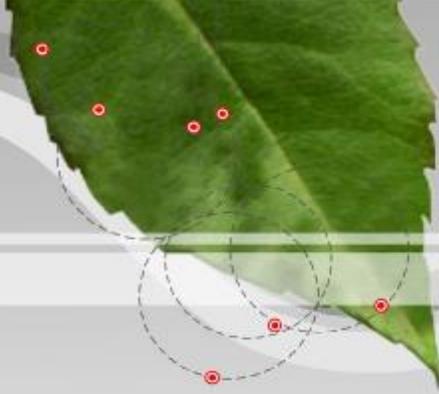
Faculty of Civil and Geodetic Engineering

2004 – Starting activities

April 2006 – first “draft” version of new study programmes

end of 2006 – final study programmes

2008 – starting new programmes



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Assistant Professor for Cartography
Chair of Cartography, Photogrammetry and Remote Sensing
Faculty of Civil and Geodetic Engineering
University of Ljubljana
Jamova 2,
1000 Ljubljana, Slovenia
phone: +386 1 476 85 43
fax: +386 1 476 85 45
email: dusan.petrovic@fgg.uni-lj.si