

## DEPARTMENT OF MAPPING AND LAND CONSOLIDATION

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### I. STAFF

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### II. EQUIPMENT

#### II.1 Teaching and Research Laboratories

Computer Graphics Laboratory  
Map Reproduction Laboratory  
Micrographics Laboratory

#### II.2 Special Measuring Instruments and Computers

Total Stations: Topcon GTS-6, CTS-1  
Offset Printing Machine: ADAST 315  
GPS receivers: Garmin eTrex Legend  
Electronic distance meters: Leica DISTO Classic5  
Digitiser: Cartometer CAR-A2

### III. TEACHING

#### III.1 Graduate Study

Subjects	Semester	Hours Per Week		Lecturer
		Lectures	Seminars	
Cartographic Techniques and Norms	2	0 - 2		M. Potočárová
Topography	4	2 - 2		J. Čižmár
Cadastral Mapping	5	3 - 3		I. Horňanský
Cartographic Creation and Reproduction	5	3 - 3		J. Čižmár
Land Surveying, Cartography and Cadastre of Real Estate	5	3 - 2		J. Bartaloš
Cadastre of Real Estate	6	3 - 3		I. Horňanský
Land Consolidation	6	3 - 3		E. Geisse
Management of Geodetic Activities	6	1 - 2		J. Vaľko
Field Practise in Cadastre of Real Estate	6	2 weeks		J. Bartaloš
Registration and Land Consolidation	7	3 - 1		J. Bartaloš
				R. Geisse
Mathematical Cartography	9	2 - 2		M. Vajsálová
Realisation of Land Consolidation	9	2 - 2		R. Geisse
Large-Scale Maps	8	2 - 2		J. Bartaloš
Cartometry	8	2 - 2		J. Vaľko
Cadastral Data Analysis Methods	9	2 - 3		J. Bartaloš
Specialised Field Practise	9	2 weeks		R. Geisse
Value and Cost of Land	9	2 - 3		E. Geisse
Digital Cartographic Model	10	3 - 3		J. Čižmár

### V. RESEARCH PROJECTS

1. New Model of Land Consolidation of an Agricultural Region Based on Identification of Real Property and Usage.
2. Cartographic Modelling of Geo-Data in a GIS Environment.

### VI. COOPERATION

#### VI.1 Cooperation in Slovakia

1. Ministry of Agriculture, Bratislava
2. Slovak Land Fund, Bratislava
3. Cadastral Office, Bratislava
4. Soil Research Institute, Bratislava
5. Geodesy, Cartography and Cadastre Authority, Bratislava
6. Geodetic and Cartographic Institute, Bratislava
7. VKÚ, a.s., Harmanec
8. Military Topographic Institute, Banská Bystrica
9. Geographic Institute, Slovak Academy of Sciences, Bratislava
10. Cartographic Society of the Slovak Republic, Bratislava

11. Cadastral Institute, Žilina
12. Research Institute of Geodesy and Cartography, Bratislava
13. Department of Cartography, Geoinformatics and Remote Sensing, Comenius University, Bratislava

## VI.2 International Cooperation

1. Central European Land Knowledge Center (CELK), Budapest, Hungary
2. ICA-Commission on Theoretical Cartography, Federal Republic of Germany
3. Military Academy, Department of Military Information, Brno, Czech Republic
4. G.E.O.S., Freiberg, Federal Republic of Germany

### VI.2.2 Visits of Staff Members and Postgraduate Students to Foreign Institutions

1. Csókásová, T. - Central European Land Knowledge Center, Budapest, Hungary, 1 month (July 2004)

## VII. THESES

### VII.1 Graduate Theses

No.	Student's Name	Title	Supervisor
1.	Bačíková, K.	Restriction and Prohibition of Lot Divisions and Shareholding Ownerships in Non-Built-Up Municipal Area	Horňanský
2.	Bednár, L.	Transformation of Coordinates from Stereographic and Cylindrical Geodetic Coordinate System to S-JTSK	Val'ko
3.	Behuliaková, M.	Determination of Range of Easement and the Rights Resulting Therefrom	Horňanský
4.	Blašková, J.	Road Network in a Land Consolidation Project	Geisse R.
5.	Blažek, R.	World Map Using Kusko Projection	Val'ko
6.	Bolfa, M.	DMR Analysis of Vertical Accuracy	Vajsálová
7.	Čičkán, L.	Ferro-Greenwich Constant Variation in Slovakia	Val'ko
8.	Drahovský, R.	Geoinformation Analysis of a Landscape Model	Čižmár
9.	Droppová, V.	Application of Pseudocylindrical Projections for a World Map	Val'ko
10.	Dzurek, F.	Cartographic Modelling in GIS	Čižmár
11.	Ferenčák, J.	World Map in Polyconical Projection Created by Numerical Analysis Method	Val'ko
12.	Ištvanffy, P.	Updating a Digital Utility Town Map	Bartaloš
13.	Jakubčeková, L.	Optimum Density of Control in a Land Consolidation District	Geisse E.
14.	Kleepoch, M.	Processing a Land Consolidation Project by Computer Techniques	Geisse R.
15.	Kohútová, A.	Plan of Common Systems in a Land Consolidation Project	Geisse E.
16.	Kováč, M.	Design of a Road Network in Land Consolidation	Geisse E.

17	Lamžová, Z.	Projection of Protective Area Boundaries in the Documentation of Cadastre of Real Estate	Bartaloš
18	Martan, J.	Validity, Credibility and Mandatory Areas of Lots in Cadastre of Real Estate after Revision of an Original Map to the Form of a Vector Cadastral Map	Horňanský
19	Pecušiaková, D.	Proceedings about Correcting an Error in Cadastral Documentation and Survey Data File of Cadastre of Real Estate	Horňanský
20	Piroha, L.	Geoinformation Sources of Cadastre of Real Estate	Čižmár
21	Sýkora, J.	Distribution of Deviations in Areas upon Surveying Changes in Cadastre of Real Estate	Bartaloš

## IX. PUBLICATIONS

### IX.1 Journals

#### Contributions to Proceedings in Slovakia:

- [1] Geisse, R.: New Regional Organization after Land Consolidation. In: Slovak Journal of Civil Engineering, Vol. XI. 2003/3, Slovak University of Technology, Bratislava 2004, pp. 30-35
- [2] Fencík, R., Vajsálová, M.: Analysis of the Vertical Accuracy of a Digital Elevation Model of the Territory of Kočín, In: Kartografické listy No. 12, Cartographic Society and Geographic Institute of the Slovak Academy of Sciences, Bratislava 2004, pp. 13-20
- [3] Horňanský, I : On the Question of Easement Entry in Cadastral Documentation. In: Geodetický a kartografický obzor, Vol. 50/91, 8/2004, Prague 2004, pp. 165-168
- [4] Horňanský, I : Problems with Dividing the Lots in Lot Corporations. In: Geodetický a kartografický obzor, Vol. 50/92, 10/2004, Prague 2004, pp. 199-202
- [5] Čižmár, J.: Education in Cadastre of Real Estate at the Faculty of Civil Engineering, Slovak University of Technology in Bratislava. In: Proceedings of 8th Conference on Cadastre of Real Estate, Žilina DT ZSVTS, Žilina 2004, pp. 135-141
- [6] Horňanský, I.: Cadastre of Real Estate and the 40th Anniversary of the Law on the Real Estate Registry in Slovakia. In: Proceedings of 8th Conference on Cadastre of Real Estate, Žilina DT ZSVTS, Žilina 2004, pp. 12-26
- [7] Čuláková, K., Čižmár, J.: Using a Digital Elevation Model for Modelling the Water Erosion of Soil. In: Proceedings of Activities in Cartography 2004 Conference, Cartographic Society and Geographic Institute of the Slovak Academy of Sciences, Bratislava 2004, pp. 19-23
- [8] Bartaloš, J.: Accuracy of the Geometric and Local Determination of Geo-Objects. In: Proceedings of Pedagogické listy 11/2004: Cartographic Modelling of Geo-Objects in a GIS Environment, Department of Mapping and Land Consolidation of the Faculty of Civil Engineering, Bratislava 2004, pp. 7-11.
- [9] Csókásová, T.: Digital Survey Data File of Cadastre of Real Estate. In: Proceedings of Pedagogické listy 11/2004: Cartographic Modelling of Geo-Objects in a GIS Environment,

Department of Mapping and Land Consolidation of the Faculty of Civil Engineering,  
Bratislava 2004, pp. 13-19

- [10] Čížmár, J.: Topological Aspects of the Creation of Cartographic Products. In: Proceedings of Pedagogické listy 11/2004: Cartographic Modelling of Geo-Objects in a GIS Environment, Department of Mapping and Land Consolidation of the Faculty of Civil Engineering, Bratislava 2004, pp. 29-34
- [11] Čuláková, K.: Digital Elevation Model in Technological Processing of Cartographic Products. In: Proceedings of Pedagogické listy 11/2004: Cartographic Modelling of Geo-Objects in a GIS Environment, Department of Mapping and Land Consolidation of the Faculty of Civil Engineering, Bratislava 2004, pp. 35-47
- [12] Droppová, V.: Application of Pseudocylindrical Projections for World Maps. In: Proceedings of Pedagogické listy 11/2004: Cartographic Modelling of Geo-Objects in a GIS Environment, Department of Mapping and Land Consolidation of the Faculty of Civil Engineering, Bratislava 2004, pp. 49-57
- [13] Fencík, R.: Utilization of Map Bases for Compilation of Derived Maps Using Digital Technology. IN: Proceedings of Pedagogické listy 11/2004: Cartographic Modelling of Geo-Objects in a GIS Environment, Department of Mapping and Land Consolidation of the Faculty of Civil Engineering, Bratislava 2004, pp. 59-63
- [14] Geisse, R.: Determining the Value of Lots Using BPEJ. In: Proceedings of Pedagogické listy 11/2004: Cartographic Modelling of Geo-Objects in a GIS Environment, Department of Mapping and Land Consolidation of the Faculty of Civil Engineering, Bratislava 2004, pp. 65-72
- [15] Horňanský, I.: Selected Aspects of the Possibilities of a Connection Between Real Estate Cadastre Databases and GIS Basic Databases. In: Proceedings of Pedagogické listy 11/2004: Cartographic Modelling of Geo-Objects in a GIS Environment, Department of Mapping and Land Consolidation of the Faculty of Civil Engineering, Bratislava 2004, pp. 73-82
- [16] Kružliak, M.: Design of Technical and Ecological Measures in a Land Consolidation Project. In: Proceedings of Pedagogické listy 11/2004: Cartographic Modelling of Geo-Objects in a GIS Environment, Department of Mapping and Land Consolidation of the Faculty of Civil Engineering, Bratislava 2004, pp. 83-91
- [17] Potočárová, M.: Standardization of Geodata for GIS Requirements. In: Proceedings of Pedagogické listy 11/2004: Cartographic Modelling of Geo-Objects in a GIS Environment, Department of Mapping and Land Consolidation of the Faculty of Civil Engineering, Bratislava 2004, pp. 103-107
- [18] Schváb, M.: Data Identification from the Cadastre of Real Estate in Geoinformation Technologies. In: Proceedings of Pedagogické listy 11/2004: Cartographic Modelling of Geo-Objects in a GIS Environment, Department of Mapping and Land Consolidation of the Faculty of Civil Engineering, Bratislava 2004, pp. 109-112

**Contributions to Proceedings Abroad:**

- [1] Csókásová, T.: News from the Beneficiary Countries. In: Celk Center Newsletter No. 3, Budapest 2004, pp. 3-8.
- [2] Čuláková, K.: Testing the Accuracy of a Digital Elevation Model in the Territory of Kočín. In: Proceedings of 6th Specialized Doctoral Study Conference – Section 6.2: Practical Aspects of Geodesy and Cartography, Technical University of Brno, Brno 2004, p.358 (full text on CD)

**IX.3 Conferences**

- [1] The 8th Conference on Cadastre of Real Estate, Žilina, October 2004
- [2] Conference on New Technologies in Geodesy and Cartography, Piešťany, October 2004
- [3] 6th Specialized Doctoral Study Conference, Brno, Czech Republic, February 2004
- [4] The 12th Geodetic Days Conference, Bratislava, December 2004
- [5] Seminar on Activities in Cartography 2004, Bratislava, October 2004
- [6] Seminar on Cartographic Modelling of Geo-Objects in a GIS Environment, Bratislava, November 2004