EDUCATIONAL PLAN of the Doctoral Scool of Geosciences of Univ. Szeged (from: 2021.02.12.)

Discipline: Geosciences / Earth Sciences

Level of the programme: PhD

Aim: supporting students to earn a scientific degree (PhD)

Duration of the programme: 8 semesters

Scholarship, financing: Scholarships are available to cover the tuition fee (e.g. Stipendium

Hungaricum, for details see the website of Tempus Public Foundation).

Tuition fee: 5000 EUR per semester (In case of Stupendium Hungaricum grant holders there is no

tuition fee)

Application requirements: Master diploma in related disciplines, good command of English and successful admission interview

Credits needed to finish the programme: 240 credits

Educational programs and their leaders

- Human geography (Kovács, Zoltán)
- **Geology** (M. Tóth, Tivadar)
- **Geomorfology** (Kiss, Tímea)
- **Geoecology** (M. Tóthné Farsang, Andrea)
- Geoinformatics (Mucsi, László)

Obligatory schedule

Semester 1

subjects to take		total cr
courses, poster (domestic,		
international), oral presentation (dom.,		30
int.), Education 1. Literature analysis 1.		

Semester 2

subjects to take	cr	total cr
courses, poster (dom, int.), oral presentation (dom., int.), Education 2., Literature analysis 2.	25	30
Progress report 1. (obligatory)	5	

Semester 3

subjects to take	cr	total cr
courses, poster (dom., int.), oral	10	
presentation (dom, int.), Education 3.		
Research 1. (obligatory)	20	30

Semester 4

subjects to take	cr	total cr
courses, poster (dom., int.), oral	5	
presentation (dom., int.), Education 4.		
Research 2. (obligatory)	20	
Progress report 2. (obligatory)	5	30

Semester 5

Semester 2		
subjects to take	cr	total cr

courses, poster (dom., int.), oral	10	
presentation (dom., int.), Education 5.		
Research 3. (obligatory)	20	30

Semester 6

subjects to take	cr	total cr
courses, poster (dom., int.), oral	5	
presentation (dom., int.), Education 6.		
Research 4. (obligatory)	20	
Progress report 3. (obligatory)	5	30

Semester 7

subjects to take	cr	total cr
courses, poster (dom., int.), oral	10	
presentation (dom., int.), Education 7.		
Research 5. (obligatory)	20	30

Semester 8

subjects to take	kr	total cr
courses, poster (dom., int.), oral	5	
presentation (dom., int.), Education 8.		
Research 6. (obligatory)	20	
Progress report 4. (obligatory)	5	30

Other rules:

- By the end of the 1st semester, the PhD student has to submit a research plan to the coordinator of the Doctoral School. The research plans has to be accepted by the Council of the Doctoral School. In case of rejection the research plan should be revised and resubmitted. Without accepted research plan the student cannot register to the 2nd semester.
- The PhD student has to collect at least 90 credits to take the comprehensive (complex) exam at the end of 4th semester. The complex exam is an obligatory element of the programme.
- Minimum 120 credits should be collected by the end of 4th semester.
- 240 credits should be collected by the end of 8th semester.
- Maximum 32 credits can be obtained from the poster and conference courses.
- The thesis should be submitted within 3 years after the date of the comprehensive (complex) exam.
- The doctoral training and the awarding of doctoral degree is regulated in the Doctoral Regulation of the University of Szeged (https://www.u-szeged.hu/doctoral/regulations).

Subjects

(every subject: 4 kr – unless it is stated otherwise)

autumn semester	
Bajmócy Péter	Ethnic geography, ethnic conflicts in the World
Bajmócy Péter	Suburbanization. Theory and regional differences
Barta Károly	Drought and soils
Boros Lajos	Research methods in human geography
Boros Lajos	Urban social conflicts
Bozsó Gábor	Analytical technics in environmental geochemistry
Dudás Gábor	Geography of air transport
Fabula Szabolcs	Introduction to housing studies: geographical perspectives

C/LT /	
Gál Tamás	Special meteorological measurement systems
Gál Tamás	GIS methods in climatology
Geiger János	Sztochastic simulations and geostatistics
Geiger János	Scaling problems of geology
Gulyás Sándor Gulyás Sándor – Geiger	Application of shape analysis and geometric morphometrics in Earth Sciences
János	CT analysis in Earth Sciences: visualization, quantification
Gulyás Sándor – Geiger	
János	Quantitative methods in geology, paleoecology
Hegedűs Gábor	Gated communities in social geography
Horváth Janina	Sedimentary rocks and environments
Kevei Ferencné	Ecozones on Earth
Kiss Tímea	Fluvial response to human impact
Kiss Tímea	Presentation techniques in Physical Geography
Kovács Ferenc – Szatmári	
József – Tobak Zalán – van Leeuwen Boudewijn	Environmental Informatics
Kovács Zoltán	Society in space
Mezősi Gábor	Environmental capabilities, hazards and conflicts (environmental hazards)
M. Tóth Tivadar	Metamorphic petrology
Nagy Erika	The European history of urban planning
Nagy Erika	Theories in economic geography
	Geography of retail and consumption
Nagy Erika	* * *
Pál-Molnár Elemér	Petrology of alkaline igneous rocks
Rácz Lajos	Environmental Problems in Historical Perspectives
Raucsik Béla	Chapters of clay minerology
Raucsikné Varga Andrea	Geochemical basis of petrology
Raucsikné Varga Andrea	Petrological and geochemical investigation of siliciclastic rocks
Schubert Félix	Cementation history
Sipos György	Absolute dating methods
Sipos György	Shallow geophysical field surveys
Sipos György	Environmental Geography
Szanyi János	Subsurface fluid flow systems
Szatmári József	Spatial models in earth sciences
Szilassi Péter – Ladányi	
Zsuzsanna	Landscape planning
Tanács Eszter	Mapping of forest areas, analysis of their temporal and spatial changes using field and remote sensing methods
Tobak Zalán, Van	sensing metrous
Leeuwen Boudewijn	GIS Fieldwork
Unger János	Chapters from urban climatology
Van Leeuwen Boudewijn,	
Tobak Zalán	Application of GIS and RS in Earth Sciences
	spring semester
Bajmócy Péter	Geography of rural areas
Barta Károly	Soil erosion and its modelling
Boros Lajos	Geography and social theory
Boros Lajos	Geographies of public spaces
Bozsó Gábor	Environmental geochemistry of saline sediments and soils
Dudás Gábor	Geographical aspects of sharing economy
Farsang Andrea	Environmental sensitivity of our soils
Fintor Krisztián	Hydrothermic mineralisation in relation to post magmatic processes
Gál Tamás	Climatologic aspects of renewable resources
Geiger János	Statistical and geostatistical tools in the static geological modelling of HC-reservoirs
Geiger János	Geostatistical modelling of uncertainty
Geiger János	Sztohasztikus szimulációk és geostatisztika

Geiger János	Stochastic simulations and geostatistics
Gulyás Ágnes	Evaluation of urban trees
Gulyás Sándor	Shape analysis and geometric morphometrics in Earth Sciences
Hegedűs Gábor	Issues and recent trends in return migration and return migration policies
Horváth Janina	Applied geologic modelling
Karancsi Zoltán	Landscape and environmental aesthetic
Kevei Ferencné	Karstecology
Kiss Tímea	Late Pleistocene and Holocene aeolian and fluvial development of a region
Kovács Ferenc	Environmental Problems, GIS solutions
Kovács Zoltán	Conflicts of urban land use change
Kovács Zoltán	Measuring socio-economic inequalities in cities
Makra László	Modelling the release and dispersion of the pollen of common ragweed
Makra László	Europe scale ragweed pollen statistics and their mapping
Makra László	Development of a ragweed pollen recognition system
Mezősi Gábor	Natural hazards
M. Tóth Tivadar	Fractured reservoirs
M. Tóth Tivadar	
Náfrádi Katalin – Sümegi	Crystelline basement of the Tisza Megaunit
Pál	Environmental History (lecture)
Náfrádi Katalin – Sümegi	Environmental History (lecture)
Pál	Environmental History (practice)
Nagy Erika	Hierarchy and terirtoriality: The state as an agent in socio-spatial processes
Nagy Erika	Global production networks
Nagy Erika	The geography of retail and consumption
Nagy Gábor	Legal background of regional development in Hungary
Pál Viktor	Health tourism and development policy
Pál-Molnár Elemér	Igneous petrology
Pusztai Bertalan	Introduction to critical tourism studies
Rakonczai János	The effects of global environmental changes on Hungary
Raucsik Béla	Chemostratigraphy - geochemical methods of stratigraphy research
Raucsik Béla	Chapters of clay mineralogy
Raucsik Béla	Chapters of geology of the Apuseni Mountains
Raucsikné Varga Andrea	Diagenesis - minerological, petrological and geochemical steps of sedimentation
Schubert Félix	Paleo-fluid migration
Sipos György	River channel dynamics
Sipos György	Shallow Geophysical Field Surveys
Sümegi Pál – Molnár	
Dávid	Relationship between human and environment
Sümegi Pál – Molnár Dávid	Delegandarias and analysis of large melancal accounts
Sümegi Pál – Gulyás	Paleoecological analyses of loess-paleosol sequences
Sándor	Quarternary Paleohydrology (lecture)
Sümegi Pál – Gulyás	Quarternary Luconyurology (recture)
Sándor	Quarternary Paleohydrology (seminar)
Szanyi János	Geothermal energy utilization
Szatmári József	Big Data - Data mining for geoinformatics
Szilassi Péter – Ladányi	
Zsuzsanna	Landscape Planning
Tanács Eszter	Assessment of forest ecosystem services and carbon sequestration modelling
Timár Judit	The geography of disadvantaged social groups
Tobak Zalán	Remote Sensing of urban and suburban areas
Unger János	Urban climate investigations in Hungary
Van Leeuwen Boudewijn	Advanced modelling in GIS
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Sümegi Pál	Research 1. – 20 kr (from Semester 3)
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M. Tóth Tivadar, Boros	Progress report 1. (obligatory in semester
Lajos M. Tóth Tivadar, Boros	2) – 5 kr Progress report 2. (obligatory in semester
Lajos	4) - 5 kr
M. Tóth Tivadar, Boros	Progress report 3. (obligatory in semester
Lajos M. Tóth Tivadar, Boros	6) – 5 kr Progress report 4. (obligatory in semester
Lajos	8) – 5 kr
Boros Lajos	Field research 1 (optional in semester 5) – 20 kr.
Boros Lajos	Field research 2 (optional in semester 6) – 20 kr.
Boros Lajos	Field research 3 (optional in semester 7) – 20 kr.

Boros Lajos	Field research 4 (optional in semester 8) – 20 kr.
Kovács Zoltán	Literature analysis 1 – 5 kr. (only in the 1st semester of the programme) Literature analysis 2 – 5 kr. (only in the 2nd semester of the programme)
M. Tóth Tivadar	Literature analysis $1-5$ kr. (only in the 1st semester of the programme) Literature analysis $2-5$ kr. (only in the 2nd semester of the programme)
Pál-Molnár Elemér	Literature analysis $1-5$ kr. (only in the 1st semester of the programme) Literature analysis $2-5$ kr. (only in the 2nd semester of the programme)
Unger János	Literature analysis $I - 5$ kr. (only in the 1st semester of the programme) Literature analysis $2 - 5$ kr. (only in the 2nd semester of the programme)
Sümegi Pál	Literature analysis $I - 5$ kr. (only in the 1st semester of the programme) Literature analysis $2 - 5$ kr. (only in the 2nd semester of the programme)