

## Podklady pro sledování průběhu doktorského studia v novém DSP Geologie

**Tabulka 1** - SZŘ MU - Článek 30 „Průběh studia a řádné plnění podmínek studia“ - (4) Individuální studijní plán vymezuje zejména:

	Forma sledování plnění na PŘF MU
a) přípravu disertační práce podle čl. 8 odst. 4,	Student zapisuje předměty <b>GD511-GD581</b> v každém semestru. Počty kreditů: 15-29 ETCS dle semestru ( <i>viz Studijní katalog Geologie</i> )
b) povinné předměty, mezi něž patří <ol style="list-style-type: none"> <li>1. předměty rozšiřující a prohlubující znalosti širšího vědního oboru nad rámec studia v magisterském programu,</li> <li>2. předměty prohlubující specializované znalosti,</li> <li>3. specializované odborné semináře a přednášky,</li> </ol>	Student zapisuje odborné přednášky, kurzy, semináře atd. podle potřeb ISP a podle požadavků programu. Standardní kreditování podle záznamů v IS MUNI.
c) prokázání odborných a jazykových kompetencí, což se ověřuje <ol style="list-style-type: none"> <li>1. ukončením dvou příslušných semestrálních předmětů nebo</li> <li>2. získáním zápočtu za napsání cizojazyčné publikace pro časopis nebo sborník a zápočtu za přednesení cizojazyčné přednášky na kvalifikovaném odborném fóru; zápočty uděluje školitel nebo hodnotitel předem stanovený oborovou radou,</li> </ol>	Student prokáže svoje jazykové znalosti jedním ze dvou následujících způsobů: (a) úspěšným ukončením dvou semestrálních předmětů zaměřených na jazykovou výuku, nebo (b) získáním zápočtu za přednesení cizojazyčné přednášky na kvalifikovaném odborném fóru – předmět <b>GD611</b> a napsáním cizojazyčné publikace pro časopis nebo sborník – předměty <b>GD631</b> nebo <b>GD621</b> .
d) podílení se na výuce v bakalářských a magisterských programech,	Podle požadavků programu (max. 150 hodin zátěže v průběhu celého studia) získávají studenti 6 zápočtů za předmět <b>GV001</b> .
e) přípravu tezí disertační práce, je-li tak stanoveno rozhodnutím oborové rady, f) další specifické požadavky související se zaměřením daného doktorského programu.	Body e) a f) určuje program, nejsou na fakultě centrálně harmonizovány
<b>Požadavek Nařízení vlády č. 274/2016 Sb.</b> (předepisuje zahraniční stáž v délce alespoň jednoho měsíce nebo jinou formu mezinárodní spolupráce)	Student získá alespoň 1x za studium zápočet za předmět <b>XD110</b> . V případě, že je relevantní jiná forma mezinárodní spolupráce než stáž, uděluje studentovi zápočet za splnění předmětu <b>G0311</b> předseda oborové rady.

## TABLE 2

### FORMAL REQUIREMENTS AND ADMINISTRATION OF DOCTORAL STUDIES

Version: Released and applicable since 1st of August 2019 (last update: February 2021)

PhD programme: **Geology (Geologie)**

Guarantor/Doctoral Board head contact: **Doc. Zdeněk Losos**, [losos@sci.muni.cz](mailto:losos@sci.muni.cz)

The Doctoral Study Program Geology is divided into the following five specializations, in accord with the topics of student's doctoral research:

- Dynamic geology, tectonics and physics of the Earth
- Stratigraphic geology, paleontology and sedimentology
- Mineralogy, petrology and economic geology
- Geochemistry and hydrogeology
- Applied and environmental geology

Rules for compiling an Individual Study Plan (ISP) are the same for all specializations, both in full-time and combined form of study. The requirements of specialization are defined by the research theme of the dissertation project and by specialized lectures. The combined form of study differs in the ISP in requirements for student presence at the training workplace.

Detailed requirements for the Individual Study Plan (ISP) are described in Table and **in detail in “Studijní katalog Geologie” 2020/2021**. Here in brief:

**Mandatory courses:** *checked by Dean's Office*

GD511-GD581/GD591	Ph.D. thesis / Disertační práce Ph.D. thesis / Disertační práce - pokračování	15 ECTS for semesters 1-4, 20 ECTS for semesters 5-8, 29 ECTS for semesters 9+
GB001	Geological seminar/Geologický seminář	4-times (1 ECTS)
GD101	Seminar DSP/Seminář DSP	obligatory for all 8 semesters of standard study duration (with exception of stay abroad) – 1ECTS
GD611	Presentation at international conference/ Přednáška v cizím jazyku na mezinárodní konferenci	minimum once (10 ECTS)
XD110, G0311	Placement Abroad / Zahraniční pracovní pobyt	minimum one month stay min. once during studies (usually 5 ECTS/month), requirement given by law Instructions for recognition of Placement Abroad (the recognition is done via IS application)

		Internship and Stays, by creating record of the stay and request for recognition; the course is then registered by Dean's Office): <a href="https://www.sci.muni.cz/en/students/go-abroad/recognition-of-stay-abroad">https://www.sci.muni.cz/en/students/go-abroad/recognition-of-stay-abroad</a> After approval of doctoral board the placement abroad can be replaced with another form of international scientific cooperation ( <b>G0311</b> )
<b>GV001</b>	<b>Teaching assistance</b>	maximum 150 hours total for all studies - 6-times (5 ECTS) during semesters 1-6.
<b>GD621, GD661</b>	<b>Odborná publikace k disertaci/Publication to dissertation thesis</b>	Student fulfills the requirement of publication of the dissertation thesis results in an peer-reviewed international journal with impact factor, in accord with the requirements set by the Program Board (10 ECTS) during semesters 7-8.

Theoretical courses and all other requirements: *checked by the Head of Doctoral Board*

*The first stage of the study is completed by the State doctoral examination (SDE) in two specialized areas. A broader overview in the field and a good orientation of the student in the specialization is required for the SDE. One of the SDE area is chosen by the student from the areas of his/her specialization in agreement with his/her supervisor, and the second one is chosen at student's own discretion. DSP Geology offers the following specialized subject areas for state doctoral examinations: Environmental Geology, Earth Physics, Geochemistry, Historical and Stratigraphic Geology, Hydrogeology, Engineering Geology, Quaternary Geology, Bearing Geology, Magmatic and Metamorphic Petrology, Mineralogy, Paleontology, Regional Geology, Sedimentology and Sedimentary Petrology, Structural Geology and Geotectonics.*

General requirements for all students in the programme (please see detailed requirements for the Individual Study Plan in the detailed table below):

Elements of the ISP		Milestones and their check						
		Enrolment to studies (Before semester 1)	Each semester	Semester 2-3	Semester 3-4	Semester 5-6	End of Semester 6 (Theoretical State Doctoral Exam, SDE)	End of Semester 8 (Preparation for PhD defence)
(A) research and development activities (ca. 70 % of workload)	<b>1. Research, dissertation project</b> , includes scientific research on the topic of the dissertation thesis (including compilation of the review on the current state of the topic), as well as continuous acquisition of practical experience in methodology during fieldwork, in laboratories, or specialized classrooms.	Define framework topic of your PhD project with your supervisor for enrolment. <b>CHECK: Dean's office [enrolment]</b>	Recorded as GD511-GD581 – (15 ECTS for semesters 1-4, 20 ECTS for semesters 5-8, 29 ECTS for semesters 9+) <b>CHECK: supervisor, Dean's office</b>	Student submits a research review for the topic of his/her dissertation work. (GD001 - 10 ECTS) <b>CHECK: supervisor, Dean's office</b>			Student proves the fulfillment of SDE admission requirements and applies for the SDE. The conditions are as follows: submission of a dissertation thesis, at least 4x presentations at the DSP seminar, completion of at least 4 semesters of the Geological Seminar, at least 6 semesters of teaching	Student submits a dissertation thesis according to the requirements set by the Doctoral Board and submits an application for its defense. <b>CHECK: Doctoral board, Dean's office</b>

							assistance, demonstration of language skills, lecture in English at an international conference. <b>CHECK: Doctoral board [SDE assessment]</b>	
	<b>2. Publications</b> Student is obliged to publish the main results from the topic of his / her thesis (before the dissertation thesis defense): at least as one paper in an international professional journal with an IF that is above the median of the discipline, or at least in two papers in journals with IF under the median of the field. The PhD student must be the first author of such publication, or at least the third author and at the same time the corresponding author.				Student presents a professional publication in the peer-reviewed journal. (GA031 – 5 ECTS) <b>CHECK: Dean's office</b>			Student fulfills the requirement of publication of the dissertation thesis results in an peer-reviewed international journal with impact factor, in accord with the requirements set by the Program Board (GD621 - 10 ECTS, or 2x GD661 – 10 ECTS) <b>CHECK: supervisor, Programme board, Dean's office</b>
	<b>3. Presentation</b> of results on scientific seminars, symposia, conferences etc., including preparation of talks and/or poster presentations					Student fulfills the requirement of oral presentation of his/her scientific result in English at an		

						international conference. (GD611 -10 ECTS) <b>CHECK:</b> supervisor, Dean's office		
	4. <b>Theoretical courses,</b> preparation to the state doctoral exam – SDE		Each semester according to ISP <b>CHECK:</b> teachers of courses, Dean's office					
(B) Specialized courses and theoretical preparation (ca. 20 % of workload)	5. <b>Doctoral seminars:</b> the student reports about the work progress on the dissertation thesis at the Doctoral Study Program (DSP) seminar – (GD101, 1 ECTS)		Each semester (1-8), once a year 9+ <b>CHECK:</b> teacher of seminar, Dean's office					
	Geological seminar – (GB001, 1 ECTS)		At least 4 semesters <b>CHECK:</b> teacher of seminar, Dean's office					
	6. <b>Further improving of English competences</b> (attending courses,		No formal check needed					

	seminars, conferences, writing publications, all in English).		
(C) International experience and competitiveness	<b>7. Placement abroad</b> student demonstrates compliance with the requirement of involvement in international scientific cooperation,		Minimum is 1 month foreign stay <b>(XD110)</b> or other international scientific cooperation <b>(G0311)</b> <b>CHECK:</b> Supervisor Dean's office
	<b>8. Teaching assistance</b> - classrooms, exercises, advising undergrad students and comparable.		at least 6 semesters of teaching assistance (GV001 - 5 ECTS) <b>CHECK:</b> Doctoral board Dean's office
(D) Pedagogical competences	<b>9. Career development</b> - preparation and management of projects, scientific writing, communication, other soft-skills.		No formal check needed
(E) Other transferrable skills.			

<b>Specialization: Dynamic geology, tectonics and physics of the Earth</b>	<b>Specialization: Stratigraphic geology, paleontology and sedimentology</b>
GB911 Advanced Tectonic Seminar GD261 Advanced tectonics GD311 Current issues in sedimentary geology GD211 Microscopy for Ph.D. theses GD281 News in regional geology of the Czech Republic	GD211 Microscopy for Ph.D. theses GD231 Current status and prospects of paleontology GD281 News in regional geology of the Czech Republic GD301 New findings in paleoecology GD311 Current issues in sedimentary geology
<b>Specialization: Mineralogy, petrology and economic geology</b>	<b>Specialization: Geochemistry and hydrogeology</b>
GB921 Advanced Seminar in Petrology GD211 Microscopy for Ph.D. theses GD221 Current issues of mineralogy GD241 New findings in crystallochemistry GD251 Advances in economic geology GD271 Formation of minerals - current issue	GB471 Stability and dynamics of natural systems GB481 Geochemistry of mineral surfaces GC351 Geochemistry of water-rock-atmosphere interactions GD241 New findings in crystal chemistry
<b>Specialization: Applied and environmental geology</b>	
GB471 Stability and dynamics of natural systems GC351 Geochemistry of water-rock-atmosphere interactions GD251 Advances in economic geology GD281 News in regional geology of the Czech Republic	