BULGARIAN ACADEMY OF SCIENCES
INSTITUTE OF MATHEMATICS AND COMPUTER SCIENCES

Approved by:
(Acad. V. Drensky, Director of IMI-BAS)

GENERAL CURRICULUM

for training in the doctoral program

"GEOMETRY AND TOPOLOGY",
for doctoral students enrolled after 01.01.2019.

Area of Higher Education:

4. Natural sciences, mathematics and computer science

Professional Field:

4.5. Mathematics

form of training:	Regular	/	Part-time	/	Self-study
action:	3 years	/	4 years	/	up to 3 years

The training of doctoral students at IMI is provided on the basis of a credit system determined by the Training Center of the Bulgarian Academy of Sciences.

I. Educational program (required minimum of 130 credits)

The specialized training of the doctoral student necessarily includes one basic and two specialized exams, as well as an exam in language preparation and computer skills, for which a corresponding number of credits are awarded.

Exam in:	Number of credits
I.1. Basic discipline	40
I.2a. Specialized discipline	20

I.2b. Specialized discipline	20
I.3. Language training	25
I.4. Computer skills	25
I.5. Others (if necessary)	...

In accordance with Art. 16 of the PPZRAS, all exams under item I.1 and I.2 are taken before a committee appointed by the director of IMI, consisting of at least 3 habilitated persons, with the participation of the doctoral student's scientific supervisor and the scientific secretary of IMI as chairman.

General academic language training and the language preparation exam for doctoral students are carried out at the Training Center at the Bulgarian Academy of Sciences.

The general academic preparation and the exam for doctoral students in computer skills are carried out at the Training Center at the Bulgarian Academy of Sciences.

During the doctoral studies, the doctoral student may also participate in other courses and seminars at the doctoral level (item I.5). The courses may correspond to both the scientific field and the thematic focus of the doctoral studies, both of which form research knowledge and skills. The courses and seminars may be organized by IMI, CO of the Bulgarian Academy of Sciences, as well as by other scientific organizations and higher education institutions with which IMI has concluded agreements, including for exchange under the Erasmus+ program.

II. Work on the dissertation

II.1. Scientific research work

(preparatory and accompanying activities for the dissertation – research and referencing of literature, etc.; experimental work on the dissertation, etc.)

II.2. Formatting the dissertation

(writing a separate part of the dissertation)

III. Reporting results on the topic of the dissertation to scientific forums

(required minimum of **40** credits)

The reports presented are evaluated as follows:

- Report before a scientific seminar at IMI – 8 credits;
- Report at a national scientific event – 24 credits;

– Report at an international scientific event – 32 credits.

IV. Publications of results on the topic of the dissertation (required minimum of **30** credits)

The credits, contact publications of scientific results on the topic of the dissertation, with equalization of points on the indicators for professional field **4.5 "Mathematics"** from the "Regulations for educational institutions and the procedure for acquiring scientific degrees and for acquiring academic skills at the Institute of Mathematics and Informatics at the Bulgarian Academy of Sciences" (Adopted at a meeting of the National Council of the Institute of Mathematics and Informatics on 02.11.2018, amended on 30.11.2018, 15.03.2019, 31.05.2019, 19.07.2019), as follows:

Indicator	Number of points
7. Scientific publication in publications that are referenced and indexed in world-renowned databases of scientific information, outside of a habilitation thesis	50 for publication in Q1 (Web of Science) 40 for publication in Q2 (Web of Science) 30 for publication in Q3 (Web of Science) 24 for publication in Q4 (Web of Science) 20 for publication in edition with SJRno IF 12 for publ., refereed and indexed in Web of Science, Scopus, Zentralblatt, MathSciNet, ACM Digital Library, IEEE Xplore or AIS eLibrary
8. Published book chapter or collective monograph	15
9. An invention, patent or utility model for which a document is protected in accordance with the order of competence	25
10. Published patent or utility model application	15

V. Other activities (study activities, participation in projects, etc.)

The activities under point V are desirable insofar as they build intellectual qualities and practical skills, including teamwork, communication and pedagogical abilities.

Reporting on the work done takes place at seminars of the training unit upon acceptance of the doctoral student's annual attestation. Regular doctoral students also describe the progress process in their quarterly reports.

The doctoral student is positively certified upon covering the mandatory minimum credits under point I at the end of the training. Failure to meet the minimum requirements under point I may be grounds for the teaching section to propose to the Scientific Council of IMI that the doctoral student be expelled from doctoral studies without the right to defend his/her thesis.

The curriculum is consistent with:

- Law on Higher Education;
- Academic Staff Development Act;
- Regulations for the implementation of the Academic Staff Development Act;
- Regulations on the conditions and procedure for acquiring scientific degrees and for acquiring academic skills at the Institute of Mathematics and Informatics of the Bulgarian Academy of Sciences (Adopted at a meeting of the National Council of the Institute on 02.11.2018, amended on 30.11.2018, 15.03.2019, 31.05.2019, 19.07.2019);
- Regulations for the activities of the Training Center (TC) and the Academic Council (AC) at the Bulgarian Academy of Sciences (adopted by decision of the BAS Governing Board on 08.06.2011, supplemented by decision of the AC of the TC on 16.12.2013, 18.11.2016, 29.10.2018).

The general curriculum for the training of doctoral students in the doctoral program "Geometry and Topology" has been adopted by the Scientific Council of IMI-BAS at a remote meeting on May 15–18, 2020 (minutes No. 5).