Training booklet

for the PhD students

of the

ANTAL KERPELY DOCTORAL SCHOOL OF

MATERIALS SCIENCE & TECHNOLOGY

University of Miskolc

Faculty of Materials Science and Engineering

2019

Contents

1. Brief description of the PhD studies

Dear Student,

Firstly congratulations on being accepted into the Doctoral School of the Faculty of Materials Science and Engineering. A number of questions have been raised by you with connection to your PhD studies. We would like to give you answers in this information booklet.

a) In addition to the research work accepted by your supervisor there are some requirements that must be fulfilled parallel with your research work.

b) You must hold a presentation about the results of your research at the end of each semester, and your chosen subjects must be finished with exams.

c) For your research work, exams, publications, etc. you get credits: 240 points must be collected by the end of the PhD studies.

d) In addition to the required credits, two papers must be published in prestigious journals in order to start the defense.

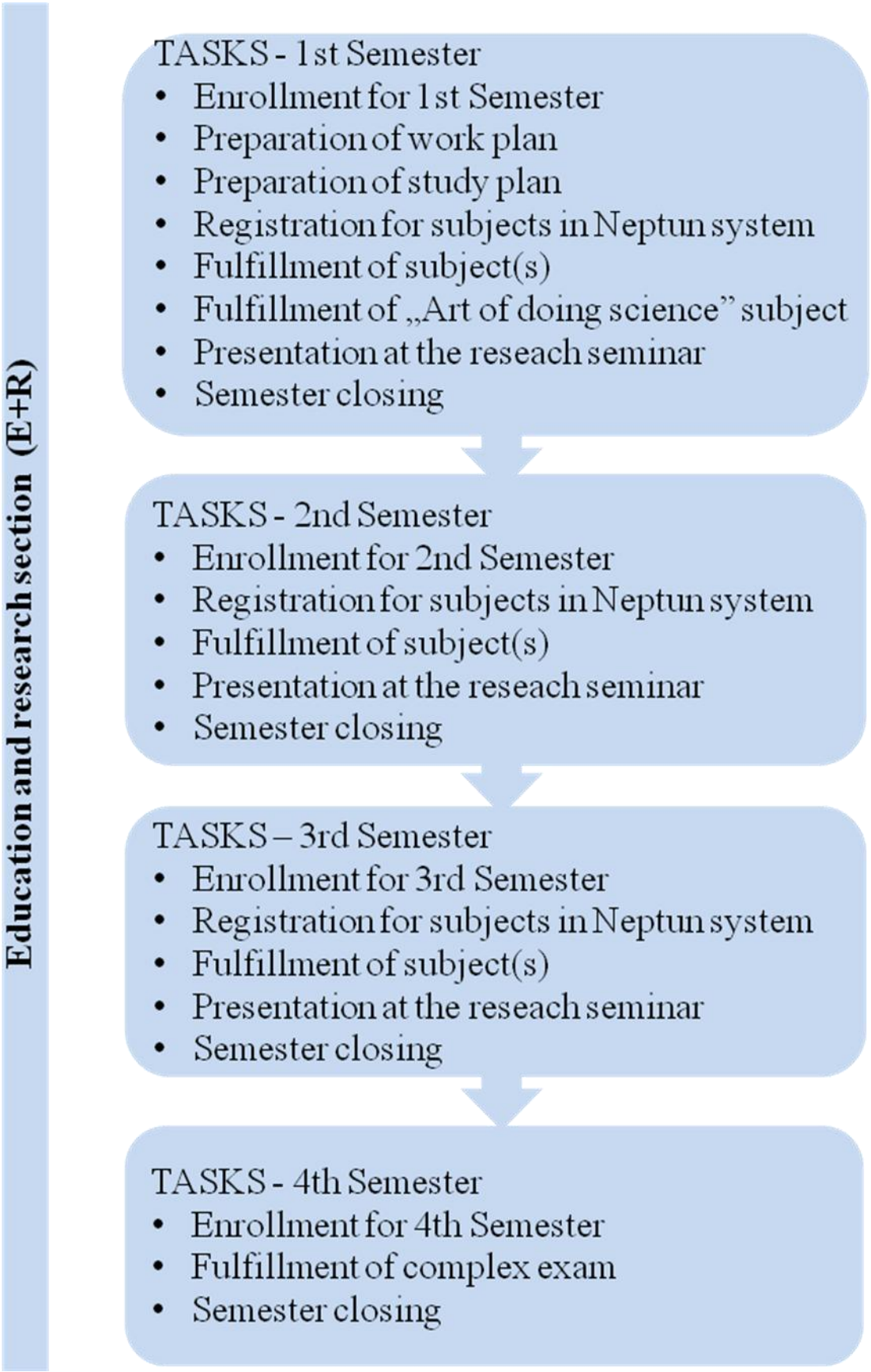
The academic requirements are described in detail in the following pages.

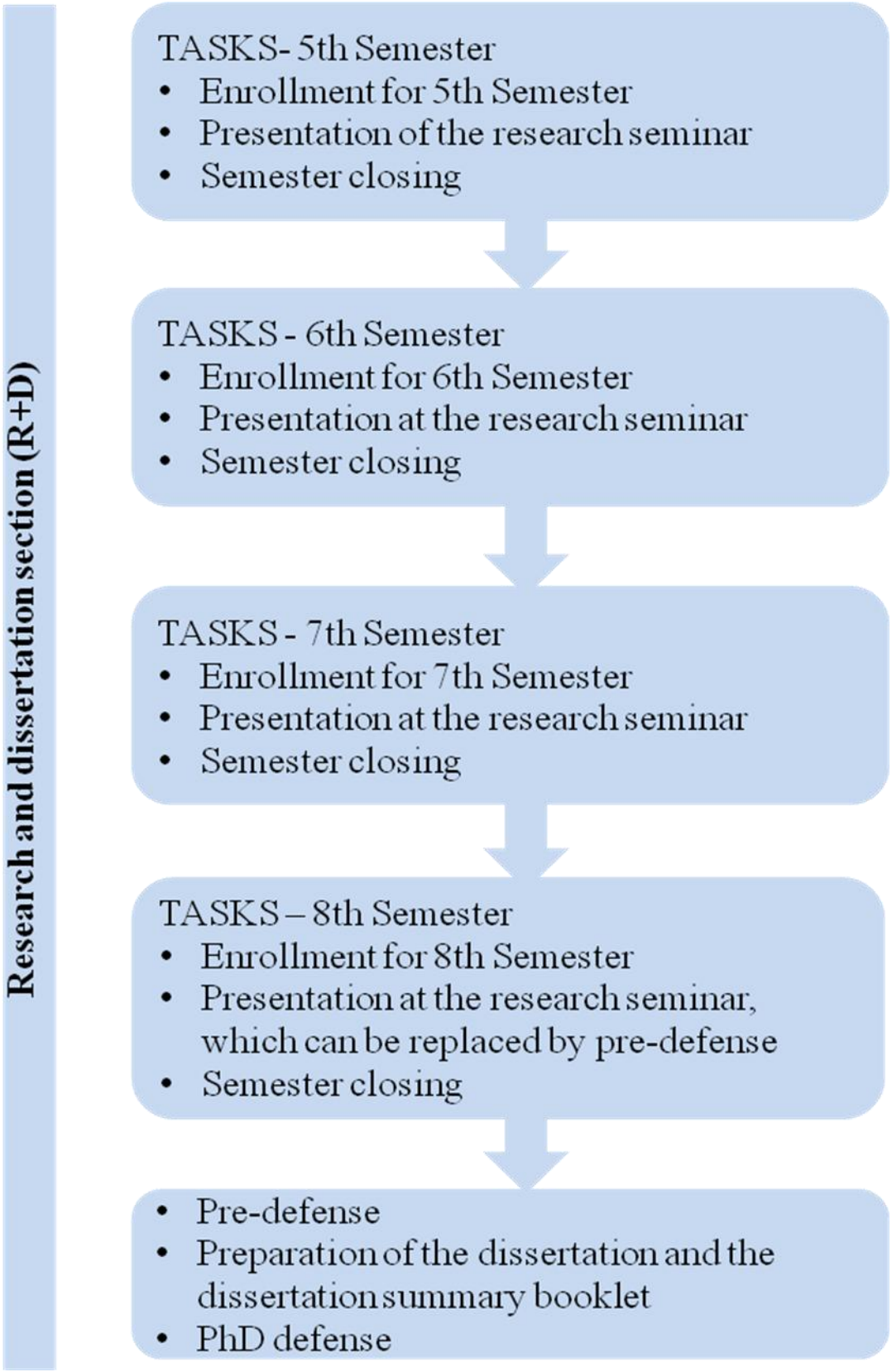
2. Training plan of the Doctoral School

Semester	Education and research section (E+R)				Research and dissertation section (R+D)				Total
	1.	2.	3.	4.	5.	6.	7.	8.	
Number of compulsory subjects	min.1-max.2	min.1-max.2	min.1-max.2	-	-	-	-	-	**4/5**
Art of doing science for 2 credits	1	-	-	-	-	-	-	-	**1**
Scientific database management for 2 credits		1							**1**
Credits/subject	10	10	10	-	-	-	-	-	**42/52**
Credits for complex exam	-	-	-	25	-	-	-	-	**25**
Number of research seminars	1	1	1	-	1	1	1	1*	**6/7**
Credits for research seminars	15	15	15	-	25	25	25	25*	**45+ 75 (100)**
Optional subjects	max.2	max.2	max.2		-	-	-	-	**0-6**
Credits for optional subjects	2	2	2		-	-	-	-	**max. 12**
Credits for publications	min. 10 credits				min. 45 credits				**min. 55**
Participation in researchwork of the department	2	2	2	-	5	5	5	5	**max. 26**
Educational activity hours per week	max. 4	max. 4	max. 4	-	max 4	max 4	max 4	-	**max. 24**
Credits for educational activity credit/hour	1	1	1	-	1	1	1	-	**max. 24**

*the 7th research seminar (and its credits) can be substituted by the pre-defense

3. The tasks of PhD students




Research and dissertation section (R+D)
TASKS- 5th Semester
• Enrollment for 5th Semester
• Presentation of the research seminar
• Semester closing
TASKS - 6th Semester
• Enrollment for 6th Semester
• Presentation at the research seminar
• Semester closing
TASKS - 7th Semester
• Enrollment for 7th Semester
• Presentation at the research seminar
• Semester closing
TASKS – 8th Semester
• Enrollment for 8th Semester
• Presentation at the research seminar, which can be replaced by pre-defense
• Semester closing
• Pre-defense
• Preparation of the dissertation and the dissertation summary booklet
• PhD defense

4. First steps

- PhD students are required to enroll in the NEPTUN System, which is a unified information system of study.
- Agnes Solczi and Eva Stumpf can help with NEPTUN system log in and enrollment.
- After the electronic enrollment, the form below must be completed, and must be handed in to Agnes Solczi.

Antal Kerpely Doctoral School
of Materials Science & Technology

APPLICATION FORM for doctoral (PhD) training

Name			
Student ID (Neptun code):			
Place and date of birth:			
Nationality:			
Residence Permits:			
Name of qualifying for residence certificates:		Number	
Permanent address:			
Mailing address:			
Mobile number :		**E-mail:**	
Bank name and account number:			
Highest degree		Number of certificate	
When and where to get the degree?			
Supervising Departement		**Supervisor(s):**	
Title of PhD researches			

Type of the payment of expenses	check/bank transfere
Payer's name and address:	

Undersigned PhD student I declare that I took over the "Training booklet for the PhD students" and its contants I know and understand.

Miskolc, **2016** year _____ month _____ day

* suitable part to be underlined

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Signiture of PhD student

5. Requirements

5.1. Research plan, timing of studies

- At the beginning of the first semester, each PhD student is required to prepare a **research plan** briefly describing the planned research work and explaining how the parts of the research build on each other.
- It is also required to prepare a study plan in parallel with the research plan.
- Both the research plan and the plan of study and also participation in the research seminar is valid only with the acceptance and signature of your supervisor. The accepted plan of research and study plan, including postponing an exam to another semester, are modifiable only with the approval of the Council of the Doctoral School.
- The PhD student is required to write a report about the completed credits with the approval of the supervisor each semester.
- Each semester, the student must complete a minimum of one and maximum of two subjects, in order to complete the required four subjects and the "Art of doing science" subject (compulsory course in the 1st semester) till the end of Semester 3.

5.2. Complex examination, continuation of study

- It is required at the end of the second year that PhD students finish their previous studies with a complex exam.
- The complex exam can be started by a PhD student who has obtained at least 90 credits, including at least 10 credits for publications. This means completing all subjects plus credit from research, etc.
- The complex exam must be taken in public before a committee. This exam consists of two main parts, a theory section and a dissertation section.
- Theoretical section: the PhD student takes an exam over his/her theoretical and professional knowledge and applicability of acquired knowledge based on two subjects.
- The training plan of the doctoral school contains the questions for the complex exam by subject.
- The complex exam consists of a written and an oral section. The subjects for the complex exam will be recommended by the supervisor and approved by the Council of the Doctoral School.
- Dissertation section: The PhD student must hold a presentation about his/her knowledge of the literature and about the obtained results in research, and must reveal his/her

research plan for the second two years of studies, with timing of the planned publication activities and writing of the dissertation.

- The scientific research report and plan must be presented by PhD student orally and in writing. The written presentation must be submitted at least two weeks before the exam. The length and format of the written reports will be approved by the Council of Doctoral School.
- The successful execution of complex exam involves 25 credits.
- The complex exam, if the candidate has a minimum of "*rite*" (from 60 to 79.9% "*rite*", from 80 to 89.9% "*cum laude*", in case of 90-100% "*summa cum laude*") meets the qualifications of each test. After successful completion of the complex exam, PhD student can continue his/her studies.
- A failed theoretical section of the complex exam can be repeated once more in the same exam period.

If the dissertation section is failed, the PhD student must apply for the complex exam again in the following semester. If the exam is successful after this second exam, the student can continue his/her studies, but only in the self-financing program.

5.3. Research and Presentation

- The PhD student is required to carry out research work, the results of which must be presented within a Research seminar at the end of each semester. The content of the presentation must be written up in a 20-30 page research report, which must be given to Dr. Peter Baumli 2 weeks before the seminar. It will be reviewed by a professor.
- In the first semester the PhD students have the opportunity to prepare this seminar report in the form of a literature overview, which specifies the research direction.
- The research seminar can only be submitted with the signature of supervisor and can be presented only if it receives a positive review.

6. Publication Activities

Conferences in Hungary

- MicroCAD (at the University of Miskolc, held annually)

  http://www.uni-miskolc.hu/~microcad/
- OATK (held every two years at Lake Balaton) http://oatk.hu/
- Interdisciplinary Sciences Doctoral Conference.
- Paper publication

It is required for the PhD defense to publish two papers in prestigious journals. The list of these journals is approved by the Council of Doctoral School. For information purposes the list of journals with Impact Factor (IF) can be found at:

http://www.citefactor.org/journal-impact-factor-list-2014.html

7. Opportunities for Literature Research

- Central Library: in person or at http://www.lib.uni-miskolc.hu/web/konyvtar/
- You can find papers on the site www.sciencedirect.com or link.springer.com, within the university network, with free full-text downloading,
- Free download of some papers at https://scholar.google.com,
- You can find papers on the site www.scopus.com, within the university network, with free downloading,

It is recommended to register on the site www.researchgate.net, where you can also download papers freely (and make yours available).

Credits in the Antal Kerpely Doctoral School of Materials Science and Technology

Items	Credits
Obligatory **courses** (4 of them):	10 each
Art of Doing Science course	2
Scientific database management course	2
Research Seminar in the 1st 4 semesters, 3 is needed for the complex exam	15 each
Research Seminar in the 2nd 4 semesters, at least 3, maximum 4	20 each
Teaching activities – need to enclose the proof of the lecturer	5
Participate in **research work** of the institute, enclose the report of the executed tests during the 1st 4 semester	2
during the 2nd 4 semester	5
Publications* – enclose copy of the submitted article or programs of the conference	
prestigious international journal - publication in Q1 ranked journal - publication in Q2 ranked journal - publication in Q3 ranked journal - publication in Q4 ranked journal	 40 30 20 10
Reviewed article published in non Q ranking journal	6
Hungarian journal, but not in Hungarian	6
Hungarian journal in Hungarian	4
international conference article not in Hungarian	5
international conference presentation (oral or poster) not in Hungarian	4
Hungarian conference article not in Hungarian	3
Hungarian conference presentation (oral or poster) not in Hungarian	2
Hungarian conference article in Hungarian	2
Hungarian conference presentation (oral or poster) in Hungarian	2
* Only those articles can be rewarded with credits which have been already accepted and published, can be seen either in electronic or in printed version. The articles must be at least 4 printed pages and have to be divided into introduction, experiments, results, conclusion and list of literatures.	
Patent	
Registered patent	10
Submitted patent	4

Compiled by Dr. Peter Baumli, Dr. Mária Svéda

Approved by the Council of the

Antal Kerpely Doctoral School of Materials Science and Technology of the University of Miskolc,

4 November, 2019

8. Who can help you…?

Krisztina Sándor
general administrative issues
Building A/4, Room 107

Nikolett Tóth
visa, Immigration office affairs,
Neptun, student ID
Building A/4, Room 111

Dr. Péter Baumli
general academic affairs
Building B/1, ground floor, Room 7

Dr. Mária Svéda
general academic affairs
Building C/1, Room 102

Éva Stumpf
Neptun system, registration
Building B/1, 4th floor, Room 404

Ágnes Solczi
Faculty's coordinator of the
international education
Building B/1, 2nd floor, Room 215

Mentors
Supervisors