

DOCTORAL SCHOOL OF MILITARY ENGINEERING

CURRICULUM

(only for training in English language)

- 2015 -

1. RESEARCH FIELD, TRAINING GOAL AND FORMS OF THE DOCTORAL SCHOOL OF MILITARY ENGINEERING (English: DSME¹, Hungarian: KMDI)

1.1 Research field of the doctoral school

The **Doctoral School of Military Engineering** conducts doctoral (PhD) training and preparation for scientific research work in the discipline of Military Engineering belonging to the science branch of technical sciences, namely in the basic, applied, experimental development, technological, technology transfer and technical innovation areas **related to the specially military application** of the technical sciences.

The **research results** are translated into the modern, new procedure and tool systems of **military technology, as well as the broader defence and public administration sphere** and the related areas of science and application. This includes the defence industry; defence electronics; informatics and communication; national defence; law enforcement; environmental security; environmental protection; defence against CBRN (chemical, biological, radiological and nuclear weapons) and non-proliferation; the fight against terrorism; disaster management; the protection of critical infrastructure; energy safety; security technology and defence administration.

In each year we find it especially important to announce among the research fields of the doctoral school the themes listed in the research plans of the Ministry of Defence.

1.2. Goal of the training

The goal of the training is to train the doctoral students participating in organised training or individually preparing students conducting scientific research in any research fields of the Military Engineering and prepare them to obtain the scientific (PhD) degree.

1.3. Entry master's degrees of the doctoral training

The doctoral training is built on the following accredited master's degrees

- Defence C3 systems manager 2005/8/IV/5
- Disaster management engineering 2005/8/IV/2
- Security technology engineering 2005/8/IV/3
- Military logistics 2005/8/IV/1

DSME primarily accepts students from the following other master's degrees:

- Defence administration Military sciences
- Military leader Military sciences
- Security and defence politics Military sciences
- National security Military sciences
- Border management and defence leader Military sciences
- Penitentiary leader Military sciences
- Electrical engineering Electric engineering sciences
- Mechanical engineering Mechanical engineering sciences
- Mechanical modelling Mechanical engineering sciences
- Civil engineering in infrastructure Civil engineering sciences
- Vehicle engineering Transport sciences
- Environmental engineering Biological, environmental and chemical sciences
- Transport engineering Transport sciences
- Logistics management Management and organisation sciences
- Logistics engineering Transport sciences

¹ Hereinafter DSME is used

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|-------------------------------|--------------------------------------|
| • IT engineer | Informatics |
| • Mechatronical engineering | Mechanical engineering sciences |
| • Technical manager | Management and organisation sciences |
| • Technical manager | Mechanical engineering sciences |
| • Chemist | Chemistry sciences |
| • Chemical engineering | Chemistry sciences |
| • Management and organisation | Management and organisation sciences |

Accordingly, the school primarily accepts students with such Masters degrees; however, it is possible to admit all other applicants who obtained a degree in other institutes and other Masters programs whose scientific history and whose research theme, related to the military sciences/military engineering entitle them to participate in the training.

1.4. Training forms at the doctoral school

Training and the doctoral degree procedure are conducted in the following forms at the doctoral school:

- organised training
 - full-time day course (with state-funded scholarship or fee-charging);
 - part-time (correspondent, fee-charging) training;
 - individual (fee-charging) training
- individual preparation (fee-charging, without training).

1.5. Research fields of the doctoral school

The training system of the doctoral school within the discipline of military engineering sciences includes the following research fields:

- Military technical infrastructure;
- Military technology and robotics (only in Hungarian);
- Defence electronics, informatics and communication;
- Military environmental safety;
- Military logistics, defence economics (only in Hungarian);
- Security technology (only in Hungarian);
- Disaster management.

1.6. Language of the training

Training is generally conducted in English.

2. CREDIT ALLOCATION, REQUIREMENTS OF THE TRAINING

2.1 General training requirements

In order to obtain the pre-degree certificate in the organised training program, it is compulsory to obtain a minimum of 180 credit points by the end of the 6th term as follows:

- academic obligations: 50 credit points;
- scientific research work: 120 credit points;
- holding lessons (teaching): 10 credit points.

During the six terms of the training, 30 credit points (minimum 21) must be obtained per term on average.

These requirements of the training are identical for the students participating in the organised training. With the exception of term 1, those participating in the individual training may freely

collect the minimum 180 credit points according to their own planning. Participation in the lessons is not compulsory for them but it is recommended.

By 31st January at the end of the first term doctoral students prepare their 3-year Individual Training And Research Program, which includes the order they enrol to the various subjects, as well as the scheduling of their research work and their planned publications.

2.2 Requirements of meeting the academic obligation

During the 1st term the students of the DSME (including those participating in individual training) must enrol to the following subjects:

- The module “Basic knowledge”, which covers five basic subjects of the doctoral school, all ending with separate mid-term assessment and carrying 2 credit points per subject;
- The subject “The theory and methodology of scientific research” worth 3 credit points, which ends with a term mark;
- Further two subjects on military sciences, each ending with mid-term assessment, worth 2 credit points each.

The students shall take an aggregated comprehensive exam of the five subjects included in the “Basic knowledge” module. Successfully taking this comprehensive exam and completing the subject “The theory and methodology of scientific research” are two pre-conditions of continuing with the further studies!

During the 2nd term all students of DSME participating in organised training shall complete a compulsory main subject they can select within their research theme in the value of 6 credit points.

During the further (preferably the 3rd and 4th) terms all students participating in organised training shall enrol two compulsory subjects of their choice from the subjects of their research theme ending with comprehensive exams (in the value of 6 credit points each). Both subjects must be related to the research theme of the student. Those participating in individual training may enrol to these subjects during any term.

Preferably during terms 2-4 students shall enrol to at least three colloquium subjects, each worth 3 credit points. Those participating in individual training may enrol to these subjects during any term.

According to the principles described in the previous paragraph, students shall enrol to at least three researcher seminars in the value of 2 credit points each. Researcher seminars end with term marks.

During the training period (preferably in the first four terms) doctoral students may enrol to and complete subjects exceeding the total number of required credit points by ten per cent without any further fees; however, the total number of completed credit points shall not exceed 198 credit points.

2.3 Requirements of meeting the scientific research work obligations

In order to deliver the required scientific researcher work, students shall enrol to the numbered subject titled “Scientific research” belonging to the given term within the subjects outside their research themes. The Roman numbers after the name of the subject indicate the number of the term when they can be enrolled to.

Through scientific research activities, a minimum of 12 credit points can be obtained per term so that students need to have at least 120 scientific credit points at the end of the training.

Credit points are to be obtained through the scientific activities determined in Section 5. In case the student has no approvable publications in the given term or if their value does not reach 12 credit points according to the chart in Section 5, the student may be given 12 credit points for the subject “Scientific research”. In other cases, the credit values of the scientific research activity shall be given to them according to Section 5.

The theme leader certifies the scientific activities by approving the credit points. The report certifying the scientific activities must contain the access information of the completed publications in the Database of Hungarian Scientific Works.

The same publication or scientific activity may only be credited on one occasion during the whole training period.

A publication can be accepted as professional publication if its length is minimum 0.3 printed sheets. An exception is the poster and the coreference issued in the publication of a scientific conference, where a shorter length is allowable.

Rules of accounting publications in the given term:

- publications already submitted but yet to be evaluated or publications where the editor requests significant modifications, which are yet to be performed, shall be considered as non peer-reviewed articles;
- in case of submitted but still unpublished publications, the editor’s authentic acceptance statement must be attached but it must be submitted after publication;
- in case of publications written as a co-author, the co-author’s statement must be attached, indicating the proportion of authorship. The credit points shall be calculated based on the proportion of authorship in a way that fractions shall be rounded up to full points according to the rules of rounding. An exception is five tenths of percentage, which shall be rounded upwards;

It is a requirement that during the training period doctoral students must obtain 15 publication points according to the Publication Points Chart of the Doctoral Rules (DR), including a minimum of four journal articles published in peer-reviewed journals (of class A, B or C as classified by the Military Sciences Committee of Department IX of the Hungarian Academy of Sciences), presenting their own research results. It is a further requirement that students must also have at least one professional publication in a foreign language during the training period.

2.4 Requirements of meeting the obligation of holding lessons (teaching

Holding lessons is an optional and not compulsory opportunity to obtain credit points.

Doctoral students employed in teaching positions may not obtain credit points through lessons held at their own universities.

Credit points may only be obtained through holding lessons from the 3rd term onwards, with the exception of students participating in individual training;

Lessons shall only be held with the permission of the competent department head in the research theme of the student or a closely related other theme.

1 credit point may be awarded for holding 4 lessons.

A maximum of 5 credit points may be obtained in one term, and a total of 10 credit points during the entire training period.

The delivery of the lessons shall be acknowledged by the department head responsible for the theme.

2.5 Special rules applying to those participating in individual training and individual preparation

The doctoral school may approve credit points for students participating in individual training based on their previously completed academic and research results as follows:

- academic obligations: maximum 12 credit points;
- scientific research work: maximum 60 credit points.

Students participating in individual training must be notified about credit points approved this way in the notice confirming their admission.

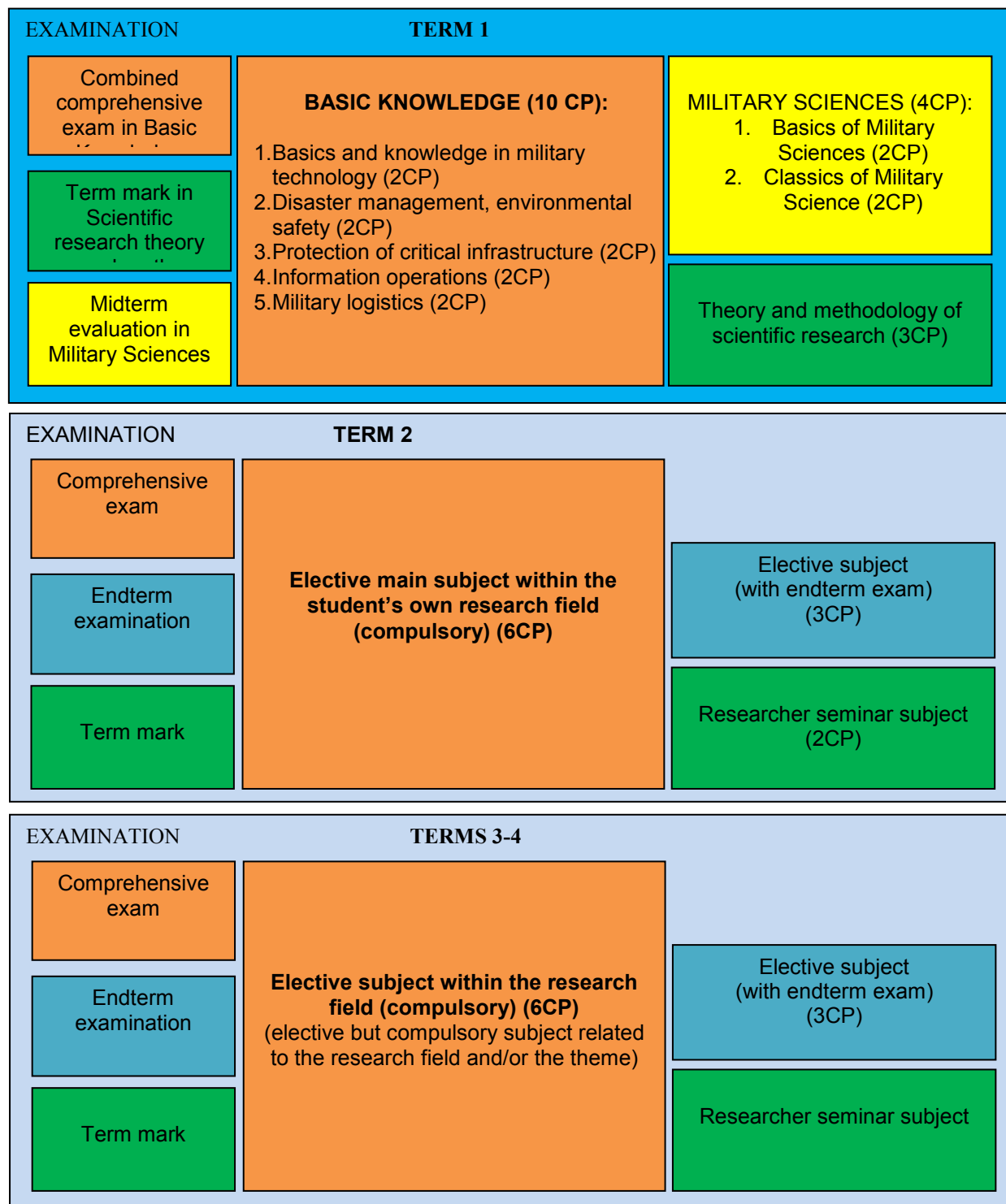
Provisions included in the sections about training, scientific research work and holding lessons shall not apply to those participating in individual preparation as they already meet the minimum conditions of scientific research work at the time of their admission according to the Doctoral Rules. Nevertheless, they may publish articles or perform other scientific work during the doctoral degree procedure, which shall be credited for them when they submit their thesis and the complete procedure material (within two years from their admission).

Further requirements of the training, as well as those related to the admission of those participating in individual preparation and their doctoral degree procedure, are included in the Academic and Examination Rules of the DSME, the Operational Rules of the DSME and the DR of the university.

3. RECOMMENDED ORDER TO ENROL TO SUBJECTS IN EACH TERM (IDENTICAL IN ALL RESEARCH FIELDS)

The charts below demonstrate a possible, recommended order to enrol to the subjects during the training period.

SAMPLE CURRICULUM



Terms 5-6: research work, publishing activity, writing the thesis, obtaining the pre-degree certificate, workshop debate, preparation for the doctoral examination and the doctoral degree procedure.

SAMPLE CURRICULUM

Term	Academic obligations					Scientific research		
	Subject	CP	Contact lessons		E	Subject	Min. CP	
			FT	PT				
1.	Basic knowledge:					CE	Scientific research I.	12
	Basics and knowledge in Military technology	2	20	6	ME			
	Disaster management, Environmental safety	2	20	6	ME			
	Protection of critical infrastructure	2	20	6	ME			
	Information operations	2	20	6	ME			
	Military logistics	2	20	6	ME			
	Theory and methodology of scientific research	3	40	12	TM			
	Military Sciences:							
	Basics of military sciences	2	20	6	ME			
	Classics of military sciences	2	20	6	ME			
2.	Elective main subject within the student's own research field (compulsory)	6	60	20	CE	Scientific research II.	12	
	Elective subject (endterm exam)	3	30	10	E			
	Researcher seminar	2	20	6	TM			
3.	Elective main subject within the student's own research field (compulsory)	6	60	20	CE	Scientific research III.	12	
	Elective subject (endterm exam)	3	30	10	E			
	Researcher seminar	2	20	6	TM			
4.	Elective main subject within the student's own research field (compulsory)	6	60	20	CE	Scientific research IV.	12	
	Elective subject (endterm exam)	3	30	10	E			
	Researcher seminar	2	20	6	TM			
5.						Scientific research V.	12	
6.						Scientific research VI.	12	
Total		50	510	162			72	

4. SUBJECTS AVAILABLE FOR PhD STUDENTS AT THE DOCTORAL SCHOOL OF MILITARY ENGINEERING

The Individual Academic and Research Program can be prepared for the training period of 1-3 years using the form available on the website:

SUBJECTS OUTSIDE THE RESEARCH FIELD

Code number	Subject type	Name of subject/researcher seminar	Credit points
HKDID0001	ME	Basics and knowledge in military technology (basic knowledge)	2
HKDID0002	ME	Disaster management, Environmental safety (basic knowledge)	2
HKDID0003	ME	Protection of critical infrastructure (basic knowledge)	2
HKDID0004	ME	Information operations (basic knowledge)	2
HKDID0006	ME	Military logistics (basic knowledge)	2
HKDID0005	RS	Theory and methodology of scientific research	3
HKDID0007	ME	Basics of Military Sciences (military sciences)	2
HKDID0008	ME	Classics of Military Sciences (military sciences)	2
HKDID0303	C	Scientific research I.	12
HKDID0304	C	Scientific research II.	12
HKDID0305	C	Scientific research III.	12
HKDID0306	C	Scientific research IV.	12
HKDID0307	C	Scientific research V.	12
HKDID0308	C	Scientific research VI.	12

Legend:

- C – Compulsory (Scientific research)
- EC – Elective but compulsory (comprehensive exam)
- E – Elective (end term exam)
- ME – Midterm evaluation
- RS – Researcher seminar (term mark)
- CE – Comprehensive exam

HKDID1100 – THEORY OF MILITARY TECHNICAL INFRASTRUCTURE RESEARCH FIELD

ELECTIVE COMPULSORY SUBJECTS WITH COMPREHENSIVE EXAM (6 credit points)

Code number	Subject type	Name of subject/researcher seminar	Name of subject owner
HKDID1103	EC	New technical equipment to perform “FP” tasks and the principles and possibilities of applying them	Dr. Tibor Kovács PhD

ELECTIVE SUBJECTS WITH EXAM (3 Credit points)

Code number	Subject type	Name of subject/researcher seminar	Name of subject owner
HKDID1211	E	Blasting tasks and techniques	Dr. Zoltán Kovács PhD
HKDID1214	E	IED and VBIED survey and neutralization	Dr. Tibor Kovács PhD Dr. Zoltán Kovács PhD

RESEARCHER SEMINAR SUBJECTS (2 Credit points)

Code number	Subject type	Name of subject/researcher seminar	Name of subject owner
HKDID1407	RS	Tasks of country's preparation, in particular the sheltered HQ's	Dr. Tibor Kovács PhD
HKDID1412	RS	Blasting tasks and techniques for iceflood protection	Dr. Zoltán Kovács PhD.
HKDID1414	RS	Environmental aspects of military blasting tasks	Dr. Zoltán Kovács PhD

HKDID3100 – DEFENCE ELECTRONICS, INFORMATICS AND COMMUNICATION RESEARCH FIELD

ELECTIVE COMPULSORY SUBJECTS WITH COMPREHENSIVE EXAM (6 Credit points)

Code number	Subject type	Name of subject/researcher seminar	Name of subject owner
HKDID3101	EC	Theory and practice of electronic warfare	Dr. Zsolt Haig PhD
HKDID3107	EC	Information infrastructures	Dr. László Kovács PhD
HKDID3108	EC	Information terrorism	Dr. László Kovács PhD
HKDID3111	EC	Multi-tasking network-centric radar system with common video signal processing for researchers	Dr. István Balajti PhD

ELECTIVE SUBJECTS WITH EXAM (3 Credit points)

Code number	Subject type	Name of subject/researcher seminar	Name of subject owner
HKDID3201	E	Bases of modelling of military system*	Dr. György Seres DSc
HKDID3209	E	Theory and practice of electronic warfare	Dr. Zsolt Haig PhD
HKDID3214	E	Information operations	Dr. Zsolt Haig PhD
HKDID3219	E	ICT basics of interactive knowledge transfer	Dr. György Seres DSc
HKDID3221	E	Information infrastructures	Dr. László Kovács PhD
HKDID3222	E	Information terrorism	Dr. László Kovács PhD
HKDID3227	E	“In Situ” radar performance checks (RPC) for researchers	Dr. István Balajti PhD
HKDID3230	E	IT capabilities and services	Dr. Sándor Munk DSc
HKDID3231	E	Basics of the computer cluster technology	Krisztina Tibenszky Dr. Főrika PhD
HKDID3234	E	Modern technological and organizational processes in the management of battlefield communication networks in the Hungarian Defence Forces	Dr. Tibor Farkas PhD
HKDID3235	E	Examination of the battlefield communication and information system in the Hungarian Defence Forces	Dr. Tibor Farkas PhD
HKDID3236	E	Technical examination of the communication support in the NATO multinational operations	Dr. Tibor Farkas PhD

RESEARCHER SEMINAR SUBJECTS (2 Credit points)

Code number	Subject type	Name of subject/researcher seminar	Name of subject owner
HKDID3407	RS	GIS in the defence electronic systems	Dr. Zsolt Haig PhD
HKDID3408	RS	Architectural issues related to defence IT systems	Dr. Sándor Munk DSc
HKDID3409	RS	Ruggedized IT devices	Dr. Sándor Munk DSc
HKDID3410	RS	Personal and wearable IT devices	Dr. Sándor Munk DSc
HKDID3415	RS	Information infrastructures	Dr. László Kovács PhD
HKDID3427	RS	Use of distributed computing network devices in IT systems computing	Krisztina Tibenszky Dr. Főrika PhD
HKDID3428	RS	Development trends in the deployable communication and information system of the Hungarian Defence Forces	Dr. Tibor Farkas PhD
HKDID3429	RS	Issues of the communication capabilities, applications and technical equipment in the joint operations of the Hungarian Defence Forces	Dr. Tibor Farkas PhD

HKDID4100 – MILITARY ENVIRONMENTAL SAFETY RESEARCH FIELD

ELECTIVE COMPULSORY SUBJECTS WITH COMPREHENSIVE EXAM (6 Credit points)

Code number	Subject type	Name of subject/researcher seminar	Name of subject owner
HKDID4102	EC	Environmental protection and Security	Dr. László Halász DSc Dr. László Földi PhD
HKDID4105	EC	Chemical safety	Dr. László Halász DSc Dr. László Földi PhD

ELECTIVE SUBJECTS WITH EXAM (3 Credit points)

Code number	Subject type	Name of subject/researcher seminar	Name of subject owner
HKDID4201	E	Weapons of mass destruction	Dr. László Halász DSc Dr. Tamás Berek PhD
HKDID4202	E	Chemistry of toxic materials	Dr. László Földi PhD Dr. László Halász DSc
HKDID4206	E	Radioecology	Dr. József Csurgay Dr. Árpád Vincze PhD
HKDID4208	E	Non-proliferation actions against the weapons of mass destruction	Dr. László Földi PhD
HKDID4210	E	Environment management	Dr. László Földi PhD
HKDID4211	E	Nature conservation	Dr. László Földi PhD Dr. László Halász DSc
HKDID4215	E	Technologies of monitoring and extermination of weapons of mass destruction	Dr. László Földi PhD Dr. József Csurgai PhD
HKDID4216	E	NBC threat analysis of the territory of Hungary	Dr. József Solymosi DSc Dr. József Csurgai PhD
HKDID4221	E	Mathematical methods of risk analysis	Dr. Árpád Vincze PhD Dr. József Csurgai PhD
HKDID4227	E	Radiological dispersion devices (RDDs)	Dr. Rezső Pellérdi PhD

RESEARCHER SEMINAR SUBJECTS (2 Credit points)

Code number	Subject type	Name of subject/researcher seminar	Name of subject owner
HKDID4401	RS	Air purity protection *	Dr. László Földi Dr. László Halász DSc
HKDID4405	RS	Waste treatment and management	Dr. László Földi PhD Dr. László Halász DSc
HKDID4406	RS	Turbulent diffusion of air pollutants	Dr. László Halász DSc Dr. József Csurgai PhD
HKDID4421	RS	Evaluation of NBC and fire situation	Dr. József Csurgai PhD

HKDID7100 – DISASTER MANAGEMENT RESEARCH FIELD

ELECTIVE COMPULSORY SUBJECTS WITH COMPREHENSIVE EXAM (6 Credit points)

Code number	Subject type	Name of subject/researcher seminar	Name of subject owner
HKDID7112	EC	Nuclear safety and events/accidents	Dr. György Pátzay PhD Dr. Kristóf Horváth PhD

ELECTIVE SUBJECTS WITH EXAM (3 Credit points)

Code number	Subject type	Name of subject/researcher seminar	Name of subject owner
HKDID7219	E	Radiology	Dr. György Pátzay PhD
HKDID7220	E	Environmental & disaster monitoring systems	Dr. László Halász DSc Dr. Gyula Vass PhD
HKDID7226	E	Protection against major accidents	Dr. Lajos Kátai-Urbán PhD
HKDID7228	E	Carriage and logistics of dangerous goods	Dr. Lajos Kátai-Urbán PhD
HKDID7229	E	Planning, organising and executing technical rescue	Dr Péter Pántya PhD

RESEARCHER SEMINAR SUBJECTS (2 Credit points)

Code number	Subject type	Name of subject/researcher seminar	Name of subject owner
HKDID7418	RS	Basic knowledge in radiation protection and nuclear accident preparedness	Dr. György Pátzay PhD
HKDID7419	RS	Case studies of industrial safety	Dr. József Dobor PhD
HKDID7422	RS	Fire investigation activities	Dr. János Bleszity CSc
HKDID7423	RS	Fire prevention activities	Dr. Ágoston Restás PhD
HKDID7424	RS	The safety of firefighter interventions	Dr. Péter Pántya PhD

5. CREDIT VALUES OF SCIENTIFIC RESEARCHER ACTIVITIES

(in case of 100% authorship)

Name of the activity		Credit points
Books, lecture notes, textbook	Scientific book of Hungarian publication	32
	Book chapter of Hungarian publication	20
	Scientific article in edited book	20
	Printed or electronic foreign language university note or textbook	24
	Printed or electronic own language university note or textbook	20
	Teaching material based on scientific research	12
Peer-reviewed journal article	In foreign journal of foreign language	24
	In domestic journal in a foreign language	20
	In a journal in own language	16
Non peer-reviewed journal article	In foreign journal of foreign language	16
	In domestic journal in a foreign language	12
	In a journal in own language	10
Participation in international (foreign language) scientific conference	Peer-reviewed publication of the lecture in foreign language	24
	Non peer-reviewed publication of the lecture in foreign language	16
	Own language publication of the lecture	14
	Holding lecture in a foreign language /1.	6
	Foreign language poster	6
	Coreference submitted in writing and featured in foreign language conference publication	4
Participation in domestic scientific conference	Foreign language publication of foreign language lecture	12
	Publication of lecture in own language publication of international level conference	10
	Own language publication of the lecture	8
	Holding lecture in a foreign language /1.	4
	Foreign language poster	4
	Holding lecture in own language /1.	2
	Own language poster	2
	Coreference submitted in writing and featured in own language conference publication	2
Scientific competitions	Participation in international (foreign language) scientific competition	12
	Participation in scientific competition of national level	10
	Participation in scientific competition of university level	6
Patent, invention	Foreign patent or application for a patent	30
	Patent or invention recorded in Hungary	20
Other scientific activity	Doctoral thesis draft prepared for the workshop debate during the training period	30
	Collection and exploration of scientific literature related to the research theme /2.	9
	Study prepared in the research theme, which is researchable in the library /3.	6

Remark: In case of co-authorship, the credit points shall be determined according to Point 2.c.

/1. Only approvable if the material of the lecture was not published!

/2. Only approvable in the first term.

/3. Only one study may be approved in each academic year.

6. THE SYSTEM OF VERIFYING THE OBTAINED KNOWLEDGE

The forms of verifying the knowledge related to the individual subjects during the training period are determined in the Sample Curriculum, while the related formal requirements are described in the Subject Programs.

The obtained knowledge shall be verified by way of five-grade rating.

In case of comprehensive exams, the end-term rating shall be determined and verified with his signature in the record book of the student by the committee; by the examiner leading teacher in case of end-term evaluation and term marks; and by the theme leader in case of “Scientific Research” subjects. In case of teaching activity (holding lessons), the department head responsible for the taught subject (or the leading teacher appointed by them) shall certify that the lessons have been held. Credit points obtained this way shall be approved under the subject “Scientific research III-IV).

The provisions of the NUPS Academic and Examination Rules shall apply to the tasks to be completed in case of repeating unsuccessful exams or the correction of successful exams.

7. CLOSING THE TRAINING (REQUIREMENTS OF OBTAINING THE PRE-DEGREE CERTIFICATE)

The pre-degree certificate certifies the completion of the academic obligations determined in the curriculum and the obligations of scientific research and teaching (optional for students); it also certifies the successful completion of the prescribed examinations (with the exception of the language exam) and the collection of the prescribed 180 credit points, certifying without qualification or evaluation that the doctoral student has fully met their pre-determined obligations related to the training and preparation

After completing the successful 6th term, in case all the conditions of issuing the pre-degree certificate are met, the doctoral school shall issue the pre-degree certificate. However, the student shall only receive this certificate if they have submitted the 3-year summary report of their own and of their theme leader to the school.

It is a requirement that during the training period doctoral students must obtain 15 publication points according to the Publication Points Chart of the Doctoral Rules (DR), including a minimum of four journal articles published in peer-reviewed journals (of class A, B or C as classified by the Military Sciences Committee of Department IX of the Hungarian Academy of Sciences), presenting their own research results. It is a further requirement that students must also have at least one professional publication in a foreign language during the training period.

The three-year training period may not be shortened and the pre-degree certificate may not be issued earlier; however, the workshop debate may be held in the last year of the training.

The doctoral examination may not be taken before closing the training period (the issue of the pre-degree certificate).

The pre-degree certificate shall be signed by the leader of the doctoral school in the electronic record book of the doctoral student.

On the day the pre-degree certificate is completed and signed the doctoral student's legal status as a student terminates. From the day the application to the doctoral degree procedure is accepted to the day of receiving the doctoral title, the candidate shall be addressed as “doctoral candidate”.

8. CONDITIONS OF APPLYING TO THE DOCTORAL DEGREE PROCEDURE

8.1 Conditions of applying to the doctoral degree procedure

Students generally apply to the doctoral degree procedure after the completion of the organised doctoral training (and obtaining the pre-degree certificate) and at the same time when the prescribed appendices are submitted and the conditions of being awarded the degree are met.

Those students can also apply to the doctoral degree procedure who have already completed their training (and obtained the pre-degree certificate) but have not yet met all conditions of being awarded the degree.

In exceptional cases, those doctoral students can also apply to the degree procedure who:

- already met their academic obligations in the third year of the training and
- whose thesis was qualified suitable for further procedure during the workshop debate.

The successful admission of applicants participating in individual preparation may also mean the beginning of the doctoral degree procedure at the same time.

Approval to start the doctoral degree procedure shall be evaluated by the Doctoral School Council and approved by the Doctoral Council of the University (DCU).

On the date of the DCU decision the doctoral candidate establishes a legal relationship with the university. If the student starts the doctoral degree procedure within the training period then he will be a student as well as a doctoral candidate according to his legal status.

Those participating in organised training must apply to the doctoral degree procedure within three years from the day the pre-degree certificate is issued and they must complete the procedure within two years from the day their application is accepted.

The doctoral degree procedure is free of charge for those students with a scholarship who apply to and start the doctoral degree procedure during the training period.

8.2 General conditions of obtaining the doctoral degree

The candidates must document their independent scientific activities with publications and notices issued in scientific journals, books and publications of scientific conferences, mostly related to their own research themes. The certification of the scientific activity shall be summarised based on the Publications points value table in the DR, where candidates must obtain a minimum of 20 publication points, including at least one peer-reviewed publication in a foreign language, and they must also have at least four notices issued in scientific journals.

In case of doctoral candidates participating in training, during the certification process it is possible to accept one Hungarian and one foreign language publication approved to be published, in addition to the already issued publications meeting the requirements of the Publications points value table in the DR. In the latter case, it is necessary to attach the off-print of the material edited for printing and the acceptance statement of the editor. In case of publications you wrote as a co-author, you also need to attach the co-author's statement about the percentages of authorship.

The candidate must certify the knowledge of two foreign languages according to Section 31 of the DR.

Doctoral candidates of non-Hungarian nationality must submit a minimum of two intermediate level complex type language examinations or one advanced and one elementary level language examinations recognised by the state or equivalent other language examinations.

The doctoral candidates must successfully pass the doctoral final exam.

The candidates must independently complete a scientific task, the thesis or work, and then defend it during the workshop debate and, finally, defend the finished thesis or work during a public debate.

After an unsuccessful doctoral degree procedure, the new procedure may be started after a period of at least two years; the procedure may be initiated only on one occasion in the same theme.

The candidate must make a statement claiming that the thesis is their own work and that the bibliography references are clear and complete.

20. July 2015, Budapest

Prof. dr. Zsolt Haig colonel, PhD
Head of DSME