



University of Pannonia  
Doctoral School of Business and Management

Training Plan

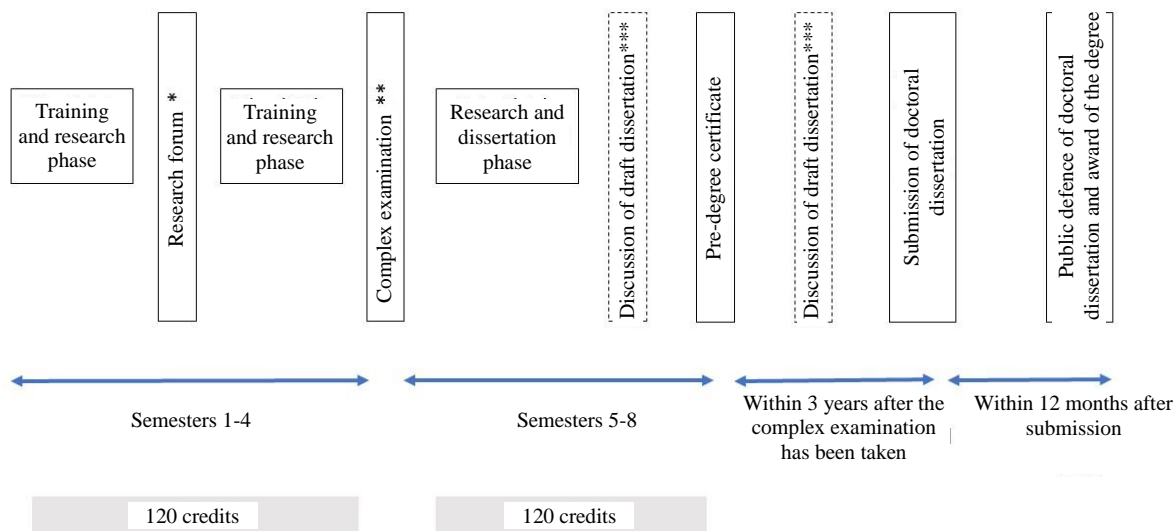
Approved by the Disciplinary Doctoral and Habilitation Council  
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## The philosophy behind the Training Plan

The aim of doctoral training is to prepare doctoral students (PhD students) for a career in academia and a successful integration into higher education and the world of research, and to help them become engaged citizens committed to science through knowledge transfer, skills development and attitude formation. The training will focus on the acquisition of knowledge as well as the development and improvement of competences in connection with research methodologies and the discipline integrating the doctoral student's research topic, facilitating an academic career and ultimately the preparation of the doctoral thesis at the end of the training. The training plan guides PhD students on a pathway to make progress and reach their goals by completing milestones, accepting the guidance and support of the doctoral school's teachers and doctoral advisors as a primary guarantee for progress. A characteristic feature of doctoral training is that performance is not measured through formal knowledge assessment but new and innovative ideas, creative solutions, outstanding added value and achievements recognised by the scientific community. The training plan is based on the Operational Rules of the Doctoral School of Business and Management (DSBM) of the University of Pannonia.

### Structure of the training programme



\*at the end of the 2<sup>nd</sup> semester; \*\*at the end of the 4<sup>th</sup> semester; \*\*\*in the research and dissertation phase or after the pre-degree certificate has been awarded and before the submission of the doctoral dissertation

The alpha and omega of the training programme is the collaboration between the doctoral student and the doctoral advisor. The PhD student's research topic and the subject of his or her doctoral dissertation are defined in consultation with the doctoral advisor within the framework of the list of topics approved by the doctoral school, and every aspect of the training programme is designed to ensure that the studies and publications based on the dissertation reflect new and valid knowledge in accordance with scientific standards and research ethics.

## The training and research phase (semesters 1-4)

During the four-semester *training and research phase*, the doctoral student will study the subjects (attend courses) specified in the model curriculum of this training plan, complete them according to the requirements set out in the course description, carry out research work agreed with and supervised by his or her doctoral advisor, report on his or her progress in the research forum, takes part in teaching activities, publish his or her research findings and pass a complex examination.

<i>Training and research phase (semesters 1-4)</i>		
<b>Description</b>	<b>Type</b>	<b>Credits</b>
Study credits (8 courses*8 fixed credits)	Compulsory	64
Research credits (8 fixed credits per semester)	Compulsory	32
Research forum (2 <sup>nd</sup> semester [until 30 <sup>th</sup> June] 16 fixed credits)	Compulsory	16
Orientation credits	Optional	8
- Teaching, if the student agrees to conduct classes registered in NEPTUN (full course=100%, proportionally=max. 8 credits) or provide educational support (2 credits/course)		
- Publication (if the specified criterion requirements are exceeded), 1*8 fixed credits		
Criterion requirements (publication requirement, 0 credits)	Compulsory	0
Total (semesters 1-4)		120

In each semester of the training and research phase (semesters 1-4), the doctoral student must accumulate study credits (64 credits in total), research credits (32 credits in total) and orientation credits (8 credits in total) as well as take part in the research forum at the end of the second semester (16 credits) and meet the non-credit criterion requirement. A minimum of 120 credits must be collected as a prerequisite for admission to the complex examination. The credits will be recorded in the Neptun system by an authorised person.

### *Completion of study requirements – 64 credits (compulsory)*

In the training and research phase, the student is expected to complete 8 courses according to the model curriculum, for which a total of 64 study credits can be earned (each completed course is worth a fixed 8 credits; the value of the credit is not influenced by the grade of the course). The doctoral student earns study credits by attending courses, fulfilling subject requirements, carrying out individual study activities, reporting and taking examinations (completed with a course grade). Doctoral students can choose their compulsory courses, compulsory courses with elective modules and optional courses from a list of courses to which credits are assigned in the doctoral school's model curriculum published in Neptun. An optional course may also be completed by taking a course offered by any of the doctoral schools of the University of Pannonia or, with the prior approval of the sub-programme leader, by taking a course offered by any higher education institution (including foreign ones) offering doctoral studies. If the doctoral student fails to successfully complete the course prescribed in the model curriculum, the head of

the DSBM may, in agreement with the lecturer and the programme leader, authorise the announcement of an exam course, subject to payment of a special procedure fee. The exam course must be completed by the end of the 4th active semester at the latest.

#### *Completion of research requirements – 32 credits (compulsory)*

Research credits can be obtained at the beginning of each semester on the basis of the completion of a semester assignment plan agreed in advance with the doctoral advisor. They are fixed and, if accepted, are considered as completed regardless of the quality of performance. A total of 32 research credits can be obtained in the training and research phase (8 fixed credits per semester). Research credits may be obtained through independent research work carried out under the supervision of a doctoral advisor. The assessment of the completion of the research work is based on the documentation submitted each semester (written reports, assignments, research plans, manuscripts, conference presentations, working papers, etc.). Research credits are certified by the doctoral advisor and approved by the sub-programme leader. A prerequisite for the completion of research credits is that the doctoral student and the doctoral advisor agree in person at the beginning of each active semester (by 30<sup>th</sup> September or 28<sup>th</sup> February at the latest) on the research tasks to be carried out in the semester in question and agree on what the advisor expects the doctoral student to complete as a minimum requirement. The tasks must be defined in such detail that, at the end of the semester (by 15<sup>th</sup> January or 15<sup>th</sup> June at the latest), their successful or unsuccessful completion can be clearly identified and thus form the basis for the award of fixed credits. The agreement must be drawn up in writing on a special form (Annex 3 of the OR), signed and scanned, and uploaded to Moodle. The assessment and the award of credits must be drawn up on the same form at the end of the semester, signed and scanned and uploaded to the relevant Moodle interface.

#### *Completion of orientation activities – 8 credits (optional)*

In the training and research phase, 8 orientation credits must be obtained. This can be achieved by carrying out teaching and educational support tasks (a maximum of 8 orientation credits are awarded for conducting a semester course alone; if the doctoral student only conducts a certain part of the course, the credits are awarded on a pro rata basis, with a minimum of 2 credits per course; a fixed 2 credits per course are awarded for educational support tasks), or by publishing research results beyond the criterion requirements. As a general rule, a doctoral student must complete the 8 credits required for the orientation activities by completing the teaching orientation or the publication orientation requirements. A doctoral student may complete the two orientations in parallel, but while partial credits may be obtained in the teaching orientation, only a whole multiple of the 8 fixed credits may be obtained in the publication orientation. If an excess of credits is earned in the education and research phase during the completion of the orientation activity, the excess can only be included in the orientation credits of the research and dissertation phase, for orientations with the same profile. The excess cannot be used to replace credits failed to be earned in the training and research phase.

- Teaching orientation

Orientation credits for teaching are recorded on the basis of information available in the Neptun system of the University of Pannonia (if teaching credits are awarded on a pro rata basis, only teaching credits for the contribution to a course in which the doctoral student's name is listed as a lecturer in Neptun can be obtained). Education support credits can be earned if the doctoral student acts in a capacity other than a lecturer when contributing to a course conducted by a lecturer or to the organisation and preparation of pedagogical processes, taking part in the administration tasks of a course, regularly attending and observing the course, preparing students for TDK (Scientific Student Research activities) or professional/study competitions or mentoring fellow doctoral students. Orientation credits for educational support may be awarded by the competent lecturer, doctoral advisor, sub-programme leader or faculty leader. It is also possible to obtain teaching credits outside the University of Pannonia, which must be approved in advance by the sub-programme leader on the basis of a written request.

- Publication orientation

Credits can be obtained by preparing publications beyond the criterion requirement. 8 additional fixed credits may be awarded for exceeding the publication criterion requirement in the training and research phase, if the doctoral student exceeds the publication criterion by 100%, i.e. publishes two papers (or has a letter of acceptance) instead of one before the complex examination takes place. The orientation credits for publishing in excess of the criteria will be awarded by the doctoral advisor.

*Completion of the research forum requirement – 16 credits (compulsory)*

The DSBM pays particular attention to ensuring that doctoral students, in the training and research phase, can obtain the 120 credits required for the complex examination as smoothly as possible, while also aiming to guide doctoral students in the preparation of the complex examination submission (research plan). In this spirit, the DSBM makes it compulsory to present and comment on the plans, methodological considerations and partial results of the doctoral thesis at a research forum (written submission and presentation) during the training and research phase. A fixed 16 credits can be obtained for successful participation in the research forum. The research forum must be held by 30<sup>th</sup> June at the end of the 2<sup>nd</sup> semester. The detailed regulation of the research forum is set out in Annex 4 of the OR.

*Completion of the publication criterion requirement – 0 credits (compulsory)*

Only doctoral students who have at least 1 single-authored or first-authored or at least second-authored article, published in a peer-reviewed journal, in Hungarian or English, or an official acceptance statement of their manuscript, may be admitted to the complex examination (an equivalent to this is a single-authored, first-authored or at least second-authored book, book chapter in Hungarian or English published by a reputable international publisher, or an official acceptance statement of the manuscript). In the first phase of the doctoral training, a peer-reviewed (refereed) journal is a journal listed in the Web of Sciences or Scopus or Scimago databases or a journal that is on the list published by any department or committee of the HAS (Hungarian Academy of Sciences) (recorded in the Hungarian Science Bibliography database).

Publishers referenced by the Web of Science database (Clarivate) are considered prestigious international publishers (<http://wokinfo.com/mbl/publishers/>).

*Complex examination – 0 credits (compulsory)*

The doctoral student is required to take a complex examination at the end of the 4<sup>th</sup> active semester. If he or she fails to take to pass it and the re-examination is not successful, he or she will be excluded from the training programme. A complex examination may be taken by a candidate who has acquired at least 120 credits during the four active semesters and has fulfilled the requirements of the training plan and the language requirements. The complex examination consists of two main parts: the first part assesses the theoretical-methodological preparedness of the doctoral candidate ('theoretical part'), while the second part gives an overview of the doctoral candidate's scientific progress ('dissertation part'). The theoretical part of the complex examination consists of a written and an oral module. In the written module, the doctoral student must submit an essay, demonstrating his or her research methodological competence in his or her own research topic, while the oral module means active participation in a related professional-scientific discourse with a specific research methodological focus in an examination situation. The oral module of the complex examination consists of the following two subjects:

- research methodology subjects
- sub-programme specific subjects (business, management, quantitative methods and econometrics)

In the dissertation part, the doctoral candidate presents his or her progress to date, his or her research agenda for the second phase of the doctoral programme, as well as the timetable for the preparation of the doctoral dissertation and the publication of the results.

The OR contains further information on the complex examination.

**Research and dissertation phase (semesters 5-8)**

In the four-semester *research and dissertation phase* following the successful completion of the complex examination, the doctoral student carries out active research, publishes his or her research results, prepares a draft dissertation for discussion at the workplace, teaches, performs educational support tasks and obtains a pre-degree certificate.

<i>Research and dissertation phase (semesters 5-8)</i>		
<b>Description</b>	<b>Type</b>	<b>Credits</b>
Research credits (research report) fixed 24 credits per semester	Compulsory	96
Orientation credits	Optional*	24
- Submission of a draft dissertation for workshop discussion (by the end of the 8 <sup>th</sup> semester)		
- Teaching if the student agrees to conduct courses registered at in NEPTUN (full course=100%, proportionally=max. 8 credits/course=3*8) or provide educational support (maximum 2 credits/course)		

- Publication (if the specified criterion requirements are exceeded), 3*8 fixed credits		
Criterion requirements (publication requirement, 0 credits)	Compulsory	0
Total (semesters 5-8)		120
Grand total (semesters 1-8)		240

\* In the research and dissertation phase, orientation credits from different orientation activities can be obtained in parallel or combined. If excess orientation credits are earned in the training and research phase, they can be credited (offset) in the research and dissertation phase in orientation activities with the same profile.

A total of 120 credits must be accumulated over the four semesters, including a total of 96 research credits and a total of 24 orientation credits. Orientation credits can be earned by submitting the draft dissertation by the end of the 8<sup>th</sup> active semester (the draft dissertation can also be submitted after the 8<sup>th</sup> active semester or after obtaining the pre-degree certificate, but in such a case, no credits are awarded), by performing teaching or educational support tasks or through publications above the criterion requirement.

#### *Completion of research requirements – 96 credits (compulsory)*

Research credits can be obtained at the beginning of each semester on the basis of the completion of a semester assignment plan agreed in advance with the doctoral advisor. They are fixed and, if accepted, are considered as completed regardless of the quality of performance. A total of 96 research credits can be earned in the research and dissertation phase (24 fixed credits per semester). The conditions for obtaining research credits are the same as those described for the training and research phase.

#### *Completion of orientation activities – 24 credits (optional)*

In the research and dissertation phase, 24 orientation credits must be obtained. This can be achieved by submitting the draft dissertation before the end of the 8<sup>th</sup> active semester, or by performing teaching and educational support tasks (a maximum of 8 orientation credits are awarded for conducting a semester course alone; if the doctoral student only conducts a certain part of the course, the credits are awarded on a pro rata basis, with a minimum of 2 credits obtainable per course; a fixed 2 credits per course are awarded for educational support tasks), or by publishing the research results beyond the criterion requirements. As a general rule, a doctoral student must complete the 24 credits required for the orientation activities by completing the dissertation draft orientation, the teaching orientation or the publication orientation requirements. The doctoral student may complete the three orientations in parallel; however no partial credits can be obtained for the submission of the draft dissertation. Partial credits may be awarded for teaching orientation and only a whole multiple of the 8 fixed credits (16 or 24 credits) may be obtained in publication orientation. If, during the completion of the orientation activity, an excess of credits is earned in the education and research phase, these may be recorded in Neptun, however, the excess credits cannot be used to replace unearned research credits.

- Draft dissertation orientation requirement

Draft dissertation orientation credits can be earned by submitting the draft dissertation by the end of the 8<sup>th</sup> active semester. The draft dissertation is considered submitted if it meets the requirements of the OR in terms of content and form and the doctoral advisor declares this in the attached one-page opinion paper.

- Teaching orientation

The conditions for obtaining teaching orientation credits are the same as those described in the training and research section.

- Publication orientation

Up to 3 times 8 extra orientation credits can be awarded for exceeding the publication criterion requirements in the research and dissertation phase, if the doctoral student exceeds the publication criterion requirements once, twice or three times, i.e. publishes two, three or four papers instead of one (or has a letter of acceptance), or the quality of the paper is as shown in the table below.

SJR (Scientific Journal Rankings) score of the journal	Orientation credits that can be earned for publications above the criterion requirement
Q3/Q4	8 credits
Q2	16 credits
Q1	24 credits

*Completion of the publication requirement for the award of the pre-degree certificate - 0 credits (compulsory)*

Only doctoral candidates who, in addition to meeting the minimum publication criteria for the complex examination, have at least 1 single-authored or first-authored or second-authored article, published in a peer-reviewed journal, in English, or an official acceptance statement of their manuscript, may be awarded a pre-degree certificate (an equivalent to this is a single-authored, first-authored or at least second-authored book, book chapter in English published by a reputable international publisher, or an official acceptance statement of the manuscript). For the second phase of the training, a peer-reviewed (refereed) journal is a journal listed in the Web of Sciences or Scopus or Scimago databases. Publishers referenced by the Web of Science database (Clarivate) are considered prestigious international publishers (<http://wokinfo.com/mbl/publishers/>).

### *Pre-degree certificate*

The pre-degree certificate is a document certifying the successful completion of doctoral studies (final certificate). It can be obtained by completing a minimum of 240 credits in structured training or a minimum of 120 credits in individual training, and by fully complying with the study requirements set out in the Training Plan and the OR. As a general rule, the pre-degree certificate is issued after the completion of the 8<sup>th</sup> active semester; however it may be issued



earlier if the doctoral student has obtained the 240 or 120 credits and complied with the requirements of the training plan earlier.

### **Workshop discussion (discussion of the draft dissertation)**

The workshop discussion can only be held after the complex examination has been taken. The successful completion of the workshop discussion is a prerequisite for the submission of the doctoral dissertation. If the submission of the draft dissertation for the workshop discussion takes place before the award of the pre-degree certificate, 24 credits may be obtained, if only afterwards, 0 credits are awarded. No credits are awarded for participation in the workshop discussion. For further information on the draft dissertation to be submitted for the workshop discussion and the workshop discussion itself, please refer to the OR.

### **Submission of the doctoral dissertation and its public defence**

The doctoral dissertation must be submitted within 3 academic years after the complex examination has been taken. This period can be extended only by the number of inactive semesters (maximum 2) in the research and dissertation phase. The 3 years available for the submission of the doctoral dissertation may be extended by up to one academic year in cases of exceptional circumstances, as specified in the doctoral regulations. For further information on the submission of the doctoral dissertation and the conduct of the public defence, please consult the OR.

**MODEL CURRICULUM OF THE DOCTORAL SCHOOL OF BUSINESS AND  
MANAGEMENT**

### Model curriculum of the DSBM as of 1<sup>st</sup> September 2023

Course title	Field of knowledge, subject area	Semester	Credit	Type	Course leader, lecturers
<i>Research methodology block</i>					
Levelling up Quantitative Research Methodology	Master's level knowledge in quantitative research methodology	1	0	C	Zsolt Kosztyán, <u>Attila Katona</u>
Modern Methods in Quantitative Research I (prerequisite: completion of the levelling course or the master course in the first semester)	Basic research methodology knowledge essential for doctoral research activities	2	8	C	<u>Zsolt Kosztyán</u> , Attila Katona
Qualitative Research Methodology I	Basic research methodology knowledge essential for doctoral research activities	2	8	C	<u>Zoltán Veres</u> , Katalin Formádi, László Józsa
Modern Methods in Quantitative Research II (prerequisite: completion of Quantitative Research Methodology I)	Advanced research methodology knowledge	3	8	CE_A*	<u>Zsolt Kosztyán</u> , Attila Katona
Qualitative Research Methods II	Advanced research methodology knowledge	3	8	CE_A**	<u>Zoltán Veres</u> , Katalin Formádi, Dávid Hargitai, László Józsa
<i>Research support block</i>					
Scientific writing and communication	Publishing strategy, types and genres of scientific publications, developing writing skills	3	8	C	<u>Mihály Görög</u>
Introduction to scientific communication	Facilitating orientation between different journal databases, searching, recording, science metrics, science communication, sociology of science, science management,	1	8	C	<u>Gábor Michalkó</u> , Nóra Obermayer,

	career planning				
<i>Sub-programme (Workshop) block</i>					
Sub-programme-oriented studies I	History of the sub-programme's subject area, recent scientific results, main research trends, debates, etc.	1	8	C	See below
Systematic literary research OR Empirical disciplinary research I	Quantitative methods and econometrics sub-programme			<u>Zsolt Kosztyán</u> , Attila Katona  <u>Tamás Molnár</u>	
History of business science and methodology	Business studies sub-programme			<u>Zoltán Veres</u> , Judit Sulyok, Erika Jáki	
Systematic literature research in the field of management	Management science sub-programme			<u>Tibor Csizmadia</u>	
Sub-programme-oriented studies II	Workshop-specific knowledge to support preparation for the Research Forum and the complex examination	4	8	C	See below
Quantitative analysis of economic networks OR Competition and market theory	Quantitative methods and econometrics sub-programme			<u>Zsolt Kosztyán</u> , Attila Katona  <u>Miklós Károly Kiss</u>	
Sub-programme-oriented studies II	Business studies sub-programme			<u>Zoltán Veres</u> , Judit Sulyok	
Sub-programme-oriented studies II	Management science sub-programme				
<i>Broadening horizons, academic career block#</i>					
# Technically, it can be announced and started in any semester (students can complete it in any semester), however, it can be started only if at least 3 doctoral students are enrolled					
Creating value in science	Philosophy of science, science ethics, logics	4	8	O	Ildikó Virág Neumanné, Boglárka Konka
Knowledge management		4	8	O	Andrea Bencsik

Operational management		4	8	O	Zoltán Kovács
Sustainability		4	8	O	Gyula Zilahy
Economic theory		4	8	O	Szabolcs Szikszai, Miklós Károly Kiss
Innovation policy		4	8	O	Zoltán Birkner, István Szabó
Empirical disciplinary research		4	8	O	Tamás Molnár
Economic theory		4	8	O	
International management		4	8	O	
Courses from other doctoral schools of the University of Pannonia, doctoral courses from other universities, any CE or sub-programme- oriented course		4	8	O	Applications must be submitted for credits to be awarded for external courses

C=Compulsory; CE=Compulsory with Elective modules; O=Optional

\*Compulsory for students in the Quantitative Methods and Econometrics sub-programme; \*\* Compulsory for students in the Business Studies sub-programme