

EXCERPT

Study requirements at the Doctoral School of Physics, PTE TTK

The study requirements and administrative procedures are set out in the Organizational and Operational Regulations of the Doctoral School of Physics at the University of Pécs, in accordance with university regulations.

A brief summary is provided below:

- 1) The doctoral programme lasts 8 semesters.
- 2) Doctoral training is carried out in two stages:
 - i) The first is a "training and research phase" lasting 4 semesters.
 - ii) The second is a "research and dissertation phase" also lasting 4 semesters.
- 3) The total number of credits that must be earned during the doctoral programme is $120+120=240$.
- 4) Credits can be earned in the doctoral programme through various activities:
 - i) participation in training ("study credits"),
 - ii) teaching,
 - iii) research work,
 - iv) reviewing professional literature,
 - v) publication of research results,
 - vi) written reports summarizing the student's activities.
- 5) Compulsory courses in doctoral training by curricula:

Quantum Optics and Quantum Informatics curriculum programme director: Péter Ádám	Laser physics, nonlinear optics and applied physics curriculum programme director: Gábor Almási	Scholar-Teacher Training Programme curriculum programme director: László Pálfalvi
Scientific communication (Zoltán Tibai)		
Quantum Optics I. (Péter Ádám)	Modern Optics (János Erostyák)	Teaching Physics I. (Classical Physics) (László Pálfalvi)
Quantum Informatics I. (Péter Ádám)	Laser Physics (János Hebling)	Teaching Physics II. (Modern Physics) (László Pálfalvi)

Students enrolled in the **Quantum Optics and Quantum Informatics, Laser Physics, Nonlinear Optics, and Applied Physics** programmes may choose from the subjects listed in sections 3.2 and 3.3 to fulfil their compulsory credit requirements. Students enrolled in the **Scholar-Teacher Training** programme may choose from the subjects listed in Chapter 3.4 to fulfil their compulsory credit requirements. A maximum of 30% of the credits may be earned from subjects listed in Chapters 3.2 and 3.3.

- 6) The subjects of the comprehensive exam:
 - For the **Quantum Optics and Quantum Informatics** programme: the main and minor subjects are selected from the subjects listed in Chapter 3.2 based on the consensus of the supervisor and the head of the Doctoral School.

- For the **Laser Physics, Nonlinear Optics and Applied Physics** programme: the main and minor subjects are selected from the subjects listed in Chapter 3.3 based on the consensus of the supervisor and the head of the Doctoral School.
- For the **Scholar-Teacher Training** programme: the main and minor subjects are selected from among the subjects listed in Chapter 3.4 based on the consensus of the supervisor and the head of the Doctoral School.

7) Requirements for credits that can be earned through each type of activity:

i) In semesters 1-4:

Total credits to be earned: 120

	Number of credits		Comments	Method of certification
	Minimum	Maximum		
Study	30	48	For courses completed based on the supervisor's recommendation, one class per week in one semester is worth 2 credits. Credits may also be earned by taking courses in other programmes or at other universities, based on the supervisor's recommendation and with the programme director's approval.	Completion of the course is certified by the course director.
Teaching	8	32	One class per week in one semester is worth 2 credits.	The teaching activity is certified by the head of teaching at the Institute of Physics.
Review of professional literature	0	24	The literature to be reviewed is designated by the supervisor. 0, 2, 4, or 6 credits may be awarded per semester.	Certified by the supervisor.
Research	6	32	0, 2, 4, 6, or 8 credits per semester.	Confirmed by the supervisor.
Final report at the end of the first two semesters	3	12	For the presentation or written report summarizing the doctoral student's activities to date in no more than 15 pages. 3, 6, 9, or 12 credits may be awarded based on the supervisor's recommendation.	Supervisor certifies.

- ii) In semesters 5-8:
Total credits to be earned: 120

	Credit number		Comments	Method of verification
	Minimum	Maximum		
Education	0	24	One class per week in one semester is worth 2 credits	The teaching activity is certified by the Director of Education at the Institute of Physics.
Review of professional literature	0	12	The literature to be reviewed is designated by the supervisor. 0, 2, 4, or 6 credits may be awarded per semester.	Certified by the supervisor.
Research	0	16	0, 2, 4, 6, or 8 credits per semester.	Certified by the supervisor.
Publication	72	96	A maximum of 30 credits can be awarded for publications in international peer-reviewed journals, a maximum of 20 credits for presentations at international conferences, a maximum of 15 credits for posters, and a maximum of 10 credits for other publications, which can be validated by the student in any semester following the acceptance of the publication.	Completion is certified by the director of the Doctoral School each semester.