

**University of Pécs**  
**Doctoral School of Chemistry**

**2025**

**TRAINING PLAN**

The Doctoral School of Chemistry conducts PhD training in chemistry and its related fields. The Doctoral School offers PhD programs to students holding university degrees in natural sciences, chemical engineering, bioengineering, environmental engineering, materials engineering, food engineering, pharmacy, or medicine, enabling them to specialize later in applied or experimental chemistry and related disciplines. Within its research areas, the Doctoral School provides opportunities to study the relationships between chemical and biochemical structure and function, as well as to explore substances of chemical, biological, and environmental importance. The research topics involve chemical syntheses, analysis of the structure and function of macromolecules, questions in coordination chemistry, investigation of optically active materials, development of analytical methods, application of biosensors, chemometric topics, and theoretical chemical issues.

There are opportunities to deepen both theoretical and practical knowledge in instrumental and experimental analytical techniques, to learn and further develop the theoretical foundations of various evaluation methods, and to master numerous chemical analysis methods. Understanding the relationships within selective chemical systems is essential for studying metabolism in living organisms, as well as various areas of biochemistry, biophysics, immunology, and clinical chemistry, making the program fundamental for training professionals in these fields. During the development of their theoretical and practical topics, candidates participate in the theoretical and practical advancement of instrumental techniques and acquire evaluation and analytical methods.

A distinctive feature of the doctoral training at the University of Pécs is that students from all doctoral schools of the University have access to courses and instructors from professionally related doctoral schools and Faculties, providing a broad foundation for high-level, interdisciplinary training.

Applicants who meet the admission requirements and pass the entrance examination may be enrolled in the PhD program.

## **CONTENT REQUIREMENTS OF THE TRAINING**

The University of Pécs awards the doctoral (PhD) degree to individuals who demonstrate that they possess theoretical and practical knowledge enabling them to carry out high-level, independent scientific work, and who have published new scientific results on this basis. The Doctoral School requires PhD students to complete courses worth at least 12 credits, selected according to the student's previous education and research interests. In addition to courses, credit points may also be earned—based on examinations—through active participation in other high-quality educational and scientific events. Participation in research work and teaching is recognized with credit points by the competent supervisor.

Students of the Doctoral School of Chemistry must complete chemistry, biochemistry, and (bio)physics-related courses corresponding to their research topics. Based on their research work, they must publish at least three papers in international journals or books, with at least one publication as first author.

Students primarily complete courses offered at the Faculty of Sciences and the Medical School of the University of Pécs. Courses announced by instructors of the Doctoral School of Chemistry are also open to PhD students from other Doctoral Schools.

During the training, students have the opportunity to participate in foreign study programs or research visits, supported by the Doctoral School's extensive international network.

Doctoral students must enroll in courses according to the credit requirements specified in the regulations. In addition to academic credits, they must also complete an appropriate number of research credits. Once these are completed and verified, the student may take the PhD comprehensive exam. Afterwards, they prepare their thesis, which they defend in a public debate. Supervisors ensure that students have sufficient time to participate in teaching activities and assist them in selecting the PhD courses most suitable for their research topics.