UNIVERSITATEA BABEŞ-BOLYAI
BABEŞ-BOLYAI TUDOMÁNYEGYETEM
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Regulation
of the Doctoral School of Chemical Engineering within the Faculty of Chemistry and Chemical Engineering, Babeș-Bolyai University of Cluj-Napoca

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1. Preamble

Art. 1. This Regulation is based on the following documents, as well as on regulations specific to the field of Chemical Engineering:

(1) National Education Law No. 1/2011; Law No. 288/2004 on the organization of university studies; with the amendments of Law No. 49/2013; Government Resolution No. 681/201 on the Code of doctoral university studies; Order of the Ministry of National Education and Research No. 4621/2020 of 23 June 2020 for the approval of the Regulation on the organization and functioning of the National Council for the Accreditation of University Degrees, Diplomas and Certificates (CNATDCU); Government Resolution No. 5110/17.10.2018 on the approval of the minimum national standards for the awarding of the title of doctor; Order No. 3131/30.01.2018 on the inclusion in the curriculums, for all university study programmes organised in higher education institutions of the national education system, of courses on ethics and academic integrity;

(2) The Regulation for the organisation and conduct of doctoral studies at Babeș-Bolyai University (BBU), approved by BBU Senate Decision No. 483/13.01.2020 (https://senat.ubbcluj.ro/wp-content/uploads/2021/04/Anexa-la-HS-nr.-46-Regulament-UBB-de-organizare-si-desfasurare-studii-de-doctorat-1.pdf) with subsequent amendments and additions brought by BBU Senate Decision No.46/19.04.2021 (https://senat.ubbcluj.ro/wp-content/uploads/2021/04/HS-nr.-46-privind-aprobare-modificare-la-Regulamentul-UBB-de-organizare-%C8%99i-desf%C4%83%C8%99urare-a-studiilor-de-doctorat.pdf) and Appendix 3 to the Regulation for the organisation and conduct of doctoral studies at Babe Bolyai University regarding the Procedure for the public online defence of the doctoral thesis (https://senat.ubbcluj.ro/wp-content/uploads/2021/04/Anexa-la-HS-nr.-46-Anexa-3-la-Regulamentul-UBB-de-organizare-%C8%99i-desf%C4%83%C8%99urare-a-studiilor-de-doctorat.pdf).

2. Doctoral studies in the field of Chemical Engineering

Art. 2. (1) The doctoral programme in Chemical Engineering ensures the formation of professional competences (advanced knowledge and methodology of scientific research in Chemical Engineering; research methods and techniques; management of research projects in Chemical Engineering; approaches and strategies in solving new problems in research; documentation, scientific authorship and publication; awareness of the principles of ethics and academic integrity) and transferable competences (written and oral communication skills in mother tongue and foreign languages; use of information and communication technology – ICT; interpersonal and teamwork skills; human and financial resources management; leadership and entrepreneurial skills; time and career management, including job search techniques; use and exploitation of intellectual property rights) appropriate for the higher education of doctoral students and for research activities in the field of Chemical Engineering.

(2) The doctoral program in Chemical Engineering leads to a scientific doctorate.

(3) The title awarded after doctoral studies in Chemical Engineering is that of Doctor of Chemical Engineering.

Art. 3. The doctoral programme in Chemical Engineering is organised in the form of a full-time and part-time degree.

3. Structure and functioning of the Doctoral School of Chemical Engineering

Art. 4. (1) The doctoral degree programme in the field of Chemical Engineering is organised by the Doctoral School of Chemical Engineering (hereinafter, the DSCE).

(2) The DSCE carries out its activity as an administrative unit subordinated to the Faculty of Chemistry and Chemical Engineering of Babes-Bolyai University (BBU). The DSCE is equal in rank with a department within the Faculty of Chemistry and Chemical Engineering.

(3) The content of the doctoral degree programme offered by the DSCE represents an integral part of the doctoral degree programme organised within the Faculty of Chemistry and Chemical Engineering

(4) The DSCE activity is supervised and coordinated by the Council of the Doctoral School of Chemical Engineering (DSCE Council) and by the Council of Doctoral Studies (CSUD) of the BBU's Institute of Doctoral Studies (IDS).

Art. 5. The DSCE is made up of: a) at least three (3) university professors, tenured doctoral supervisors in the field of Chemical Engineering, with an employment contract with BBU; b) affiliated university teaching staff and affiliated researchers, involved in the development of teaching/research activities stipulated in the doctoral degree programme of the DSCE; c) enrolled doctoral students; d) administrative staff who, through specific contributions, ensure the technical and administrative conditions for the uninterrupted deployment of the didactic, research and administrative activities of the DSCE.

Art. 6. (1) The DSCE within the Faculty of Chemistry and Chemical Engineering is run by the Council of the Doctoral School of Chemical Engineering.
(2) The DSCE Council is made up of five (5) members, in accordance with the provisions of the DSCE, namely:
a) two (2) doctoral supervisors tenured in the DSCE, upon proposal of the doctoral supervisors who are members of the DSCE;
b) one (1) doctoral student enrolled in the DSCE, upon proposal of the doctoral students who are members of the DSCE;
c) one (1) member from outside the DSCE, selected from among the scientific personalities whose scientific activity in the field of Chemical Engineering is internationally acknowledged;
d) the Director of the DSCE, who is an *ex officio* member of the DSCE Council.

Art. 7. (1) The main objective of the DSCE is to ensure the improvement and extension of the training in Chemical Engineering, attested by the diploma obtained at the end of the master's degree, through teaching and seminar activities, assessment, scientific research, and valorisation of the scientific research, in order to create a generation of scientists according to the specificities of the scientific field of Chemical Engineering.
(2) In the field of research in Chemical Engineering, the DSCE aims at: the promotion of

broad thematic research and of efficient methodological undertakings, with particular emphasis on Chemical Engineering, both in the field of fundamental research and in the field of applied Chemical Engineering, as well as in interdisciplinary and scientific research;
(3) These principles shall be implemented through the development of various collaboration forms, on the basis of memoranda of understanding concluded with other BBU doctoral schools, as well as from other universities, as well as with national and international research units.
(4) The DSCE may also be organised in partnerships or consortia with other higher education institutions or national or international research units.

Art. 8. The DSCE, in collaboration with the Dean and the Administrator of the Faculty of Chemistry and Chemical Engineering, shall ensure the appropriate and efficient use of the funds allocated to the advanced study programme and of the funds allocated to doctoral students for research programmes, as well as those form extra-budgetary resources.

4. Doctoral supervisors of the Doctoral School of Chemical Engineering

Art. 9. To become a doctoral supervisor at BBU and to become a member of the DSCE, the applicant must:

a) fulfil the scientific requirements established by the CNATDCU for the award of the title of University Professor/Scientific Researcher (SR), approved by Ministerial Order (according to Art. 300 para. 5 of the National Education Law No. 1/2011 and its subsequent amendments and additions, specific to the field of Chemical Engineering from Appendix No. 8 to the Ministerial Order No. 6129/2016);
b) to maintain at least the minimum standards stipulated by the BBU Senate to occupy the position of University Professor, for the field of Chemical Engineering;
c) to defend the *habilitation* thesis, in accordance with the BBU Regulation on the public defence of *habilitation* theses and attraction of doctoral supervisors, as well as the procedure for the online public defence of the *habilitation* thesis, in accordance with the Decision of the University Senate No. 5940/16.04.2020, and to obtain the *habilitation* certificate by Ministerial Order.

5. Admission to doctoral studies at the Doctoral School of Chemical Engineering

Art. 10. Admission to doctoral studies is carried out according to the Methodology for admission to doctoral studies at BBU (https://doctorat.ubbcluj.ro/wp-content/uploads/2021/04/Anexa-1-la-HS-nr.-47-privind-aprobarea-calendarului-%C8%99i-actualiz%C4%83rii-Metodologiei-de-admitere-la-studiile-de-doctorat-2021.pdf).

Art. 11. (1) In the field of Chemical Engineering, the admission to doctoral studies consists of two exams:

a) a specialist written exam, based on a topic announced by the doctoral supervisor, with the approval of the DSCE council, at least two months before the date of the admission examination.

b) an interview (oral exam) during which the candidate's scientific interests, research skills and the proposed topic for the doctoral thesis are analysed.

(2) The exams are taken before an admission committee made up of the doctoral supervisor, who made the place of available for admission, and at least two other BBU specialists, who are at least a university associate professor or a scientific researcher grade II. The chair of the admission committee is the doctoral supervisor. The admission committees are appointed by the DSCE Council and are approved by the Director of the CSUD.

(3) For each specialist exam, the committee awards a mark between 1 and 10, the average of these marks representing the candidate's score during the admission process. Those candidates who have obtained at least 8 as an average mark will be admitted, in descending order of the average marks obtained and within the limit of the places available.

(4) After the grading of the exams (based on the established evaluation criteria), the admission committee nominates, on the basis of the established selection criteria, the candidate who shall occupy the place of doctoral student. This candidate can only be enrolled in the place in question after obtaining the approval of the DSCE Council.

6. The training programme based on advanced academic studies and the scientific research programme at the Doctoral School of Chemical Engineering

Art. 12. (1) The training programme based on advanced university studies in Chemical Engineering ensures the training of the doctoral student through didactic and scientific activities (lectures, seminars, debates, consultations) and is carried out in the first year of the first year of doctorate studies. It lasts 12 weeks and cannot be extended.

(2) The training programme based on advanced university studies in Chemical Engineering is carried out through the participation of the doctoral student in the activities of at least three disciplines of doctoral studies.

(3) The disciplines to be pursued by a doctoral student within the framework of the programme based on advanced university studies in Chemical Engineering may be chosen from the disciplines offered by the DSCE or by another BBU doctoral school. In the case of a joint-supervision doctorate, with a doctoral supervisor from outside BBU, the doctoral student can choose, in accordance with the agreement between BBU and the partner institution, the discipline offered by the doctoral schools of the partner institution.

Art. 13. (1) The subjects offered by the DSCE are included in the Curriculum elaborated at the beginning of the academic year by the DSCE Council and approved by the Council of the Faculty of Chemistry and Chemical Engineering and the CSUD. The Curriculum of the DSCE is signed by the Director of the DSCE, the Dean of the Faculty of Chemistry and Chemical Engineering, the Director of the CSUD.

(2) For each discipline included in the Curriculum of the DSCE there are three physical hours per week and 20 credits.

(3) The thematic content of a discipline is established by the course holder. In the seminars doctoral students may present the results of their own research.

(4) Seminar activities and applied/research work may be carried out by doctoral supervisors, but also by university teaching staff or researchers who are not qualified to supervise doctoral students, but have at least the position of university associate professor or scientific researcher grade II.

Art. 14. (1) In order to ensure a coherent scientific path for the doctoral student, three (3) oral presentations in front of the doctoral supervisor and the guidance committee are planned in the individual scientific research program, established in the individual doctoral study plan of the doctoral student;

a) in the first year of doctoral studies, the doctoral student presents the scientific research project for the doctoral thesis;
b) in the second and third years of doctoral studies, the doctoral student submits a research report on his/her progress in scientific research and the results of this activity.

(2) The effective date of each presentation referred to in para. (1) shall be determined by the doctoral supervisor upon receipt of a written request from the doctoral student. The interval between two consecutive exposures shall not exceed 12 months. The doctoral supervisor cannot be absent from any presentation and at least two members of the supervisory committee must be present at each presentation.

(3) After each presentation, minutes shall be drawn up recording the main observations and recommendations made by the doctoral supervisor and the members of the guidance committee. A copy of the minutes, signed by the doctoral supervisor and the members of the guidance committee who were present, is then submitted to the IDS secretariat.

(4) The organization of the online oral presentations within the DSCE shall be carried out according to the BBU IDS regulations in compliance with the provisions of the Regulations for the organization and conduct of doctoral studies at Babeș-Bolyai University – Procedure for the public defence of oral presentations.

7. Elaboration and public defence of the doctoral thesis at the Doctoral School of Chemical Engineering

Art. 15. The elaboration and public defence of the doctoral thesis at the DSCE shall be made in accordance with the Regulation for the organization and conduct of doctoral studies at Babeș-Bolyai University, approved by BBU Senate Decision No. 483/13.10.2020 (Articles 48-60), with subsequent alterations and additions (https://senat.ubbcluj.ro/wp-content/uploads/2021/04/Anexa-la-HS-nr.-46-Regulament-UBB-de-organizare-si-

desfasurare-studii-de-doctorat.pdf).

Art. 16. The doctoral thesis in the field of Chemical Engineering must fulfil the requirements set by the Specialty Commission within the CNATDCU, as well as those mentioned in the Guidelines for writing a doctoral thesis. Adapted to the particularities of the field of Chemical Engineering, these guidelines include elements such as: the formal structure of the thesis; elements of content; the percentage of pages for the theoretical part, for the part of original contributions, and for the conclusions; bibliographic references, as well as formal requirements for editing and format.

8. Doctoral students of the Doctoral School of Chemical Engineering

Art. 17. The provisions related to the rights and obligations of the doctoral students of the doctoral school of chemical engineering are those specified in the Regulation for the organization and conduct of doctoral studies at BBU approved by BBU Senate Decision No. 483/13.10.2020 (Articles 61-66) with subsequent amendments and additions (https://senat.ubbcluj.ro/wp-content/uploads/2021/04/Anexa-la-HS-nr.-46-Regulament-UBB-de-organizare-si-desfasurare-studii-de-doctorat.pdf).

9. Principles of ethics and scientific, professional, and academic deontology

Art. 18. The principles of scientific, professional and academic ethics and deontology applied to the doctoral school of chemical engineering are those specified in the Regulation for the organization and conduct of doctoral studies at BBU approved by BBU Senate Decision No. 483/13.10.2020 (Art. 35) with subsequent amendments and additions (https://senat.ubbcluj.ro/wp-content/uploads/2021/04/Anexa-la-HS-nr.-46-Regulament-UBB-de-organizare-si-desfasurare-studii-de-doctorat.pdf).

10. Quality assurance of the doctoral degree programme in Chemical Engineering

Art. 19. The quality assurance of the doctoral degree programme in Chemical Engineering is carried out according to the Regulation for the organization and conduct of doctoral studies at BBU approved by BBU Senate Decision No. 483/13.10.2020 (Articles 67-73) with subsequent amendments and additions (https://senat.ubbcluj.ro/wp-content/uploads/2021/04/Anexa-la-HS-nr.-46-Regulament-UBB-de-organizare-si-desfasurare-studii-de-doctorat.pdf).

11. Transitional and final Provisions

Art. 20. The transitional and final provisions are those mentioned in the Regulation for the organization and conduct of doctoral studies at BBU approved by BBU Senate Decision No. 483/13.10.2020 (Articles 74-78) with subsequent amendments and additions (https://senat.ubbcluj.ro/wp-content/uploads/2021/04/Anexa-la-HS-nr.-46-Regulament-UBB-de-organizare-si-desfasurare-studii-de-doctorat.pdf).