II.3.COURSES

II.3.1. Structure and organisation of doctoral study

II.3.2. List of basis and optional courses

Basis courses:

1. Engineering of Particulate Systems
2. Chemical Reactor Analysis
3. Catalytic Reaction Engineering
4. Advances Course in Biochemical Engineering
5. Chemical Engineering Thermodynamics
6. Separation Processes
7. An Overview of Mathematics for Engineering
8. Mathematical Modelling
9. Transport Phenomena

Optional courses:

1. Treatment Processes of Waste Substances
2. Industrial Energy
3. Synthesis and Design Of Processes
4. Monolithic and Membrane Reactors
5. Catalysts Deactivation
6. Polymerization Engineering
7. Kinetic Models
8. Mechanical Aspects of Process Equipment
9. Advance Course in Bioreaction Engineering
10. Environmental Engineering and Management
11. Cement Materials
12. Degradation and Recycling of Plastic Waste
13. Dyes and Environmental Protection
14. Polymer Processing and Structure/Property Interrelation
15. The Stability of Polymeric Material
16. Advanced Petroleum Refinery Processes
17. Modification of Polymer Materials
18. Engineering of Boundary Layers
19. Adhesive Processes and Materials
20. Metal Corrosion Inhibitors
21. Applied Transport Phenomena
22. High-Pressure Process Technologies
23. Dynamic Modelling of Deep Bed Filtration
24. Partial Differential Equation
25. Biocatalysts and Biotransformations

Study of Chemical Engineering last for three years with 180ECTS points.
Basic courses have 20 lecture hours with 12 ECTS while optional courses have 12 lecture hours with 8 ECTS points. Dissertation has 120 ECTS points.