

| Title of Course | Chemical Industry Equipment | | |
|-----------------------------------|--|--------------------|---------------------|
| Semester | Autumn/Spring | | |
| Teaching Hours per Course: | Total | - Lectures: | - Tutorials: |
| | | 30 | 30 |
| ECTS Credits | 3 | | |
| The content of education | | | |
| Aims of Course | <p>This course focuses on chemical industry equipment. The student will be introduced to a wide range of the equipment for different processing operations such as material storage and handling equipment, heat and mass transfer equipment, filters, dryers, chemical reactors and bioreactors, boilers and furnaces, refrigerating systems. Students will learn to use appropriate terminology to describe components of chemical process equipment and basic functions of chemical process equipment as well as functions of safety devices of process plants.</p> | | |
| Program | <p>L1. Chemical processing equipment classification; L2. Solids and fluids storage equipment; L3. Heat-exchange equipment; L4. Distillation and rectification equipment; L5. Absorbers; L6. Adsorbers; L7. Extractors; L8. Evaporators and crystallizers; L9. Chemical reactors and bioreactors; L10. Drying equipment; L11. Filters and dust separators; L12. Industrial boilers and furnaces; L13. Refrigerating systems; L14. Piping and fittings; L15. Safety devices of process plants;</p> | | |
| Conditions of completion | <p>Written test</p> <p>Pass mark: 50%</p> <p>Marks:</p> <p>50-60% 3</p> <p>61-70% 3,5</p> <p>71-80% 4</p> <p>81-90% 4,5</p> <p>91-100% 5</p> | | |
| Teacher | Robert Grabarczyk, Dr. | | |