WARSAW UNIVERSITY OF TECHNOLOGY
FACULTY OF CHEMICAL AND PROCESS ENGINEERING
WARYŃSKIEGO 1, 00-645 WARSAW

PROGRAM AND OBJECTIVES OF STUDENT INTERNSHIP AT THE FACULTY OF CHEMICAL AND PROCESS ENGINEERING

Minimal duration of the Internship:

- For first-degree students, who started studies in 2012 or later – 4 weeks,
- For second-degree students – internship is not an obligatory part of the curriculum

General information

The Internship, as an element of vocational training, is an integral part of academic process during first-degree studies.
It takes place in industrial units that meet the chemical and process engineering curriculum profile, during academic brake.
It is advised to complete the Internship after the second or third year of studies.

Effects of completing the Student Internship

The aim of the Internship is to familiarize the student with:

- the aspects of project management and development,
- industrial processes in production plants,
- waste and raw material management,
- organization and management systems and economical aspects in industrial environment,
- measurement and monitoring equipment as well as control principles,
- specific production processes and scope of responsibilities on selected positions,
- operation of individual services,
- OHS issues.

Faculty of Chemical and Process Engineering of Warsaw University of Technology educates students in the field of chemical and process engineering:

- In first-degree studies (BSc) without specializations,
- In second-degree studies (MSc) with specializations in:
  1. Industrial processes engineering
  2. Dispersed systems engineering
  3. Bioengineering
  4. Nanostructure process engineering

Curriculum

Students of first-degree studies in the field of chemical and process engineering are educated in the range of subjects that may be divided into three main groups:

I. Basic subjects: Mathematics, Physics, Chemistry: inorganic, organic, analytical, physical, Information technology, Foreign languages, HES (Humanistic, economic and social subjects);

II. Technical subjects: Engineering graphic (AutoCAD), Fundamentals of fluid mechanics, Fundamentals of engineering calculations, Computer science, Automatics, Electrical engineering and electronics, Rules for industrial technologies design;

III. Core subjects: Process thermodynamics, Heat transfer, Fundamentals of environmental protection, Process kinetics, Fundamental processes and process equipment, Separation processes, Chemical reactor engineering, Introduction to biotechnology, Industrial process safety.

Graduate profile

First-degree studies graduate has obtained general engineering knowledge in the field of technical sciences and mathematics and natural sciences, as well as the ability to apply this knowledge in practice. The knowledge in particular concerns processes and unit operations applying to physical and chemical matter processing, their mechanisms and mathematical description methods. The graduate is prepared to work in various branches of processing industry, in particular – chemical, pharmaceutical, food processing and beauty industry. He or she also is familiar with the fundamentals of control and safe conduct of industrial processes as well as principles of processes and equipment design. The graduate is able to plan and conduct experimental research, use advanced measurement and monitoring equipment and accurately interpret the results of survey. He or she is prepared for cooperation with specialists in the field of chemical and process engineering using state-of-the-art means of communication and presentation as well as specialized language, and works effectively in a multidisciplinary team. The graduate understands the principles of professional responsibility and the necessity to comply with ethical and legal norms. He or she is prepared to work in state administration and to conduct his or her own business activity.

Second-degree studies graduate has obtained knowledge concerning theory and principles of conducting processes and unit operations applying to physical and chemical matter processing. The graduate's education enables him or her to take up independent work in terms of conducting and controlling processes and operations in processing industry, in particular – chemical, pharmaceutical, food processing and beauty industry as well as metalwork, power, engineering and electronic industry. He or she is familiar with principles of industrial automation systems and control systems. The graduate's qualifications enable creative work in the area of development, modernization, optimization and use of new technologies in processing industry. He or she is competent to continue technical education at Doctoral schools and postgraduate studies.

Final notes

The detailed time schedule and the scope of student internship is determined by the person responsible for the intern. It is advised, that the intern have the opportunity to work as an assistant to shift manager. It is also essential that the student takes part in meetings and conferences concerning the functioning of the production plant in a range to be decided by the intern's guide in consultation with the site manager.