

Kemijski tehnik/kemijska tehnica

Selected qualifications

Name of qualification	Kemijski tehnik/kemijska tehnica
Translated title (no legal status)	Chemical technician
Type of qualification	Srednja strokovna izobrazba
Category of qualification	Izobrazba
Type of education	Upper secondary technical education
Duration	4 years
Credits	240 credits
Admission requirements	<ul style="list-style-type: none">• Elementary school education or• lower vocational education or equivalent education under previous regulations.
ISCED field	Field Tehnika, proizvodne tehnologije in gradbeništvo
ISCED subfield	subfield kemijsko inženirstvo in procesi

Learning outcomes

Certificate holders will be able to:

- carry out procedures of sampling raw materials, packaging and products;
- carry out routine analytical tests in the field of traditional qualitative and quantitative analytical chemistry;
- carry out routine analytical tests using a range of instrumental techniques from analytical chemistry;
- carry out a range of chemical syntheses on a laboratory scale;
- carry out and supervise basic mechanical operations;
- carry out and supervise basic separation processes;
- use suitable measurement and control procedures and instruments;
- implement requirements and regulations to ensure safety at work and protection of the environment in industry and in chemical laboratories;

(elective)

Analytical chemistry:

- implement the necessary procedures of quality assurance systems in the process of carrying out analytical testing;
- autonomously apply basic chemical and physical analytical methods;

Polymer materials and technologies:

- apply methods of testing and characterisation of polymers;
- demonstrate mastery of the basics of polymer chemistry and classify polymers according to various criteria;
- demonstrate knowledge of the chemical, physical and processing properties of polymers;
- demonstrate mastery of polymer processing technologies and familiarity with polymer processing machines;

Chemical technological processes:

- carry out basic operations in chemical process engineering;
- carry out electroplating operations;

Papermaking technology:

- demonstrate knowledge of the properties of paper, raw materials in paper production, preparation of materials, papermaking machines, paper coating, treatment and processing of paper in the paper industry;

Plant and process management in industry:

- use measurers of physical quantities in the chemical and paper industries.

Certificate holders have built on their key vocational knowledge and abilities with key general knowledge in line with national standards.

Assessment and completion

Students' vocational abilities and skills and the fulfilment of conditions to obtain credits in accordance with the relevant education programme are established through verification and assessment. Assessment of students also takes into account non-formally acquired knowledge, which must be adequately demonstrated. Students are assessed using scores from 5 (excellent) to 1 (inadequate).

Progression

Students may progress to the next year if at the end of the academic year they pass all general education subjects and relevant vocational modules set out in the school's operational curriculum, and have completed all extracurricular activities and practical on-the-job training, or progress on the basis of a programme faculty decision.

Transitions

Matura/vocational course, higher vocational education (SQF level 6), professional higher education (SQF level 7) and academic higher education (SQF level 7)

Condition for obtaining certificate

Students must successfully (i.e. with passing grades) complete general education subjects, compulsory and elective vocational modules, and the open part of the curriculum. They must also complete extracurricular activities and on-the-job training and pass the vocational matura examination.

A vocational matura comprises a compulsory section (written and oral examination in Slovene, written and oral examination in chemistry) and an elective section (written and oral foreign language or mathematics examination, and a product/service and an oral presentation).

Awarding body

Vocational and technical secondary schools and adult education institutions.

URL

<https://paka3.mss.edus.si/registriweb/ProgramPodatki.aspx?ProgramID=6218>
