# Specific features and conditions of education of pupils with special educational needs

The requirements for the education of pupils with special educational needs are set out in **State** educational programme for vocational education and training:

STATE EDUCATIONAL PROGRAMME FOR VOCATIONAL EDUCATION AND TRAINING Group of study and teaching disciplines 28 TECHNICAL AND APPLIED CHEMISTRY. Approved by the Ministry of Education, Science, Research and Sport of the Slovak Republic on 15 January 2013 under number 2013-762/1878:19-925 with effect from 1 September 2013 starting with the first year.

(ŠTÁTNY VZDELÁVACCÍ PROGRAM pre odborné vzdelávanie a prípravu Skupina študijných a učebných odborov 28 TECHNICKÁ A APLIKOVANÁ CHÉMIA. Schválilo Ministerstvo školstva, vedy, výskumu a športu Slovenskej republiky dňa 15. januára 2013 pod číslom 2013-762/1878:19-925 s účinnosťou od 1. septembra 2013 začínajúc prvým ročníkom.)

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Website: https://siov.sk/wp-content/uploads/2019/02/SVP\_28%20Technicka\_a\_aplikovana\_chemia.pdf

# 28 TECHNICAL AND APPLIED CHEMISTRY - full secondary vocational education

- biotechnology and pharmacology
- environmental protection and creation technology
- chemical informatics
- control analytical methods
- chemical production
- rubber and plastics production operator
- chemist operator
- chemistry and environment
- pharmaceutical production operator
- chemical and pharmaceutical industry

Graduates in the fields of study 28 Technical and Applied Chemistry are highly qualified workers, able to independently carry out professional activities in various areas of the chemical and pharmaceutical industry (including rubber production, fibre processing, rubber and plastics production, paper production and processing) and in the field of environmental protection and creation. They are employed as middle technical and economic workers in the field of control methods, technical production management, industry or in highly skilled blue-collar occupations in these industries.

Graduates of the field work mostly in the conditions of production halls, difficult working conditions (noise, dirt), increased demands on the physical prerequisites and health of employees, strict compliance with OSH regulations, increased risk at work, also the operation of machinery and equipment (increased demands on hearing and eyesight, unacceptable seizure disorders), increased demands on manual dexterity, technical prerequisites, understanding of mechanical relationships, on spatial and spatial imagination.

The general medical practitioner for children and adolescents assesses the health of applicants and their suitability for study.

#### Physical disability

For most chemical occupations, applicants are required to be in good health with unimpaired mobility, good sensory organs are required due to the increased risks of the job, seizure disorders are not acceptable. Stricter requirements for the health of employees are in production plants (rubber factories, diary factories, breweries) - increased occupational risk, noise, dustiness, high temperatures, exposure to chemicals.

Some occupations can be carried out in laboratories in a sit-down position (chemist, biochemist) and can therefore also be carried out by persons with impaired mobility of the lower limbs, but with excellent fine motor skills and good eyesight, a healthy respiratory system, and no allergies.

The suitability of vocational training in specific cases is assessed by a medical practitioner and the relevant school educational guidance and prevention establishments, depending on the type and degree of disability and impairment.

## Mental disability

Study group 28 is not suitable for pupils with mental disabilities.

## Visual impairment

Due to the increased risks of working in chemical production, in manufacturing plants, the 28 courses of study are **not suitable for candidates with severe visual impairments**; **milder visual impairments corrected by eyeglasses are acceptable**, especially outside manufacturing plants, e.g. in chemical laboratories or in sheltered workshops.

The appropriateness of vocational training in specific cases is assessed by a doctor and the relevant educational guidance and prevention establishments, depending on the type and degree of disability and impairment.

## Hearing impairment

Study courses 28 are not suitable for applicants with severe hearing impairments; less severe impairments corrected by compensatory aids are allowed for work outside production plants, e.g. in chemical laboratories or sheltered workshops.

The suitability of vocational training in specific cases is assessed by a medical practitioner and the relevant school counselling and prevention facilities, depending on the type and degree of disability and impairment.

#### Specific learning disabilities

Depends on the individual case, the type of disorder and the level of compensation. Given the high demands of the 28 fields of study on the pupil's academic aptitudes (technical imagination, mathematical skills, reading and preparation of technical documentation), their suitability for pupils with dyslexia, dysgraphia and dyscalculia should be considered. Given the high demands of the professions on the manual dexterity of workers, also in the interests of OSH, the 28 courses of study are not suitable for dyspractitioners.

The school counselling and prevention services should be consulted on the suitability of courses of study for pupils with specific developmental learning difficulties.

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#### Pupils from socially disadvantaged backgrounds (SDB)

Pupils from SDB backgrounds should be integrated into secondary schools as long as they are physically and mentally capable of performing the relevant occupations. Integration must include their activation, motivation, cultivation of a positive attitude towards work, occupation, acquisition of work habits, development of professional interests.

In cooperation between the school and the local authority and the Office of Labour and Social Affairs, pupils may receive an allowance for school supplies, travel, accommodation, and meals.

#### Exceptionally gifted pupils

It is socially beneficial if **technically gifted pupils with an interest in working in the chemical and pharmaceutical industries** apply for these courses of study. They can be taught in the form of **individual study plans and programmes**, which will be developed according to the real situation (possibility of completing the course in a shorter period of time, preparation for further education in a related field of study, or preparation for entrepreneurship in the relevant field).