

## Description of the assumed learning outcomes for the field of study

**Name of the field of study:** Садоводство / Horticulture

**Level of education:** first-cycle studies

**Profile of education:** practical

**Form of study:** full-time studies (7 semesters), paid studies

leading scientific discipline : agriculture and horticulture (100%)

The description of learning outcomes takes into account the universal first level characteristics for level 6 defined in the Act of 22 December 2015 on the Integrated Qualification System (Journal of Laws of 2016, item 64 and 1010, as amended) and second degree characteristics learning outcomes for level 6 qualifications defined in the regulations issued on the basis of art. 7 par. 3 of this Act.

Description of learning outcomes for qualifications at level 6 of the Polish Qualifications Framework

Symbol	Directional learning outcomes	Reference to characterize the second level of PRK learning outcomes
<b>KNOWLEDGE</b> <b>The graduate knows and understands:</b>		
OGP_W01	to an advanced degree terms, theories and processes in the field of botany, chemistry and biochemistry, plant physiology, genetics and plant growing, soil science, entomology, phytopathology and plant biotechnology constituting basic general knowledge in the field of horticulture	P6S_WG
OGP_W02	operation of word processors, spreadsheets and basic statistical tools and databases used in horticultural sciences	P6S_WG
OGP_W03	basics of taxonomy and principles of identification of crop plants, beneficial microorganisms, pests and pathogens of plants and weeds, including invasive and quarantine species and the relationships between them, as well as the use of this knowledge in professional practice	P6S_WG
OGP_W04	principles and methods concepts of tillage and plant growing, plant nutrition, plant protection, fruit crops, seed production and horticulture nursery, vegetable growing, ornamental plants, storage, herbology, horticulture mechanization, greenery shaping and gardening research methodology	P6S_WG
OGP_W05	bases of economy, legal, ethical and social knowledge adapted to the forms of gardening activities	P6S_WG PS6_WK
OGP_W06	Natural and economic factors determining horticultural production as well as the condition, functioning and development of rural areas	P6S_WG
OGP_W07	the importance of natural environment and the ways to counteract	P6S_WG

	the threats resulting from horticultural production, taking into account the sustainable use and preservation of biodiversity	PS6_WK
OGP_W08	basic technologies in horticultural production and principles of their adaptation to natural and economic conditions	P6S_WG
OGP_W09	rules for the operation and use of equipment, facilities and technical systems used in horticulture	P6S_WG
OGP_W10	methods of harvesting and storage of horticultural products allowing to preserve their high quality	P6S_WG
OGP_W11	threats resulting from the contamination of horticultural crops and the environment, methods of their prevention and reduction	P6S_WG PS6_WK
OGP_W12	contemporary problems of horticultural production and technical assumptions for engineering tasks in this field	
OGP_W13	basic rules for creating, managing and functioning of horticultural enterprises and farms	P6S_WG PS6_WK
OGP_W14	concepts/regulations in the field of protection of intellectual or industrial property and copyright law, especially in relation to horticulture	PS6_WK
OGP_W15	basic rules of ergonomics and legal protection of work, health and safety regulations, hazards in gardener's working environment and methods of limiting them	PS6_WK

**SKILLS  
the graduate can:**

OGP_U01	search, analyze, evaluate and apply necessary information from various sources and databases in the field of horticulture and related sciences, formulate and solve problems related to horticulture activities, create documents and presentations, apply advanced information and communication techniques, independently plan and implement own learning and organize individual work and in team	P6S_UU P6S_UO P6S_UW
OGP_U02	practically use the knowledge in the field of intellectual and industrial property, assess the workplace in the aspect of ergonomics and occupational health and safety, use available methods for preventing work-related hazards in gardening	P6S_UW
OGP_U03	apply microtechnical, microscopic and analytical methods in identification and assessment of living organisms and their reproduction for horticulture needs	P6S_UW
OGP_U04	recognize basic taxa of horticultural plants and use their utility values for human health and economy	P6S_UW
OGP_U05	assess physical, chemical and biological properties of soil, determine the richness of soil and substrates, nutritional status of plants and the condition of horticultural crops to obtain high-quality horticultural products while maintaining the environment protection and rational management principles	P6S_UW
OGP_U06	apply various methods of plant reproduction used in horticultural practice	P6S_UW
OGP_U07	Adjust dates, methods and conditions of plant cultivation as well as their treatments to the kind of species and destination of horticultural yield	P6S_UW
OGP_U08	choose cultivation methods and storage methods and parameters for horticultural products to ensure their longest high-quality preservation	P6S_UW
OGP_U09	perform assessment of nursery material, budding, grafting rootstocks of fruit plants	P6S_UW

OGP_U10	form and cut trees and fruit bushes, regulate their fruiting and yield	P6S_UW
OGP_U11	choose proper varieties of fruit plants for different kinds of orchards- freight, industrial, ecological or backyard	P6S_UW
OGP_U12	assess commercial quality of gardening products	P6S_UW
OGP_U13	diagnose diseases and pests of horticultural plants, identify agrofags/pests, use beneficial organisms, evaluate threats and the extent of damage caused by pests and design a programme to limit them in order to ensure high-quality horticultural yield and consumer safety while maintaining biological balance	P6S_UW
OGP_U14	identify weeds, apply methods of weed control and protection of crops against pests while maintaining the principles of sustainable use of biodiversity	P6S_UW
OGP_U15	choose, apply and optimize basic techniques and technologies used in horticulture, including modern methods of growing, reproduction, cultivation, fertilization and protection of horticultural plants as well as storing fruits, vegetables, decorative plants and nursery material	P6S_UW
OGP_U16	use different studies and prepare recommendations for plant protection and fertilization, provide consultancy in the field of horticultural production in order to obtain high-quality garden products and make decisions while maintaining principles of environment protection and rational management	P6S_UW
OGP_U17	arrange and cultivate green areas and create plantings of various character and purpose	P6S_UW
OGP_U18	properly select and apply equipment, tools and machines for soil and horticultural plants cultivation, their care, protection, harvesting and storage	P6S_UW
OGP_U19	plan and perform a simple engineering or design task tailored to the field of study under the guidance of a tutor; correctly interpret the results and draw conclusions; indicate weaknesses and strengths of the adopted solution and collaborate with others in team work	P6S_UW P6S_UO
OGP_U20	adapt trends and technologies of growing horticultural plants to local, natural and economic conditions	P6S_UW
OGP_U21	assess economic efficiency of a horticultural farm applying basic methods of cost accounting, income and profitability, carry out economic, social and legal analysis of undertaken activities	P6S_UW
OGP_U22	communicate with the use of specialized terminology, participate in the gardening debate and use a foreign language at the B2 level (CEFR)	P6S_UK

**SOCIAL COMPETENCE**  
**The graduate is prepared to:**

OGP_K01	evaluate of his/her activity in terms of social, professional and ethical responsibility for the quality of plant products, the condition of natural environment and preservation of biodiversity	P6S_KR P6S_KO
OGP_K02	recognize of the importance of knowledge in solving cognitive and practical problems, for critical assessment of his/her knowledge and skills and for constant training and self-improvement in the field of horticulture and to consult the experts	P6S_KK
OGP_K03	think and act in an entrepreneurial and responsible way and predict the effects of decisions in the professional area	P6S_KO

OGP_K04	co-organize activities related to proper management of natural resources, shape public awareness and support social initiatives, local governments and environmental programs related to sustainable development	P6S_KO
OGP_K05	determine properly priorities and mechanisms serving the implementation of specific objectives in the professional field and also in natural, economic and ethical results of professional activity	P6S_KK P6S_KR