



AgriTech Solutions: Innovating VET for Sustainable Agriculture
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 2024-1-RS01-KA210-VET-000244168

MINUTES

From the implementation of an activity for the needs of the project

Review of existing qualifications

Overview of the prevalence of sustainable agricultural practices, precision agriculture, organic farming, renewable energy sources and the use of technology in agriculture in the qualification curricula.

Teacher: Sonja Slavkovic, Efremcho Nikolov

Place: Skopje

Qualification **Agricultural technician**

Curriculum	Agrometeorology with climatology	
Year	I (first) year	
Module/modular unit	Representation	Description
Meteorological elements and phenomena	Precision farming	Teaching is being carried out instrument content for measuring various meteorological phenomena

Proposal for improving the curriculum in terms of the representation of sustainable agricultural practices, precision agriculture, organic agriculture, renewable energy sources and the use of technology in agriculture in the curricula of the qualification

Module/modular unit	Proposal
Meteorological elements and phenomena	To provide practical examples of the use of instruments in agriculture



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Subject	Agrochemistry	
Year	II (second) year	
Module/modular unit	Representation	Description
Fertilizers	Use of technology in agriculture	It is represented in the result of learning a hydroponic system for cultivation of certain types of plants
	Organic farming	The task is a result of learning the selection and use of organic fertilizers for conventional and organic agricultural production, depending on the type of the soil and the type of the plant

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Module/modular unit	Proposal
Fertilizers	Let's also look at aeroponics as a new production technology. To develop more types of organic manures and their use in organic production.



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Subject	Plant protection	
Year	II (second) year	
Module/modular unit	Representation	Description
Crop protection	Sustainable agricultural practices	It is represented in one learning outcome. principles and measures for integrated plant protection

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Module/modular unit	Proposal
Protection of agricultural cultures	To provide practical programs and examples for integrated protection in agriculture

Subject	Agricultural machinery	
Year	II (second) year	
Module/modular unit All modular	Representation	Description
units Soil cultivation machines and tools	Use of technology in agriculture Precision farming Sustainable agriculture practices	All areas are underrepresented.





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Fertilizer, sowing, planting and transplanting Machines for protection plants and machinery and irrigation devices Machinery, devices and equipment for making hay, green fodder and silage Harvesting machines and performance, grain harvesters and harvesters corn Machines for extracting sugar beets, potatoes, cotton harvesting and rolling tobacco Harvesting machines and fruit grading in viticulture and fruit growing Machinery in livestock farming	Renewable energy sources Organic farming	
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Module/modular unit All modular units	Proposal
Soil cultivation machines and tools	All areas should be processed through all modular units, because agricultural mechanization is part of all production technologies in agriculture.



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Fertilizer, sowing, planting and transplanting Machines for protection plants and machinery and irrigation devices Machinery, devices and equipment for making hay, green fodder and silage Harvesting machines and performance, grain harvesters and harvesters corn Machines for extracting sugar beets, potatoes, cotton harvesting and harvesting and rolling tobacco Harvesting machines and fruit grading in viticulture and fruit growing Machinery in livestock farming	
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Subject	Floriculture	
Year	III (third) year	
Module/modular unit Production of	Representation	Description
flowers species	Use of technology in agriculture Precision farming	Technologies are represented the cultivation and production of flowers in protected areas,





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		the technologies of flower propagation
Agricultural engineering, protection and flower species care	Use of technology in agriculture Precision farming	They are represented agrotechnical measures in cultivation and production of flowers.

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Module/modular unit Production of	Proposal
flowers species	To provide practical programs for the use of new technology in the production of flower species.
Agrotechnics, protection and care of flowering species	To provide practical programs for the application of agrotechnical and other measures in flower production.

Subject	Gardening	
Year	III (third) year	
Module/modular unit	Representation	Description
Agroecology	Use of technology in agriculture Precision farming Sustainable agriculture practices Renewable energy sources Organic farming	As a result of learning measures are given for the adaptation of gardening to climate change. The learning outcomes include the principles and



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		measures in organic horticultural production
Agricultural machinery	Use of technology in agriculture Precision farming Sustainable agriculture practices Renewable energy sources Organic farming	As a result of learning the vegetables are given gardens and protected areas. As a result of learning agrotechnical measures in production are given of vegetables The learning outcomes include technologies for production of garden seedling The learning outcomes include the collection, transport and storage of the vegetables

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Module/modular unit Agroecology	Proposal
	All areas with multiple curricular content can be represented in this modular unit, especially the use of technology in agriculture, precision agriculture, and sustainable agricultural practices.
Agricultural machinery	In this modular unit, all 5 areas can be represented more, with special emphasis on the application of each of the areas.



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Subject	Viticulture	
Year	III (third) year	
Module/modular unit Production of	Representation	Description
grape planting material	Use of technology in agriculture Precision farming Sustainable agricultural practices Renewable energy sources Organic farming	The learning outcomes are given as lifting and agrotechnical measures for cultivation of mother vines for vine rootstocks. As a result of learning The parent varietal vineyard is given for coil production- branches of different varieties on a grapevine As a result of learning The nursery's building facilities are provided. As a result of learning reproduction is given on the vine with grafting, methods of grafting (domestication) and grape production coils.
Agrobiological traits and grape agronomy vine	Use of technology in agriculture Precision farming Sustainable agriculture practices Renewable energy sources Organic farming	As a result of learning the technique for planting the grafts in rooting ground. The learning result is given as lifting and the care of young vines plantations until birth. The learning outcomes are given in the pruning of the grapevine is ripe and green





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		The learning outcome includes the type, methods and timing of fertilization and irrigation of vineyards.
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Proposal for improving the curriculum in terms of the representation of sustainable agricultural practices, precision agriculture, organic agriculture, renewable energy sources and the use of technology in agriculture in the curricula of the qualification	
Module/modular unit Production of	Proposal
grape planting material	In this modular unit, all 5 areas can be represented more, especially the use of technology in agriculture, precision agriculture and sustainable agricultural practices.
Agrobiological traits and grape agronomy vine	In this modular unit, all 5 areas can be represented more, with special emphasis on the application of each of the areas.

Subject	Fruit growing	
Year	III (third) year	
Module/modular unit Growing	Representation	Description
conditions and fruit picking plantations and systems of cultivation of the fruits and the formation of the crowns	Use of technology in agriculture Precision farming Sustainable agriculture practices Renewable energy sources Organic farming	As a result of learning a raise has been given to fruit plantations. As a result of learning systems of are given growing fruit trees and forming crowns.





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Fruit growing, harvesting, storage, packaging and transportation of fruit	Use of technology in agriculture Precision farming Sustainable agricultural practices Renewable energy sources Organic farming	The learning outcomes include measures of cultivation and maintenance on the soil in orchards and processing techniques the areas under fruit trees plantations.. The learning outcome includes the type, methods and timing of fertilization and watering the fruit trees plantations. The learning outcomes include harvesting, storage, packaging, and transportation of fruit.
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Module/modular unit Conditions for	Proposal
growing and raising fruit trees plantations and systems of cultivation of the fruits and the formation of the crowns	This modular unit may cover more/all 5 areas, especially the use of technology in agriculture, precision agriculture, and sustainable agricultural practices.
Fruit growing, harvesting, storage, packaging and transportation of fruit	This modular unit may cover more/all 5 areas, with particular emphasis on the application of each area.





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Subject	Agriculture	
Year	III (third) year	
Module/modular unit	Representation	Description
Agroecology	Use of technology in agriculture Precision farming Sustainable agriculture practices Renewable energy sources Organic farming	As a result of learning measures have been given for the adaptation of agriculture to climate change. As a result of learning the principles are given and measures in organic agricultural production
Agricultural machinery	Use of technology in agriculture Precision farming Sustainable agriculture practices Renewable energy sources Organic farming	As a result of learning the corresponding ones are given measures, methods and systems for tillage. The learning outcomes are given as garbage and composting. As a result of learning The time, methods and norms for sowing various agricultural crops are given. As a result of learning Measures for the care of agricultural crops are given. The learning outcomes are given as collection, the transportation and storage of agricultural products.





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Proposal for improving the curriculum in terms of the representation of sustainable agricultural practices, precision agriculture, organic agriculture, renewable energy sources and the use of technology in agriculture in the curricula of the qualification

Module/modular unit Agroecology	Proposal
	All areas with multiple curricular content can be represented in this modular unit, especially the use of technology in agriculture, precision agriculture and sustainable agriculture practices.
Agricultural machinery	This modular unit may cover more/all 5 areas, with particular emphasis on the application of each area.

Subject	Livestock farming	
Year	III (third) year	
Module/modular unit Methods of	Representation	Description
cultivation domestic animals and other zootechnical measures	Use of technology in agriculture Precision farming Sustainable agriculture practices Renewable energy sources Organic farming	The learning outcomes include the methods of animal husbandry.
Organic livestock production and livestock food	Organic farming Sustainable agriculture practices	As a result of learning basic principles are given and principles of organic livestock production. As a result of learning given is normalized





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		nutrition when feeding different species and categories of animals.
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Module/modular unit Methods of	Proposal
cultivation domestic animals and other zootechnical measures	More than/all 5 areas may be represented in this modular unit.
Organic livestock production and livestock food	To provide practical experiences in applying the principles and measures for organic livestock farming production.

Subject	Food quality - elective program	
Year	III (third) year	
Module/modular unit Agrotechnical	Representation	Description
measures	Use of technology in agriculture Precision farming Sustainable agricultural practices Renewable energy sources Organic farming	As a result of learning given the ecological management and water use for irrigation. As a result of learning agrotechnical measures for modern soil cultivation are given. The learning outcomes are given in the agrotechnical measures for modern soil cultivation





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Processing of agricultural products	Use of technology in agriculture	The learning outcomes include the technological procedures for processing fruits and vegetables. As a result of learning The procedures for processing cereals are given. cultures..
Food preservation	Use of technology in agriculture	As a result of learning The technological procedures for processing are given from vegetables. As a result of learning Technological procedures for fruit processing are given.

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Module/modular unit Agrotechnical	Proposal
measures	More than/all 5 areas may be represented in this modular unit.
Agricultural processing products	To provide practical experiences in applying agricultural product processing procedures.
Food preservation	To provide practical experiences in applying the procedures for preserving food.

Subject	Organic Plant Production - Elective Program
Year	III (third) year



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Module/modular unit Measures in the	Representation	Description
plant organic production	Sustainable agricultural practices Renewable energy sources Organic farming	The learning outcomes provide measures in organic vegetable production.
Organic technologies plant production	Sustainable agriculture practices Renewable energy sources Organic farming Use of technology in agriculture	In learning outcomes given are the technologies that are applied in organic vegetable production.

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Module/modular unit Measures in the	Proposal
plant organic production	In this modular unit, in addition to measures in organic production, emphasis should also be placed on sustainable agricultural practices, renewable energy sources and the use of technology in agriculture.
Organic technologies plant production	In this modular unit, in addition to technologies in organic production, emphasis should also be placed on sustainable agricultural practices, renewable energy sources, and the use of technology in agriculture.

Subject	Parks - elective program
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Year	III (third) year	
Module/modular unit Raising grass	Representation	Description
surfaces	Sustainable agriculture practices	In learning outcomes procedures are given for weeding the surfaces. In learning outcomes procedures are given for maintenance of grass areas.

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Module/modular unit Raising grass	Proposal
surfaces	To provide practical experiences in applying the procedures for raising flower surfaces.

Subject	Beekeeping - elective program	
Year	III (third) year	
Module/modular unit Bee habitats and	Representation	Description
beekeeping equipment	Sustainable agricultural practices Use of technology in agriculture	In learning outcomes the bee ones are given dwellings, that is the beekeeping boxes. The learning outcomes include the equipment, tools and beekeeping equipment.





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Work activities in the apiary through the year	Sustainable agricultural practices Use of technology in agriculture	The learning outcomes include worksheets. apiary operations throughout the year..
Organic beekeeping	Organic production Sustainable agriculture practices Use of technology in agriculture	The learning outcomes provide the basic principles and tenets of organic beekeeping.

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Module/modular unit Bee habitats and	Proposal
beekeeping equipment	To provide practical examples of the application of new technological solutions for beekeeping equipment.
Work activities in the apiary through the year	To provide practical examples of the application of new technologies in beekeeping.
Organic beekeeping	To provide practical examples of the application of sustainable and new technologies in organic beekeeping.

Subject	Tobacco production technology - optional program	
Year	III (third) year	
Module/modular unit Production and	Representation	Description
maintenance of tobacco seedling	Use of technology in agriculture	As a result of learning The production and care of tobacco seedlings are given.





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Tobacco cultivation and handling	Use of technology in agriculture	The learning outcomes include the technologies of tobacco cultivation from seedling to the end of vegetation. The learning outcomes include tobacco manipulation: harvesting, stringing, drying, storage and packaging of dried tobacco.
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Module/modular unit Production and maintenance of tobacco seedling	Proposal
	To provide practical examples of the application of new technological solutions.
Tobacco cultivation and handling	To provide practical examples of the application of new technologies in tobacco cultivation and manipulation.

Subject	Winemaking - elective program	
Year	III (third) year	
Module/modular unit Alcoholic fermentation Use of technology in	Representation	Description
	agriculture	In a learning outcome given is the process of alcoholic fermentation.
Production of red, rosé and white wines	Use of technology in agriculture	In learning outcomes the technologies of are given for the production of red, rosé and white wines.





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		The learning outcomes include tobacco manipulation: harvesting, stringing, drying, storage and packaging of dried tobacco.
Ripening and repair of the wine	Use of technology in agriculture	In learning outcomes the processes of are given maturation and repair of the wine.

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Module/modular unit Alcoholic	Proposal
fermentation	To provide practical examples of the application of new technological solutions.
Production of red, rosé and white wines	To provide practical examples of the application of new technologies in the production of red, rosé and white wines.
Ripening and repair of the wine	To provide practical examples of the application of new technologies in wine maturation and repair.

Subject	Floriculture	
Year	IV (fourth)	
Module/modular unit Flower	Representation	Description
production for exterior	Use of technology in agriculture Precision farming	Technologies are represented of cultivation and production of bulbous flowers crops, annuals and





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		biennial flower crops, perennials flower crops, cut flower, medicinal and spicy cultures.
Flower production for interior	Use of technology in agriculture Precision farming	Technologies are represented of cultivation and production of potted flowering ornamental plants, succulents and cacti.

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Module/modular unit Flower production for exterior	Proposal
for exterior	To provide practical programs for the use of new technology in the production of exterior flowers
Flower production for interior	To provide practical programs for the use of new technology in interior production

Subject	Gardening	
Year	IV (fourth)	
Module/modular unit	Representation	Description
Technologies of vegetable production	Use of technology in agriculture Precision farming Sustainable agricultural practices	The learning outcomes include the technologies of fruit production horticultural crops, horticultural crops from





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	Renewable energy sources Organic farming	the legume pumpkins and families, the onions horticultural crops, cabbage and leafy horticultural crops, roots and tubers horticultural crops and the mushrooms.
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Module/modular unit Technologies of	Proposal
vegetable production	This modular unit may cover more/all 5 areas, with particular emphasis on the application of each area.

Subject	Viticulture	
Year	IV (fourth)	
Module/modular unit Wine grape	Representation	Description
varieties	Use of technology in agriculture Precision farming Sustainable agriculture practices Renewable energy sources Organic farming	In learning outcomes the technologies of are given cultivation of wine grape varieties that provide raw materials for production of red, rosé and white wines.
Table grape varieties and direct-inbred hybrids	Use of technology in agriculture Precision farming	In learning outcomes the technologies of are given cultivation of table vegetables



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	Sustainable agricultural practices Renewable energy sources Organic farming	grape varieties and direct-inbred hybrids
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Module/modular unit Wine grape varieties	Proposal
	This modular unit may cover more/all 5 areas, with particular emphasis on the application of each area.
Table grape varieties and direct-inbred hybrids	This modular unit may cover more/all 5 areas, with particular emphasis on the application of each area.

Subject	Fruit growing	
Year	IV (fourth)	
Module/modular unit Poultry, stone fruit and nuts	Representation	Description
	Use of technology in agriculture Precision farming Sustainable agricultural practices Renewable energy sources Organic farming	In learning outcomes The technologies for growing apples, stone fruits and nuts are given.
Strawberries, southern and subtropical fruits	Use of technology in agriculture	In learning outcomes the technologies of are given



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	Precision farming Sustainable agriculture practices Renewable energy sources Organic farming	cultivation of strawberries, southern and subtropical fruits
Fruit processing	Use of technology in agriculture	In learning outcomes given are the methods of preserving fruit and the types and methods of preparation of finished fruit products and semi-finished products.

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Module/modular unit Poultry, stone	Proposal
fruit and nuts	This modular unit may cover more/all 5 areas, with particular emphasis on the application of each area.
Strawberries, southern and subtropical fruits	This modular unit may cover more/all 5 areas, with particular emphasis on the application of each area.
Fruit processing	In this modular unit, special emphasis can be placed on the application of new technological solutions.

Subject	Agriculture
Year	IV (fourth)



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Module/modular unit Technologies of	Representation	Description
production of grain and tuber crops	Use of technology in agriculture Precision farming Sustainable agricultural practices Renewable energy sources Organic farming	In learning outcomes the technologies of are given cultivation of grains and tuberous crops.
Technologies of production of industrial crops	Use of technology in agriculture Precision farming Sustainable agriculture practices Renewable energy sources Organic farming	In learning outcomes the technologies of are given cultivation of industrial crops
Technologies of fodder production cultures	Use of technology in agriculture Precision farming Sustainable agriculture practices Renewable energy sources Organic farming	In learning outcomes the technologies of are given forage farming cultures

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Module/modular unit Technologies of	Proposal
production of grain and tuber crops	This modular unit may cover more/all 5 areas, with particular emphasis on the application of each area.



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Technologies of production of industrial crops	In this modular unit, all 5 areas can be represented more, with special emphasis on the application of each of the areas.
Technologies of fodder production cultures	In this modular unit, all 5 areas can be represented more, with special emphasis on the application of each of the areas.

Subject	Livestock farming	
Year	IV (fourth)	
Module/modular unit Horsemanship	Representation	Description
	Use of technology in agriculture Precision farming Sustainable agriculture practices Renewable energy sources Organic farming	In learning outcomes the methods of are given breeding in horse breeding.
Cattle breeding	Use of technology in agriculture Precision farming Sustainable agriculture practices Renewable energy sources Organic farming	In learning outcomes the technologies are given in cattle breeding.
Shepherding and goat breeding	Use of technology in agriculture Precision farming Sustainable agricultural practices Renewable energy sources Organic farming	The learning outcomes include the technologies in sheep and goat farming.



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Cunicularity	Use of technology in agriculture Precision farming Sustainable agricultural practices Renewable energy sources Organic farming	The learning outcomes include the methods of cultivation in the cunicularity.
Pig farming	Use of technology in agriculture Precision farming Sustainable agriculture practices Renewable energy sources Organic farming	In learning outcomes the technologies are given in pig farming.
Poultry farming	Use of technology in agriculture Precision farming Sustainable agriculture practices Renewable energy sources Organic farming	In learning outcomes the technologies are given in poultry farming.
Fishing	Use of technology in agriculture Precision farming Sustainable agricultural practices Renewable energy sources Organic farming	The learning outcomes include the methods of breeding in fisheries.
Beekeeping	Use of technology in agriculture Precision farming Sustainable agriculture practices Renewable energy sources Organic farming	In learning outcomes the technologies are given in beekeeping.





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Module/modular unit	Proposal
Horsemanship	This modular unit may cover more/all 5 areas, with particular emphasis on the application of each area.
Cattle breeding	This modular unit may cover more/all 5 areas, with particular emphasis on the application of each area.
Shepherding and goat breeding	This modular unit may cover more/all 5 areas, with particular emphasis on the application of each area.
Cunicularity	This modular unit may cover more/all 5 areas, with particular emphasis on the application of each area.
Pig farming	This modular unit may cover more/all 5 areas, with particular emphasis on the application of each area.
Poultry farming	This modular unit may cover more/all 5 areas, with particular emphasis on the application of each area.
Fishing	In this modular unit, all 5 areas can be represented more, with special emphasis on the application of each of the areas.
Beekeeping	This modular unit may cover more/all 5 areas, with particular emphasis on the application of each area.



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Subject	Food Safety - Elective Program	
Year	IV (fourth)	
Module/modular unit Plant protection	Representation	Description
measures and techniques	Use of technology in agriculture Sustainable agriculture practices	The learning outcome includes measures and techniques from the integral protection for efficient pest control in vegetation of cultures.
Chemical hazards in the food	Use of technology in agriculture	As a result of learning measures are given for control of chemical hazards in food, ensuring the production of safe food.
Hygiene in production of food	Use of technology in agriculture	As a result of learning hygiene measures are given sanitary measures and principles in food production

Proposal for improving the curriculum in terms of the representation of sustainable agricultural practices, precision agriculture, organic agriculture, renewable energy sources and the use of technology in agriculture in the curricula of the qualification	
Module/modular unit Plant protection	Proposal
measures and techniques	To provide practical experiences in applying measures and techniques from integrated protection for efficient pest control in crop vegetation.



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Chemical hazards in the food	To provide practical experiences in applying measures to control chemical hazards in food, thereby ensuring the production of safe food.
Hygiene in production of food	To provide practical experiences in the application of hygiene-sanitary measures and principles in food production

Subject	Organic Livestock Production - Elective Program	
Year	IV (fourth)	
Module/modular unit Organic livestock	Representation	Description
farming production	Sustainable agriculture practices Renewable energy sources Organic farming Use of technology in agriculture	In learning outcomes the technologies of are given animal husbandry according to principles and principles of organic livestock farming
Organic aquaculture	Sustainable agriculture practices Renewable energy sources Organic farming Use of technology in agriculture	In learning outcomes the technologies of are given breeding and feeding of certain categories and species of fish (trout and carp) according to the principles and the rules of organic fishing.
Organic beekeeping	Sustainable agriculture practices Renewable energy sources Organic farming Use of technology in agriculture	In learning outcomes the technologies are given in beekeeping according to the principles and rules of organic production.





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Proposal for improving the curriculum in terms of the representation of sustainable agricultural practices, precision agriculture, organic agriculture, renewable energy sources and the use of technology in agriculture in the curricula of the qualification

Module/modular unit Organic livestock	Proposal
farming production	In this modular unit, in addition to measures in organic production, emphasis should also be placed on sustainable agricultural practices, renewable energy sources and the use of technology in agriculture.
Organic aquaculture	In this modular unit, in addition to technologies in organic production, emphasis should also be placed on sustainable agricultural practices, renewable energy sources, and the use of technology in agriculture.
Organic beekeeping	In this modular unit, in addition to technologies in organic production, emphasis should also be placed on sustainable agricultural practices, renewable energy sources, and the use of technology in agriculture.

Subject	Floristics - elective program	
Year	IV (fourth)	
Module/modular unit External	Representation	Description
arrangement Use of technology in	agriculture	Types and styles are given in learning outcomes in gardens.

Proposal for improving the curriculum in terms of the representation of sustainable agricultural practices, precision agriculture, organic agriculture,



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renewable energy sources and the use of technology in agriculture in the curricula of the qualification	
Module/modular unit External arrangement	Proposal
	To provide practical experiences in applying the procedures for external arrangement.

Subject	Fisheries - elective program	
Year	IV (fourth)	
Module/modular unit Aquaculture	Representation	Description
	Sustainable agriculture practices Use of technology in agriculture	In learning outcomes technologies of are given carp and trout farming in fishponds

Proposal for improving the curriculum in terms of the representation of sustainable agricultural practices, precision agriculture, organic agriculture, renewable energy sources and the use of technology in agriculture in the curricula of the qualification	
Module/modular unit Aquaculture	Proposal
	To provide practical examples of the application of sustainable and new technologies in fisheries.

Subject	Tobacco Processing Technology - Elective Program
Year	IV (fourth)





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Module/modular unit Seasonal and off-	Representation	Description
seasonal fermentation of oriental types of tobacco	Use of technology in agriculture	The learning outcome includes seasonal and off-season fermentation. of oriental types of tobacco.
Preparation of tobacco in the manufacturing plant cigarette production	Use of technology in agriculture	The learning outcomes include the preparation of tobacco in the manufacturing process. cigarette production
Manufacturing, packaging and improving filter quality cigarettes and other tobacco products	Use of technology in agriculture	The learning outcomes include the production, packaging and improvement of filter quality. cigarettes and other tobacco products

Proposal for improving the curriculum in terms of the representation of sustainable agricultural practices, precision agriculture, organic agriculture, renewable energy sources and the use of technology in agriculture in the curricula of the qualification

Module/modular unit Seasonal and off-	Proposal
seasonal fermentation of oriental types of tobacco	To provide practical examples of the application of new technological solutions.
Preparation of tobacco in the cigarette manufacturing plant	To provide practical examples of the application of new technological solutions.
Manufacturing, packaging and improving filter quality	To provide practical examples of the application of new technological solutions.



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cigarettes and other tobacco products	
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Subject	Production of strong alcoholic beverages - elective program	
Year	III (third) year	
Module/modular unit Grape, fruit and	Representation	Description
brandy spirits berries	Use of technology in agriculture	In learning outcomes technologies of are given production of grape, fruit and forest brandies fruits.
Production of special brandies – herbalists	Use of technology in agriculture	Learning outcomes include technologies of production of special brandies – herbalists.
Production of grain brandies, alcoholic beverages from other agricultural products raw materials and liqueurs	Use of technology in agriculture	In learning outcomes technologies of are given production of grain brandies, alcoholic beverages from other agricultural raw materials and liquors.

Proposal for improving the curriculum in terms of the representation of sustainable agricultural practices, precision agriculture, organic agriculture, renewable energy sources and the use of technology in agriculture in the curricula of the qualification

Module/modular unit Grape, fruit and	Proposal
brandy spirits berries	To provide practical examples of the application of new technologies in the production of grape, fruit and forest fruits.



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Production of special brandies – herbalists	To provide practical examples of the application of new technologies in the production of special brandies – herbalists.
Production of grain brandies, alcoholic beverages from other agricultural products raw materials and liqueurs	To provide practical examples of the application of new technologies in the production of grain brandies, alcoholic beverages from other agricultural raw materials and liqueurs.

In Skopje

Teachers

Date 05/31/2025

Sonja Slavkovic, Efremcho Nikolov



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