

#### **<u>Curriculum of Horticultural Engineering BSc</u>**

Botany I.-II.

Chemistry

Plant physiology

Genetics, biotechnology

Natural resources

Agrochemistry

Agrometeorology

Water management

Microbiology and tissue culture

Environmental and nature protection

Biometrics

Physics

IT

Basic technical knowledge

Precision gardening tools

Environmental management, sustainable development

Economics

Agricultural economics

Agrarian and property policy

Agricultural and economic law

Cultivation

Plant production

Animal husbandry

Organic farming

Soil science

Basic ornamental cultivation

Open field ornamental cultivation

Herbs and spices cultivation

Basic knowledge of fruit growing and nursery school



Fruit growing technologies Basics of viticulture Viticulture technology Basics of vegetable growing Open field vegetable growing Plant protection I.-II. Food safety knowledge Sectoral work organization and economics Household farming Integrated plant protection Marketing Quality management Finance and Accounting Agronomy Business Economics

#### Specializations for the horticulture sectors - GREEN INDUSTRY AND PRECISION HORTICULTURAL specialization (can be selected independently)

Application of ornamental plants Establishment and maintenance of green surfaces Sustainable vegetable production Small-scale vegetable cultivation Integrated fruit growing Precision gardening technologies Integrated viticulture Functional food production

# Specializations for the horticultural sectors – ORNAMENTAL GARDENING AND PLANT APPLICATION specialization

Dendrology

- Growing ornamental plants in greenhouses
- Establishment and maintenance of green surfaces



Application of ornamental plants

## *Optional subjects for the ORNAMENTAL GARDENING AND PLANT APPLICATION specialization (8 credits)*

Outdoor cultivation of other vegetable species

Precision greenhouse vegetable cultivation

Small-scale vegetable cultivation

Sustainable vegetable production

Cultivation of apples and berries

Cultivation of stone and shell fruits

Pruning of fruit trees

Fruit storage and commercialization

Knowledge of grape varieties

Cultivation of table grapes

Special methods of grape cultivation

Wine tourism

### Specializations for horticultural sectors - SUSTAINABLE VEGETABLE GROWING specialization

Outdoor cultivation of other vegetable species

Precision greenhouse vegetable cultivation

Small-scale vegetable cultivation

Sustainable vegetable production

## *Optional subjects for the SUSTAINABLE VEGETABLE GROWING specialization (8 credits)*

Dendrology

Growing ornamental plants in greenhouses

Establishment and maintenance of green surfaces

Application of ornamental plants

Cultivation of apples and berries

Cultivation of stone and shell fruits

Pruning of fruit trees

Fruit storage and commercialization



Knowledge of grape varieties Cultivation of table grapes Special methods of grape cultivation Wine tourism

## Specializations for horticultural sectors - INTEGRATED FRUIT GROWING specialization

Cultivation of apples and berries

Cultivation of stone and shell fruits

Pruning of fruit trees

Fruit storage and commercialization

#### **Optional subjects for the INTEGRATED FRUIT GROWING specialization (8 credits)**

Dendrology

Growing ornamental plants in greenhouses

Establishment and maintenance of green surfaces

Application of ornamental plants

Outdoor cultivation of other vegetable species

Precision greenhouse vegetable cultivation

Small-scale vegetable cultivation

Sustainable vegetable production

Knowledge of grape varieties

Cultivation of table grapes

Special methods of grape cultivation

Wine tourism

#### Specializations for the horticultural sectors - VINE GROWING AND WINE TOURISM specialization

Knowledge of grape varieties Cultivation of table grapes Special methods of grape cultivation Wine tourism



### *Optional subjects for the VINE GROWING AND WINE TOURISM specialization (8 credits)*

Dendrology Growing ornamental plants in greenhouses Establishment and maintenance of green surfaces Application of ornamental plants Outdoor cultivation of other vegetable species Precision greenhouse vegetable cultivation Small-scale vegetable cultivation Sustainable vegetable production Cultivation of apples and berries Cultivation of stone and shell fruits Pruning of fruit trees Fruit storage and commercialization

#### **Others:**

Transversal knowledge I.-II.-III. Physical education I. Physical education II. Foreign language 1 Foreign language 2 Thesis writing I.-II.-III. Semester practice Practice I.-II.-III.-IV. Practical horticultural lessons I-II. Competency test I-II. Professional seminar Optional subjects min. 10 kr