MAGYAR AGRÁR- ÉS ÉLETTUDOMÁNYI EGYETEM
Budai Campus

INSTITUTE OF HORTICULTURAL SCIENCES
ADDRESS: 1118 BUDAPEST, VILLÁNYI ÚT 29-43.
HTTPS://HORTICULTURE.UNI-MATE.HU/

COURSE CATALOGUE FOR THE ACADEMIC YEAR OF 2025/2026- FALL SEMESTER

HORTICULTURAL ENGINEER BSC

FRUIT SPECIES AND VARIETIES- KERTU040N
SEMESTER: FALL
ECTS: 4
REQUIREMENT: EXAM
DESCRIPTION: The aim of the subject is to introduce the most important species and varieties of Hungarian fruit production, as well as the main characteristics of the use of varieties in the world and Europe. More topics are morphological, growth and biological characteristics of fruit species, the domestic cultivation of individual species, the pomological characteristics, usability and market value of varieties, and preparation for the practical application of knowledge are also important aspects.

MEDICINAL PLANT PRODUCTION- KERTU035N
SEMESTER: FALL
ECTS: 4
REQUIREMENT: EXAM
DESCRIPTION: Group planning task. In the subject of medicinal plant production, we teach integrated crop production technologies and sustainable approaches to sectoral production. The students will learn about the 30 most important field and garden medicinal, spice and essential oil plant species, their biological, active and utilisation characteristics and their ecological needs. Building on this, we will review the technological steps of drug production, including GAP-based technologies for variety use, propagation, stocking, care, harvesting and primary processing.

FRUIT PRODUCTION AND VITICULTURE- KERTU039N **GÖDÖLLŐ!!!**
SEMESTER: FALL
ECTS:3
REQUIREMENT: EXAM
DESCRIPTION: The morphology, grouping and propagation of fruit species are described. Introduction of ecological conditions of fruit and grape growing, possibilities of protection against disadvantages weather conditions. Establishment and planting of fruit orchards and vineyards. Variety usage bases in fruit and grape growing. Elements of cultivation technology. Introduction of crown shapes and cultivation methods.

VEGETABLE PRODUCING TECHNOLOGIES- KERTU093N
SEMESTER: FALL
ECTS: 4
REQUIREMENT: EXAM
DESCRIPTION: Cultivation technologies of most important vegetable sepcies in Europe. The course focuses on modern forcing and field cultivation technologies.

COURSE CATALOGUE FOR THE ACADEMIC YEAR OF 2025/2026 – FALL SEMESTER

HORTICULTURAL ENGINEER MSC

INSTITUTE OF HORTICULTURAL SCIENCES

EVALUATION OF FRUIT CULTIVARS – KERTU041N
SEMESTER: FALL
ECTS: 3
REQUIREMENT: EXAM
DESCRIPTION: The course covers the temperate zone fruit species and cultivars of commercial orchards. An introduction to the methodology of cultivar evaluation. Topics include the various gene sources, trends, and most new results of the international and Hungarian breeding work. Students learn about the biological and technological basis of mixing cultivars for proper cross-pollination. They get a picture about the currently dominant fruit cultivars, and about the possibilities of renewing the cultivar assortment.

BIOLOGICALLY ACTIVE SUBSTANCES OF HORTICULTURAL CROPS – KERTU055N
SEMESTER: FALL
ECTS: 5
REQUIREMENT: EXAM
DESCRIPTION: In this subject the most important biologically active compounds of different plant species are presented referring to their biosynthesis, role in the plant life, structure, effect on the human body and possible utilization. Project work elaboration is included in the requirements as well. The course ends with a written exam.

MEDICINAL AND SPICE PLANTS IN NUTRITION AND THERAPY – KERTU026N
SEMESTER: FALL
ECTS: 3
REQUIREMENT: EXAM
DESCRIPTION: The occurrence of special plant substances in the plant kingdom is quite widespread. These substances play an important functional role in plant life, but they also have a wide range of uses in humans, In this course, students will learn about the biogenetic system of special substances, the structure of the five main classes of substances and the active systems within them. Also examples of the major substances in the active substance classes and their use in food and medicine will be presented.

BIOLOGY AND CULTIVATION OF FUNGI
SEMESTER: FALL
ECTS: 3
REQUIREMENT: EXAM
DESCRIPTION: Biologial background of the mushroom cultivation, focusing on the main cultivated mushroom species (eg. Agaricus, Pleurotus spp.). Input materials, financiel background, facilities and propagation and sustainable practices.