HUNGARIAN UNIVERSITY OF
AGRICULTURE AND LIFE SCIENCES
INSTITUTE OF LANDSCAPE
ARCHITECTURE, URBAN PLANNING
AND GARDEN ART

Address: 1118 Budapest, Villányi str. 29-43.

COURSE CATALOGUE for Exchange students

2026/27 Academic year

The Institute of Landscape Architecture, Urban Planning and Garden Art of MATE at Buda Campus is currently offering the following core courses for the 2026/27 academic year. Additional courses will be announced before the start of the semester, providing a wider range of courses to choose from.

Exchange students are integrated with full degree international students during the semesters' workflow in the following study programme:

- **Landscape Management and Garden Construction Engineering**

Exchange students can take both bachelor's and master's subjects regardless of their study level or semester; however, timetable conflicts may occur.

Available subjects (based on MATE curricula) are mostly part of full degree study programmes, as exchange students are integrated with full degree international students during the semesters' workflow. Additional courses will be announced before the start of the semester, providing a wider range of courses to choose from.

2026/27 Autumn semester

Lectures: from early September to mid December.
Exams: mid December to late January

2026/27 Spring semester

Lectures: from early February to mid May.

Exams: mid May to late June

2026/27 Autumn semester

SUBJECT CODE	SUBJECT NAME	ECTS Credits
TETTD070N	Contemporary Art	4
TETTD084N	Cultivation of Greenhouse Ornamental Plants	4
TETTD125N	Landscape Graphics and Visual Communication 1	6
TETTD127N	Landscape Graphics and Visual Communication 3	3
TETTD229N	Landscape Planning in Budapest Agglomeration	4
TETTD138N	Landscape Protection and Planning	7
TETTD104N	Open Space Design 1	5
TETTD106N	Open Space Design 3	5
TETTD028N	Ornamental Plants Application	3
TETTD065N	Period Styles in Garden Arts	7
TETTD160N	Plant Use in Spatial Compositions 1	4
TETTD162N	Plant Use in Spatial Compositions 3	3
TETTD144N	Protection of the Urban Built Environment	2
TETTD074N	Research Strategies in Ornamental Horticulture	4
TETTD312N	Sustainable landscapes	4
TETTD128N	Technical Details in Landscape Architecture	2
TETTD359N	Theory and practice in Landscape Architecture	6
TETTD043N	Woody Plant Nursery	4

2026/27 Spring semester

SUBJECT CODE	SUBJECT NAME	ECTS Credits
TETTD035N	Architectural and Landscape Architectural Space Theory	4
TETTD126N	Landscape Graphics and Visual Communication 2	4
TETTD229N	Landscape Planning in Budapest Agglomeration	4
TETTD079N	Modern Systems in Floriculture	4
TETTD105N	Open Space Design 2	5
TETTD102N	Outdoor Cultivation of Ornamental Plants	4
TETTD161N	Plant Use in Spatial Compositions 2	2
TETTD175N	Restoration of Historical Gardens, Landscapes	6
TETTD141N	Settlement and Environmental Sociology	2
TETTD049N	Shaping and Modelling	2
TETTD183N	Urban Ecology	3

Contemporary Art

SEMESTER: 2026/27/1

SUBJECT CODE: TETTD070N

ECTS Credits: 4

AIM OF SUBJECT:
Lectures provide an introduction to modern, and contemporary art styles and the modern and contemporary tendencies in landscape architecture. The contextual approach of the different contemporary design styles is emphasized, with its relation to different cultural, ecological, and philosophical aspects of our times, implicitly or explicitly integrated in each project. Based on the theoretical knowledge, students are also required to prepare a project design for a specific area.

CONTENT:
This course offers students a comprehensive exploration of the key forces, characteristics, and ideologies that have shaped modern, and contemporary art movements, with a particular focus on their influence on architecture and landscape architecture.

Teaching methods include visits to art exhibitions, site visits, student presentations, and class discussions. During lectures and site visits, students are required to use a sketchbook to take notes and create diagrams that reflect their main conclusions and opinions on artists' concepts, patterns, and forms.

By the end of the course, students will develop a design concept for a specific site by applying the design principles and patterns of a modernist landscape architect. The final presentation of the semester should include both spatial and planting compositions.

GRADING SYSTEM:
Individual and teamwork projects

LITERATURE:

ppt presetations of lecture and practice

Cultivation of Greenhouse Ornamental Plants

SEMESTER: 2026/27/1

SUBJECT CODE: TETTD084N

ECTS Credits: 4

AIM OF SUBJECT:
The subject provides general training on the most important areas of ornamentals growing in a greenhouse. Provides general knowledge on growing media, nutrient supply, growth regulators, and timing of cultivation. It details the cultivation technology of the most important greenhouse ornamental plants.

CONTENT:
Lectures: Plug production of annual bedding plants. Growing Geranien. Plug cultivation of biennial ornamental plants. Cut rose cultivation in greenhouse. Cut chrysanthemum cultivation in greenhouse. Cut gerbera cultivation. Cut carnation cultivation in greenhouse. Micropropagation of ornamental plants. Cut green cultivation in greenhouse. Foliage pot plant cultivation. Cultivation of shortday flowering pot plants. Cultivation of cyclamen, African violet and primula. Basics of timed flowering of bulbous ornamental plants. Cultivation of bulbous ornamentals. Practices: Introduction of bedding and balcony plants (planting locations in the Buda Arborétum). Bedding and balcony plant identification test. Production technology plan, assignments. Equipment for ornamentals growing in a greenhouse. Introduction of pot plants. Individual consultation possibility for the production technology plan. Pot plant identification test. Harvest, timing of harvest, post harvest storage options of cut flowers, factors influencing longevity. Production substrates, fertilization and irrigation of greenhouse ornamentals. Semester Final written test. Field practices in Tordas and in the Buda Arboretum.

GRADING SYSTEM:
Participation in field exercises and exercises is compulsory. For field exercises, we provide once-per-site replacement during the term. Field exercises can only be completed in the manner and at the time advertised as a replacement, and anyone who fails to do so may not receive signature. Attendance at lectures is optional but required, students participating in the lectures (absent up to 2 times) - based on a positive catalog - they get 5% extra points for earning the

mark of the closed thesis. Missing lectures and classroom practices cannot be substituted. Plant identification reports: We announce one reporting date and one additional reporting date for each crop group (see practice date) Students who have made an unsuccessful report for the first time or who have not appeared at the time of the report may report at the time of the additional report written for them. Students who are dissatisfied with their previous marks may appear at this time to improve, but in any case, the result of the second report will be valid, even if it is weaker. The purpose of the reports is to provide students with a level of knowledge in the field of horticulture, so the evaluation is rigorous: each mistakenly recognized plant entails the deduction of one mark. The plants shall be named in the report by their full scientific (Latin!!) name (including, where appropriate, the variety name). The grade of the report will be counted towards the grade offered for the students who have passed the qualification in the closed class. Semester Final written test: Test of the course material presented in the lectures and published in the compulsory literature at the end of the semester. (date and location see practice dates.) Writing the test is not obligatory. At least good result (4) of the test is recommended as an exam mark. Preparing technology task, as presented during the practice: The length of the essay: 4-5 pages. We accept only the student's individual assignment. Evaluation: adequate / non adequate. ‚Adequate" level is the criterion for the signature of the semester. Requirements for the signature of the semester: taking part on the practices, taking part on the study visits and field exercises (according to the relevant provisions of the rules of university), successful bedding and balcony plant identification report, successful pot plant identification report, technology task in ‚adequate" level. The result of the written test is offered at least with a good (4) mark. Students who have achieved at least a sufficient result will also be credited with the aggregate results of the plant identification reports completed during the current semester. Students who have not obtained or have not accepted the offered mark, but who are eligible for semester signature, have earlier passed the exam of Plant Taxonomy can pass the exam on the exam days announced during the exam period. The form of it is oral colloquium. Students who have semester signature are able to register for the exam date through the Neptun unified study system. (Students who have partially completed the semester signing requirements must present their certification to the supervisor, who will then enter their semester signature.)

LITERATURE:

Obligatory literature: HAMRICK, D. (ed.): Ball Redbook. Ball Publishing, Batavia Illionis, USA 2003. Supplements: POLLOCK, M. – GRIFFITH M.: RHS Illustrated Dictionary of Gardening. DK (Dorling Kindersley) London 2005

Landscape Graphics and Visual Communication 1

SEMESTER: 2026/27/1

SUBJECT CODE: TETTD125N

ECTS Credits: 6

AIM OF SUBJECT:
The course "Landscape Architecture Graphics and Visual Communication" aims to provide students with a foundation in the use of visual communication tools and techniques necessary for landscape architecture design, thereby enabling them to present and communicate effectively and creatively in relation to landscape architecture projects.

CONTENT:
1. Developing Visual Communication Skills: Students learn how to use graphic tools such as drawings, photographs, rendered images, and other media to present landscape architecture designs in a clear and appealing way.

2. Creative Design Approaches: Students learn creative forms of expression that allow them to express their own style and unique approaches when designing landscape architecture projects.

3. Use of Digital Tools: During the course, students become familiar with digital design tools and software, such as CAD (Computer-Aided Design), graphic design software, and 3D modeling tools, which aid in the creation of designs and the visual communication of projects.

4. 3D Modeling: Students learn the basics of three-dimensional modeling, which effectively aids in the realistic presentation of designs.

5. Poster Design and Presentation Techniques: Creating effective posters, slides, and digital presentations to showcase landscape architecture designs.

GRADING SYSTEM:
Individual and teamwork projects

LITERATURE:

ppt presetations of lecture and practice

Landscape Graphics and Visual Communication 3

SEMESTER: 2026/27/1

SUBJECT CODE: TETTD127N

ECTS Credits: 3

AIM OF SUBJECT:
Artistic design creative work and mindset development

CONTENT:
1. Discussion about color + instructor presentation

2. Color mixing exercise - painting with acrylic technique

3. Color composition with geometric elements

4. Color composition using complementary contrast

5. Color theory in landscape architecture applications

6. Coloring a given composition using digital software Johannes Itten's seven color contrasts

7. Color composition using geometric elements with digital techniques

8. Vertical structure with digital techniques

9. Wave motif - complementary contrast

10. Spatial arrangement of a colorful outdoor composition

11. Colorful plants - composition

12. Portfolio submission in digital format, presentation

GRADING SYSTEM:
Individual and teamwork projects

LITERATURE:

ppt presetations of lecture and practice

Landscape Planning in Budapest Agglomeration

SEMESTER: 2026/27/1

SUBJECT CODE: TETTD229N

ECTS Credits: 4

AIM OF SUBJECT:
The course contains 4 study trips about the actual landscape planning challenges as brownfield rehabilitation, control of suburbanization, city rehabilitation. The focus of the course is to visit sites interesting from landscape planning view in Budapest and the agglomeration zone.

CONTENT:
Greenways and Brownfield / urban rehabilitation in Budapest

Recreational landscape in the vicinity of Budapest (Visegrád cultural landscape)

Suburbanisation process and conflicts in Budapest agglomeration, mining sites

Brownfield rehabilitation (Gázgyár), landscape changes in Pannonia

GRADING SYSTEM:
Participation on the site visits, students are required to elaborate thematic reports about the site visits.

LITERATURE:

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Landscape Protection and Planning

SEMESTER: 2026/27/1

SUBJECT CODE: TETTD138N

ECTS Credits: 7

AIM OF SUBJECT:
The central theme of the course is the value of urban green spaces for children's play, i.e., their ability to provide opportunities for varied, free, and exploratory play. The course is part of the Child-Friendly Vác living lab and builds directly on the results of the previous semester. In previous courses, students identified unused urban green spaces, analyzed children's preferences, and determined which sites had development potential. The aim of the current course is to use these results as a basis for developing specific proposals and interventions that will enrich children's experiences of nature. Focus areas: Development of green spaces along the Danube, development of the Török-hegy forest.

CONTENT:
Presentation of the Child-Friendly Vác program. Introduction to concepts related to the projects. Presentation of requirements, schedule, and tasks.

School workshop and site visit (Vác)

Independent workshop work.

Consultation.

School workshop (Vác).

Independent workshop work.

Consultation.

School workshop (Vác).

Consultation.

Presentation

GRADING SYSTEM:
Exam

LITERATURE:

ppt presetations of lecture and practice

Open Space Design 1

SEMESTER: 2026/27/1

SUBJECT CODE: TETTD104N

ECTS Credits: 5

AIM OF SUBJECT:
The purpose of the course is to get acquainted with the basics of landscape architecture by theoretical lectures and practical exercises. The goal is to get students to know and apply the various landscape design principles in harmony with functional needs and expectations during the semester. Another important aim is to make clear how the beauty of an open-air architectural work is interconnected with the appropriate functional setup of the plan. The most important aspect of the education is the site-specific design approach. In both projects there are regular presentations (digital and pin-up) to improve the presentation skills of the students.

CONTENT:
1st assignment – public space development

Students are required to keep a 8 minutes long presentation introducing 4 different type of open spaces from their hometown (at least two slides per open space). The changing character, function, identity of these public places should be highlighted, displaying and introducing the space before recent renewal and the current state, in the spirit of the lecture. 4 of the following public space types should be chosen and presented: protocol spaces, touristic squares, open spaces around churches, pedestrian streets, public gardens, public parks.

2nd assignment – residential garden design

The residential garden design will have a special emphasis on the terrain. Besides understanding the main principles of residential garden design, the three dimensions in which the design process takes place and the importance of the different planes (horizontal, vertical, and overhead plane) will be in focus. The design area is a real garden, which we will have no chance to visit. A scale model of the proposed design will be made by the student to understand the spatial relations of the terrain and the functions. The project will be carried out individually by the students, and one-to-one consultation will be provided throughout the design process.

3rd assignment – Courtyard Design project

The redesign of a courtyard in Budapest (real site). Being a real site, the analysis of all aspects of the existing site condition will be emphasized. The focus will be on the design strategy of the student and how their strategy will influence the proposed structure and the applied form. The theoretical lectures will support the design process. Teamwork will be required for this project, and a group will have one-to-one consultations provided throughout the design process.

GRADING SYSTEM:

The evaluation is given between 1-5, where 1 is not acceptable and 5 is excellent. During the semester, students will receive 5 grades. The sixth will be given on the design exam. The method of the assessment will be based on the theoretical lectures and in relation with the instructions given during the consultations. Each element of the task description should appear in the assignments, in the case of missing parts, the submitted assignment will be rejected (for example if anaylsis, detail design, plantation concept is required, but left out the assignment will receive grade 1).

Evaluation will be announced within a week compared to the submission.

LITERATURE:

ppt presetations of lecture and practice

Open Space Design 3

SEMESTER: 2026/27/1

SUBJECT CODE: TETTD106N

ECTS Credits: 5

AIM OF SUBJECT:
In line with the practice of project-based training, two design tasks will be worked through in the course. The first task will be carried out from the identification of the design features through programme design to the concept/sketch plan level. The second task provides the opportunity to take the design task to the object level. The tasks seek answers to the question of artistic object design.

CONTENT:
In line with the practice of project-based training, two design tasks will be worked through in the course. The first task will be carried out from the identification of the design features through programme design to the concept/sketch plan level. The second task provides the opportunity to take the design task to the object level. The tasks seek answers to the question of artistic object design.

GRADING SYSTEM:
Individual and teamwork projects

LITERATURE:

ppt presetations of lecture and practice

Ornamental Plants Application

SEMESTER: 2026/27/1

SUBJECT CODE: TETTD028N

ECTS Credits: 3

AIM OF SUBJECT:
Within the framework of the course students learn the basic knowledge of outdoor and indoor plant application. They get to know the fundamentals of plant association, and with the concept of garden as artificial plant association. They learn about the possibilities of establishment and sustainability of plant arrangements, and the traditional and innovative methods of tree valuation. They get to know the specialities of establishment and plant use in garden types for special application. They will have some information about the climatic capability of indoor surfaces as places for plants, the design principles and the tolerance of foliage pot plants used for indoor decoration.

CONTENT:
Introduction, requirements. The garden as an artificial plant association, basis of plant application. Application of bedding and balcony plants. Decoration specialities of watersides and saline areas. Traditional and innovative methods of tree value estimation. Urban forestry, tree examination methods. Practice: experience with acoustic tomograph. Application of woody ornamental plants. Special plantations (Miyawaki forests, rain gardens, Stockholm tree pits). Plant application of special gardens 1 – home garden, weekend garden, kindergarden, school, hospital. Plant application of special gardens 2 – hotel, sport facilities etc. Basis of indoor plant application. Green roofs and green frontages. Presentation of students

GRADING SYSTEM:
Short presentation (5-10 minutes) in determined topic. At least one week before the presentation day ppt file must be sent to the responsible lecturer via e-mail. Written examination in the examination period.

LITERATURE:

Presentations of the lessons (available on the homepage of Department)

Period Styles in Garden Arts

SEMESTER: 2026/27/1

SUBJECT CODE: TETTD065N

ECTS Credits: 7

AIM OF SUBJECT:
Through the lecture and the practical assignments, students learn about the spatial experience of those who once used the garden, which helps them develop their design skills. Another objective of the course is to develop proficiency in the detailed design of garden elements, which can be useful in historic preservation design tasks, but is not intended to aid in historicization. The stated aim of the course is that the design skills acquired through imitating historical styles should lead to an understanding of the designers who came before them, rather than imitation, and should serve as a tool for designer confidence.

CONTENT:
The aim of the course is to provide an in-depth understanding of the design practices of the different periods of European garden architecture, characterized by their distinctive stylistic features. Students will primarily learn about the methods used to map the different stylistic periods and the proportions of garden elements.

GRADING SYSTEM:
Exam

LITERATURE:

ppt presetations of lecture and practice

Plant Use in Spatial Compositions 1

SEMESTER: 2026/27/1

SUBJECT CODE: TETTD160N

ECTS Credits: 4

AIM OF SUBJECT:
During the semester, we hold one 2-hour theoretical and one 2-hour practical class per week, during which students learn about the most important areas of plant application and the preparation of plant planting plans. To this end, they learn about the systematization and possible uses of their basic knowledge of plant geography, ecology, and dendrology. Introduction to the aspects of plant planting under special environmental conditions and in response to different customer requirements.

CONTENT:
During lectures and practical classes, students learn about the application of plants studied in the courses Dendrology and Ornamental Plant Science 1, 2, (3). They learn about the connections and relationships between native and cultivated flora. They become familiar with the specific characteristics of plant selection for open spaces with different functions. By mastering the subject matter, students will be able to implement special plant application solutions, artistic space creations, and plant arrangements. They can acquire this skill by learning about well-known and lesser-known species and their special, rarely used varieties.

GRADING SYSTEM:
Exam

LITERATURE:

ppt presetations of lecture and practice

Plant Use in Spatial Compositions 3

SEMESTER: 2026/27/1

SUBJECT CODE: TETTD162N

ECTS Credits: 3

AIM OF SUBJECT:
During lectures and practical classes, students will learn about the application of plants studied in the courses Dendrology and Ornamental Plant Science 1, 2, (3). They will learn about the connections and relationships between native and cultivated flora. They become familiar with the specific characteristics of plant selection for open spaces with different functions. By mastering the subject matter, students will be able to implement special plant application solutions, artistic spatial designs, and plant arrangements. This skill can be acquired by learning about well-known and lesser-known species and their special, rarely used varieties. Further expansion of the plant application knowledge acquired in the previous two semesters, development of an artistic perspective.

CONTENT:
Important topics of this semester: plant species applied in special environment (like sodic, wet, dry, calcareous habitats), the contact between the ecology and landscape design, plant application in urban context and landscape renewal projects (restoration projects). Impact of climate hange on ornamental plant use will be discussed, with special focus on urban environment. Excursions, plant identification walks, and planning exercises will take place during the semester. Theoretical lectures: applied botany, planting design in urban environment, green roof, green wall, plant application types, plant application in climate change, planting plan and design Practicum: deciduous plant species, perennials, excursions, plant identification walks and exams, presentation of planting plans

GRADING SYSTEM:
Mid term test and assignment

LITERATURE:

ppt presetations of lecture and practice

Protection of the Urban Built Environment

SEMESTER: 2026/27/1

SUBJECT CODE: TETTD144N

ECTS Credits: 2

AIM OF SUBJECT:
The aim of the course is to deepen and apply the knowledge acquired in the basic training in the field of settlement value protection. Through case studies, students learn about the daily tasks, planning aspects, and management methods of settlement value protection.

As a course assignment, students work on a heritage protection topic.

CONTENT:
Students will learn the subject matter through published literature, case studies, and four block lessons. External guests will also be invited to the lessons.

Program outline

Introductory lecture, requirements, and program

Budapest 100 – background, history, and practice

The research methodology of Budapest 100

About the first Budapest Tree Festival

The contemporary heritage of urban trees - Pair assignment (see assignment description)

Questionnaire preparation WS

Everyday heritage

Urban trees as cultural heritage

Good practices in heritage protection, presentation of case studies

Consultation and workshop on the pair assignment

Discussion of interim results and experiences

Documentation and preparation for the May 23 presentation

Medieval city walls in today's urban fabric (in cooperation with the ELTE Institute of Archaeology)

Walkshop along the medieval city walls of Pest and museum visit

Joint preparation for Friday's presentation

Participation in the first Budapest Tree Festival

Presentation of semester assignment, in pairs at different locations

GRADING SYSTEM:
Exam

LITERATURE:

ppt presetations of lecture and practice

Research Strategies in Ornamental Horticulture

SEMESTER: 2026/27/1

SUBJECT CODE: TETTD074N

ECTS Credits: 4

AIM OF SUBJECT:
Students get global knowledge about variety innovations, guidelines in breeding, development of greenhouse technology, organic pots, organic products, modern substrates, ensuring sustainable development, development of biological plant protection, modern technology of robotics in ornamental plant production.

CONTENT:
New trends in the cultivation of bedding and balcony plants. Application possibilities of peat substitute materials.

Perennials in pots – new products in pot plant cultivation. Ecological services of urban trees. New trends in cut flower production. Biostimulator utilities in nursery. New trends of ornamental varieties in Hungarian nurseries. New trends in the cultivation of foliage pot plants. New trends in the cultivation of flowering ornamental pot plants. Automation options for ornamental plant production. Technological changes in ornamental tree nursery production. Biostimulants and retardants in sustainable cultivation of ornamental plants. Student presentations.

GRADING SYSTEM:
Based on the students' presentation the students get practical grade.

LITERATURE:

Presentations of the lessons (available on the homepage of Department).

Journals connected to the chosen topic of the student's presentation

Sustainable landscapes

SEMESTER: 2026/27/1

SUBJECT CODE: TETTD312N

ECTS Credits: 4

AIM OF SUBJECT:
The subject highlights issues of sustainable planning in both urban and rural landscapes. The aim of the module is to provide competences in sustainable development and management of landscapes.

CONTENT:
Sustainability-Ecosystem services, landscape functions

City rehabilitation

Landscape connectivity - elements of territorial and urban green infrastructure

Nature based tourism

Sustainability in EU policies

Territorial cohesion

Environmental policy

Living countryside (public participation)

Common Agricultural Policy

Preventing urban sprawl, greenbelts, Greenways

Environmental best practices

GRADING SYSTEM:
Participation on the classes and presentation a self research related to the course topics

LITERATURE:

Selman, Paul. Sustainable Landscape Planning : The Reconnection Agenda, Routledge, 2012. Monteiro, R.; Ferreira, J.C.;

Antunes, P. Green Infrastructure

Planning Principles: Identification of

Priorities Using Analytic Hierarchy

Process. Sustainability 20

Technical Details in Landscape Architecture

SEMESTER: 2026/27/1

SUBJECT CODE: TETTD128N

ECTS Credits: 2

AIM OF SUBJECT:
The aim of the course in Hungarian education is for students to use the structural knowledge they have acquired over several semesters (BSc) independently to create creative object structures from both a formal and technical point of view.

CONTENT:
Mid-term assignments are usually related to a specific design task, project, or (design) competition. The current assignments are explained in detail at the beginning of each semester during the first class.

GRADING SYSTEM:
Individual and teamwork projects

LITERATURE:

ppt presetations of lecture and practice

Theory and practice in Landscape Architecture

SEMESTER: 2026/27/1

SUBJECT CODE: TETTD359N

ECTS Credits: 6

AIM OF SUBJECT:
Giving new Master students from all over the world a first introduction into scope, theory & practice in landscape architecture, its work domains and design approaches

CONTENT:
The seminar comprises two weeks full time teaching and focusses on precedent analysis of realised projects by Hungarian landscape architects in Budapest. In the first week students learn the technique of precedent analysis; there are lectures on theoretical backgrounds, exercises in mapping, map analysis and techniques for fieldwork. In the first week there are three assignments relating to the subsequent steps in the analysis, which are presented in the studio and graded.

In the second week students apply what they have learned in the first week in a realised project where they analyse the relation between site, design means and functioning & use. The results are worked out in steps and presented in three intermediate presentations. In the final assignment, students work individually — in the project they analysed — on a problem related to climate change (energy transition, water management, the creation of comfort and healthy environments for people) and they make a conceptual proposal for improvement with some elaborations on the detailed level. Students work in groups, except for the final assignment.

GRADING SYSTEM:
Sequence of gradings for 7 studio-assignments based on explicit grading criteria

LITERATURE:

ppt presetations of lecture and practice

Woody Plant Nursery

SEMESTER: 2026/27/1

SUBJECT CODE: TETTD043N

ECTS Credits: 4

AIM OF SUBJECT:
The aim of the course is to familiarize students with nursery cultivation as a sub-sector of horticulture, the most important propagation methods, nursery technologies, as well as sales and regulation of activities at such a level that graduated horticultural engineers have basic knowledge of the field, as well as to provide a basis for the subject in the form of chosen subjects for more in-depth study.

CONTENT:
Lectures: Parts and role of woody nurseries in horticulture. Propagation methods of woody nursery stock. Nuclear stock and propagating material management. Propagation by seed, seedbed management. Seedling training. Autovegetative propagation (by cuttings and layering). Micropropagation in nursery practice. Propagation by grafting, usage in nursery practice. Grafting formation. Tree raising by budding and grafting. Special methods of raising grafts. Basics of container grown plant production. Root-balled and transplanted plants. Lifting of field grown plants in the nursery, management of lifting. Transport, storage and marketing of nursery products. Regulation of trade of hardy nursery stock in the EU and in Hungary. Basics of rootstock usage for woody plants' grafts. Rootstocks of main plant groups (fruits and ornamentals). Practices: Budding practice. Hard- and softwood cuttings, propagation by seed, seedbed management. Seed recognition test. Brief presentation of grafting methods. Grafting practice. Hardy nursery stock. Field practices: 2 days at woody plant nurseries, 1 day in the experimental farm of the university.

GRADING SYSTEM:
Participation requirements: Participation in technical tour, practices are compulsory. Missing students have to take remedy practices. Missed educational events: Missing students have to apply the Study and Exam Rules of MATE. Checking the progress in the semester, topics, terms and possible remedies: 1. Seed recognition test. Testing knowledge in seed recognition and

some data of seeds (see more in attachment of requirement system). 2. Tests (3 times in semester): testing the basic knowledge provided in the lectures and practices. Acknowledgement of semester requirements: participation in technical tours (2 times), participation in daily practice (1 day), participation in the lectures and practices (apply the Study and Exam Rules of MATE), achieved minimum level in seed recognition test, achieved minimum level in tests (3times in the semester). Evaluation of students in oral exams: Students can achieve recommended grade. It will be counted average of in person held seed test and in person held 3 tests if it has at least medium (3) grade. Those students who do not achieve this, have to take an oral exam during the exam period. In the case of online assessments, the recommended grade cannot be given, in which case students who have met the conditions for signing the semester will take an oral or online exam in accordance with the current rector's instructions.

LITERATURE:

Compulsory readings: PPT files of lectures (see website of the department) Stanley, J. and Toogood, A. 1981. The Modern Nurseryman. Faber and Faber, London Macdonald, B. 1989. Practical Woody Plant Propagation for Nursery Growers. B.T. Batsford Ltd. Londo

Architectural and Landscape Architectural Space Theory

SEMESTER: 2026/27/2

SUBJECT CODE: TETTD035N

ECTS Credits: 4

AIM OF SUBJECT:
To introduce students to the basics of spatial theory in architecture and landscape architecture, the practical significance and application of theories

CONTENT:
During the course, we examine the functioning of space through fieldwork and seminars, from the scale of settlements to the world of interior spaces. Placing the theoretical background of spatial design in a historical context, we analyze practices from different eras, with a special focus on contemporary trends in urban planning and architecture. During our classes, we will analyze significant architectural works (buildings, urban spaces, parks, gardens, etc.) and examine the successive phases of architectural development, from program creation to implementation. We explore the relationship between the physical reality of the work and the architectural idea behind it, seeking the cohesion that organizes the mature work into a harmonious system, both within itself and in its environmental context.

GRADING SYSTEM:
Exam

LITERATURE:

ppt presetations of lecture and practice

Landscape Graphics and Visual Communication 2

SEMESTER: 2026/27/2

SUBJECT CODE: TETTD126N

ECTS Credits: 4

AIM OF SUBJECT:
Developing the artistic and creative skills of master's level students. Exploring the mechanisms and principles of creation through practical exercises. Completing project-based tasks based on spatial and planar composition using geometric and organic forms. Examining the relationship between design and landscape architecture through modeling.

CONTENT:
Workshop launch: form – discussion, joint placement of last year's installations in the arboretum with the graduating class

Form studies and photographing them, Land Art projects – assignment

Installation – personal presentations, selection of the best, consultation

Installation implementation

Flat composition assignment

GRADING SYSTEM:
Individual and teamwork projects

LITERATURE:

ppt presetations of lecture and practice

Landscape Planning in Budapest Agglomeration

SEMESTER: 2026/27/2

SUBJECT CODE: TETTD229N

ECTS Credits: 4

AIM OF SUBJECT:
The course contains 4 study trips about the actual landscape planning challenges as brownfield rehabilitation, control of suburbanization, city rehabilitation. The focus of the course is to visit sites interesting from landscape planning view in Budapest and the agglomeration zone.

CONTENT:
Greenways and Brownfield / urban rehabilitation in Budapest

Recreational landscape in the vicinity of Budapest (Visegrád cultural landscape)

Suburbanisation process and conflicts in Budapest agglomeration, mining sites

Brownfield rehabilitation (Gázgyár), landscape changes in Pannonia

GRADING SYSTEM:
Participation on the site visits, students are required to elaborate thematic reports about the site visits.

LITERATURE:

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Modern Systems in Floriculture

SEMESTER: 2026/27/2

SUBJECT CODE: TETTD079N

ECTS Credits: 4

AIM OF SUBJECT:
The subject provides comprehensive knowledge of the worldwide specialization of tropical and subtropical ornamental plant cultures and the continental specialization of temperate cultures. It discusses the resulting national and European changes and trends, emerging environmental protection tasks, as well as sustainable opportunities for breakthroughs and development. It covers the most modern technological procedures used in cultivation, the possibilities of growth control, and controlled cultivation.

CONTENT:
Lectures: Theoretical foundations of growth regulation, developmental stages of ornamental plants. Growth control methods in ornamental plant cultivation. Hydroponic cultivation in the cultivation of ornamental plants. Complementary pot cultures: Cultivation of gloxinia, Impatiens New Guinea hybrids, Spathiphyllum, bromeliads and orchids, hydrangea and azalea. In vitro techniques in the service of modern ornamental plant cultivation. Special Cut Flowers: Cultivation of Freesia, Iris × hollandica, Gladiolus, Anthurium, Streiltzia, Calla Lily, Agapanthus and Alstroemeria. The situation and trends of nursery cultivation in Hungary and Europe. The situation and trends in the cultivation and use of perennial ornamental plants. Changes in ornamental plants caused by abiotic stress effects - causes, prevention options, solutions. Practices: Knowledge of annual and balcony plants. Dendrology. Knowledge of potted plants. Mediums for growing ornamental plants, water and nutrient supply. Biotechnology practice. Bud and cane knowledge. Field practice: SpeciálMix Ltd., Gödöllő

GRADING SYSTEM:
Mid-term: Annual and balcony plant knowledge report. Dendrological report. Foliager and flowering pot plant knowledge report. The students have to recognize 20 annual, 20 woody and 15 potted ornamental plants at the skill level (immediately named by their scientific names after pointing them out), each mistake results in a deduction of one grade. It is possible to replace the report

once. Completing all plant knowledge reports to at least a sufficient (2) level and participating in the practicies are conditions for signing up for the semester. Students who have obtained a semester certificate take a written exam during the exam period. The exam covers the material presented in the lectures and practices. Students who are entitled to obtain a semester certificate apply for the announced dates through the Neptun system.

LITERATURE:

Presentations of the course material presented at the lectures (can be downloaded from the department's website). http://kertesztananyag.hu/modern-systems-in-production-and-commerce-in-ornamentals Hamrick, D. 2003. Ball Redbook I-II. Ball Publishing, Bata

Open Space Design 2

SEMESTER: 2026/27/2

SUBJECT CODE: TETTD105N

ECTS Credits: 5

AIM OF SUBJECT:
Based on the knowledge of general composition in landscape architecture taught in Open Space Design 1, this course focuses more on the practical issues of the design process. Student will learn about the value of existing vegetation on site and about how to integrate it into the composition. They will be acquainted with the basics of community supported design process. Gradually they will be aware of each level the design process (from conceptual plan to construction drawing), and about what is details of the design required at each level.

CONTENT:
Understanding the different levels of the planning process is cleared partly through design theory lectures, partly through practical exercises. During the studio work students prepare a detailed landscape renewal plan for a small court yard of a multi-story housing compound. During the design process we imitate a community supported design. As there is a dense existing vegetation on the site, students will be able to practice, how to deal with existing vegetation, how to communicate in drawing the decision regarding tree felling/protection. The last week of the semester is a design workshop where students complete a larger scale and more complex design- project in groups of 2-3, based on the design knowledge acquired in the first half of the semester. The task is to make a renewal plan for a small park integrating the compositional skills with the functional requirements. The final documentation contains tree felling/protection plan , plantation plan and necessary technical details. The semester ends with the presentation of the workshop week project.

GRADING SYSTEM:
Exam

LITERATURE:

ppt presetations of lecture and practice

Outdoor Cultivation of Ornamental Plants

SEMESTER: 2026/27/2

SUBJECT CODE: TETTD102N

ECTS Credits: 4

AIM OF SUBJECT:
The aim of the course is to introduce the importance, morphological and physiological characteristics, ecological needs, development and cultivation of woody and perennial ornamental plants in the open field. Within the framework of the course, the students' knowledge of plants will be expanded, they will also learn about the application possibilities of each species and variety, and we will also provide an insight into the green area maintenance work related to them.

CONTENT:
Lectures: Opening class: importance of floriculture, classification, international and Hungarian tendencies. Additional skills of nursery production – propagation, growing, utilization and purchase relationships. Evergreens I-II. Deciduous ornamental trees and shrubs I-VI. Perennials cultivation – Rock garden, Ornamental grasses, Water in the garden Practices: Evergreens - plant knowledge practice I-II. Plant identification test – Evergreens. Perennials cultivation- Plant knowledge practice. Deciduous ornamental trees and shrubs - plant knowledge practice I-III., Plant identification test – Deciduous trees and shrubs; Perennials. 1 All-day service in the semester + 3 days field trips and technical tours: 1 day: Visit the parks of Budapest, 1 day: Buda Arboretum, 1 day: Soroksár, Woody Plant Nursery

GRADING SYSTEM:
Projekt task: The aim of the project is for the students to apply what they have learned in the subject through independent work. The task: to survey an individual plant or a group of plants in the Buda Arboretum (given to the student at the beginning of the semester by name). Characterization of the taxon(s) is based on literature data, assessment of the condition of the plant or plant group, proposal for treatment, maintenance works. The written assignment (illustrated with own photos of the student) must be uploaded to the university e-learning system by deadline. Evaluation on a two-point scale (passed / failed). The "passed" rating is a condition for obtaining a semester signature. The assignment submitted by the deadline can be returned by the

supervisor for correction once, if the corrected assignment is also not suitable, the student cannot receive a semester signature. The methods of evaluation, exam: Written and oral examination in the examination period. Students have to register for the exam in the NEPTUN System. Participation requirements: Participation on all tours (in the Buda Arboretum, Soroksár and parks of Budapest) is obligatory. In case of replacement of these practices, one occasion will be provided during term-time. All-day service is also obligatory. For field exercises, we provide once-per-site replacement during the term. Field exercises can only be completed in the manner and at the time advertised as a replacement, and no one who fails to do so may receive signature. Attendance at lectures is optional but required, plus points (as 'positive catalog') will be added for the results of exam mark in + 5% added value if students take part in almost every classes (with maximum 2 absences). Missing lectures and classroom practices cannot be substituted. Missed educational events: Evidence of absenteeism may be provided by the course officer by presentation of a medical regulatory certification. In the case of field practice, a proven absence is also has to be provided. Missing of practices or exams: ways of certificate: In cases of absence, students have to give medical or official certificate to responsive lecturer. Number, subject matter, possibility of substitution and repair of mid term inspections: Plant identification tests: We announce one reporting date and one additional reporting date for each crop group (see practice date on the website of the department). Students who have made an unsuccessful report for the first time or who have not appeared at the time of the report may report at the time of the additional report written for them. Students who are dissatisfied with their previous marks may appear at this time to improve, but in any case, the result of the second report will be valid, even if it is weaker. The purpose of the reports is to provide students with a level of knowledge in the field of horticulture, so the evaluation is rigorous: each mistakenly recognized plant entails the deduction of one mark. The plants shall be named in the report by their full scientific (Latin!!) name (including, where appropriate, the variety name). 1. Plant identification test – evergreens (time and location: see practical timetable) 2. Plant identification test – deciduous trees and shrubs (time and location: see practical timetable) 3. Plant identification test – perennials (time and location: see practical timetable) The grade of the report will be counted towards the exam mark for the students who have passed the qualification in the written examination. Acknowledgement of semester requirements - participation in technical tours - participation in the lectures and practices (apply the Study and Exam Rules of MATE) - successful passing of all the plant identification tests (Evergreens, Deciduous ornamental trees and shrubs; Perennials) The classification method Exam in the

examination period Registration to the exam Students who have not obtained or have not accepted the offered mark, but who are eligible for semester signature, have earlier passed the exam of Plant Taxonomy can pass the exam on the exam days announced during the exam period. The written exam contains series of single choice and debugging tests and the test material includes the complete curriculum. Procedure of written exam: In order to pass the exam, students have to write a test, which includes described/verbal information of literatures, practical lessons and courses. Spelling of plant scientific names is also controlled. Gross mistakes (for example 5 or more false letter/10 plant name) will eventuate point-reductions. If the written exam (test) has at least mark 2 (and the test's total score number reach 41 with a maximum 1 fail issue/exam), summarized points of plant identification tests added to the final result (seen on tables 'Plant identification test'). Students who have achieved at least a sufficient result (48 points) will also be credited with the aggregate results of the plant identification reports completed during the current semester. If the written exam successful and gives mark 3 (or better), the students are offered and exam mark. If the written exam fails (mark 1), the students has to repeat this exam (oral exam is not allowed). Students have to do oral exam (except when they get 3 or better mark of concrete theme), if: partial result of one theme is fail (1), even if the total score is satisfactory (3) or better; the total score is only pass (2); someone is not satisfied with the offered (at least 3) exam mark. Time of oral exam: after the announcement of results of the written exam. Partial results of written exam deleted when students miss the oral examination, in that case the final (summarized) mark is 1 (fail). If someone gets partial mark 1 at least one theme during the oral exam, the final mark is also 1, so, replacement of examination (with both themes) is obligatory.

LITERATURE:

PPT files of lectures (see website of the department) Dirr, M. A (1998): Manual of Woody Landscape Plants. Stipes Publ. Company, Champaign, Ilinois, USA. Hoffman, M. H. A. (2005): List of Names of Woody Plants. International standard ENA 2005-2010, Applie

Plant Use in Spatial Compositions 2

SEMESTER: 2026/27/2

SUBJECT CODE: TETTD161N

ECTS Credits: 2

AIM OF SUBJECT:
During lectures and practical classes, students will learn about the application of plants studied in the courses Dendrology and Ornamental Plant Science 1, 2, and 3. They will learn about the connections and relationships between native and cultivated flora. They will become familiar with the characteristics of plant selection for open spaces with different functions. By mastering the subject matter, students will be able to implement special plant application solutions, artistic space creations, and plant arrangements. They can acquire this skill by learning about well-known and lesser-known species and their special, rarely used varieties.

CONTENT:
During lectures and practical classes, students learn about the application of plants studied in the courses Dendrology and Ornamental Plant Science 1, 2, and 3. Different types of ecological conditions allow for the planning of different plant groups, which we collect from the comprehensive lectures of the previous semester and supplement with more special taxa. Classroom and homework assignments provide an opportunity to practice preparing plant planting plans and learn about new species and varieties. Small assignments on various topics at the beginning of the semester lay the foundation for larger-scale assignments at the end of the semester and in the following semester.

GRADING SYSTEM:
Individual and teamwork projects

LITERATURE:

ppt presetations of lecture and practice

Restoration of Historical Gardens, Landscapes

SEMESTER: 2026/27/2

SUBJECT CODE: TETTD175N

ECTS Credits: 6

AIM OF SUBJECT:
To learn, master and apply the principles, rules and practices of restoring historical gardens and landscapes.

CONTENT:
During the course, students will learn the basic principles of surveying, analyzing, and planning related to historical gardens, landscapes, and the preservation of garden architecture and heritage, and will apply these principles to specific tasks.

They will learn to assess and interpret the value of historical sites, interpret the monuments found in landscapes of bygone eras, and identify the characteristic stylistic features of historical gardens.

During the practical sessions, students will participate in real garden revitalization projects at various locations in Hungary and abroad.

GRADING SYSTEM:
Individual and teamwork projects

LITERATURE:

ppt presetations of lecture and practice

Settlement and Environmental Sociology

SEMESTER: 2026/27/2

SUBJECT CODE: TETTD141N

ECTS Credits: 2

AIM OF SUBJECT:
The aim of the course is to enable students to analyze the social and cultural phenomena encountered during their studies from a complex sociological, cultural, and art sociological perspective, and to gain a deeper understanding of social contexts. On the one hand, it provides a systematic overview of the most important characteristics of classical and contemporary sociological paradigms, and the most important characteristics of today's late modern societies, based on the latest findings in social theory, sociology, and related social sciences, while also placing great emphasis on a multifaceted, detailed presentation of the social embeddedness of modern and contemporary art.

CONTENT:
1. Introduction. The subject of sociology, its place in the scientific system and its internal structure. The nature of social science paradigms.

2. The methodology of sociological research.

3. History of sociology 1. The classical theorists and paradigms of sociology.

4. History of sociology 2. The main paradigms, trends, and theorists of modern sociology.

5. Microsociology 1. Action. Action and decision theories.

6. Microsociology 2. Social interaction and small social groups. Game theories.

7. Mesosociology. Social organization and social networks.

8. Macrosociology 1. Large social groups and social stratification.

9. Macrosociology 2. Social structure and social subsystems.

10. Modernization and its subprocesses. Theories of late modern society.

11. Social problems and conflicts in modern society.

12. Fundamentals of the sociology of culture and art. The sociological concept of culture and its classical theories.

13. Main approaches in classical and contemporary sociology of culture and art.

GRADING SYSTEM:

Exam

LITERATURE:

ppt presetations of lecture and practice

Shaping and Modelling

SEMESTER: 2026/27/2

SUBJECT CODE: TETTD049N

ECTS Credits: 2

AIM OF SUBJECT:
The object of the course is to make students familiar with detailed technical, structural, and design principles of garden constructions. Besides describing basic technical and aesthetical rules, the lectures and seminars mainly provide a specific mindset in relation to garden constructions. The aim of the course is to deepen the gained knowledge through practice and consultation. The personal feedback given on consultations represents the core educational techniques of the course. Object design and the process of form genesis will be discovered partially through modelling. The practice of modelling is emphasised within the framework of the subject. The course introduces students to the technical and formal details of landscape architecture through modelling with a variety of materials.

CONTENT:
Design work in different scales. Concept plan and detail drowings of certain garden constructions such as pergolas, benches, pavements, etc.

GRADING SYSTEM:
Individual and teamwork projects

LITERATURE:

ppt presetations of lecture and practice

Urban Ecology

SEMESTER: 2026/27/2

SUBJECT CODE: TETTD183N

ECTS Credits: 3

AIM OF SUBJECT:
The aim of the course is to learn about the theoretical foundations of urban ecology and to integrate them through a practical task. The lectures provide an overview of the basic knowledge. The practical course of the subject provides assistance in urban planning and landscape architecture through a problem-solving design task.

CONTENT:
Theoretical topics of the course:

- Fundamentals of urban ecology and urban climate

- Methods for examining and planning urban green infrastructure

- Nature-based solutions

The practical assignment for students of the MSc in Urban Engineering is designed to support the planning tasks in the Urban Planning 2 and Architecture 2 courses, in line with the sample area. MA students in Landscape Architecture and Garden Design will complete a separate practical assignment.

Planned program:

Theoretical and practical classes

See e-learning!

GRADING SYSTEM:
Exam

LITERATURE:

ppt presetations of lecture and practice