

Faculty of Architecture

IMPORTANT NOTES

If for one subject you can find several different types (lecture, practice, laboratory) of courses then please choose one and only one course from each type in order to be able to perform the subject's requirements successfully. Civil Engineering courses are on the website separately. Courses chosen from the offer of Faculty of Civil Engineering will be checked and arranged individually by the departmental coordinator.

Subject code	Subject name		Requirement	ECTS credit
BMEEPAG0236	Applied Building Information Modelling B (Archicad advanced)		Mid-semester mark	3
Course type	Course code	Course language	Timetable information	
Laboratory	EN1-ER	English		
This course aims to expand the existing CAD knowledge of students to be able to create and modify complex CAD models easily. During the course, we use Archicad, so a basic knowledge of the program is expected.				
Subject code	Subject name		Requirement	ECTS credit
BMEEPAG0246	Applied Building Information Modelling A (Revit Architecture)		Mid-semester mark	3
Course type	Course code	Course language	Timetable information	
Laboratory	EN1-ER	English		
Design and documentation with Revit Architecture - Introductory course. Design and basic CAD knowledge is recommended. (Architectural informatics 2)				
Subject code	Subject name		Requirement	ECTS credit
BMEEPAG0247	Constructive CAAD G		Mid-semester mark	3
Course type	Course code	Course language	Timetable information	
Laboratory	EN1-ER	English		
Introduction to Google Sketchup, an easy to use 3D design software to create 3D visual models of buildings together with its surroundings. Basic modelling, textures, creating models from plans and matching photo. (See http://www.epab.bme.hu/?sketchup/index.en.html). Architects from all around the world use Google SketchUp in nearly all phases of design, starting from solid modelling to photorealistic 3D rendering. Sketchup is a simple, but powerful tool to visualize ideas in 3D. Easy to learn, simple, fullz understandable, helps the user to evolve creativity. Needs less time to find the right tool enables to spend more time with what we learn for... to be an architect!				
Subject code	Subject name		Requirement	ECTS credit
BMEEPAG0249	Constructive CAAD CE		Mid-semester mark	3
Course type	Course code	Course language	Timetable information	
Laboratory	EN1-ER	English		
Advanced CAD modelling course for students who are familiar with AutoCAD. The course deals with modeling concepts and techniques, texture, lighting and rendering. In the second part of the semester students work more or less autonomously (with occasional one-on-one consultations) on a model of their choice. See: http://www.epab.bme.hu/en/?ccce/				
Subject code	Subject name		Requirement	ECTS credit
BMEEPAGA205	Digital Representation		Mid-semester mark	4
Course type	Course code	Course language	Timetable information	
Laboratory	EN1-ERI	English	TUE:10:15-12:00	
Laboratory	EN1-ER	English	TUE:10:15-12:00	
Lecture	EN0-ER	English	TUE:10:15-12:00	
Subject code	Subject name		Requirement	ECTS credit
BMEEPAG0995	Architectural Research for Exchange Students - EG		Mid-semester mark	6
Course type	Course code	Course language	Timetable information	
Practice	EN1-ER	English		
Architectural Research for Exchange Students on the topics of the Department's competency. The aim of the subject is to carry out a research on a special topic. The research contains specifying and processing the related international literature, summing up the findings in a study and finally a presentation. The language of the research depends on the consultant - the available topics are listed on the department's homepage.				

Subject code	Subject name			Requirement	ECTS credit
BMEEPEGA601	Building Service Engineering 2			Exam	2
Course type	Course code	Course language	Timetable information		
Lecture	EN0-ER	English	MON:14:15-16:00		
Calculation of heat loss of buildings. Energy consumption of a heated space. Introduction to fluid flow. Classification of Heating. Central heating. Elements of water heating system. Pipe distributing networks Emitters and surface heating. Controlling. Renewable energy sources for heating and producing domestic hot water. Introduction to psychometrics. Psychometric processes. Ventilation (Classification, natural ventilation and mechanical one, fundamental systems of air inlet and extract) Estimation of the necessary air volume. Air heating and cooling systems. Air conditioning.					
Subject code	Subject name			Requirement	ECTS credit
BMEEPEGMM01	Building Energetics MM			Exam	5
Course type	Course code	Course language	Timetable information		
Lecture	EN0	English	MON:14:15-16:00		
Practice	EN1	English			
Subject code	Subject name			Requirement	ECTS credit
BMEEPEK0626	Real-Estate Development			Exam	2
Course type	Course code	Course language	Timetable information		
Lecture	EN1-ER	English			
Basics of RE development: The RE Cycle. Contributors and actors in the process. Real estate Market. Descriptive figures of market segments. RE Market, presentation of different markets. Market Valuation, Definition of the Market Value. Other valuation bases: RICS, TEGOVA. Valuation methodology. Development Process : the process and the Developer. Main international development companies. Feasibility Study, legal, technical and economic analysis. Sensitivity analysis. Development Parameters: GBA, GLA, lot coverage ratio, green area. Functional mix. Potential rental and other revenues. Development Cost, elements of the building costs, structure of the operation costs, yearly CF calculation. RE Marketing: Sales methodology, traditional and new marketing tools. RE Agencies and their activities. Contracting, contract types, contracting process. RE Financing.					
Subject code	Subject name			Requirement	ECTS credit
BMEEPEK0995	Architectural Research for Exchange Students - EK			Mid-semester mark	6
Course type	Course code	Course language	Timetable information		
Practice	EN1-ER	English			
Architectural Research for Exchange Students on the topics of construction technology and management. The aim of the subject is to carry out a research on a special topic. The research contains specifying and processing the related international literature, summing up the findings in a study and finally a presentation. The language of the research depends on the consultant - the available topics are listed on the department's homepage.					
Subject code	Subject name			Requirement	ECTS credit
BMEEPEKA701	CM3 - Planning of Construction Technology			Exam	4
Course type	Course code	Course language	Timetable information		
Lecture	EN0-ER	English	WED:10:15-12:00		
Practice	EN1-ER	English	WED:12:15-14:00		
The goal of the subject is to present information on the planning of elementary construction technologies related to superstructures and finishing work. The subject introduces how to apply recent innovations of building technologies during design and realisation. It gives a basic knowledge to evaluate construction options and make appropriate decisions about technology. There are case studies of building technologies used in construction of loadbearing structures, finishing and cladding works. The practical part contains workshops on planning of construction technologies: connection of structures and technologies, volume calculation, resource estimation, scheduling and construction site planning.					
Subject code	Subject name			Requirement	ECTS credit
BMEEPEKA801	Building and Architectural Economics			Mid-semester mark	2
Course type	Course code	Course language	Timetable information		
Lecture	EN0-ER	English	WED:08:15-10:00		
Aim: investigate the economic side of a real estate development emphasizing the Social cost and benefit of development. This module concentrates economical computation models, theories dealing with real estate valuation. There is a homework concerning with calculation, valuation of a real estate development. Successful submission is required for the module acceptance. Written mid-semester test as indicated, minimum pass grade required.					

Following main topics are discussed: construction cost, estimates, time value of money, building life cycle cost , measuring the worth of real estate investments.

Subject code	Subject name		Requirement	ECTS credit
BMEEPESA201	Building Constructions 1.		Exam	4
Course type	Course code	Course language	Timetable information	
Lecture	EN0-ER	English	MON:08:15-10:00	
Practice	EN1-ER	English	TUE:08:15-10:00	

This subject presents the details of the main load-bearing constructions (walls, floors, stairs) and the joints between them. Wall supported / skeleton frame, or mixed construction. Walls: Effects on walls, and how to fulfil the requirements. Sorting the walls by function, position, material, by layer-order. Walls built from elements, the development of walling elements. Floors: Functions, effects on floors, how to fulfil the requirements. Elements of floor construction. Types: plain floors (in details), arches (overview). The materials, construction lines, building methods, About the future of floors Joints between walls – floors, skeleton frames – floors. Methodology of the floor design. Stairs: Functions, effects on stairs, how to fulfil the requirements, principles of stressing and how to choose construction. Sorting the constructions by material, load bearing method, building method ... etc. Design possibilities.

Subject code	Subject name		Requirement	ECTS credit
BMEEPESA401	Building Constructions 3		Exam	4
Course type	Course code	Course language	Timetable information	
Lecture	EN0-ER	English	TUE:08:15-10:00	
Practice	EN1-ER	English	FRI:08:15-10:00	

General and detailed review of the structures of the elevation constructions. The most important aim of the subject is the analysis of the external separating constructions. Principles of the continuity of the protecting levels depending on the position in the structure. Multi-layer external separating walls, construction methods of the elevation claddings and elevation coverings, the ordinary and special external doors and windows. Complementary structures for the external doors and windows, especially the shading devices. Requirements for the external separating structures and performances of the different constructions. Building physics: heat and vapour physics, acoustic features of the external separating structures.

Subject code	Subject name		Requirement	ECTS credit
BMEEPESQ602	Building System Methodology (Building Constructions 5.)		Mid-semester mark	4
Course type	Course code	Course language	Timetable information	
Lecture	EN0-ER	English	TUE:12:15-14:00	
Practice	EN1-ER	English	MON:10:15-12:00	

Subject code	Subject name		Requirement	ECTS credit
BMEEPET0408	History of Theory of Architecture 2		Exam	2
Course type	Course code	Course language	Timetable information	
Lecture	EN1-ER	English	THU:13:15-15:00	

HISTORY OF THEORY OF ARCHITECTURE 2. BMEEPET0408 The course presents, exposes and explains the most important constituent facts, selected from the innumerable different intellectual reflections of the twentieth century and the second millennium, as a rich and simultaneous interplay of parallel stories, either promoting, or opposing each other. It doesn't interpret history as a homogeneously evolving story, emerging from the past, but at the same time, it doesn't deny the importance and operative function of creating histories. Instead of a simple, successive presentation of well-known historical facts, or a collection of fashionable notions, topics and themes, it rather concentrates on exploring their synchronic functional relationships and finding creative and relevant conclusions. 1. Introduction, theory and history in the 20th century. 2. Dominant modern reflections: Riegl, Loos Corbusier 3. Science, technology, art, future, constituent parts of the modern identity Submission and discussion of first paper. 4. Great histories of modern architecture. History, or theory? 5. The destructions of modern technologies. Totalitarian regimes, and the war. Post war time, neo-technicism and total utopias of the sixties, Banham, Archigram. 6. Rediscovery of the operative function of history. Kahn, Venturi. Vulgar modernism and vulgar historicism. Submission and discussion of second paper. 7. The global, the regional, the rural, the archaic. Structuralism, accidentism. 8. Positive and negative side of modern urbanism. 9. Beyond modern histories. Critical theories anthologies. Presence and representation. Deconstruction, phenomenology, hermeneutics. Submission and discussion of third paper.

Subject code	Subject name		Requirement	ECTS credit
BMEEPET0801	Hungarian Historic Buildings in Context		Exam	2
Course type	Course code	Course language	Timetable information	
Lecture	EN0-ER	English		

Subject code	Subject name		Requirement	ECTS credit
BMEEPET0995	Architectural Research for Exchange Students - ET		Mid-semester mark	6
Course type	Course code	Course language	Timetable information	
Practice	EN1-ER	English		
Similarly to the international practice, the course aims research activity in architecture and its documentation primarily. The research topics' possible horizon is determined by the course lists of the departments and the students' interest. Besides the architectural topics, the course will appreciate interdisciplinary and special fields in the international environment. The project work will demonstrate generic and specific skills and understanding of the research's open and synthetic character. The objective of this course is to hone the skills of analysis and abstraction in order to develop a framework for research. The student should be able to draw from precedent in the art, architecture, and engineering in the development of this framework, which will act as scaffolding for the theoretical, experimental, and creative decisions. This course will consist of a series of consultations with the teachers, but the essay should write by the student. The available topics are given by the Departments of the Faculty. The student can also propose a special topic for research during the course, but the teacher must be agreeing with the proposal. The available topics are listed on the department's homepage: http://www.eptort.bme.hu/				
Subject code	Subject name		Requirement	ECTS credit
BMEEPETA201	History of Architecture 2. (Antiquity)		Mid-semester mark	3
Course type	Course code	Course language	Timetable information	
Lecture	EN0-ER	English	WED:14:15-16:00	
Practice	EN1-ER	English	WED:16:15-17:00	
The intended task of the subject is to investigate the evaluation and formation of the European architecture of the four main cultures as Mesopotamia, Egypt, Greece and Rome. Before introducing to the evaluation of architecture we are speaking the used building materials and the structures involved. The presentation of architecture follows chronological order, analysing the functional expectation of the building types used. In Mesopotamia we discuss the space demands of the sacral, the dwelling and the palace architecture. The analysis makes possible to prove the early use of space systems in architecture. The accented topic in Egypt is the evaluation of monumental architecture in stone. It is important to understand, that the later funerary buildings are not unique architectural constructions, but part of a composition. The Hellenic and the Roman civilisation is basically an urbanistic culture. That is the reason, that both cultures are discussed through their developments in settlements. The analysis of Hellenic temple construction gives opportunity to discuss the evaluation of the Greek and Roman orders.				
Subject code	Subject name		Requirement	ECTS credit
BMEEPETA401	History of Architecture 4		Exam	3
Course type	Course code	Course language	Timetable information	
Lecture	EN0-ER	English	MON:12:15-14:00	
Practice	EN1-ER	English	MON:14:15-15:00	
Brunelleschi and the early renaissance architecture in Tuscany. The evolution of the renaissance palace in Florence and in the Northern regions of Italy. The architect and scholar Leon Battista Alberti. Bramante and and the influence of his circle in the first half of the 16th century. Michelangelo Buonarroti architect. Renaissance in Lombardy and Venice. Mannerist architecture. The late sixteenth century: Palladio and Vignola. Urban development and early baroque architecture in Rome under Pope Sixtus V. The architecture of Lorenzo Bernini and Francesco Borromini. Baroque in Venice and in Piedmont. Architecture in France in the 16-17th centuries. Baroque in central Europe: Austria, Bohemia and Germany.				
Subject code	Subject name		Requirement	ECTS credit
BMEEPETO601	History of Architecture 6		Mid-semester mark	3
Course type	Course code	Course language	Timetable information	
Lecture	EN0-ER	English	THU:17:15-20:00	
The course gives an overview of the architecture in the 20-21st centuries. The classes follow chronology with focusing on the works of some great architects: Modernism and Modern Movement. Architecture between the two world wars – De Stijl, Bauhaus, Russian Constructivism, Less is more – Architecture of Ludwig Mies van der Rohe, Toward a New Architecture – Architecture of Le Corbusier. The Nordic Classicist Tradition – Architecture of E. G. Asplund and S. Lewerentz. Alvar Aalto and the modern Finnish architecture. In the second part the course picks up some relevant architectural trends: New Empiricism, New Humanism, New Brutalism and the Team X, the way from large housing estates to architecture without architects. Unfolding post-modern architecture, participation and the Las Vegas strip, Colin Rowe's studio, Critical Regionalism. The third part concentrates on timely problems: new materials or the multi-sensorial experience of space and surface, Rem Koolhaas's Dirty Realism, new technology and digital perception, architecture of seduction.				

Subject code	Subject name			Requirement	ECTS credit
BMEEPETO801	History of Architecture in Hungary 1			Mid-semester mark	2
Course type		Course code	Course language	Timetable information	
Lecture		EN0-ER	English	TUE:10:15-12:00	
<p>The subject History of Architecture in Hungary I. aims to present and analyze the architecture of historic Hungary in European and domestic context from the history of Pannonia to the end of Baroque. The principle of the presentation is the chronological interdependence, however, particular attention is given to the main trends within the different periods as the main stylistic tendencies or external and internal factors that determine the historical and architectural context. A great emphasis is given to the exploration of the connections between the European and Hungarian history of architecture. Lecture topics include: The beginnings of architecture in the Carpathian Basin. Roman architecture in Hungary. Early medieval architecture in Hungary - Christian Architecture between West and East. The flourishing Romanesque and the beginnings of Gothic Architecture. The rise of Gothic Architecture - architecture in towns and Gothic architecture of the orders. The beginning and the first period of the renaissance till the middle of th 16th century. The architecture of fortified palaces and fortifications. The renaissance architecture in Transylvania. The beginnings of the baroque in Western Hungary in the 17th century. The High Baroque in Hungary.</p>					
Subject code	Subject name			Requirement	ECTS credit
BMEEPIPA401	Architecture of Workplaces 1			Exam	2
Course type		Course code	Course language	Timetable information	
Lecture		EN0-ER	English	THU:13:15-15:00	
<p>The history of industrial architecture, the history of Hungarian industrial architecture. Load-bearing structures of halls and of multi-storey buildings. Size standardization. Constructions of space separation, facades, subsystems of space separation constructions (foundations, roof structures, intermediate floors, external wall systems, finishes. Characteristic architectural requirements, social facilities. Logistics: transport, storage. From location to layout, emplacement of industrial plants. Design methodology, re-use, reconstruction. Offices.</p>					
Subject code	Subject name			Requirement	ECTS credit
BMEEPIQ703	PRAXIS – Architectural strategies			Mid-semester mark	3
Course type		Course code	Course language	Timetable information	
Practice		EN1-ER	English	FRI:14:15-16:00	
<p>Similar to the international practice aims the course primary research activity on architecture and its documentation. The possible horizon of the research topics is determined by the course lists of the departments and the personal interest of the students. Beside the architectural topics will give the course an appreciation of interdisciplinary and special fields in international environment too. The project work demonstrating generic and specific skills and understanding of the open and synthetic character of the research. The objective of this course is to hone the skills of analysis and abstraction in order to develop a framework for research. The student should be able to draw from precedent in both art, architecture and engineering in the development of this framework, which will act as scaffolding for the theoretical, experimental and creative decisions. This course will consist of a series of consultations to the teachers, but the essay should be written by the student. The available topics are given by the Departments of the Faculty. The student can propose also a special topic for research during the course, but the teacher has to be agree with the proposal.</p>					
Subject code	Subject name			Requirement	ECTS credit
BMEEPKO0995	Architectural Research for Exchange Students - KO			Mid-semester mark	6
Course type		Course code	Course language	Timetable information	
Practice		EN1-ER	English		
<p>Similar to the international practice aims the course primary research activity on architecture and its documentation. The possible horizon of the research topics is determined by the course lists of the departments and the personal interest of the students. Beside the architectural topics will give the course an appreciation of interdisciplinary and special fields in international environment too. The project work demonstrating generic and specific skills and understanding of the open and synthetic character of the research. The objective of this course is to hone the skills of analysis and abstraction in order to develop a framework for research. The student should be able to draw from precedent in both art, architecture and engineering in the development of this framework, which will act as scaffolding for the theoretical, experimental and creative decisions. This course will consist of a series of consultations to the teachers, but the essay should be written by the student. The available topics are given by the Departments of the Faculty. The student can propose also a special topic for research during the course, but the teacher has to be agree with the proposal.</p>					
Subject code	Subject name			Requirement	ECTS credit
BMEEPKOA402	Design Methodology			Mid-semester mark	2
Course type		Course code	Course language	Timetable information	
Lecture		EN0	English	WED:08:15-10:00	
<p>Design Methodology course introduces theoretical and practical principles of architectural design flow. The point of theoretical part is to show the history and philosophical aspects of design process, while practice is mainly trained in parallel courses. Through lectures and home works students develop skills of creativity, representation and modeling the real design activities. The process of architectural design thus can be compared to an informatics system, so for making the method more clear. Practical Design Methodology is closely connected to the Public Building Design 2 course, extending it with special design aspects and details. Through analyzing existing buildings and fictional situations interesting practical problems and solutions can be introduced and discussed. Several special methods of new facilities, building reconstructions and technologically or structurally determined buildings are also presented, to gear towards understanding the need for collaboration with design partners. Because of its importance, local and global responsibility, sustainability, free access and ecological design will be touched along whole study, to</p>					

understand the meaning of "fair architecture".				
Subject code	Subject name		Requirement	ECTS credit
BMEEPRA0995	Architectural Research for Exchange Students - RA		Mid-semester mark	6
Course type	Course code	Course language	Timetable information	
Practice	EN1-ER	English		
<p>University of Universities Students joining the Department of Graphics, Form amp; Design will have the opportunity to participate at the University of Universities. UoU (https://uou.ua.es) is an international / interacademic course with the contribution and close collaboration of 40 faculties of architecture and arts around Europe, of which our department has been an active member since its first edition three years ago. Instead of a single specific research program, our students will have the opportunity to join six (2-week long) compact project or research-based creative amp; scientific workshops, over the course of the semester. Each of the 6 sessions offer a selection of 3 to 5 online workshops, covering various fields of Architecture amp; Arts, among which students have complete freedom to choose, according to their interest and preference. We will also offer students developing the results of one or more of their workshops into a scientific paper the opportunity to publish at the open access UoU Scientific Journal (indexed at DOAJ / SHERPA / RoMEO / Dialnet / Norwegian Register for Scientific Journals). For more information, please visit the following link: http://www.rajzi.bme.hu/en/research/research-themes/630-university-of-universities</p>				
Subject code	Subject name		Requirement	ECTS credit
BMEEPRAA405	Form and Composition 2.		Mid-semester mark	3
Course type	Course code	Course language	Timetable information	
Practice	EN1	English		
Subject code	Subject name		Requirement	ECTS credit
BMEEPRAA601	Drawing and Composition 6		Mid-semester mark	2
Course type	Course code	Course language	Timetable information	
Practice	EN1-ER	English		
<p>The main topic in the syllabus in this semester is the intuitive representation of internal and external spaces: this subject aims at teaching students perspective representation at a higher level (applying 3-6 vanishing points). While drawing the streets and squares of the Buda Castle and the internal spaces of some atmospheric old public building sin Budapest (e.g. Saint Stephen Cathedral, Opera House, Hungarian National Museum) students investigate invisible geometrical and structural relations and improve their drawing skills (applying lead pencil, ink and crayon techniques). The objective is not to simply represent a naturalistic view as a camera, but to prepare a drawing of the architectural structure of a real space after grasping the gist of the composition.</p>				
Subject code	Subject name		Requirement	ECTS credit
BMEEPRAO702	Drawing 7.		Mid-semester mark	2
Course type	Course code	Course language	Timetable information	
Practice	EN1-ER	English		
<p>The course examines the relationship between colour and colour, colours and humans, and between colours and the built environment. Technical introduction of pigments, behaviour of colours when mixing pigments, the basic techniques of painting. The role of colours in the creative character and in the thoughtfully built environment. Presentation of the exterior architectural colour design, colour preferences and theories in the different historical periods. The concept and conditions of colour harmonies, guide to the effective use of the different harmony-theories. The use of colour design in everyday projects (authentic colouration in historic renovation, aesthetic urban rehabilitation, etc.) Students learn the architectural use of colour design through a series of projects, from the manual techniques of painting to digital colouration.</p>				
Subject code	Subject name		Requirement	ECTS credit
BMEEPRAQ801	Visual Communication		Mid-semester mark	3
Course type	Course code	Course language	Timetable information	
Practice	EN1-ER	English		
Subject code	Subject name		Requirement	ECTS credit
BMEEPRAQ90U	Drawing and Composition U - Architecture of the picture and picture of the architecture		Mid-semester mark	2
Course type	Course code	Course language	Timetable information	
Practice	EN1-ER	English		

Subject code	Subject name		Requirement	ECTS credit
BMEEPST0995	Architectural Research for Exchange Students - ST		Mid-semester mark	6
Course type	Course code	Course language	Timetable information	
Practice	EN1-ER	English		
Architectural Research for Exchange Students on the topics of the Department's competency. The aim of the subject is to carry out a research on a special topic. The research contains specifying and processing the related international literature, summing up the findings in a study and finally a presentation. The language of the research depends on the consultant - the available topics are listed on the department's homepage.				
Subject code	Subject name		Requirement	ECTS credit
BMEEPSTA205	Strength of Materials 1		Exam	6
Course type	Course code	Course language	Timetable information	
Lecture	EN0	English	MON:10:15-12:00; TUE:12:15-14:00	
Practice	EN1	English	WED:12:15-14:00	
Subject code	Subject name		Requirement	ECTS credit
BMEEPSTQ602	Special Load-Bearing Structures		Exam	4
Course type	Course code	Course language	Timetable information	
Lecture	EN0	English	MON:12:15-14:00	
Practice	EN1	English	TUE:10:15-12:00	
Subject code	Subject name		Requirement	ECTS credit
BMEEPTCEP02	Interdisciplinary, Project based Design S		Mid-semester mark	16
Course type	Course code	Course language	Timetable information	
Practice	EN1-ER	English		
Practice	EN2-ER	English		
The subject is based on the cooperation of the departments of the Faculty of Architecture. Students work in studios in groups with individual tasks as well instructed by teachers of the departments involved. There are two design tasks to be solved during the semester, that can be chosen freely from the offered opportunities. Each task is to solve in seven weeks. Some of the tasks are: sport hall for Olympic Games in Budapest, Dwelling Underground, Suspension in Architecture, The Green in the Metropolitan Area (green walls, green roofs) etc.				
Subject code	Subject name		Requirement	ECTS credit
BMEEPU10901	Urban housing		Mid-semester mark	2
Course type	Course code	Course language	Timetable information	
Lecture	EN1	English	FRI:12:15-16:00	
see moodle: https://edu.epitesz.bme.hu/course/view.php?id=702 The seminar is related to the Urban Housing LAB of the BME Department of Urban Planning and Design: http://urb.bme.hu/urbanhousing/ The objectives of this course are to introduce you to think critically about contemporary mass housing issues and solutions, to have an international comparison about the urban housing situation, and to make understand the complexity of mass housing development. As students arrive from different countries, the seminar uses the opportunity to learn from each other, to discover and compare several case studies. The five 4x45minute-long occasions are differentiated by geopolitical position and key topics: Introduction / urban housing terminology / comparative research method Post-Socialist Central European Countries / large housing estates Western European Countries / contemporary alternative housing solutions Post-Soviet Countries / homeownership USA / affordable housing				
Subject code	Subject name		Requirement	ECTS credit
BMEEPU10995	Architectural Research for Exchange Students - UI		Mid-semester mark	6
Course type	Course code	Course language	Timetable information	
Practice	EN1-ER	English		
Architectural research for exchange and international students: with the professional leadership of the tutors of the Department of Urban Planning and Design students work on individual research topics (eg.. Urban History, Urban Typologies, Urban Morphologies, Housing estates etc.). The course is based on individual work, with a final output of an essay.				

Subject code	Subject name		Requirement	ECTS credit
BMEEPUIQ601	Department's Design 1.		Mid-semester mark	3
Course type	Course code	Course language	Timetable information	
Practice	EN1-ER	English	THU:14:15-17:00	
A special urban design course focusing mainly on urban public space design with the help of invited lecturers and landscape designer consultants. The course is a partly theoretical and partly practical where students get acquainted with special issues and problems of public space definition, basic notions and tools of public realm and public space design. In the design assignment students deal with a smaller spatial entity, where they start from the analysis of the urban problem and provide a possible solution for the publicly attainable zones in between buildings.				
Subject code	Subject name		Requirement	ECTS credit
BMEEPUIQ702	Urban development: analysis, planning, management		Mid-semester mark	3
Course type	Course code	Course language	Timetable information	
Lecture	EN1	English	WED:16:15-18:00	
The course is a series of lectures of the eighth semester of the regular MSc curriculum and an elective course for Erasmus students, with 2 hours lecture weekly. The goal of the course is to get students acquainted with the multidisciplinary urban challenges due to the climate change, introduced by basic theoretical knowledge and illustrated with contemporary projects from all around the world. The semester will terminate by student's power-point presentations, demonstrating the best practices from their home countries.				
Subject code	Subject name		Requirement	ECTS credit
BMEEPUIQ704	Urban Activism / Community driven experiences in urban development		Mid-semester mark	3
Course type	Course code	Course language	Timetable information	
Practice	EN1	English		
The elective course aims to teach students the practice of participatory design, focusing on urban public space design involving local communities. Students – after analysing the European best practices – will get experience in involving different social groups and interest-groups into the design process of a public space. The course is based on the results from the research on the possibilities to enhance the practice of participatory design done at the Urban Design and planning department. Students will get an extensive knowledge on the international practice of participatory design, reading much of its English literature, analysing completed European public spaces designed with this method. During the practical classes, the students will make a design proposal or activity process simulation for a selected public space in Budapest, either in a dense urban context or on the spaces of a housing estate, or in a suburban situation. A group work is expected to study the capabilities of the place, the different social groups present and the possibilities to involve these locals. Students will simulate the process of participatory design, will place themselves in the position of the locals, will work on strategies to grant the collaboration needed. The process will result in a series of rules needed to gain equal possibilities of action from all social groups on the site. Students will map the real needs of locals, will get into interaction with their communities, and will find design tools to fulfil their needs. The first presentation will summarize the needs of the local groups, while the final presentation will show the finished results of the design process. Both presentations need to be handed in digitally the final grade is a result of the evaluation of both.				
Subject code	Subject name		Requirement	ECTS credit
BMEEPUIQ705	Urban Landscape / Garden and Landscape Design in the Perspective of Architecture		Mid-semester mark	3
Course type	Course code	Course language	Timetable information	
Practice	EN1	English	FRI:13:15-16:00	
The urban landscape is an interdisciplinary theoretical concept in which the concepts of landscape, open space, and garden architecture appear in close symbiosis with architectural and urban architecture approaches. For this reason, interdisciplinary interpretations of the concept can be developed primarily in the interprofessional dialogue, from the comparison of different positions and visions. The aim of the subject is the complex interpretation of the concept of the urban landscape, the search for connections between the concepts of architecture, urban architecture and related disciplines. In its multi-scale methodology, the subject examines the interpretation of the urban landscape as both an ecological and social issue. During the semester, the emphasis is placed on the theoretical and practical problems of the urbanized landscape, interprofessional dialogue with invited specialist speakers, and joint site visits. The theme of the course analyzes the transformation along the three lines of "positions, visions, concepts", which can also be understood as a model of landscape theory, through which the urbanized landscape and the green areas and gardens appearing in the urban environment can be examined from the viewpoints of different disciplines (landscape architect, garden designer, urban architect, architect, etc.) , problems of parks. Contemporary horticulture and landscape architecture projects are presented by invited speakers, with particular attention to their practical experience gained during creative work. On each occasion, the theoretical perspectives of the urban landscape are shaped by a series of scale changes emerging from different concepts. The concept of the urbanized landscape appearing in the contemporary literature directs attention to the new qualitative dimensions that try to interpret the changes in territories that are becoming malleable, borders that are blurring, and territorial identities that are getting mixed up. The ever-changing, ever-changing landscape, the ever-stronger landscape-shaping role of				

humanity requires new approaches to the relationship between landscape and architecture. The motto of the subject also assumes the active participation of the students, in connection with the topic of the lectures, during the semester it is possible to present individual analyzes of the raised landscape problems. The core of the occasions is shaped by joint conversations and the discussion of different points of view arising in connection with the topics.

Subject code	Subject name		Requirement	ECTS credit
BMEEPUIQ801	Sustainable and livable city		Exam	3
Course type	Course code	Course language	Timetable information	
Lecture	EN0	English		
Practice	EN1	English		