

Study plan

Name of study plan: U itelství stavebních p edm t pro st ední školy - kombinovaná forma studia

Faculty/Institute/Others:

Department:

Branch of study guaranteed by the department: Welcome page

Garantor of the study branch:

Program of study: Training Teachers of Building Courses at Higher Secondary Schools

Type of study: Follow-up master combined

Required credits: 120

Elective courses credits: 0

Sum of credits in the plan: 120

Note on the plan: Studijní plán pro kombinovanou formu studia od akademického roku 2025/2026

Name of the block: Compulsory courses

Minimal number of credits of the block: 51

The role of the block: Z

Code of the group: NU202502_K

Name of the group: U itelství, povinné p edm ty - oborová didaktika

Requirement credits in the group: In this group you have to gain at least 27 credits

Requirement courses in the group: In this group you have to complete at least 5 courses

Credits in the group: 27

Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) <i>Tutors, authors and guarantors (gar.)</i>	Completion	Credits	Scope	Semester	Role
123DSMV_K	Didactics of Building Materials and their Practical Teaching <i>Milena Pavlíková, Zbyšek Pavlík, Adam Pivák Milena Pavlíková Milena Pavlíková (Gar.)</i>	Z,ZK	6	18B	Z	z
132MVSM_K	Methodology of Teaching Structural Mechanics in Examples <i>Jaroslav Kruis, Eva Novotná Jaroslav Kruis Jaroslav Kruis (Gar.)</i>	Z,ZK	6	18B	Z	z
154DGPM_K	Didactics of Land Surveying and Instrumental Measurement	Z,ZK	6	18B	L	z
124MVPS_K	Didactics of Building Structures and of Building Physics	Z,ZK	6	18B	L	z
123SPDP_K	Semester Project of Diploma Thesis <i>Milena Pavlíková</i>	Z	3	4B	Z	z

Characteristics of the courses of this group of Study Plan: Code=NU202502_K Name=U itelství, povinné p edm ty - oborová didaktika

123DSMV_K	Didactics of Building Materials and their Practical Teaching	Z,ZK	6
132MVSM_K	Methodology of Teaching Structural Mechanics in Examples	Z,ZK	6
154DGPM_K	Didactics of Land Surveying and Instrumental Measurement	Z,ZK	6
124MVPS_K	Didactics of Building Structures and of Building Physics	Z,ZK	6
In the introduction, the subject is focused on the theoretical side of the didactics of professional teaching. Students will get to know the RVP and ŠVP educational programs, teaching methods, key competencies, goals, didactic principles and resources. Emphasis is placed on the phases of the lesson, the preparation of the teacher for the lesson, methods of knowledge assessment and the creation of a didactic test. A significant part of the teaching focuses on the practical explanation of the didactics of selected issues of building construction, specifically structural systems of buildings, vertical and horizontal load-bearing structures, stairs, foundation structures, substructure, protection against ground moisture and expansion of load-bearing structures. The expanding part is the issue of building physics (thermal protection of buildings, sun exposure, daylighting, building acoustics), which is either not taught at all, or only to a limited extent, in high schools with a focus on construction.			
123SPDP_K	Semester Project of Diploma Thesis	Z	3

Code of the group: NU202504_K

Name of the group: U itelství, povinné p edm ty - praxe

Requirement credits in the group: In this group you have to gain at least 24 credits

Requirement courses in the group: In this group you have to complete at least 3 courses

Credits in the group: 24

Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) <i>Tutors, authors and guarantors (gar.)</i>	Completion	Credits	Scope	Semester	Role
123PPPR_K	Propedeutics of Pedagogical Practice	KZ	6	16B	L	z
123SPPR_K	Continuous Teaching Practice	KZ	15	450XH	Z	z
123RPPR_K	Reflection of Teaching Practice	Z	3	8B	Z	z

Characteristics of the courses of this group of Study Plan: Code=NU202504_K Name=U itelství, povinné p edm ty - praxe

123PPPR_K	Propedeutics of Pedagogical Practice	KZ	6
123SPPR_K	Continuous Teaching Practice	KZ	15
123RPPR_K	Reflection of Teaching Practice	Z	3

Name of the block: Compulsory courses in the program

Minimal number of credits of the block: 51

The role of the block: P

Code of the group: NU202501_K

Name of the group: U itelství, povinné p edm ty - u itelská propedeutika

Requirement credits in the group: In this group you have to gain at least 24 credits

Requirement courses in the group: In this group you have to complete at least 6 courses

Credits in the group: 24

Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) <i>Tutors, authors and guarantors (gar.)</i>	Completion	Credits	Scope	Semester	Role
32MC-K-U SP-01	Role of Teachers in Modern Society <i>Miroslava Kova íková Miroslava Kova íková Miroslava Kova íková (Gar.)</i>	ZK	3	8B		P
32MC-K-PEDO-01	General Pedagogy <i>Daniela Nováková, Martin Kursch Daniela Nováková Martin Kursch (Gar.)</i>	Z,ZK	5	16B		P
32MC-K-PSEP-01	Psychology in Educational Process <i>Lenka Emrová, Eva Šírová Eva Šírová Lenka Emrová (Gar.)</i>	Z,ZK	5	16B		P
32MC-K-ODID-01	General Didactics <i>David Van ek, Kate ína Mrázková David Van ek David Van ek (Gar.)</i>	Z,ZK	5	16B		P
32MC-K-MSVV-01	Social Science Research Methods	Z,ZK	3	8B		P
32MC-K-PEDS-01	Social Pedagogy	ZK	3	8B		P

Characteristics of the courses of this group of Study Plan: Code=NU202501_K Name=U itelství, povinné p edm ty - u itelská propedeutika

32MC-K-U SP-01	Role of Teachers in Modern Society	ZK	3
32MC-K-PEDO-01	General Pedagogy	Z,ZK	5
The course focuses on basic knowledge of educational phenomena, processes, laws, principles, categories, and theories that form the basis of pedagogical thinking. Education and training will be discussed in the context of pedagogical sciences in connection with changes in the Czech education system over the past twenty years, namely in relation to curricular reform, diversification of the system, alternative educational concepts, and changes in vocational education.			
32MC-K-PSEP-01	Psychology in Educational Process	Z,ZK	5
The course guides students toward future applications of psychological theory in practical teaching activities. It facilitates the acquisition and development of specific skills, particularly in the area of personal development and understanding the personality traits of others. Furthermore, the course presents selected psychological knowledge necessary for understanding and guiding the educational process. This mainly concerns the characteristics and development of cognitive, motivational, and emotional processes, the psychological characteristics of individuals, and their changes in individual developmental stages, especially during adolescence.			
32MC-K-ODID-01	General Didactics	Z,ZK	5
32MC-K-MSVV-01	Social Science Research Methods	Z,ZK	3
32MC-K-PEDS-01	Social Pedagogy	ZK	3

Code of the group: NU202503_K

Name of the group: U itelství, povinné p edm ty - oborové

Requirement credits in the group: In this group you have to gain at least 18 credits

Requirement courses in the group: In this group you have to complete at least 5 courses

Credits in the group: 18

Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) <i>Tutors, authors and guarantors (gar.)</i>	Completion	Credits	Scope	Semester	Role
133SK1U_K	Building Structures 1	ZK	3	10B	L	P
122PRSU_K	Planning and Implementation of Projects	ZK	3	10B	L	P
127ASKU_K	Architecture, Settlements and Landscape	Z,ZK	6	18B	L	P
134SK2U_K	Building Structures 2	ZK	3	10B	Z	P
124KOCU_K	Exercises in Building Construction	ZK	3	10B	Z	P

Characteristics of the courses of this group of Study Plan: Code=NU202503_K Name=U itelství, povinné p edm ty - oborové

133SK1U_K	Building Structures 1	ZK	3
This course aims to provide understanding of the specifics of concrete and concrete structures with respect to the didactics of lecturing concrete structures.			
122PRSU_K	Planning and Implementation of Projects	ZK	3
127ASKU_K	Architecture, Settlements and Landscape	Z,ZK	6
134SK2U_K	Building Structures 2	ZK	3
124KOCU_K	Exercises in Building Construction	ZK	3
The course is focused on practicing the design and drawing of building structures, including their assessment from the point of view of building physics. Students will become familiar with and/or improve in structural designs of buildings, preliminary dimensioning and drawing of building structures. They will learn basic building physics calculations in the field of thermal protection of buildings, building acoustics, sun exposure and daylighting.			

Code of the group: NU202509_K

Name of the group: U itelství, diplomová práce

Requirement credits in the group: In this group you have to gain at least 9 credits

Requirement courses in the group: In this group you have to complete at least 1 course

Credits in the group: 9

Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) <i>Tutors, authors and guarantors (gar.)</i>	Completion	Credits	Scope	Semester	Role
123DPUC_K	Diploma Thesis <i>Milena Pavlíková</i>	Z	9		Z,L	P

Characteristics of the courses of this group of Study Plan: Code=NU202509_K Name=U itelství, diplomová práce

123DPUC_K	Diploma Thesis	Z	9
-----------	----------------	---	---

Name of the block: Compulsory elective courses

Minimal number of credits of the block: 9

The role of the block: S

Code of the group: NU202505PV_K

Name of the group: U itelství, povinn volitelné p edm ty - p edm ty v angli tin

Requirement credits in the group: In this group you have to gain at least 6 credits

Requirement courses in the group: In this group you have to complete at least 2 courses

Credits in the group: 6

Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) <i>Tutors, authors and guarantors (gar.)</i>	Completion	Credits	Scope	Semester	Role
126YCON_K	Construction Contracting	Z,ZK	4	18B	L	s
32ME-K-PRSK-01	Presentation and Communication Skills	ZK	4	16B		s

Characteristics of the courses of this group of Study Plan: Code=NU202505PV_K Name=U itelství, povinn volitelné p edm ty - p edm ty v angli tin

126YCON_K	Construction Contracting	Z,ZK	4
As every project manager in construction business has to be a contract manager at the same time, understanding the contract - respectively contracting in general - is a must. Course of Construction Contracting is oriented on current business practices and methods, management techniques and understanding general legal principles, codes and regulations. It is about doing business in construction using standard procurement systems and applying given types of contracts, respectively standard contracts (e.g. FIDIC). Lectures are based on the real practice experience of both course's lecturers and various case studies are studied and solved in the course.			
32ME-K-PRSK-01	Presentation and Communication Skills	ZK	4

Code of the group: NU202507PV_K

Name of the group: U itelství, povinn volitelné p edm ty - oborová didaktika

Requirement credits in the group: In this group you have to gain at least 3 credits

Requirement courses in the group: In this group you have to complete at least 1 course

Credits in the group: 3

Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) <i>Tutors, authors and guarantors (gar.)</i>	Completion	Credits	Scope	Semester	Role
32MC-K-TECR-01	Impacts of Information Technology on Society	Z,ZK	3	8B		s
32MC-K-DLAB-01	Didactics of Laboratories	KZ	3	8B		s

Characteristics of the courses of this group of Study Plan: Code=NU202507PV_K Name=U itelství, povinn volitelné p edm ty - oborová didaktika

32MC-K-TECR-01	Impacts of Information Technology on Society	Z,ZK	3
32MC-K-DLAB-01	Didactics of Laboratories	KZ	3

Name of the block: choice of courses from a compulsory group of courses

Minimal number of credits of the block: 9

The role of the block: SA

Code of the group: NU202506PV_K

Name of the group: U itelství, povinn volitelné p edm ty - u itelská propedeutika

Requirement credits in the group: In this group you have to gain at least 6 credits

Requirement courses in the group: In this group you have to complete at least 2 courses

Credits in the group: 6

Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) <i>Tutors, authors and guarantors (gar.)</i>	Completion	Credits	Scope	Semester	Role
32MC-K-SPKO-01	Social and Pedagogical Communication	KZ	3	8B		SA
32MC-K-PSHY-01	Psycho-hygiene Aspects of Teaching Profession	Z,ZK	3	8B		SA
32MC-K-RIZZ-01	Risk Behavior of Pupils	KZ	3	8B		SA
32MC-K-OSPN-01	Personality: Pathology and Normality	KZ	3	8B		SA

Characteristics of the courses of this group of Study Plan: Code=NU202506PV_K Name=U itelství, povinn volitelné p edm ty - u itelská propedeutika

32MC-K-SPKO-01	Social and Pedagogical Communication	KZ	3
32MC-K-PSHY-01	Psycho-hygiene Aspects of Teaching Profession	Z,ZK	3
32MC-K-RIZZ-01	Risk Behavior of Pupils	KZ	3
32MC-K-OSPN-01	Personality: Pathology and Normality	KZ	3

Code of the group: NU202508PV_K

Name of the group: U itelství, povinn volitelné p edm ty - oborové stavební

Requirement credits in the group: In this group you have to gain at least 3 credits

Requirement courses in the group: In this group you have to complete at least 1 course

Credits in the group: 3

Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) <i>Tutors, authors and guarantors (gar.)</i>	Completion	Credits	Scope	Semester	Role
124YRHS_K	Reconstruction of Historical Building Structures	Z	2	8B	L	SA
134YPOD_K	Fire Resistance of Steel and Timber Structures	Z	2	8B	L	SA
127UKKO_K	Urban and Landscape Design	ZK	3	8B	L	SA
129TSTP_K	Traditional Building Technologies and Crafts	ZK	3	8B	L	SA

Characteristics of the courses of this group of Study Plan: Code=NU202508PV_K Name=U itelství, povinn volitelné p edm ty - oborové stavební

124YRHS_K	Reconstruction of Historical Building Structures	Z	2
In the period from the second half of the 19th century by 1960, more than 250 thousand of two- to five-story brick apartment (mainly rental) houses in traditional brick technology were constructed in the Czech Republic. Brick buildings from this period were built according to regulations, building codes and laws from the turn of the 19th and 20th centuries. Multi-storey brick tenement houses do not meet the current thermal, acoustic and other requirements, the requirements of a dynamically developing society to the required extent, and in many cases require regeneration and modernization interventions, including the replacement of non-compliant and out-of-date structures and equipment enabling their further use. The course is focused on the current issue of renewal, reconstruction and modernization of brick multi-storey rental apartment buildings, on historical structures and materials, the issue of degradation and aging of structures and materials of historic brick residential buildings, their residual life, failures and reconstruction of historical buildings and their parts. Furthermore, the course is focused on the issue of improving the well-being of the internal environment, the replacement of finishing structures, opening fillings, etc. as an integral part of the modernization of these buildings.			
134YPOD_K	Fire Resistance of Steel and Timber Structures	Z	2
The class gives introduction to fire modeling, fire safety and fire resistance of steel, steel-concrete composite and timber structural elements.			
127UKKO_K	Urban and Landscape Design	ZK	3
The course introduces selected chapters from urban and landscape composition and the theory of urbanism as a basis for urban and landscape design (city image, city environment, perception, landscape composition, composed landscape, cultural landmarks, the phenomenon of the garden in the historical context, etc.). The aim of the course is a comprehensive view of urban and landscape design as a creation of the environment. A theoretical basis and a sound analysis of existing towns and landscapes are subsequently a prerequisite for successful practical design. This extends the content of the basic urban planning courses from the Bachelor's degree. Theoretical issues are complemented by examples from history and examples of various urban analyses. It focuses mainly on the development of the urban form of Prague, its selected districts (Dejvice, Karlín), aspects of their planning (regulatory commissions) and some specific issues (high-rise buildings). The basic set of lectures is complemented by several extension topics by invited external speakers.			
129TSTP_K	Traditional Building Technologies and Crafts	ZK	3
The lecture series of the course focuses on the construction and design practices of traditional urban construction, selected crafts related to the topic at hand and also on the methodological proposal of the procedure of sensitive conservation restoration of the affected details of historical buildings. The lectures will include exemplary examples of restoration and presentations by practitioners focused on particular thematic areas. The lectures will focus on the following building professions.			

List of courses of this pass:

Code	Name of the course	Completion	Credits
122PRSU_K	Planning and Implementation of Projects	ZK	3
123DPUC_K	Diploma Thesis	Z	9
123DSMV_K	Didactics of Building Materials and their Practical Teaching	Z,ZK	6
123PPPR_K	Propedeutics of Pedagogical Practice	KZ	6
123RPPR_K	Reflection of Teaching Practice	Z	3
123SPDP_K	Semester Project of Diploma Thesis	Z	3
123SPPR_K	Continuous Teaching Practice	KZ	15
124KOCU_K	Exercises in Building Construction	ZK	3
The course is focused on practicing the design and drawing of building structures, including their assessment from the point of view of building physics. Students will become familiar with and/or improve in structural designs of buildings, preliminary dimensioning and drawing of building structures. They will learn basic building physics calculations in the field of thermal protection of buildings, building acoustics, sun exposure and daylighting.			
124MVPS_K	Didactics of Building Structures and of Building Physics	Z,ZK	6
In the introduction, the subject is focused on the theoretical side of the didactics of professional teaching. Students will get to know the RVP and ŠVP educational programs, teaching methods, key competencies, goals, didactic principles and resources. Emphasis is placed on the phases of the lesson, the preparation of the teacher for the lesson, methods of knowledge assessment and the creation of a didactic test. A significant part of the teaching focuses on the practical explanation of the didactics of selected issues of building construction, specifically structural systems of buildings, vertical and horizontal load-bearing structures, stairs, foundation structures, substructure, protection against ground moisture and expansion of load-bearing structures. The expanding part is the issue of building physics (thermal protection of buildings, sun exposure, daylighting, building acoustics), which is either not taught at all, or only to a limited extent, in high schools with a focus on construction.			
124YRHS_K	Reconstruction of Historical Building Structures	Z	2
In the period from the second half of the 19th century by 1960, more than 250 thousand of two- to five-story brick apartment (mainly rental) houses in traditional brick technology were constructed in the Czech Republic. Brick buildings from this period were built according to regulations, building codes and laws from the turn of the 19th and 20th centuries. Multi-storey brick tenement houses do not meet the current thermal, acoustic and other requirements, the requirements of a dynamically developing society to the required extent, and in many cases require regeneration and modernization interventions, including the replacement of non-compliant and out-of-date structures and equipment enabling their further use. The course is focused on the current issue of renewal, reconstruction and modernization of brick multi-storey rental apartment buildings, on historical structures and materials, the issue of degradation and aging of structures and materials of historic brick residential buildings, their residual life, failures and reconstruction of historical buildings and their parts. Furthermore, the course is focused on the issue of improving the well-being of the internal environment, the replacement of finishing structures, opening fillings, etc. as an integral part of the modernization of these buildings.			
126YCON_K	Construction Contracting	Z,ZK	4
As every project manager in construction business has to be a contract manager at the same time, understanding the contract - respectively contracting in general - is a must. Course of Construction Contracting is oriented on current business practices and methods, management techniques and understanding general legal principles, codes and regulations. It is about doing business in construction using standard procurement systems and applying given types of contracts, respectively standard contracts (e.g. FIDIC). Lectures are based on the real practice experience of both course's lecturers and various case studies are studied and solved in the course.			
127ASKU_K	Architecture, Settlements and Landscape	Z,ZK	6
127UKKO_K	Urban and Landscape Design	ZK	3
The course introduces selected chapters from urban and landscape composition and the theory of urbanism as a basis for urban and landscape design (city image, city environment, perception, landscape composition, composed landscape, cultural landmarks, the phenomenon of the garden in the historical context, etc.). The aim of the course is a comprehensive view of urban and landscape design as a creation of the environment. A theoretical basis and a sound analysis of existing towns and landscapes are subsequently a prerequisite for successful practical design. This extends the content of the basic urban planning courses from the Bachelor's degree. Theoretical issues are complemented by examples from history			

and examples of various urban analyses. It focuses mainly on the development of the urban form of Prague, its selected districts (Dejvice, Karlín), aspects of their planning (regulatory commissions) and some specific issues (high-rise buildings). The basic set of lectures is complemented by several extension topics by invited external speakers.			
129TSTP_K	Traditional Building Technologies and Crafts	ZK	3
The lecture series of the course focuses on the construction and design practices of traditional urban construction, selected crafts related to the topic at hand and also on the methodological proposal of the procedure of sensitive conservation restoration of the affected details of historical buildings. The lectures will include exemplary examples of restoration and presentations by practitioners focused on particular thematic areas. The lectures will focus on the following building professions.			
132MVSM_K	Methodology of Teaching Structural Mechanics in Examples	Z,ZK	6
133SK1U_K	Building Structures 1	ZK	3
This course aims to provide understanding of the specifics of concrete and concrete structures with respect to the didactics of lecturing concrete structures.			
134SK2U_K	Building Structures 2	ZK	3
134YPOD_K	Fire Resistance of Steel and Timber Structures	Z	2
The class gives introduction to fire modeling, fire safety and fire resistance of steel, steel-concrete composite and timber structural elements.			
154DGPM_K	Didactics of Land Surveying and Instrumental Measurement	Z,ZK	6
32MCK-DLAB-01	Didactics of Laboratories	KZ	3
32MCK-MSV-01	Social Science Research Methods	Z,ZK	3
32MCK-ODID-01	General Didactics	Z,ZK	5
32MCK-OSPN-01	Personality: Pathology and Normality	KZ	3
32MCK-PEDO-01	General Pedagogy	Z,ZK	5
The course focuses on basic knowledge of educational phenomena, processes, laws, principles, categories, and theories that form the basis of pedagogical thinking. Education and training will be discussed in the context of pedagogical sciences in connection with changes in the Czech education system over the past twenty years, namely in relation to curricular reform, diversification of the system, alternative educational concepts, and changes in vocational education.			
32MCK-PEDS-01	Social Pedagogy	ZK	3
32MCK-PSEP-01	Psychology in Educational Process	Z,ZK	5
The course guides students toward future applications of psychological theory in practical teaching activities. It facilitates the acquisition and development of specific skills, particularly in the area of personal development and understanding the personality traits of others. Furthermore, the course presents selected psychological knowledge necessary for understanding and guiding the educational process. This mainly concerns the characteristics and development of cognitive, motivational, and emotional processes, the psychological characteristics of individuals, and their changes in individual developmental stages, especially during adolescence.			
32MCK-PSHY-01	Psycho-hygiene Aspects of Teaching Profession	Z,ZK	3
32MCK-RIZZ-01	Risk Behavior of Pupils	KZ	3
32MCK-SPKO-01	Social and Pedagogical Communication	KZ	3
32MCK-TECR-01	Impacts of Information Technology on Society	Z,ZK	3
32MCK-U SP-01	Role of Teachers in Modern Society	ZK	3
32ME-K-PRSK-01	Presentation and Communication Skills	ZK	4

For updated information see <http://bilakniha.cvut.cz/en/FF.html>

Generated: day 2025-10-06, time 06:22.