Study plan

Name of study plan: Stavitelství - příprava, realizace a provoz staveb

Faculty/Institute/Others:
Department:
Branch of study guaranteed by the department: Welcome page
Garantor of the study branch:
Program of study: Construction Engineering - Planning, Implementation and Operation of Structures
Type of study: Follow-up master full-time
Required credits: 90
Elective courses credits: 0
Sum of credits in the plan: 90
Note on the plan: platí pro nástup od akad. roku 2023/24

Name of the block: Compulsory courses
Minimal number of credits of the block: 79
The role of the block: Z

Code of the group: NR20230100
Name of the group: Stavitelství - příprava, realizace a provoz staveb, 1. semestr
Requirement credits in the group: In this group you have to gain at least 19 credits
Requirement courses in the group: In this group you have to complete at least 3 courses
Credits in the group: 19
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)* *Tutors,* ***authors*** *and guarantors (gar.)*	Completion	Credits	Scope	Semester	Role
122KVAS	**Quaility in Construction** *Linda Veselá, Pavel Svoboda* ***Pavel Svoboda*** *Linda Veselá (Gar.)*	Z,ZK	7	3P+2C	Z	z
122PRPV	**Use of Computers for Planing and Management of Projects** *Rostislav Šulc, Tomáš Váchal, Vjačeslav Usmanov, Michal Kovářík* ***Tomáš Váchal*** *Rostislav Šulc (Gar.)*	Z,ZK	7	3P+3C	Z	z
210DIIK	**Diagnostics of Engineering Structures** *Jiří Litoš, Jan Zatloukal, Martin Jonáš, Petr Konvalinka, Radoslav Sovják* ***Jiří Litoš*** *Jiří Litoš (Gar.)*	Z,ZK	5	2P+2C	Z,L	z

Characteristics of the courses of this group of Study Plan: Code=NR20230100 Name=Stavitelství - příprava, realizace a provoz staveb, 1. semestr

122KVAS	Quaility in Construction	Z,ZK	7
122PRPV	Use of Computers for Planing and Management of Projects	Z,ZK	7
210DIIK	Diagnostics of Engineering Structures	Z,ZK	5

The course aims to introduce diagnostics of civil engineering structures, mechanical, thermal, hygric, chemical and others influences of genesis of failure of civil engineering structures, specificaly on engineering structures (bridges, footbridges, halls etc.). During thecourse students will introduce with behavior of engineering structures, structural and material failures, testing devices for diagnostics and data evaluation.

Code of the group: NR20230200
Name of the group: Stavitelství - příprava, realizace a provoz staveb, 2. semestr
Requirement credits in the group: In this group you have to gain at least 30 credits
Requirement courses in the group: In this group you have to complete at least 6 courses
Credits in the group: 30
Note on the group: Pro zápis předmětu Projekt - 122PRJL je nutné v průběhu magisterského nebo předchozího bakalářského studia absolvovat kombinaci předmětů Provozování a správa budov - 122PSBL nebo Řízení správy, provozu a údržby budov - 122RPSB a Inženýrské činnosti pro pozemní stavby - 122ICPS nebo Inženýrské činnosti pro pozemní stavby - 122ICPP.

Code	Name of the course / Name of the group of courses *(in case of groups of courses the list of codes of their members)* *Tutors,* ***authors*** *and guarantors (gar.)*	Completion	Credits	Scope	Semester	Role
122BOZF	**Health and Safety Management in Construction Company and on Building Site** *Pavel Svoboda, Tomáš Váchal* ***Tomáš Váchal*** *Pavel Svoboda (Gar.)*	Z,ZK	7	4P+2C	L	z
122PRJL	**Project Design** *Tomáš Váchal, Pavel Neumann, Čeněk Jarský* ***Čeněk Jarský*** *Čeněk Jarský (Gar.)*	KZ	5	4C	L	z
122SPTC	**Robot Control and Special Technology** *Vjačeslav Usmanov, Michal Kovářík* ***Vjačeslav Usmanov*** *Vjačeslav Usmanov (Gar.)*	Z,ZK	4	2P+2C	L	z
122TEPR	**Construction Technology Design** *Vít Kosina, Matouš Kosina* ***Vít Kosina*** *Vít Kosina (Gar.)*	Z,ZK	5	2P+2C	L	z
126FRIN	**Financial Management, Capital Investment and Insurance** *Eduard Hromada, Božena Kadeřábková*	Z,ZK	4	2P+2C	L	z
134NKPS	**Design of structures during construction process** *Břetislav Židlický, Karel Šeps, Martin Tipka* ***Břetislav Židlický*** *Břetislav Židlický (Gar.)*	Z,ZK	5	2P+2C	L	z

Characteristics of the courses of this group of Study Plan: Code=NR20230200 Name=Stavitelství - příprava, realizace a provoz staveb, 2. semestr

122BOZF	Health and Safety Management in Construction Company and on Building Site	Z,ZK	7
The aim of the course is to acquaint students with the performance of the health and safety coordinator (hereinafter in the Health and Safety Department) in the preparatory and implementation phase of construction, operation on the construction site in the role of coordination of safe work and workplace. The main goal is to train the development of a health and safety plan for a specific building and its updating and problem solving on examples. Sm.92 / 57 / EHS, introduction of KOO OSH in the Czech Republic, nomenclature, content and compilation of OSH plan according to Act No. 309/2006 Coll. elaboration of individual types of project documentation, application in practice, view of OIP on KOO BOZP, BOZP plan - Excel; software related to the issue; statutory activities of KOO BOZP, photographs of good and bad practice from constructions Practical experience from tenders for the determination of KOO BOZP, remuneration of KOO BOZP and its insurance; conditions for Special Risks and Constructions. Within the exercise, the aim of the course is to develop a health and safety plan for a specific construction and understand the need to coordinate safe work on construction sites and identify all possible health and safety deficiencies and risks on a specific construction; check that all risks on the construction site have been described and assessed; to get acquainted with the activities of KOO BOZP on the construction site.			
122PRJL	Project Design	KZ	5
Assessment of submitted project documentation (for building permits) and its possible additions, solution of the spatial, technological and time structure of the complex construction process of the event, including the processing of the inspection and test plan, environmental plan and health and safety plan, construction site equipment design, technological work procedure (production regulations) 2 of selected important processes, accompanying technical report with commentary on the solution.			
122SPTC	Robot Control and Special Technology	Z,ZK	4
122TEPR	Construction Technology Design	Z,ZK	5
126FRIN	Financial Management, Capital Investment and Insurance	Z,ZK	4
Financial strategies and objectives, financial analysis, sources of financing and choice of optimal financial structure, investment activity of the company, decision making about investments, cash-flow investment project management, financial risks and their elimination, fundamentals of insurance.			
134NKPS	Design of structures during construction process	Z,ZK	5
Deepening of knowledge in the field of steel and concrete structures with respect to the construction method. Advanced design of steel structures - lateral and torsional stability of beams, global analysis of structures, scaffold, technological structures; cable and membrane structures. Advanced design of concrete structure with respect to the technology during construction.			

Code of the group: NR20230300
Name of the group: Stavitelství - příprava, realizace a provoz staveb, 3. semestr
Requirement credits in the group: In this group you have to gain at least 30 credits
Requirement courses in the group: In this group you have to complete at least 2 courses
Credits in the group: 30
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)* *Tutors,* ***authors*** *and guarantors (gar.)*	Completion	Credits	Scope	Semester	Role
122ROPM	**Guided Professional Practice** *Rostislav Šulc, Tomáš Váchal* ***Rostislav Šulc*** *Rostislav Šulc (Gar.)*	Z	4	8C	Z	z
122DPST	**Diploma Thesis** *Linda Veselá, Pavel Svoboda, Rostislav Šulc, Tomáš Váchal, Michal Kovářík, Pavel Neumann, Čeněk Jarský, Vít Kosina, Karel Polák, ...* ***Tomáš Váchal*** *Tomáš Váchal (Gar.)*	Z	26	16C	Z	z

Characteristics of the courses of this group of Study Plan: Code=NR20230300 Name=Stavitelství - příprava, realizace a provoz staveb, 3. semestr

122ROPM	Guided Professional Practice	Z	4
122DPST	Diploma Thesis	Z	26

Name of the block: Compulsory elective courses
Minimal number of credits of the block: 6
The role of the block: S

Code of the group: NR20230100_2
Name of the group: Stavitelství - příprava, realizace a provoz staveb, PV předměty - oborový
Requirement credits in the group: In this group you have to gain at least 4 credits
Requirement courses in the group: In this group you have to complete at least 1 course
Credits in the group: 4
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)* *Tutors,* ***authors*** *and guarantors (gar.)*	Completion	Credits	Scope	Semester	Role
124PS4C	**Building Structures 4** *Vladimír Žďára, Hana Gattermayerová, Tomáš Čejka, Ctislav Fiala* ***Vladimír Žďára*** *Vladimír Žďára (Gar.)*	Z,ZK	4	2P+2C	Z	S
136TPPK	**Realization Technologies for Road Structures** *Jan Valentin, Petr Mondschein* ***Jan Valentin*** *Jan Valentin (Gar.)*	Z,ZK	4	2P+2C	Z	S
142PMRV	**Operation, Modernisation and Reconstruction of Water Structures** *Karel Kříž, Pavel Fošumpaur, Tomáš Dally* ***Pavel Fošumpaur*** *Pavel Fošumpaur (Gar.)*	Z,ZK	4	2P+2C	Z	S
125TTZB	**Technical and Technological Equipment of Buildings** *Michal Kabrhel, Ilona Koubková* ***Michal Kabrhel*** *Michal Kabrhel (Gar.)*	Z,ZK	4	2P+2C	Z	S
128OVMT	**Operations Research and Mathematical Models in Technology** *Jana Kučerová* ***Jana Kučerová*** *Jana Kučerová (Gar.)*	Z,ZK	4	2P+2C	Z	S

Characteristics of the courses of this group of Study Plan: Code=NR20230100_2 Name=Stavitelství - příprava, realizace a provoz staveb, PV předměty - oborový

124PS4C	Building Structures 4	Z,ZK	4
136TPPK	Realization Technologies for Road Structures	Z,ZK	4
The 136TPPK course is an extension course for students who have chosen to focus on transport structures within the specialization "Civil Engineering - preparation, erection and operation of buildings" or who want to deepen their knowledge in this area. The course in the field of technologies and technical solutions of road structures allows to obtain an extension of previously acquired knowledge and introduces students to other technologies of road construction. The student will be introduced to key technologies for asphalt pavements, CB pavements, paved pavements and bridge pavements.			
142PMRV	Operation, Modernisation and Reconstruction of Water Structures	Z,ZK	4
125TTZB	Technical and Technological Equipment of Buildings	Z,ZK	4
The subject deals with systems of technical equipment of buildings - water supply, gas supply, sewage, heating, ventilation and cooling. Individual systems are described and their properties and methods of use are discussed. Important technological units found in buildings are also addressed in the lesson.			
128OVMT	Operations Research and Mathematical Models in Technology	Z,ZK	4
An introduction to optimization methodologies with the emphasis on linear optimization, stochastic modelling and multiple criteria optimization including algorithms and computations. Applications will be introduced as appropriate in seminars.			

Code of the group: NR20230100_3
Name of the group: Stavitelství - příprava, realizace a provoz staveb, PV předměty - technologie
Requirement credits in the group: In this group you have to gain at least 2 credits
Requirement courses in the group: In this group you have to complete at least 1 course
Credits in the group: 2
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)* *Tutors,* ***authors*** *and guarantors (gar.)*	Completion	Credits	Scope	Semester	Role
122YTSD	**Technology of Component Production** *Rostislav Šulc* ***Rostislav Šulc*** *Rostislav Šulc (Gar.)*	Z	2	1P+1C	Z,L	S
122YTEE	**Technology of Ecological Projects** *Michal Kovářík* ***Michal Kovářík*** *Michal Kovářík (Gar.)*	Z	2	1P+1C	Z	S
122YTRH	**Technology of recostructions of historical buildings** *Pavel Svoboda, Pavel Neumann, Ladislav Valtr* ***Rostislav Šulc*** *Pavel Neumann (Gar.)*	Z	2	1P+1C	Z	S
123YTVM	**Production technology of building materials** *Dana Koňáková, Eva Vejmelková, Vojtěch Pommer, Martin Böhm* ***Eva Vejmelková*** *Eva Vejmelková (Gar.)*	Z	2	1P+1C	Z	S
126YMIS	**Managerial Information Systems** *Lucie Brožová, Petr Kalčev* ***Petr Kalčev*** *Petr Kalčev (Gar.)*	Z	2	2C	Z	S
134YPDK	**Additional Timber and Metal Structures** *Jakub Dolejš* ***Jakub Dolejš*** *Jakub Dolejš (Gar.)*	Z	2	1P+1C	Z	S

Characteristics of the courses of this group of Study Plan: Code=NR20230100_3 Name=Stavitelství - příprava, realizace a provoz staveb, PV předměty - technologie

122YTSD	Technology of Component Production	Z	2
122YTEE	Technology of Ecological Projects	Z	2

122YTRH	Technology of recostructions of historical buildings	Z	2
123YTVM	Production technology of building materials	Z	2
Basic building materials, different types of the production technology, energy consumption of the production, storage and transport, safety at work.			
126YMIS	Managerial Information Systems	Z	2
Enterprise IS architecture, internal and external information sources to support managerial decision-making - Business Intelligence, information strategy of the enterprise, IS effectiveness, structure and function of managerial IS, multidimensional database and OLAP technology, procedure for building and implementing managerial IS, practical demonstration of Business Navigation System applications and the COGNOS system in construction companies, knowledge management and knowledge base to support strategic management, Competitive Intelligence.			
134YPDK	Additional Timber and Metal Structures	Z	2
Subject provides basic information regarding to design and application of supporting, working and industrial scaffolding systems. It is focused especialy on design rules in accordance with European codes and on modelling of structures.			

Name of the block: Povinně volitelné předměty, doporučení S3
Minimal number of credits of the block: 5
The role of the block: S3

Code of the group: NR20230100_1
Name of the group: Stavitelství - příprava, realizace a provoz staveb, PV předměty - dle bc. studia
Requirement credits in the group: In this group you have to gain at least 5 credits
Requirement courses in the group: In this group you have to complete at least 1 course
Credits in the group: 5
Note on the group: volitelný předmět dle bc. studia

Code	Name of the course / Name of the group of courses *(in case of groups of courses the list of codes of their members)* *Tutors,* ***authors*** *and guarantors (gar.)*	Completion	Credits	Scope	Semester	Role
122ICPP	**Engineering Activities for Building Construction** *Tomáš Váchal* ***Tomáš Váchal*** *Tomáš Váchal (Gar.)*	Z,ZK	5	2P+2C	Z	S3
122RPSB	**Management of Administration, Operation and Maintenance of Buildings** *Pavel Neumann, Ondřej Štrup, Stanislav Smugala, Martin Václavík* ***Ondřej Štrup*** *Ondřej Štrup (Gar.)*	Z,ZK	5	2P+2C	Z	S3

Characteristics of the courses of this group of Study Plan: Code=NR20230100_1 Name=Stavitelství - příprava, realizace a provoz staveb, PV předměty - dle bc. studia

122ICPP	Engineering Activities for Building Construction	Z,ZK	5
Basic regulations, concepts according to legal regulations, flow diagram of the preparation and authorization of the contract Building Act - performance of public administration and spatial planning Building Act - building regulations Implementing legislation to the Building Act - design phase Implementing legislation to the Building Act - permit process Implementing legislation to the Construction Act - construction Roads Act - basic provisions and special use - implementation process Rights and obligations of the client, builder, contractual relationship in variants Rights and obligations of the designer, contractual relationship in variants Air Protection Act, Waste Act and Nature and Landscape Protection Act - permit process Law on the protection of agricultural land fund, law on forests and water law - permit process Act on State Monument Care and Act on Environmental Impact Assessment - permit process Civil Code - contract			
122RPSB	Management of Administration, Operation and Maintenance of Buildings	Z,ZK	5

List of courses of this pass:

Code	Name of the course	Completion	Credits
122BOZF	Health and Safety Management in Construction Company and on Building Site	Z,ZK	7
The aim of the course is to acquaint students with the performance of the health and safety coordinator (hereinafter in the Health and Safety Department) in the preparatory and implementation phase of construction, operation on the construction site in the role of coordination of safe work and workplace. The main goal is to train the development of a health and safety plan for a specific building and its updating and problem solving on examples. Sm.92 / 57 / EHS, introduction of KOO OSH in the Czech Republic, nomenclature, content and compilation of OSH plan according to Act No. 309/2006 Coll. elaboration of individual types of project documentation, application in practice, view of OIP on KOO BOZP, BOZP plan - Excel; software related to the issue; statutory activities of KOO BOZP, photographs of good and bad practice from constructions Practical experience from tenders for the determination of KOO BOZP, remuneration of KOO BOZP and its insurance; conditions for Special Risks and Constructions. Within the exercise, the aim of the course is to develop a health and safety plan for a specific construction and understand the need to coordinate safe work on construction sites and identify all possible health and safety deficiencies and risks on a specific construction; check that all risks on the construction site have been described and assessed; to get acquainted with the activities of KOO BOZP on the construction site.			
122DPST	Diploma Thesis	Z	26
122ICPP	Engineering Activities for Building Construction	Z,ZK	5
Basic regulations, concepts according to legal regulations, flow diagram of the preparation and authorization of the contract Building Act - performance of public administration and spatial planning Building Act - building regulations Implementing legislation to the Building Act - design phase Implementing legislation to the Building Act - permit process Implementing legislation to the Construction Act - construction Roads Act - basic provisions and special use - implementation process Rights and obligations of the client, builder, contractual relationship in variants Rights and obligations of the designer, contractual relationship in variants Air Protection Act, Waste Act and Nature and Landscape Protection Act - permit process Law on the protection of agricultural land fund, law on forests and water law - permit process Act on State Monument Care and Act on Environmental Impact Assessment - permit process Civil Code - contract			

122KVAS	Quaility in Construction	Z,ZK	7
122PRJL	Project Design	KZ	5
Assessment of submitted project documentation (for building permits) and its possible additions, solution of the spatial, technological and time structure of the complex construction process of the event, including the processing of the inspection and test plan, environmental plan and health and safety plan, construction site equipment design, technological work procedure (production regulations) 2 of selected important processes, accompanying technical report with commentary on the solution.			
122PRPV	Use of Computers for Planing and Management of Projects	Z,ZK	7
122ROPM	Guided Professional Practice	Z	4
122RPSB	Management of Administration, Operation and Maintenance of Buildings	Z,ZK	5
122SPTC	Robot Control and Special Technology	Z,ZK	4
122TEPR	Construction Technology Design	Z,ZK	5
122YTEE	Technology of Ecological Projects	Z	2
122YTRH	Technology of recostructions of historical buildings	Z	2
122YTSD	Technology of Component Production	Z	2
123YTVM	Production technology of building materials	Z	2
Basic building materials, different types of the production technology, energy consumption of the production, storage and transport, safety at work.			
124PS4C	Building Structures 4	Z,ZK	4
125TTZB	Technical and Technological Equipment of Buildings	Z,ZK	4
The subject deals with systems of technical equipment of buildings - water supply, gas supply, sewage, heating, ventilation and cooling. Individual systems are described and their properties and methods of use are discussed. Important technological units found in buildings are also addressed in the lesson.			
126FRIN	Financial Management, Capital Investment and Insurance	Z,ZK	4
Financial strategies and objectives, financial analysis, sources of financing and choice of optimal financial structure, investment activity of the company, decision making about investments, cash-flow investment project management, financial risks and their elimination, fundamentals of insurance.			
126YMIS	Managerial Information Systems	Z	2
Enterprise IS architecture, internal and external information sources to support managerial decision-making - Business Intelligence, information strategy of the enterprise, IS effectiveness, structure and function of managerial IS, multidimensional database and OLAP technology, procedure for building and implementing managerial IS, practical demonstration of Business Navigation System applications and the COGNOS system in construction companies, knowledge management and knowledge base to support strategic management, Competitive Intelligence.			
128OVMT	Operations Research and Mathematical Models in Technology	Z,ZK	4
An introduction to optimization methodologies with the emphasis on linear optimization, stochastic modelling and multiple criteria optimization including algorithms and computations. Applications will be introduced as appropriate in seminars.			
134NKPS	Design of structures during construction process	Z,ZK	5
Deepening of knowledge in the field of steel and concrete structures with respect to the construction method. Advanced design of steel structures - lateral and torsional stability of beams, global analysis of structures, scaffold, technological structures; cable and membrane structures. Advanced design of concrete structure with respect to the technology during construction.			
134YPDK	Additional Timber and Metal Structures	Z	2
Subject provides basic information regarding to design and application of supporting, working and industrial scaffolding systems. It is focused especialy on design rules in accordance with European codes and on modelling of structures.			
136TPPK	Realization Technologies for Road Structures	Z,ZK	4
The 136TPPK course is an extension course for students who have chosen to focus on transport structures within the specialization "Civil Engineering - preparation, erection and operation of buildings" or who want to deepen their knowledge in this area. The course in the field of technologies and technical solutions of road structures allows to obtain an extension of previously acquired knowledge and introduces students to other technologies of road construction. The student will be introduced to key technologies for asphalt pavements, CB pavements, paved pavements and bridge pavements.			
142PMRV	Operation, Modernisation and Reconstruction of Water Structures	Z,ZK	4
210DIIK	Diagnostics of Engineering Structures	Z,ZK	5
The course aims to introduce diagnostics of civil engineering structures, mechanical, thermal, hygric, chemical and others influences of genesis of failure of civil engineering structures, specificaly on engineering structures (bridges, footbridges, halls etc.). During thecourse students will introduce with behavior of engineering structures, structural and material failures, testing devices for diagnostics and data evaluation.			

For updated information see http://bilakniha.cvut.cz/en/FF.html
Generated: day 2025-04-16, time 02:45.