

## Study plan

### Name of study plan: Systematic Integration of Processes in Healthcare - combined study

Faculty/Institute/Others:

Department:

Branch of study guaranteed by the department: Welcome page

Garantor of the study branch:

Program of study: Systematic Integration of Processes in Healthcare

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:

Name of the block: Compulsory courses

Minimal number of credits of the block: 113

The role of the block: Z

Code of the group: F7KMS1 POV 24

Name of the group: Systematic Integration of Processes in Healthcare compulsory course

Requirement credits in the group: In this group you have to gain 113 credits

Requirement courses in the group: In this group you have to complete 28 courses

Credits in the group: 113

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
F7KMS1AM	<b>Applied Mathematics</b>	Z,ZK	5	8P+8S	Z	z
17BOZP	<b>Occupational Safety and Health, Fire Protection and First Aid</b> <i>Petr Kudrna Petr Kudrna Petr Kudrna (Gar.)</i>	Z	0	1P	Z	z
F7KMS1BSCD	<b>Statistical Methods in the Analysis of Clinical Studies</b>	Z,ZK	5	4P+12S	Z	z
F7KMS1BE	<b>Business English</b>	KZ	2	8S	L	z
F7KMS1EHIS	<b>E-Health and Information Systems in Healthcare</b>	Z,ZK	5	8P+4S	Z	z
F7KMS1EKZ	<b>Economic Aspects of Healthcare</b>	Z,ZK	5	8P+8S	Z	z
F7KMS1EZZ	<b>Economy of Healthcare Facilities</b>	Z,ZK	4	12P+8S	L	z
F7KMS1HZT	<b>Health Technology Assessment</b> <i>Gleb Donin</i>	Z,ZK	4	12P+8S	L	z
F7KMS1IP	<b>Individual Training</b>	Z	2	80XH	Z	z
F7KMS1IZZ	<b>Information Sources in Healthcare</b>	KZ	3	4P+8S	Z	z
F7KMS1IZS	<b>Integrated Rescue System and the Disaster Medicine</b>	ZK	4	8P	L	z
F7KMS1LKH	<b>Legislation in Healthcare and Clinical Evaluation</b>	Z,ZK	5	12P+8S	Z	z
F7KMS1MZT	<b>Health Technology Management</b>	KZ	5	12P+4S	L	z
F7KMS1MZZ	<b>Management of Medical Facilities</b>	Z,ZK	5	8P+8S	Z	z
F7KMS1MV	<b>Methodology of Research</b>	KZ	5	8P+4S	Z	z
F7KMS1OP	<b>Professional Training</b>	Z	2	160XH	L	z
F7KMS1PLPT	<b>Overview of Medical Devices</b>	Z,ZK	4	12P+8L	L	z
F7KMS1RP	<b>Annual Project</b> <i>Gleb Donin</i>	Z	3	8S	L	z
F7KMS1RKZ	<b>Quality Management in Healthcare</b>	Z,ZK	5	12P+8S	L	z
F7KMS1RLZ	<b>Management of Human Resources</b>	Z,ZK	4	8P+4S	L	z
F7KMS1RNZ	<b>Management of Costs in Healthcare</b>	KZ	5	8P+8S	Z	z
F7KMS1SDP1	<b>Diploma Thesis Seminar I.</b> <i>Gleb Donin Gleb Donin (Gar.)</i>	Z	5	8S	Z	z

F7KMS1SDP2	Diploma Thesis Seminar II.	Z	4	8S	L	z
F7KMS1SZZ	Strategy of Healthcare Facilities	KZ	2	8P	L	z
F7KMS1VZ1	Public Health I.	ZK	5	8P	Z	z
F7KMS1VZ2	Public Health II.	Z,ZK	5	8P	L	z
F7KMS1VPZ	Selected Processes in Healthcare Facilities	KZ	2	4P+4S	Z	z
F7KMS1DP	Diploma Thesis	Z	8	4XT	L	z

**Characteristics of the courses of this group of Study Plan: Code=F7KMS1 POV 24 Name=Systematic Integration of Processes in Healthcare compulsory course**

F7KMS1AM	Applied Mathematics	Z,ZK	5
The course Applied Mathematics combines both theoretical knowledge and practical skills. Theoretical knowledge is necessary to formulate a mathematical model and then to solve decision-making and optimization problems in economic processes. Practical knowledge is trained by solving concrete situations using sample examples, where students are introduced to specific methods and techniques of mathematical data analysis.			
17BOZP	Occupational Safety and Health, Fire Protection and First Aid	Z	0
F7KMS1BSCD	Statistical Methods in the Analysis of Clinical Studies	Z,ZK	5
F7KMS1BE	Business English	KZ	2
F7KMS1EHIS	E-Health and Information Systems in Healthcare	Z,ZK	5
F7KMS1EKZ	Economic Aspects of Healthcare	Z,ZK	5
This course introduces students to the fundamentals of health care economics, providing an understanding of the basic approaches to the study of health care as an important sector of the national economy. It introduces the market in health care, the occurrence of sub-market structures in health care, the supply of health care, the demand for health care and its specifics, and familiarizes students with tools for rationalizing supply and demand. In addition, the course discusses the issue of public goods, and introduces students to the concept of market failure and its forms. In terms of macroeconomics, the course deals primarily with the health sector as part of the national economy, the importance of the public sector in the national economy, and the functions of the public sector. The role of the state in the national economy is introduced. The financing of health care - sources, financial flows and forms of payment - is also discussed. Students are also introduced to basic macroeconomic concepts such as inflation, unemployment and gross domestic product. Upon successful completion, students will be able to better understand the functioning of the economic system as a whole and the economic aspects of health care.			
F7KMS1EZZ	Economy of Healthcare Facilities	Z,ZK	4
F7KMS1HZZ	Health Technology Assessment	Z,ZK	4
F7KMS1IP	Individual Training	Z	2
Individual practice is related to the subject Professional practice. A student who has already completed the Professional Practice course has the opportunity of profiling in a selected medical facility. Individual practice is an integral part of quality and qualified preparation for the future profession. During the internship, the student gets the opportunity to practice theoretical knowledge in the form of independent work under the guidance of a professional worker. Individual practice is a form of teaching where students are placed in individual workplaces in medical institutions or in manufacturing or service organizations in the field of medical devices on the basis of agreement and written recommendation of the faculty. Here, based on a set plan, students acquire in-depth practical skills and work independently under the supervision of a designated member of staff. The work experience in the selected workplaces must be of a high professional standard. During the individual practice, all hygiene, safety and other regulations given for the specific workplace are observed. Students are familiarised with the workplace operating rules. The practice is supervised and evaluated by the supervisor. The internships of the students of the study programme System Integration of Processes in Healthcare are focused mainly on the legislative area, quality control and management, medical documentation, reporting of performance to health insurance companies, selection procedures, preparation and implementation of medical equipment purchases, work with information systems, internal audit, material and technical supply, personnel management, record keeping, statistical reporting, planning, process coordination and other activities.			
F7KMS1IZZ	Information Sources in Healthcare	KZ	3
F7KMS1IZS	Integrated Rescue System and the Disaster Medicine	ZK	4
F7KMS1LKH	Legislation in Healthcare and Clinical Evaluation	Z,ZK	5
F7KMS1MZZ	Health Technology Management	KZ	5
F7KMS1MZZ	Management of Medical Facilities	Z,ZK	5
F7KMS1MV	Methodology of Research	KZ	5
F7KMS1OP	Professional Training	Z	2
Professional practice is focused on learning about the activities of a manager in a healthcare facility or in a manufacturing or service organization in the healthcare sector. The aim is to acquire practical habits and skills for future employment in professional life, not only in terms of acquiring professional skills, but also working in a team. Areas of activity: - Activities in the field of medical record keeping (medical procedures, collection and processing of data for billing of health care to insurance companies, reporting system, tracking and management of costs for high-cost care, etc.). - Participation in the activities of the controlling/internal audit department, familiarization with the organization's budgets, evaluation of the performance of individual departments, complaints agenda, etc. - Participation in the processing of source data for economic decisions (providing input for further planning, participation in partial economic analyses, etc.). - Familiarisation with the area of medical equipment acquisition, including the issue of tendering procedures, preparation of documents for public procurement, drafting of medical technology kits, as well as familiarisation with the area of technical briefings for workers in the field of medical technology and occupational safety. - Familiarization with investment planning, depreciation plan, servicing of medical technology, recording of fixed assets in the organization. - Familiarisation and subsequent work with information systems (hospital IS, laboratory IS, management IS and others). - Archiving of medical documentation. - Evaluation and creation of technical documentation of medical devices. - Human resources management in the organisation - personnel planning, strategic planning in the field of HRM, training system, application of labour legislation, recruitment and selection of employees, personnel agenda, participation in support activities in the field of human resources management. - Quality control and management in healthcare institutions (implementation of quality standards in the hospital and follow-up quality standards, quality improvement processes, audits of healthcare activities, monitoring of adverse events and their resolution, documentation). - Integration of processes in healthcare facilities. The student has to undergo compulsory practice in the economic (min. 40 hours), personnel (min. 20 hours), technical (min. 40 hours) and quality (min. 20 hours) departments. Further (more detailed) focus depends on the nature of the organisation's activities.			
F7KMS1PLPT	Overview of Medical Devices	Z,ZK	4
F7KMS1RP	Annual Project	Z	3
F7KMS1RKZ	Quality Management in Healthcare	Z,ZK	5
F7KMS1RLZ	Management of Human Resources	Z,ZK	4
F7KMS1RNZ	Management of Costs in Healthcare	KZ	5
F7KMS1SDP1	Diploma Thesis Seminar I.	Z	5
F7KMS1SDP2	Diploma Thesis Seminar II.	Z	4

F7KMS1SZZ	Strategy of Healthcare Facilities	KZ	2
The long-term successful existence of any market entity depends on a clear idea of long-term strategy. Increasing competition, rising demand for healthcare services, growing patient demands and significant developments in medical science characterise the state of the contemporary healthcare sector. These facts make the management of healthcare facilities increasingly challenging and complex. This course introduces students to the fundamentals and phases of strategic management, the principles of strategy development and management applied to the conditions of a healthcare facility. It analyzes the different concepts: mission - vision - mission - strategic goals - strategic plan, different forms of strategies and principles of their management. It deals with the formulation of the strategy itself, its communication, implementation of the strategy - especially from the point of view of application of appropriate means and methods used in transformation of the top goals of the enterprise as a whole to lower responsibility and process levels - and providing information feedback, i.e. verifying whether the set goals are being met. The course also includes the analysis of the business plan environment, the creation of scenarios and their application in strategic planning.			
F7KMS1VZ1	Public Health I.	ZK	5
F7KMS1VZ2	Public Health II.	Z,ZK	5
F7KMS1VPZ	Selected Processes in Healthcare Facilities	KZ	2
F7KMS1DP	Diploma Thesis	Z	8

Name of the block: Compulsory elective courses

Minimal number of credits of the block: 7

The role of the block: S

Code of the group: F7KMS1 PV 4S 24

Name of the group: Systematic Integration od Processes in Healthcare combined studies compulsory optional course

Requirement credits in the group: In this group you have to gain at least 2 credits (at most 6)

Requirement courses in the group: In this group you have to complete at least 1 course ( at most 3)

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) <i>Tutors, authors and guarantors (gar.)</i>	Completion	Credits	Scope	Semester	Role
F7KMS1EM	Enviromental Management of Medical Facilities	KZ	2	8P+4S	L	s
F7KMS1JIP	Icus and Mobile Healthcare Units	KZ	2	8P+4L	L	s
F7KMS1BMH	Basics of Modelling in Healthcare	KZ	2	8P+4L	L	s

Characteristics of the courses of this group of Study Plan: Code=F7KMS1 PV 4S 24 Name=Systematic Integration od Processes in Healthcare combined studies compulsory optional course

F7KMS1EM	Enviromental Management of Medical Facilities	KZ	2
F7KMS1JIP	Icus and Mobile Healthcare Units	KZ	2
The course provides an overview of resuscitation and intensive care in the ARO, departmental and mobile ICUs, including instrumentation and physiological context. The aim of the course is to familiarize students with current trends in biomedical engineering in this field. The course assumes a basic knowledge of internal medicine and surgery in particular. Upon completion, the student should be able to actively collaborate with the clinician and propose optimal solutions when necessary.			
F7KMS1BMH	Basics of Modelling in Healthcare	KZ	2

Code of the group: F7KMS1 PV 2S 24

Name of the group: Systematic Integration od Processes in Healthcare combined studies compulsory optional course

Requirement credits in the group: In this group you have to gain at least 2 credits (at most 6)

Requirement courses in the group: In this group you have to complete at least 1 course ( at most 3)

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) <i>Tutors, authors and guarantors (gar.)</i>	Completion	Credits	Scope	Semester	Role
F7KMS1FU	Financial Accounting of Healthcare Facilities	KZ	2	4P+4S	L	s
F7KMS1TP	Team Project	KZ	2	8S	L	s
F7KMS1ZAD	Fundamentals of Data Analysis	KZ	2	8S	L	s

Characteristics of the courses of this group of Study Plan: Code=F7KMS1 PV 2S 24 Name=Systematic Integration od Processes in Healthcare combined studies compulsory optional course

F7KMS1FU	Financial Accounting of Healthcare Facilities	KZ	2
The course is designed as a theoretical and practical unit. Accounting is an indispensable source of information to support decision-making processes for managers and other stakeholders. The aim of the course is to introduce students to accounting issues, to familiarize them with the importance of accounting and its place in the management system of the organization. Emphasis is placed on practical application using selected model examples.			
F7KMS1TP	Team Project	KZ	2

F7KMS1ZAD	Fundamentals of Data Analysis	KZ	2
-----------	-------------------------------	----	---

Code of the group: F7KMS1 PV 3S 24

Name of the group: Systematic Integration of Processes in Healthcare combined studies compulsory optional course

Requirement credits in the group: In this group you have to gain at least 3 credits (at most 9)

Requirement courses in the group: In this group you have to complete at least 1 course (at most 3)

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
F7KMS1EE	Economic Evaluation of Healthcare Programmes	KZ	3	8P+4S	Z	s
F7KMS1PR	Project Management	KZ	3	8P+4S	Z	s
F7KMS1STT	Smart Technologies and Telemedicine in Healthcare	KZ	3	8P+4L	Z	s

**Characteristics of the courses of this group of Study Plan: Code=F7KMS1 PV 3S 24 Name=Systematic Integration of Processes in Healthcare combined studies compulsory optional course**

F7KMS1EE	Economic Evaluation of Healthcare Programmes	KZ	3
F7KMS1PR	Project Management	KZ	3
F7KMS1STT	Smart Technologies and Telemedicine in Healthcare	KZ	3

### List of courses of this pass:

Code	Name of the course	Completion	Credits
17BOZP	Occupational Safety and Health, Fire Protection and First Aid	Z	0
F7KMS1AM	Applied Mathematics The course Applied Mathematics combines both theoretical knowledge and practical skills. Theoretical knowledge is necessary to formulate a mathematical model and then to solve decision-making and optimization problems in economic processes. Practical knowledge is trained by solving concrete situations using sample examples, where students are introduced to specific methods and techniques of mathematical data analysis.	Z,ZK	5
F7KMS1BE	Business English	KZ	2
F7KMS1BMH	Basics of Modelling in Healthcare	KZ	2
F7KMS1BSCD	Statistical Methods in the Analysis of Clinical Studies	Z,ZK	5
F7KMS1DP	Diploma Thesis	Z	8
F7KMS1EE	Economic Evaluation of Healthcare Programmes	KZ	3
F7KMS1EHIS	E-Health and Information Systems in Healthcare	Z,ZK	5
F7KMS1EKZ	Economic Aspects of Healthcare This course introduces students to the fundamentals of health care economics, providing an understanding of the basic approaches to the study of health care as an important sector of the national economy. It introduces the market in health care, the occurrence of sub-market structures in health care, the supply of health care, the demand for health care and its specifics, and familiarizes students with tools for rationalizing supply and demand. In addition, the course discusses the issue of public goods, and introduces students to the concept of market failure and its forms. In terms of macroeconomics, the course deals primarily with the health sector as part of the national economy, the importance of the public sector in the national economy, and the functions of the public sector. The role of the state in the national economy is introduced. The financing of health care - sources, financial flows and forms of payment - is also discussed. Students are also introduced to basic macroeconomic concepts such as inflation, unemployment and gross domestic product. Upon successful completion, students will be able to better understand the functioning of the economic system as a whole and the economic aspects of health care.	Z,ZK	5
F7KMS1EM	Environmental Management of Medical Facilities	KZ	2
F7KMS1EZZ	Economy of Healthcare Facilities	Z,ZK	4
F7KMS1FU	Financial Accounting of Healthcare Facilities The course is designed as a theoretical and practical unit. Accounting is an indispensable source of information to support decision-making processes for managers and other stakeholders. The aim of the course is to introduce students to accounting issues, to familiarize them with the importance of accounting and its place in the management system of the organization. Emphasis is placed on practical application using selected model examples.	KZ	2
F7KMS1HZZ	Health Technology Assessment	Z,ZK	4
F7KMS1IP	Individual Training Individual practice is related to the subject Professional practice. A student who has already completed the Professional Practice course has the opportunity of profiling in a selected medical facility. Individual practice is an integral part of quality and qualified preparation for the future profession. During the internship, the student gets the opportunity to practice theoretical knowledge in the form of independent work under the guidance of a professional worker. Individual practice is a form of teaching where students are placed in individual workplaces in medical institutions or in manufacturing or service organizations in the field of medical devices on the basis of agreement and written recommendation of the faculty. Here, based on a set plan, students acquire in-depth practical skills and work independently under the supervision of a designated member of staff. The work experience in the selected workplaces must be of a high professional standard. During the individual practice, all hygiene, safety and other regulations given for the specific workplace are observed. Students are familiarised with the workplace operating rules. The practice is supervised and evaluated by the supervisor. The internships of the students of the study programme System Integration of Processes in Healthcare are focused mainly on the legislative area, quality control and management, medical documentation, reporting of performance to health insurance	Z	2

companies, selection procedures, preparation and implementation of medical equipment purchases, work with information systems, internal audit, material and technical supply, personnel management, record keeping, statistical reporting, planning, process coordination and other activities.			
F7KMS1IZS	Integrated Rescue System and the Disaster Medicine	ZK	4
F7KMS1IZZ	Information Sources in Healthcare	KZ	3
F7KMS1JIP	Icus and Mobile Healthcare Units	KZ	2
The course provides an overview of resuscitation and intensive care in the ARO, departmental and mobile ICUs, including instrumentation and physiological context. The aim of the course is to familiarize students with current trends in biomedical engineering in this field. The course assumes a basic knowledge of internal medicine and surgery in particular. Upon completion, the student should be able to actively collaborate with the clinician and propose optimal solutions when necessary.			
F7KMS1LKH	Legislation in Healthcare and Clinical Evaluation	Z,ZK	5
F7KMS1MV	Methodology of Research	KZ	5
F7KMS1MZT	Health Technology Management	KZ	5
F7KMS1MZZ	Management of Medical Facilities	Z,ZK	5
F7KMS1OP	Professional Training	Z	2
Professional practice is focused on learning about the activities of a manager in a healthcare facility or in a manufacturing or service organization in the healthcare sector. The aim is to acquire practical habits and skills for future employment in professional life, not only in terms of acquiring professional skills, but also working in a team. Areas of activity: - Activities in the field of medical record keeping (medical procedures, collection and processing of data for billing of health care to insurance companies, reporting system, tracking and management of costs for high-cost care, etc.). - Participation in the activities of the controlling/internal audit department, familiarization with the organization's budgets, evaluation of the performance of individual departments, complaints agenda, etc. - Participation in the processing of source data for economic decisions (providing input for further planning, participation in partial economic analyses, etc.). - Familiarisation with the area of medical equipment acquisition, including the issue of tendering procedures, preparation of documents for public procurement, drafting of medical technology kits, as well as familiarisation with the area of technical briefings for workers in the field of medical technology and occupational safety. - Familiarization with investment planning, depreciation plan, servicing of medical technology, recording of fixed assets in the organization. - Familiarisation and subsequent work with information systems (hospital IS, laboratory IS, management IS and others). - Archiving of medical documentation. - Evaluation and creation of technical documentation of medical devices. - Human resources management in the organisation - personnel planning, strategic planning in the field of HRM, training system, application of labour legislation, recruitment and selection of employees, personnel agenda, participation in support activities in the field of human resources management. - Quality control and management in healthcare institutions (implementation of quality standards in the hospital and follow-up quality standards, quality improvement processes, audits of healthcare activities, monitoring of adverse events and their resolution, documentation). - Integration of processes in healthcare facilities. The student has to undergo compulsory practice in the economic (min. 40 hours), personnel (min. 20 hours), technical (min. 40 hours) and quality (min. 20 hours) departments. Further (more detailed) focus depends on the nature of the organisation's activities.			
F7KMS1PLPT	Overview of Medical Devices	Z,ZK	4
F7KMS1PR	Project Management	KZ	3
F7KMS1RKZ	Quality Management in Healthcare	Z,ZK	5
F7KMS1RLZ	Management of Human Resources	Z,ZK	4
F7KMS1RNZ	Management of Costs in Healthcare	KZ	5
F7KMS1RP	Annual Project	Z	3
F7KMS1SDP1	Diploma Thesis Seminar I.	Z	5
F7KMS1SDP2	Diploma Thesis Seminar II.	Z	4
F7KMS1STT	Smart Technologies and Telemedicine in Healthcare	KZ	3
F7KMS1SZZ	Strategy of Healthcare Facilities	KZ	2
The long-term successful existence of any market entity depends on a clear idea of long-term strategy. Increasing competition, rising demand for healthcare services, growing patient demands and significant developments in medical science characterise the state of the contemporary healthcare sector. These facts make the management of healthcare facilities increasingly challenging and complex. This course introduces students to the fundamentals and phases of strategic management, the principles of strategy development and management applied to the conditions of a healthcare facility. It analyzes the different concepts: mission - vision - mission - strategic goals - strategic plan, different forms of strategies and principles of their management. It deals with the formulation of the strategy itself, its communication, implementation of the strategy - especially from the point of view of application of appropriate means and methods used in transformation of the top goals of the enterprise as a whole to lower responsibility and process levels - and providing information feedback, i.e. verifying whether the set goals are being met. The course also includes the analysis of the business plan environment, the creation of scenarios and their application in strategic planning.			
F7KMS1TP	Team Project	KZ	2
F7KMS1VPZ	Selected Processes in Healthcare Facilities	KZ	2
F7KMS1VZ1	Public Health I.	ZK	5
F7KMS1VZ2	Public Health II.	Z,ZK	5
F7KMS1ZAD	Fundamentals of Data Analysis	KZ	2

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

Generated: day 2024-05-18, time 06:54.