

**Study plan for students who enrolled in the academic year 2018-2019 and later  
(in the IS/STAG as version 2018)**

**Study programme: SYSTEM ENGINEERING AND INFORMATICS – P0688D140005  
Specialization: Managerial Informatics – 19**

Study program P0688D140005 – System Engineering and Informatics is implemented as interconnected partnership of the three faculties involved (Technical University of Liberec – the Faculty of Economics, University of Hradec Králové – the Faculty of Informatics and Management, University of Pardubice – the Faculty of Economics and Administration). The study is not a parallel study in the faculties involved, but a joint study in which the mobility of both students and teachers is envisaged.

**Compulsory Courses**

Course title Lecturers	Abbrevia- -tion	Departm ent	Classes	No. of credits	Course is complet ed with	Enrolment
Selected Issues of Economic Theory prof. Ing. Jiří Kraft, CSc. prof. Ing. Ladislav Hájek, CSc. doc. Ing. Mgr. Petra Marešová, Ph.D.	VOT-D	KEK	8/4	20	zk.	1 <sup>st</sup> semester
General Systems Theory doc. Ing. Vladimír Bureš, Ph.D. doc. Ing. Jiří Křupka, Ph.D. doc. Ing. Klára Antlová, Ph. D.	OT-D	KIN	8/4	20	zk.	1 <sup>st</sup> semester
Methodology of Science doc. Ing. Klára Antlová, Ph.D. prof. Ing. Miroslav Žížka, Ph.D. doc. Ing. Vladimír Bureš, Ph.D. prof. Ing. Jan Čapek, CSc. doc. Ing. Miloslav Hub, Ph.D.	MV-D	KIN	8/4	20	zp.	2 <sup>nd</sup> semester
Statistical and Mathematical Methods in Management prof. RNDr. Jan Pícek, CSc. prof. RNDr. Hana Skalská, CSc. doc. RNDr. Bohdan Linda, CSc. doc. PaedDr. Jana Kubanová, CSc.	SMI-D	FP-KAP	16/8	20	zk.	3 <sup>rd</sup> semester
Pedagogical Activity I *	PI1-D	KIN	0/2	5	zp.	1 <sup>st</sup> semester
Pedagogical Activity III *	PI3-D	KIN	0/2	5	zp.	2 <sup>nd</sup> semester
Colloquium	KMI-D	KIN	0/8	0	zp.	3 <sup>rd</sup> semester
Research Activities **	V?-D	KIN		min. 40	zp.	
Internship Abroad***	ZMI-D	KIN	12 týdnů	20	zp.	1 <sup>st</sup> -6 <sup>th</sup> semester
Dissertation****	DIP-D	KIN		40	zp.	8 <sup>th</sup> semester
State Doctoral Exam	SDZMI	KIN				4 <sup>th</sup> semester
<b>kreditů celkem</b>				<b>190</b>		

In the specialization Managerial Informatics is necessary to pass compulsory subjects, major optional subjects profiling specialization and optional subjects. The structure of optional subjects is given by doctoral student's individual study plan. Students must **gain the minimum of 240 credits** for the whole study programme.

Note:

\* Pedagogical work is completed by a credit given by the head of the department where the doctoral student carries out his/her Pedagogical Activity

\*\*The student is involved in the Research Activities of the training workplace under the supervision of his supervisor and publishes the results of his Research Activities.

**The outcomes of the publication are evaluated by credits as follows:**

Type of outcome	ECTS credits
Publishing in a journal with a recognized IF in Q1 and Q2 (indexed in WoK) = V40-D	40
Book monographic publication (published outside the Czech Republic and the Slovak Republic) = V30-D	30
Publishing in a journal with IF v Q3 a Q4 (indexed in WoK) = V30-D	30
Publishing in a Scopus indexed journal with SJR in Q1 and Q2 = V25-D	25
Publishing in a ESCI WoK journal = V25-D	25
Publishing in a Scopus journal with SJR in Q3 and Q4 = V20-D	20
Book monographic publication (ČR or SR) = V20-D	20
Publishing in indexed proceedings (WoK, Scopus) = V15-D	15
Textbook, students book = V10-D	10
Publishing in a non-indexed peer-reviewed journal = V8-D	8
Other scientific publications, presentations, performances (conferences without indexing in the Scopus or WoK database, professional magazines, etc.) = V5-D	5

**In the case of co-authors, the number of credits is awarded according to the share of individual authors. Provided the share is not given, then the number of credits is divided by the number of authors. If is the supervisor a co-author, the supervisor is removed from the share division.**

\*\*\* During the first three years of study, a student must complete a placement at a selected foreign university or a research institution for a minimum of one month. The length of the internship can be divided into several parts with a minimum duration of one week. The internship can be in a form of visiting other foreign institutions, participating in a European research project, or making a direct contribution to international cooperation in another form.

\*\*\*\* A prerequisite for participating in the dissertation defense is a list of publications that contains at least one author (student) publication in a journal with a non-zero impact factor or two author publications with non-zero SJR value; in the case of co-authorship, the shares add up. In this case, a publication written with student's supervisor is considered as the student's publication.

**Major Optional Courses for the Specialization Managerial Informatics**

Course title Lecturers	Abbrevia- tion	Departme- nt	Classes	No. of credits	Course is complet- ed with	Enrolment
Quantitative Methods in Management Decision Making prof. Ing. Miroslav Žižka, Ph.D.	KM-D	KPE	4/8	10	zk.	1 <sup>st</sup> semester
Project IS Implementation Management doc. Ing. Klára Antlová, Ph.D. doc. Ing. Petra Rydvalová, Ph.D.	PZI-D	KIN	4/8	10	zk.	2 <sup>nd</sup> semester
Selected Items of Information Systems doc. Ing. Jan Skrbek, Dr. Doc. Ing. Klára Antlová, Ph.D. Ing. Athanasios Podaras, Ph.D.	VSI-D	KIN	4/8	10	zk.	3 <sup>rd</sup> semester
Management of Information Security doc. RNDr. Jaroslav Mlýnek, CSc.	MBI-D	KMD	4/8	10	zk.	4 <sup>th</sup> semester

**The student selects two of the four major optional courses for the specialization of Managerial Informatics.**

**Optional Courses**

Course title Lecturers	Abbrevia- tion	Departme- nt	Classes	No. of credits	Course is completed with	Enrolment
Modern Technologies for Decision Making Support Mgr. Daniela Ponce, Ph.D.	MT-D	KIN	4/8	5	zk.	1 <sup>st</sup> semester
Pedagogical Activity II	PI2-D	KIN	0/2	5	zp.	1 <sup>st</sup> semester

Pedagogical Activity IV	PI4-D	KIN	0/2	5	zp.	2 <sup>nd</sup> semester
Econometry doc. Ing. Mgr. Petra Marešová, Ph.D.	EK-D	KIN	12/0	5	zk.	3 <sup>rd</sup> semester
Advanced Methods of Data Mining doc. Ing. Pavel Petr, Ph.D.	PMM-D	KIN	4/4	5	zk.	3 <sup>rd</sup> semester
Selected Chapters from Marketing	VSM-D	KMG	4/4	5	zk.	3 <sup>rd</sup> semester
Selected Issues of Innovation Management doc. Ing. Petra Rydvalová, Ph.D.	VPI-D	KPE	4/4	5	zk.	4 <sup>th</sup> semester
Ambient Intelligence prof. RNDr. Peter Mikulecký, Ph.D.	AIN-D	KIN	0/8	5	zk.	5 <sup>th</sup> semester
Expert Systems doc. Ing. Petr Hájek, Ph.D.	ES-D	KIN	4/4	5	zk.	5 <sup>th</sup> semester
Fuzzy Methods and their Applications prof. RNDr. Martin Gavalec, CSc.	FM-D	KIN	4/4	5	zk.	5 <sup>th</sup> semester
Geographic Information Systems doc. Ing. Jitka Komárková, Ph.D.	GS-D	KIN	4/4	5	zk.	5 <sup>th</sup> semester
Selected Problems of Knowledge Management doc. Ing. Klára Antlová, Ph.D.	VPM-D	KIN	4/4	5	zk.	5 <sup>th</sup> semester
Commercialization and Research Results prof. Dr. Ing. Pavel Němeček	KVV-D	KVM	4/4	5	zk.	5 <sup>th</sup> semester
e-Government prof. Ing. Jan Čapek, CSc. doc. Ing. Stanislava Šimonová, Ph.D.	EG-D	KIN	4/4	5	zk.	5 <sup>th</sup> semester

Out of the optional subjects, a student must gain so many credits that the **total amount of the credits gained** for the whole study is the minimum of **240** credits.

#### State doctoral exam and the defense of the dissertation work

The coursework for the doctoral programme is completed with **the state doctoral examination**. Doctoral students can register for the state doctoral examination if they have successfully completed compulsory theoretical courses, as well as at least 2 optional courses of their specialization and gained the minimum of 180 credits.

The state doctoral exam in Managerial Informatics includes the topics from managerial informatics and economics.

**The defense of the dissertation work** completes the research and scientific part of the doctoral study and concludes the whole programme. Therefore, a doctoral student may register for the defense of the dissertation work if he/she has met the following conditions:

- he/she has passed the state doctoral examination
  - he/she can list at least one single-author publication in a journal with a non-zero impact factor or two single-author publications with a non-zero value of SJR (in the case of co-authorship the doctoral student's shares are added up).
- If a publication was written by a doctoral student and his/her supervisor, it is evaluated as a single-author publication by the doctoral student. In all other cases, the shares are counted according to the authorship

#### Standard form of the study plan

Enrolment	DOCTORAL STUDENT'S ACTIVITY		No. OF CREDITS
	CZECH	ENGLISH	
1.	Vybrané otázky ekonomické teorie	Selected Issues of Economic Theory	20
	Obecná teorie systémů	General Systems Theory	20
	Povinně volitelný předmět	Compulsory Optional Courses	10
	Volitelný předmět	Optional Courses	5
	Pedagogické působení I	Pedagogical Activity I	5

2.	Metodologie vědy	Methodology of Science	20
	Povinně volitelný předmět	Compulsory Optional Courses	10
	Vědecko-výzkumná činnost	Research Activity	?
	Pedagogické působení II	Pedagogical Activity II	5
3.	Statistické a matematické metody v řízení	Statistical and Mathematical Methods in Management	20
	Kolokvium	Colloquium	0
	Povinně volitelný předmět	Compulsory Optional Courses	10
	Volitelný předmět	Optional Courses	5
	Vědecko-výzkumná činnost	Research Activity	?
4.	Vědecko-výzkumná činnost	Research Activity	?
	Povinně volitelný předmět	Compulsory Optional Courses	10
	Volitelný předmět	Optional Courses	5
	Státní doktorská zkouška	Doctoral State Examination	0
5.	Vědecko-výzkumná činnost	Research Activity	?
	Volitelný předmět	Optional Courses	5
6.	Vědecko-výzkumná činnost	Research Activity	?
	Volitelný předmět	Optional Courses	5
	Zahraníční stáž	Internship Abroad	20
7.	Volitelný předmět	Optional Courses	5
	Vědecko-výzkumná činnost	Research Activity	?
8.	Disertační práce	Dissertation	40
<b>Celkový počet kreditů</b>			<b>240</b>

**List of Supervisors:**

doc. Ing. Klára Antlová, Ph.D.  
prof. Ing. Zdeněk Plíva, Ph.D.  
doc. RNDr. Pavel Satrapa, Ph.D.  
doc. Ing. Jan Skrbek, Dr.