

Doctoral study programme:	<b>Applied Informatics</b>
Doctoral study specialization:	<b>Applied Informatics</b>
Limit of Credits:	180
Form of Study:	full-time/part-time
Standard Length of Study:	4 years

### Compulsory Courses

Code	Course	Credit Points ECTS	Format L+S	Type of Exam	Recomm. Semester
FES/AVCA2	Scientific-Research Activities	10	0-0	a	SS/1
FES/AVCA4	Scientific-Research Activities	10	0-0	a	SS/2
FES/AVCA5	Scientific-Research Activities	20	0-0	a	WS/3
FES/AVCA6	Scientific-Research Activities	20	0-0	a	SS/3
FES/AMVPA	Methodology of Scientific Work	15	15-0	ex	
FES/APMMS	Advanced Methods of Mathematics and Statistics	15	15-0	ex	
FES/ATI	Theoretical Informatics	30	15-0	ex	

### *Credit evaluation of scientific and research publications in terms of scientific-research activities of a PhD student*

Publication in a periodical with IF awarded (registered in ISI Thomson)	30
Book monographic publication (outside the Czech and Slovak Rep.)	30
Publication in an index journal (e.g. Scopus, ACM, IEEE)	25
Publication in index conference proceedings (ISI Thomson, Scopus, ACM, IEEE, etc.)	20
Book monographic publication (inside the Czech and Slovak Rep.)	20
Publication in a reviewed non-index journal	15
Publication in non-index international conference proceedings	12
Teaching text, text-book/script, e-course	10
Publication in national conference proceedings	8
Other scientific publication, presentation, performance	5

In case of co-authors, the number of credits is awarded in compliance with the share of each author. If the share is not defined, the number of credits is divided by the number of authors.

## Optional Courses

Code	Course	Credit Points ECTS	Format L+S	Type of Exam	Recomm. Semester
FES/AAINA	Ambient Intelligence	10	12	ex	
FES/AAIB	Application of Informatics in Biomedicine	10	12	ex	
FES/AAZP	Application of Knowledge Management	10	12	ex	
FES/AAWA	Architecture and Design of Web Application	10	12	ex	
FES/ADAM	Data Modelling	10	12	ex	
FES/ADKP	Discrete and Combinatorial Approaches	10	12	ex	
FES/AEP	Evolutionary Approaches	10	12	ex	
FES/AFMA	Fuzzy Methods and Application	10	12	ex	
FES/AGIS	Geographic Information Systems	10	12	ex	
FES/AMAD	Data Mining Methods and Algorithms	10	12	ex	
FES/AMAS	Multi-agent systems	10	12	ex	
FES/APGGM	Computer Graphics and Graphical Methods	10	12	ex	
FES/APMV	PC Modelling in Natural Sciences	10	12	ex	
FES/APDM	Advanced Database Methods	10	12	ex	
FES/APUR	Usability of User Interfaces	10	12	ex	
FES/ARRS	Decision-making and Management in Complex Systems	10	12	ex	
FES/ASIM	Simulation and Modelling	10	12	ex	
FES/ASU	Machine Learning	10	12	ex	
FES/ASAPS	System Analysis and Design	10	12	ex	
FES/ATZDI	Theory of Data and Information Security	10	12	ex	
FES/ATZT	Knowledge and Technology Transfer	10	12	ex	
FES/ATSA	Trends in Software Architectures	10	12	ex	
FES/AUVIA	Artificial and Computational Intelligence	10	12	ex	
FES/AVASP	Selected Application of Statistical Approaches	10	12	ex	
FES/AVKV	Selected Chapters from Cognitive Science	10	12	ex	

FES/AVPD	High Parallel and Distributed Computing Systems for Big Data Processing	10	12	ex	
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Students choose at least two optional courses.

Students in full-time form of study:

### **Compulsory Courses**

Code	Course	Credit Points ECTS	Format L+S	Type of Exam	Recomm. Semester
FES/APPA1	Pedagogical Activities	5	0-0	a	WS/1
FES/APPA2	Pedagogical Activities	5	0-0	a	SS/1
FES/APPA3	Pedagogical Activities	5	0-0	a	WS/2
FES/APPA4	Pedagogical Activities	5	0-0	a	SS/2
FES/APPA5	Pedagogical Activities	5	0-0	a	WS/3
FES/APPA6	Pedagogical Activities	5	0-0	a	SS/3

Students in part-time form of study:

### **Optional Courses**

Code	Course	Credit Points ECTS	Format L+S	Type of Exam	Recomm. Semester
FES/APPA1	Pedagogical Activities	5	0-0	a	WS/1
FES/APPA2	Pedagogical Activities	5	0-0	a	SS/1
FES/APPA3	Pedagogical Activities	5	0-0	a	WS/2
FES/APPA4	Pedagogical Activities	5	0-0	a	SS/2
FES/APPA5	Pedagogical Activities	5	0-0	a	WS/3
FES/APPA6	Pedagogical Activities	5	0-0	a	SS/3

Students choose the pedagogical activity in each semester or at least two courses from the group of Optional Courses per whole doctoral study.

**Students choose a certain number of courses to gain the total number of 180 credit points for the whole doctoral study.**

### Compulsory courses for Final State Exam

Code	Course	Credit Points ECTS	Format L+S	Type of Exam	Recomm. Semester
FES/AZI	Informatics	0	0-0	state exam	SS

Explanatory notes:

*Format*

Indicates the teaching format of the subject i.e. the number of lectures (L) and seminars (S) per semester.

*Credit Points*

Indicates the number of credit points appointed to each course upon its completion. A total of 180 credit points is required to complete successfully the Doctoral study programme.

*Type of Exam*

Explains the form of a course assessment. The following two types of assessment are recognized:

a – assignment

ex – examination (written and/or oral examination)

SS = summer semester

WS = winter semester

doc. = Assoc. Prof. in Czech