

my **UNIVERSITY**

FE  
TUL

Ph.D.



System Engineering and Informatics  
**MANAGERIAL  
INFORMATICS**



TECHNICAL UNIVERSITY OF LIBEREC  
Faculty of Economics



### Compulsory courses

The Student has to pass 4 compulsory courses, 20 ECTS credits each:

Selected Issues of Economic Theory

Methodology of Science

Statistical and Mathematical Methods in Management

General Systems Theory

### Compulsory optional courses

Student chooses at least two courses, 10 ECTS credits each:

Quantitative Methods in Management Decision Making

Project IS Implementation Management

Selected Items of Information Systems

Management of Information Security

### Optional courses

The student chooses as many optional courses (5 ECTS credits each) as he needs to achieve at least 180 ECTS credits needed to apply for a state doctoral exam and a minimum of 240 ECTS credits for the entire study period. The credits from other activities are included in this count.

Selected Chapters from Marketing

Selected Issues of Innovation Management

Commercialization and Research Results

Selected Problems of Knowledge Management

Econometry

Modern Technologies for Decision Making Support

Ambient Intelligence

Fuzzy Methods and their Applications

Advanced Methods of Data Mining

Geographic Information Systems

Usability of Software Products

Expert Systems



Feel free to ask

In Czech: [prijimacky.ef@tul.cz](mailto:prijimacky.ef@tul.cz)  
In English: [admissions.ef@tul.cz](mailto:admissions.ef@tul.cz)



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## State doctoral exam

The state doctoral examination and the defense of the dissertation are governed by the study and examination rules of the university at whose faculty the student is enrolled. Specifically: at the Faculty of Economics of the Technical University of Liberec, the state doctoral exam is held in accordance with Article 20 and the defense of the dissertation in accordance with Article 23 of the Study and Examination Regulations of the Technical University of Liberec; the Faculty of Informatics and Management, University of Hradec Kralove state doctoral examination takes place in accordance with Articles 41 to 44 of the Study and Examination Rules of the University of Hradec Kralove; the dissertation defense is held in accordance with Articles 51 and 52 of the Study and Examination Regulations of the University of Hradec Králové; at the Faculty of Economics and Administration of the University of Pardubice, the State Doctoral Examination is held in accordance with Article 14 of the Study and Examination Regulations of the University of Pardubice; the defense of the dissertation is in accordance with Articles 15 and 16 of the Study and Examination Regulations of the University of Pardubice.

### Subjects of the state doctoral exam in the specialization Managerial Informatics:

Managerial Informatics

Economics

#### Required scientific activity

The student is involved in the research activity of his department under the supervision of his supervisor and publishes the results of his research activities. The outputs of the publication activity are evaluated as follows:

Publishing in a journal with a recognized IF in Q1 and Q2 (indexed in WoK)	40
Book monographic publication (published outside the Czech Republic and the Slovak Republic)	30
Publishing in a journal with IF v Q3 a Q4 (indexed in WoK)	30
Publishing in a Scopus indexed journal with SJR in Q1 and Q2	25
Publishing in a ESCI WoK journal	25
Publishing in a Scopus journal with SJR in Q3 and Q4	20
Book monographic publication (ČR or SR)	20
Publishing in indexed proceedings (WoK, Scopus)	15
Textbook	10
Publishing in a non-indexed peer-reviewed journal	8
Other scientific publications, presentations, performances (conferences without indexing in the Scopus or WoK database, professional magazines, etc.)	5



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## Internship requirements

During the first three years of his / her studies, the student enters an internship at a selected foreign university or 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 traineeship can take forms of exits to institutions, participation in a European research project or the realization of direct participation in international cooperation in another form. For this activity, he / she will gain at least 20 ECTS credits, but not more than 60 ECTS credits. The total credit score will be made once before the state doctoral exam on the basis of the submission of the relevant documents substantiating the quality of the achieved outputs. The relevant Vice-Dean decides on the number of credits awarded.

## Other study duties

From the full-time students, pedagogical activity is required in the range of 2-4 classes per week per semester during two semesters, usually during the first two years of study. The specific scope will be determined by the supervisor in coordination with the supervisor of the workplace in dependence on his / her needs. For students of the combined form, this activity is optional. The student's pedagogical activities are evaluated with 5 ECTS credits per 2 hours per week per semester.

The prerequisite for participation in the dissertation defense is a list of publishing activities, which contains at least one whole-author publication in a journal with a non-zero impact factor, or two whole-author publications with non-zero value of the SJR; in the case of co-authorship, the shares add up. In this case, the student's entire publication is also considered as a publication created by the student with his supervisor. The student will receive 40 credits for submitting the final version of the dissertation for the final defense at the study department.

## Dissertation theses topics

### **Suggestions for Doctoral Thesis Topics in the Managerial Informatics Specialization:**

Modelling of Knowledge Network in Organization

Optimization of Innovation Processes

Modern Approaches in Implementation of Information Systems

Information Management during Unexpected Situation

Communication Model for Mitigation of Information System during Failover



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