

List of supervisors and dissertation topics FIS 2024/2025

Study Programme Applied Informatics

prof. Ing. Josef Basl, CSc.

Innovation of Enterprise Information Systems
IT Applications for Industry 4.0
Green Aspects of IS/IT Innovation
Digital Innovation of Companies

doc. Ing. Miloš Maryška, Ph.D.

Internet of Things
Industry 4.0
Data and Business Analytics

prof. Ing. Václav Řepa, CSc.

Business Process Engineering
Information Modelling of Organizations
Information Modelling of Real-World Systems
Information Modelling in Public Administration
Information Modelling in Evidence-Based Health Care

prof. Ing. Petr Berka, CSc.

Knowledge Acquisition Methods

prof. RNDr. Jiří Ivánek, CSc.

Fuzzy Logic Operators for Data-Mining and Expert Systems

doc. Ing. Tomáš Kliegr, Ph.D.

Rule Learning

prof. RNDr. Jan Rauch, CSc.

Knowledge Discovery in Databases

prof. Ing. Vojtěch Svátek, Dr.

Ontological Engineering
Linked Data on the Web

Ing. Jiří Vomlel, Ph.D.

Semantic Aspects of Data / Text Mining
Bayesian networks for Educational Applications

[doc. Ing. Mgr. Zdeněk Smutný, Ph.D.](#)

Research in social informatics (or related fields such as computer–mediated communication; human–computer interaction; ICT and society; internet studies; science, technology and society) – is also suitable for graduates of master's programs in sociology, psychology, anthropology, media and communication studies or statistics

[doc. Ing. Vlasta Svatá, CSc.](#)

IT Audit (regulations, case studies, software support, challenges, trends)
IT Process Assessment (CMMI, COBIT, maturity levels, capability levels, process automation)
EGIT (Enterprise Governance of IT), (frameworks, implementation, measures, assessment)
Internal Audit (challenges, regulations, quality assessment, trends)

Study Programme Econometrics and Operations Research

[prof. RNDr. Ing. Petr Fiala, MBA, CSc](#)

Analysis of network economy and supply chains
Models of revenue management
Models of auctions
Biform games - theory and practice

[prof. RNDr. Jan Pelikán, CSc](#)

Discrete models in operations research
Models of production and logistics

[prof. Ing. Josef Jablonský, CSc](#)

Intertemporal data envelopment analysis models
Data envelopment analysis network models

[prof. Ing. Mgr. Martin Dlouhý, Dr., MSc](#)

Operational research applied to health service
Resource allocation and data envelopment analysis

[prof. RNDr. Ing. Michal Černý, Ph.D](#)

Econometric analysis of special data: symbolic, interval, high-frequency, streams etc.
Inference in partially identified models
Imprecise inputs in optimization models
Financial data and risk-management applications

[doc. Ing. Tomáš Formánek, Ph.D.](#)

Modelling macroeconomic impacts of the potential euro introduction in the Czech Republic
Credit risk analysis in the banking sector
Semi-parametric methods in spatial econometric analysis applications

Study Programme Statistics

prof. Ing. Josef Arlt, CSc.

Time Series Analysis

doc. RNDr. Ivana Malá, CSc.

Statistical Analysis of Interval Censored Data
Regression models for censored data
Robust models and their application in statistical modelling

prof. Ing. Jakub Fischer, Ph.D.

Regional Statistical Indicators

doc. Ing. Jaroslav Sixta, Ph.D.

Input-Output Accounts: Development and Extensions
Measurement of Modern Society within National Accounts Framework