Thesis themes
Academic Year 2020/2021
for 4years programmes

Study Programme: : System Engineering and Informatics
Study program guarantor: prof. Ing. Jana Hančlová, CSc.

- *A different topic can be selected if pre-arranged with a given supervisor*

doc. Ing. Václav Friedrich, Ph.D., Ing.Paed.IGIP, dept. 151, +420 597 322 503
- Advanced Statistical and Mathematical Methods and Models
- Statistical Analysis of Multidimensional Data, Multidimensional Models of Economic and Social Indicators
- Computational Modeling of Systems using Statistical, Numerical and Logical Methods

prof. Ing. Jana Hančlová, CSc., dept. 157, +420 597 322 285
- Modelling and Evaluation of Competitiveness (Econometric Modelling, Data Envelopment Analysis)
- Formulation and Applications of new hybrid DEA models for Evaluation the Performance of Decision Making Units)

doc. Dr. Ing. Miroslav Hudec, dept. 157, +420 596 992 318
- Fuzzy Logic for Smart Cities
- Extension of Business Intelligence Reporting with Quantified Sentences of Natural Language

doc. Ing. Pavla Macurová, CSc., dept. 152, +420 597 322 253
- Selected Tools for Increasing Resilience of Suplly Chains

prof. Ing. Dušan Marček, CSc., dept. 155, +420 597 322 378
- CNN in Predicting Economic Time Series (CNN (Convolutional Neural Networks)

doc. RNDr. Ivo Martiník, Ph.D., dept. 155, +420 597 322 235
- Neuro-fuzzy Expert Systems and their Economic Applications
- Time Petri Nets and their Applications in the Area of Project Management
- Economic Applications of Augmented and Mixed Reality Technologies

prof. RNDr. Dana Šalounová, Ph.D., dept. 151, +420 597 322 522
- Statistical Methods Applications in Business Intelligence

prof. Mehdi Toloo, Ph.D., dept. 157, +420 597 322 104
- Performance Evaluation Under Uncertainty

- Risk Management & Data Envelopment Analysis

doc. Mgr. Ing. František Zapletal, Ph.D., dept. 157, +420 597 322 255

- Sentiment Analysis and its Application in Managerial Decision Making (Analýza sentimentu a její aplikace pro manažerské rozhodování)
- Stochastic and fuzzy optimization of economic processes (Stochastická a fuzzy optimalizace ekonomických procesů)
- Application of multi-criteria decision making methods under risk and uncertainty in economics and IT (Aplikace vícekriteriálních rozhodovacích metod za rizika a neurčitosti pro řešení ekonomických a IT problémů)