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**Associate Professor**

***Thesis topics***

1. **Economic analysis of capital investment aiming at increasing the corporate capacity and productivity (expansion of production capacity). The return on investment.**

*Description of the topic:*

*Number of students: 3*

1. Economic and financial study of a capital investment. Profitability, discounted payback period, internal rate of return, net present value calculation. Evaluation of the created value added of the investment in financial point of view.
2. Application of the Quadruple or Triple Helix model to evaluate a particular project.
3. **Investigations of Corporate Performance Measurement and Evaluation**

*Description of the topics:*

*Number of students: 2-3*

An important factor of responsible corporate governance is the use of a performance measurement and evaluation system that contributes to meet the strategic goals. The efficiency of performance measurement and evaluation is partly due to the identification and application of key factors contributing to meeting company goals.

1. The aim of the thesis is to examine ways and approaches measuring enterprise performance, what the main determinants of corporate performance within a given company are, and how the duality of performance measurement and social responsibility appear. What is the relationship between achieving a company strategy and performance measurement, evaluation? Balanced Scorecard vs. Performance Prism.
2. Examination of employees' performance measurement and motivating employees. Analysis of the relationship between efficiency of production and corporate performance. Research can contribute to explore the relationship between corporate performance and the corporate or private investment in human capital, such as increase ability and knowledge of employees.
3. One aim of the thesis is to analyze the impact of corporate human capital investment on employee motivation and performance, to identify the relationship between motivation factors and performance.
4. **Economic study of the use of renewable energy sources (in terms of economy, efficiency and effectiveness)**

*Description of the topic:*

*Number of students: 2*

The measures to improve energy efficiency, encourage of renewable energy production and consumption, reduction of greenhouse gas emissions should be introduced in the interest of sustainable development. Many factors can influence the use of renewable energy sources, and the level of greenhouse gas emissions, such as the level of economic development and energy dependency, the nature of urbanization, the level of human capital, the economic actor's environmental awareness, and the government policy. The aim of the thesis is to explore the macroeconomic factors influencing the use of renewable energy sources, examine the relationship between energy consumption, carbon dioxide emissions and macroeconomic factors, and analyze the economic impact of renewable energy use.

1. **Econometric analysis (examination of the relationship between economic or technical variables). The existence or absence of relationship between variables.**
2. **Business Process Improvement through lean management methods (Lean Manufacturing and Six Sigma) and different techniques.**

The purpose of this thesis is to study the effect of lean management on the quality improvements, cost reductions, service or product enhancements, and productivity of a business activity or process.

Keywords: Six Sigma, JIT, kaizen, lean methods, measures of operational performance