

Doctoral Thesis Themes 2024/2025
Study programme: **REGIONAL AND PUBLIC ECONOMICS**

Supervisor: Prof. Petr Hájek, Ph.D. (petr.hajek@upce.cz)

1. Modelling Dynamics of Regional Innovation Systems

The aim of the dissertation is to evaluate current approaches to modelling dynamics in regional innovation systems, to define the elements of regional innovation systems and its environment, to propose a suitable model, to simulate the development of regional innovation systems and assess the impact of public policies, and to compare the simulation results with the actual situation.

2. Impact of Interregional Cooperation on Regional Economic Development

The aim of the dissertation is to summarize current knowledge on the determinants of regional economic development with a focus on spillover effects, to propose ways of measuring interregional cooperation, to obtain relevant spatial data and to assess the impact of the proposed measures on the economic development of selected regions).

3. Towards Business Model Innovation for a Circular Economy

The aim of the dissertation is to summarize existing business models in the area of circular economy, to choose a suitable application domain, to propose a framework for evaluating the innovation of business models in this domain, to evaluate its impact on business performance, and to discuss implications for the development of circular economy.

Supervisor: Assoc. Prof. Viktor Prokop, Ph.D. (viktor.prokop@upce.cz)

1. Innovation Ecosystems: Investigation of their Dynamics, Resilience, and Transition

The doctoral student will focus on key topics related to the building and effective functioning of (global/national/regional) innovation ecosystems in Europe. From one perspective, the dissertation will focus on the dynamics of innovation ecosystems regarding the role of individual actors operating in these systems. In parallel, the resilience of these systems will be investigated, for example regarding multi-crisis influences. In the last phase of the research, the doctoral student will focus on the so-called twin-transition of innovation ecosystems, including the issues of digitization and sustainable development.

2. Circular Economy and Regional Development

The dissertation will focus on issues of sustainable development and the application of circular economy principles in European regions. Subsequently, the student will examine what role regional stakeholders play in these processes and how, on the contrary, these processes influence the behaviour of regional stakeholders. As part of his research, the dissertation student should map the European environment and identify key factors leading to the effective application of circular economy principles and the achievement of regional economic growth.

Supervisor: Prof. Jan Stejskal, Ph.D. (jan.stejskal@upce.cz)

1. Regional Innovation Systems in Terms of Sustainability and Resilience

Regional innovation systems form a basic platform for the implementation of innovation processes in a defined space (usually a region), when applying the triple-helix approach. These systems have already been established in a number of regions and are supported by

public policies, including financial support. The question of the effectiveness (sustainability and resilience) will be a research problem in the future. This requirement is gaining importance especially in the European area. Therefore, Ph.D. student should analyze the determinants and aspects influencing (or forming) regional innovation systems, analyze their importance for the innovation system and evaluate how they contribute to efficiency and sustainability.

Applicants can propose their own themes of dissertation theses. Such themes will be accepted upon agreement of a supervisor and advisory board of a particular study programme.