# PhD Program in Economics - Institutions, Business and Quantitative Methods

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## **Program Description**

The PhD program integrates the typical competencies of economics and business with mathematical, statistical and econometric tools, to offer a training program that enables students to carry out high-quality research, as well as to work in the fields of consultancy and business. The PhD program consists of three complementary curricula:

### A) Economics and Institutions (E&I)

This curriculum aims at providing advanced theoretical knowledge in economic disciplines, focusing on the role of institutional factors in shaping development and growth dynamics, labour and product markets, behaviour and performance of firms. In particular, the following topics will be covered:

- 1. Growth and development (institutions and economic change, comparative economic systems, social/political instability and development, theory and empirics of economic growth, inequality)
- 2. Labour Economics (theory and empirics of imperfect markets, macroeconomic shocks and policy responses)
- 3. Corporate governance and firm organization (theories of the firm, economics of transaction costs)
- 4. International economics (Firms in international trade)
- 5. Energy and Environmental Economics

The theoretical analysis of these topics will be supported by a rigorous application of qualitative and quantitative methods of analysis.

### B) Economics and Business (E&B)

This curriculum aims at providing in-depth knowledge of the different governance models, management and administration of companies (including managerial and family firms, as well as state-owned and non-profit organizations). In particular, the curriculum will focus on decision-making and organizational processes, aimed at understanding the basic conditions underlying the competitiveness of firms. Special attention will be devoted to strategy themes, including the managerial aspects of the internationalization of firms and innovation processes. Finally, this curriculum will analyse the impact of regulatory changes on the development of internal expertise and methodologies of administrative and accounting control, to support the ability of various business organizations to face international competition.

### C) Quantitative Methods for Economics (QME)

The curriculum provides:

- 1. A basic understanding of quantitative tools for the study of economic and financial phenomena (statistical inference, multivariate analysis, micro- and macro-econometric models, stochastic processes), which are essential for students who want to develop empirical analyses in the context of the other two curricula;
- 2. Specific training for professionals and academics, specializing in the use and development of advanced econometric tools.

Complementarities also emerge between the "Economics and Institutions" curriculum, focused on the institutional dimensions of economic systems, and the "Economics and Business" one. Both will

provide an in-depth knowledge of firms' governance and organizational models, as well as an understanding of the competencies needed in different management areas, from accounting to marketing, allowing students to carry out an analysis of firms' strategic competitiveness.