**Quadro degli obiettivi formativi specifici e delle propedeuticità** Corso di Laurea magistrale in ECONOMICS/SCIENZE ECONOMICHE Rau, art. 12, comma 2, lettera b

N.	Insegnamento	Settore SSD	Obiettivi formativi specifici	Propedeuticità obbligatorie*
1	Advanced Mathematics	SECS-S/06	Aim of the course is to provide students with the advanced quantitative knowledge to study economics in a formal way. More specifically the course covers topics such as (but is not limited to) functions of more variables, differential calculus, optimization problems with and without constraints. All of the above instruments are widely used in economic analysis.	
2	Public Economics	SECS-P/06	The course is rooted in a theoretical and applied framework aimed at understanding the economic justification of the role of the state in the market economy, already outlined in previous courses. The course of Public economics starts with a first part dedicated to the economic theory of taxation and public finance, providing a micro- and a macro-economic framework for discussing the impact of alternative taxes and instruments of public finance on the economy.  The second part of the course analyzes the main sectors on which the state plays a role as a regulator, a direct producer or a financer. More in particular, the course analyzes the welfare state and its main components (health, social security, education, pensions, housing), network utilities (electricity, natural gas, water and solid waste)  Both parts are developed integrating mainstream economics with institutional economics and adopt a comparative approach focused on OECD member states	
3	Labour Market Law	IUS/07	The course has the following learning aims: integration of the basic knowledge of the legal framework of labour law contract (employment or autonomous) and the right of coalition. More specifically, we want to provide expertise and qualified on issues related to the protection of the worker in the job and/or in the labor market (public and private services), to the European social dialogue, on the free movement of workers within the Community and access to employment of no EU citizens.	
4	Financial Intermediaries and Financial Markets	SECS-P/11		
5	Advanced Microeconomics	SECS-P/01	Economic models must carefully identify decision makers, goals, choices and relationship between choices and outcomes. Aim of the course is to make students accustomed to this way of modeling the behavior of economic agents and their optimization problem.  In particular the course will cover consumer theory and utility maximization, theory of the firm in perfectly competitive markets, monopoly, oligopoly theory. The course provides students with basic knowledge of and game theory and information economics.	
6	Development Economics	SECS-P/06	The course introduces students to modern growth theory by presenting the Harrod-Domar model, the Solow-Swan model, the Ramsey-Cass-Koopmand model, and endogenous growth models. These models provide the basis to discuss development problems and policies. Students should have acquired the knowledge of the mathematical tools provided by the course of Advance Mathematics.	
7	Advanced Macroeconomics	SECS-P/01	The course presents the fundamental Neokeynenesian models and some basic models based on the rational expectations hypothesis at an	

			advanced level. Students should have acquired the basic concepts of microeconomics provided by the course of Advanced Microeconomics and the knowledge of the mathematical tools provided by the course of Advance Mathematics.	
8	Advanced Econometrics	SECS-P/05	The course is aimed to the description of advanced microeconometrics tools, usefull to analyse complex data structures and contexts. Particularly lessons are firstly devoted to hierarchical data structures and their analysis throught Linear Mixed Models (LMM) or multilvel models. Then models with not normal response are deepened within the unified approach of Generalized Linear Models (GLM). In the last part of the corse these extensions towards mixed effects (LMM) and towards not normal responses are merged within the contexts of Generalized Linear Mixed Models (GLMM).	
9	Time Series Analysis	SECS-S/01	Multivariate statistical methods have become more and more popular among all kinds of scientists, and particularly among economists. The aim of the course is to provide the student knowledge of commonly used multivariate statistical analysis methods. The core of the course consists of two major parts:  1. Data reduction based on the analysis of covariance structures: Principal Components Analysis and simple Correspondence Analysis;  2. Data reduction based on classification methods or the analysis of grouping structures: Cluster Analysis.  The emphasis is in both theory and interpretation of the results, with graphical analysis and utilization of modern statistical software packages.	
10	Environmental and Resource Economics	AGR/01	The course provides the students with comprehensive knowledge about theoretical approaches and methodological tools from a political economics point of view in a perspective of sustainable development. The evolution of environmental and ecological economics related to pollution problems, environmental services and natural resources management will be illustrated.	
1	Industrial Organization	SECS-P/05	The course presents a rigorous investigation of different forms of interaction among firms and of different market structures, using game theoretical tools. Equilibrium concepts associated with different market structures are systematically compared from the point of view of Pareto-efficiency criterion.	
12	Political Economy	SECS-P/01	Aim of the course: This course provides an introduction to modern general equilibrium theory. Students should have acquired the basic concepts of microeconomics provided by the course of Advanced Microeconomics and the knowledge of the mathematical tools provided by the course of Advance Mathematics.	

st va indicato il numero di riferimento dell'/degli insegnamento/i propedeutico/i a quello descritto.