TRACK IN ECONOMICS (XXIX, a.a. 2013/2014)

Introductory

- Essentials of Calculus (20 h, Alex Petersen, Orion Penner)

- Foundations of Probability Theory (Irene Crimaldi, 20h)

- Introduction to Mathematical Statistics and Stochastic Processes (Irene Crimaldi, 20h)
Prerequisites: "Foundations of Probability Theory"

- Statistics Lab (10h, Rodolfo Metulini)
prerequisites: "Foundations of Probability Theory" and "Introduction to Mathematical Statistics and Stochastic Processes"

- Optimal control (CDSS, Giorgio Gnecco, 20h)

- Basic numerical linear algebra (CDSS, Luigi Brugnano, 20 h)

- Computer programming and methodology (CDSS, Michele Loreti, 20 h)

- **Management (Basics)** (CDSS, Massimo Riccaboni, 10 h)

- Introduction to Networks theory (CDSS, Guido Caldarelli, 10 h)

Core/Advanced

- Advanced topics in Econometrics (Sasha O. Becker, 20h)

- Econometrics I (40 h, Cristina Tealdi, Marco Leonardi)

- Econometrics II (30 h, Carla Rampichini, Valentina Tortolini, E. Ioannis)

- Economic growth & development (Massimiliano Onorato, 30h)

- Game theory (Nicola Dimitri, 30h)

- Innovation and industrial dynamics (Massimo Riccaboni 20h)

- Introduction to Stochastic Control Theory and Applications (20 h, Andrea Vindigni, Simone Scotti)

- Macroeconomics I (40 h, Davide Ticchi, Cristina Tealdi)

- Macroeconomics II (20h, TBD)

- Microeconomics (40h, docente TBD)

- Political Economy (30 h, Davide Ticchi)

- Topics in Political Economy (30, Massimiliano Onorato, Andrea Vindigni)

- States and Marktes (Andrea Vindigni, 20h)

* Advanced courses from CDSS

- Complex systems and data crunching (20 h, Guido Caldarelli, Alessandro Chessa)

- Computational Finance (20 h, Michele Bonollo)

- Management (10 h, Massimo Riccaboni)

- Networks theory (20 h, Guido Caldarelli, Massimo Riccaboni)

- Numerical methods for the solution of PDEs (20 h, Marco Paggi)

- Quantitative finance (20 h, Roberto Renò)

- Computational contact and fracture mechanics (only the first part, Marco Paggi)

* "Long Seminars"

- Ethics and Research: Objectivity, neutrality and values in sciences (10 h, Stefano Gattei)

- Scientific writing, Dissemination and Evaluation (8 h, Luca Aceto)

- Intellectual property and management of research (15 h, Marco Paggi)