

Institutions and organizations are increasingly searching for professionals skilled in strategic decision making and policy evaluation. This Master aims to satisfy this growing demand by leveraging on cutting edge **Big Data technologies** and on the data modelling opportunities offered by **Machine Learning** and **Artificial Intelligence**. These tools, paired with statistical and econometric methods for causal inference, offer a unique perspective to support decision making in the context of **public policy evaluation** and for **strategic decisions in the corporate field**.

The course is organized by the **Department of Economics and Statistics "Cognetti de Martiis"** of the **University of Turin**, in collaboration with **Metro-Polis** and **Corep**, and builds upon a consolidated collaborative network coming from national and international research centres and institutions: ILO International Labour Organisation; OECD Organisation for Economic Co-operation and Development; French Institute of Research for Sustainable Development (IRD), LEDa-DIAL, Paris; Marche Polytechnic University; Laboratorio Revelli - Centre for Employment Studies.

## COURSE CONTENTS:

During the course students will learn to:

- ✓ Analyze economic data using traditional econometric models and ML/Al tools.
- Evaluate public policies and corporate strategies.
- Develop simulation models for ex-ante evaluations of the effect of interventions on economic systems.
- Provide expert advice to policy makers relying on a solid understanding of both institutional and political contexts.
- Provide private businesses' management with quantitative evidence to support strategic decisions.

Combining the theoretical presentation with laboratory activities students will acquire the necessary programming skills with the main open source statistical and data management software.

The course is divided into 9 didactic modules distributed over **three subject areas**:

- Data, databases and coding
- Economic Foundations
- Statistics and Econometrics

The course working language is English.

WHO CAN ATTEND: A Bachelor level degree and a good knowledge of English are required.

TUITION FEE: 5.000,00 Euro. A limited number of scholarships will be available. Visit the website <a href="https://www.master-bda4pe.it/">https://www.master-bda4pe.it/</a> for further information.

APPLICATION WINDOW: 12th July 2023 – 24th November 2023.

## **BLENDED LEARNING FORMAT & VENUE:**

The Program is divided into three phases:

- Assisted distance learning phase: January 2024 March 2024. This introductory phase's purpose is the acquisition of basic knowledge and competences through activities carried out by students autonomously. Online meeting with teachers and tutors guide the activities.
- 2. On campus phase: **April 2024 July 2024**, at the premises of the University of Turin, Campus Luigi Einaudi. In this period, attendance of lectures is mandatory and implies full time engagement from Monday to Friday.
- 3. Assisted distance Research Project preparation: **July 2024 December 2024**. A selection of students will have the option to visit a partner organization to work on their research topic.

## **FACULTY**

The faculty of the Master's program is selected for its professional experience and subject knowledge. It consists of university professors, IT and policy experts coming from the University of Turin, ILO, IRD/DIAL, OECD and other leading institutions, as well as from private companies. Specialist tutors will support and interact with the participants throughout the program.

## FOR INFO AND DETAILS PLEASE REFER TO:

Web: <a href="https://www.master-bda4pe.it/">https://www.master-bda4pe.it/</a>
E-mail: <a href="masterbda4pe@corep.it">masterbda4pe@corep.it</a>