

Program 2024/2025

# AIMS AND SCOPE OF THE PROGRAM

DIPLÔME NATIONAL DE MASTER CONTRÔLÉ PAR L'ÉTAT

Public policy and development are at the core of the public debate. Issues such as education and health and other public policies, democracy, foreign aid, governance, human development, infrastructure, and the historical origins and effects of political and economic institutions, are of concern, not only to academics, but also to the general public all over the world.

This two-year master's programme in Public Policy and Development (PPD) program at the Toulouse School of Economics combines economic theory, state-of-the-art applied microeconometric techniques, and an interdisciplinary approach to issues of development and public policy. While the program is primarily focused on economics, it is based on the belief that insights from related fields such as political science, history, and anthropology, are essential to study the problems of today's world in depth.

The program provides students with fundamental skills in applied microeconometrics, with a focus on Randomized Control Trials (RCTs), causal inference with observational data, and structural models in public policy evaluation. The general philosophy of the program is to train students, via a wide range of elective courses, on how to analyze real-world problems using economic theory and rigorous quantitative thinking. A special focus is given to topics of infrastructure, governance and industrial organization, economic history, political and economic institutions, international organizations, global value chains, trade, and human development. Students learn how to analyze real-world problems using perspectives from economic history, political science, and anthropology. Students are also trained on using statistical software packages, and on collecting and analyzing data through various empirical projects.

**Note:** students can apply to either the full program (i.e. two years) or directly to the 2nd year (refer to the Admission section for further information).

## STRENGTHS OF THE PROGRAM

- Courses are taught in English by TSE faculty members with well-established international reputation in the areas of development economics, economic history, labor economics, industrial organization, and political economy.
- The program benefits from its close ties with the Institute for Advanced Study in Toulouse (IAST), which enables the program to focus on the intersection of public policy and development with political science, history, and anthropology.
- A number of PPD instructors have consulting experience with international and national organizations in the fields of development and public policy in developed countries, including the World Bank, the OECD, and the French AFD (Agence française de développement). This ensures a focus on issues that are relevant to policymakers and the professional community.

- PPD instructors have acquired an international reputation in various cutting-edge research topics, such as the political economy of international organizations, economics of regulation, randomized control trials, and economics of civil conflicts.
- Within TSE, teaching in the PPD program remains in close connection with recent developments in applied microeconometrics and economic theory.

## COURSES

# 1<sup>st</sup> Year - Master in Applied Economics

SEMESTER 1	SEMESTER 2
Compulsory:	Compulsory:
<ul> <li>Game Theory*</li> <li>Theory of Incentives*</li> <li>Macroeconomics *</li> <li>Intermediate Econometrics *</li> <li>Applied Econometrics *</li> <li>Applied Econometrics *</li> <li>R programming *</li> <li>Professional Development</li> <li>French as a Foreign Language</li> </ul> 2 electives: Choose 2 among 12 <ul> <li>Environmental economics</li> <li>Economic History (closed 2023/24)</li> <li>Evolution of economic behaviour</li> <li>Understanding Real World Organizations</li> <li>Markov Chains and applications****</li> <li>Probability Modeling</li> <li>Project Management</li> <li>Experimental economics</li> <li>Political Economy</li> <li>Market Power &amp; Regulation</li> <li>Markets and Incentives: a historical-theoretical perspective</li> <li>ENGAGE</li> </ul>	<ul> <li>Public economics * <ul> <li>Applied Econometrics *</li> <li>Program Evaluation *</li> <li>French as a Foreign Language</li> </ul> </li> <li>4 electives: Choose 4 among 16 <ul> <li>Advanced Macroeconomics</li> <li>Advanced Microeconomics</li> <li>Industrial Organization **</li> <li>Development Economics **</li> <li>Environmental &amp; Resource Economics **</li> <li>Time series **</li> <li>Panel Data **</li> <li>Corporate finance **</li> <li>Market finance **</li> <li>Empirical Industrial Organization</li> <li>Topics in food economics</li> <li>Behaviorial and Experimental economics</li> <li>Dynamic Optimization</li> <li>Martingales theory and applications****</li> <li>ENGAGE</li> </ul> </li> </ul>
<ul> <li>Optional courses: <ul> <li>Introduction to SAS (for newcomers in the first year of master)</li> <li>Math camp for M1 and M2 (End of August): Algebra / Probability / Static Optimization refresher***</li> </ul> </li> </ul>	Compulsory International internship or Master 1 Thesis*

\*\*Masters 2 Directors highly recommend to attend these options :

- Industrial Organization: M2 EMO
- Environmental & Resource Economics: M2 EEP
- Development Economics: M2 PPD
- Corporate finance et Market Finance: M2 Finance
- Panel Data or Time series: M2 EEE
- \*\*\* Math refresher courses opened to M1 and M2 students<sub>2</sub>

\*\*\*\* To attend the Martingales theory and applications course you need to have attended the Markov Chains course first

# 2<sup>nd</sup> Year - Master in Public Policy and Development

SEMESTER 3	SEMESTER 4
Mandatory:	Mandatory:
<ul> <li>Causal Inference with Observational Data</li> <li>Empirical Project from October to March (tutored projects)</li> </ul>	<ul> <li>Randomized Control Trials and Policy Evaluation</li> </ul>
1 among 3:	3 among 6 electives:
<ul> <li>Datanomics : regulation of data spreading and data protection</li> <li>Project management*</li> <li>Ethics of social studies</li> </ul> 3 among 4 electives: <ul> <li>Governance, Industrial Organization and Development</li> <li>Institutions and Political Economy</li> <li>Machine learning for economics</li> <li>Agriculture and Global Value Chains</li> </ul>	<ul> <li>The Long-Run History of Trade</li> <li>Structural Models and Policy Evaluation</li> <li>Political Economy of International Organizations</li> <li>Economic Analysis of Infrastructure and Network Industries</li> <li>Topics in Development Economics ***</li> <li>Institutions and long-run development</li> </ul>
Not mandatory:	
Introduction to geographical information systems	Internship or master thesis
(facultatif)	
Optional:	
<ul> <li>Professional Development*</li> <li>Algebra Refresher **</li> <li>Probability Refresher **</li> <li>Dynamic Optimization Refresher **</li> </ul>	

\* Students who followed the course " Professional Development" in M1 in 2022-2023 will be exempted \*\* Upgrade courses in Mathematics, open to students in M1 and M2 of TSE

\*\*\* Choice of this option must be validated by the ETE Master Director for Development: theory, public policy and historical perspectives\*\*\* and for the EEE Master Director for Machine Learning as well as the PP&D Master Director

### SKILLS

- Conducting Randomized Control Trials
- · Applied Microeconometrics methods of causal inference with observational data
- Using statistical software packages such as STATA and R through applied projects in courses
- Analytical skills of how to analyze real-world problems using economic theory and econometrics
- An interdisciplinary approach to real-world problems with a focus on economic history and political science.

### **CAREERS /JOBS**

Economists at European and international organizations in the field of development economics and public policy.

### ALUMNI, PRACTIONNERS AND PROFESSORS FEEDBACK

#### Aram Gassama

Master PP&D Graduate - Field Coordinator at World Bank

My role is to coordinate and supervise several activities related to the implementation of impact assessments (mainly RCTs) at all stages of the process. I help the teams to finalize concept notes, to ensure their technical assessment, I intervene in the recruitment process of the survey firms and their supervision once they are engaged, in the management and supervision of the field-based teams, in the processing and analysis of R and STATA data, in the writing of reports and finally in the awareness raising, dissemination and capacity building activities.

To do this, I use the data analysis and interpretation capacity acquired at TSE. I have been fortunate to learn rigorously the econometric theory and practical implementation of the various impact assessment methods used to provide concrete answers to real development problems and to critically interpret the results obtained.



#### Sam Paltridge Directorate of Science Technology and Industry – OECD

I had the opportunity to offer an internship to a TSE Master student a few years ago. Some of the things I took into account were recommendations from her previous employer in Mexico, who was an official in the field in which we worked at the OECD, and a colleague who met her while on mission for a telecommunication project we had worked on. I also knew she had commenced a Master in Public Policy and Development at the Toulouse School of Economics. Apart from being a very well regarded institution, this demonstrated a

determination to study and work in an international environment. During her internship, we were impressed with her strong work ethic and formidable capabilities to learn. With that in mind, following her internship, I was pleased she returned to Toulouse to continue with her studies leading to the successful completion of her Masters and PhD. I then offered her a position in my unit at the OECD confident that she had broadened her research capabilities and that she had shown the ability to learn and work in an international environment, something that is key to working in an international government organisation.

#### Victor Gay



Professor of Economics - TSE, Research Fellow - IAST

Understanding the roots of contemporary development requires taking a historical perspective. Contributing toward this goal, my course provides an overview of the processes through which institutions emerge and affect long-run development. In line with the philosophy of the TSE M2 PPD program, students will not only learn about the state-of-the-art research on these guestions, but also actively acquire a set of analytical and econometric tools by developing their own thinking on a topic of their choice. The insights gained will help students deepen their understanding of the relevant policies to address long-run global development challenges.

## **ADMISSIONS**

Admission is based on academic excellence.

## First year admission:

- Aimed at English speakers
- Students should hold a BSc in Economics, Applied Mathematics within a recognized curriculum considered as consistent with the program and approved by the TSE selection committee.

## Second year admission:

- Applicants from the French system must have passed the TSE International track Master 1 (1st year Master's) in Economics or another French University master's in applied mathematics or an equivalent degree (e.g., engineering school).
- Holders of a BSc, M.A., or MSc degree, within a recognized curriculum regarded as consistent with the program and approved by the TSE Selection Committee.
- Some brushing-up in Economics or Maths might be advisable in some cases. Working knowledge of English is obviously required.

## APPLICATION

For the 1<sup>st</sup> year, students have to apply to the Master in Applied Economics. For the 2<sup>nd</sup> year, students have to apply to the Master in Public Policy and Development.

For more details about requirement documents and application process, please see the <u>Admission</u> <u>section</u>.

## CONTACT

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