MIT SCHOOL OF HUMANITIES, ARTS, AND SOCIAL SCIENCES

ECONOMICS MASTER'S PROGRAM: 2-Year Curriculum Overview

Program Structure

Duration: 4 Semesters (2 Academic Years) **Credit Hours:** 66 credits total **Focus:** Advanced Economic Theory, Econometrics, Applied Economics, and Research Methods

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CURRICULUM OVERVIEW BY SEMESTER

FIRST YEAR

Semester 1 (Weeks 1-15): Foundation in Economic Theory and Methods

Core Themes: Mathematical Economics, Microeconomic Theory, Macroeconomic Theory, Statistical Foundations

Key Learning Objectives:

- Master advanced mathematical tools for economic analysis
- Develop deep understanding of microeconomic and macroeconomic foundations
- Build statistical and econometric analysis capabilities
- Establish research methodology skills

Weekly Structure:

- Advanced Mathematical Economics (Weeks 1-5)
- Microeconomic Theory I (Weeks 6-10)
- Macroeconomic Theory I (Weeks 11-15)
- Continuous: Statistics and Probability, Research Methods

Semester 2 (Weeks 16-30): Advanced Theory and Applied Economics

Core Themes: Advanced Economic Theory, Econometrics, Development Economics, Applied Microeconomics

Key Learning Objectives:

- Advance to graduate-level economic theory
- Master econometric techniques and applications
- Explore specialized fields in applied economics
- Develop empirical research skills

Weekly Structure:

- Microeconomic Theory II (Weeks 16-20)
- Macroeconomic Theory II (Weeks 21-25)
- Development Economics and Applied Fields (Weeks 26-30)
- Continuous: Econometrics, Applied Research Methods

SECOND YEAR

Semester 3 (Weeks 31-45): Specialization and Advanced Applications

Core Themes: Field Specialization, Advanced Econometrics, Policy Analysis, Research Project Development

Key Learning Objectives:

- Develop expertise in chosen field of specialization
- Master advanced econometric and computational methods
- Analyze contemporary economic policy issues
- Design and initiate independent research project

Weekly Structure:

- Field Specialization Courses (Weeks 31-40)
- Advanced Econometrics and Computational Methods (Weeks 41-45)
- Continuous: Policy Analysis, Research Project Development

Semester 4 (Weeks 46-60): Research and Professional Development

Core Themes: Master's Thesis Research, Advanced Seminars, Professional Preparation

Key Learning Objectives:

- Complete independent research project/thesis
- Participate in advanced research seminars
- Develop professional presentation and communication skills
- Prepare for PhD studies or professional career

Weekly Structure:

- Master's Thesis Research (Weeks 46-55)
- Advanced Seminars and Professional Development (Weeks 56-60)

SPECIALIZATION TRACKS (Choose one in Second Year)

1. **Applied Microeconomics**
    - Industrial Organization
    - Labor Economics
    - Public Economics
    - Health Economics
2. **Macroeconomics and Finance**
    - Monetary Economics
    - International Economics
    - Financial Economics
    - Economic Growth
3. **Development and International Economics**
    - Development Economics
    - International Trade
    - Political Economy
    - Economic History
4. **Econometrics and Data Science**
    - Advanced Econometrics
    - Machine Learning for Economics
    - Causal Inference
    - Computational Economics
5. **Behavioral and Experimental Economics**
    - Behavioral Economics
    - Experimental Economics
    - Game Theory Applications
    - Decision Theory

ASSESSMENT STRUCTURE

Continuous Assessment (40%)

- Weekly problem sets and assignments
- Research proposals and progress reports
- Seminar presentations
- Peer review exercises

Midterm Examinations (25%)

- Core theory examinations
- Econometric applications
- Field-specific assessments

Final Projects and Thesis (35%)

- Semester research projects
- Master's thesis
- Final presentations
- Comprehensive portfolio review

RESEARCH COMPONENT

First Year Research Training

- Research methodology workshops
- Data analysis training
- Literature review techniques
- Academic writing development

Second Year Independent Research

- Master's thesis project (equivalent to 15 credits)
- Faculty mentorship program
- Research presentation series
- External research collaboration opportunities

PROFESSIONAL DEVELOPMENT

Skills Development

- Academic writing and presentation
- Data analysis and visualization
- Policy briefing and communication
- Professional networking

Career Preparation

- PhD program preparation
- Industry placement support
- Government and policy career guidance
- International organization pathways

LEARNING RESOURCES

Primary Resources

- MIT OpenCourseWare Economics courses
- Open-access economics textbooks
- Academic journal databases
- Economic data repositories

Technology and Tools

- Statistical software (R, Stata, Python)
- Economic databases (FRED, World Bank, IMF)
- Reference management systems
- Collaboration platforms

This curriculum provides a comprehensive foundation in economic theory and methods while allowing for specialization and independent research development.