

# Graduate School in Economics<sup>1</sup>: Theo Eicher's Guide for Undergraduates<sup>2</sup>

This guide is for students interested in pursuing graduate school in economics. I created the guide because students are often surprised after they talk to me about economics grad schools. Here are some common surprises:

## What to Expect

Undergraduate economics focuses on applications, concepts, and simplified models. But graduate economics is very different, it involves the construction of formal mathematical and statistical models of the economy. Essential methods include advanced course work in differential equations, dynamic optimization, linear algebra, statistics, and real analysis.

Here is an example: As an undergrad, you learn about equilibrium prices through simple supply and demand graphs. In grad school, you solve infinite horizon, dynamic optimization problems using advanced calculus, set theory, and real analysis to understand the properties of the price equilibrium that underlie the graphs.

Many undergraduates are deeply shocked when they find out about the heavy focus on mathematical modeling and proofs in econ grad school.

## What Is Graduate Material Like?

To form rational expectations, check out textbooks used in first year PhD programs:

- **Microeconomics:** *Microeconomic Theory* by Mas-Colell, Whinston, and Green
- **Macroeconomics:** *Advanced Macro* by David Romer
- **Econometrics:** *Introductory Econometrics* by Wooldridge

You can also find [YouTube videos](#) of math camps that universities offer before classes start to ensure students have the necessary technical knowledge. This stuff is super dry and entirely void of economic applications. Frankly, I don't use much of what is in these YouTube lectures in my daily work today. But the reality is that the material is fundamental and PhD programs require it.

## What Do Ph.D. Economists Do?

Economics grad school prepares students primarily for a Ph.D. in economics. Ph.D. economists typically conduct research at universities (with minor teaching obligations), think tanks, international organizations, and central banks. Recently, some large corporations like Amazon, Google, and Microsoft started hiring economics Ph.D.s for specialized roles in empirical microeconomics. Google the American Economic Association's job market listing to get an idea of the types of Ph.D. jobs that are available.

## How about the MA in Economics?

Most U.S. MA grad programs in economics is not more applied than the Ph.D. In fact, most US MA grad programs in economics are simply a stepping stone for those not fully prepared for a Ph.D. In these programs, MA candidates basically take first year of Ph.D. classes. If you

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<sup>1</sup> For alternative perspectives, pls explore the links on the [American Economic Association's](#) website.

<sup>2</sup> I thank Fabio Ghironi for his comments.

are interested in applied work, consider instead a Master of Public Affairs or a Master of International Affairs (discussed below).

Not all US MA econ programs are simply the first year Ph.D program. A few “purpose-designed” MA economics programs do exist. They are also called “Terminal Masters” or “PreDoc Programs”. Such programs can be found, for example, at BU, Wisconsin, Duke, UBC, and the University of Chicago. These programs usually have the goal to prepare students for Ph.D. programs along with a greater focus on applied economics.

European universities also offer strong terminal masters programs in economics, for example, Pompeu Fabra, CEMFI, Paris School of Economics, and Bocconi. These programs are usually taught in English and can be a gateway to top Ph.D. programs in the U.S.

To determine whether an MA program is purpose-designed, simply check the overlap between the Ph.D. and MA coursework. The larger the overlap, the less purpose-designed the MA program is. Here is a list of [Predoc Programs](#).

### **Funding and Financial Aid**

Ph.D. programs typically offer funding and stipends to students they expect to finish. MA programs, on the other hand, usually do not offer funding.

### **Alternatives to a Predoc / MAs in Economics**

If you’re considering a Predoc MA in economics, you might instead explore job opportunities at various econ institutions. These include regional Federal Reserve Banks, the Federal Reserve Board, the Council of Economic Advisers, the NBER, the Brookings Institution, the Peterson Institute for International Economics, the Institute for International Finance, the Council on Foreign Relations, the Jain Family Institute, the Washington Center for Equitable Growth, and international organizations like the IMF, World Bank, and Inter-American Development Bank. Keep in mind that these positions are competitive and often require you to live in Washington, D.C., before applying. The following Centers also offer great RA opportunities:

- <https://bfi.uchicago.edu/info-for/prep/> (pre-docs in econ at the U of Chicago)
- <https://opportunityinsights.org/> (Raj Chetty’s at Harvard has a lot of RAs),
- <https://www.povertyactionlab.org/> (Banerjee-Duflo at MIT has a lot of RAs)
- <https://risc.uchicago.edu/> (Steve Levitt’s lab at UC)

### **How to Apply to Economics Graduate Schools**

#### **Research Economics Ph.D. Programs**

- **Study Each Department’s Coursework and Design:** Most programs outline what to expect on their websites to Understand the Department’s culture. Some schools, like the University of Chicago, admit more students than they expect to graduate, fostering a “market” sink-or-swim environment. Others, like Berkeley, Harvard, and MIT, are more supportive and admit only as many students as they hope to see finish.

To determine if a program is “market” or “supportive”, gather data on:

- The size of the incoming class
- The second-year class
- The ABD class (All But Dissertation)
- The graduating class of Ph.D.s

If this data isn't available on the program's website, contact the department's graduate director. All programs have these statistics; reluctance to share to share the information indicates poor outcomes.

## Getting Into Grad School: Signaling Your Readiness

Since undergraduate and graduate economics are so different, grad programs are cautious about admitting students who haven't proven they know exactly what grad school entails. At the UW, undergrads can take graduate econ classes in their senior year to demonstrate their readiness (Econ 501 or Econ 502 in the fall quarter). Why would you do that?

1. **Perform Well and Signal Effectively:** Achieving a high grade (4.0) in a graduate course leads to a strong recommendation from professors and signals you can handle grad work.
2. **Secure Quality Letters of Recommendation:** Professors who teach in the graduate sequence often have a proven research record. This is important to admission committees.
3. **Assess Your Interest:** Doing well in these courses confirms your interest in the material. Else you learn that the material/interest may just not be for you before you spend years applying and struggling in a Ph.D. program.

## Alternatives to Economics Ph.D. Programs

If you feel that spending 4-7 years in a Ph.D. program, plus perhaps a year in an Predoc program isn't for you, consider Applied Policy MA programs at top public policy schools, for example,

- Kennedy School (Harvard)
- Woodrow Wilson School (Princeton)
- Maxwell School (Syracuse)
- Hubert Humphrey School (University of Minnesota)
- La Follette School (University of Wisconsin)
- Paul H. Nitze School of Advanced International Studies (Johns Hopkins)
- SIPA (Columbia)

These programs focus on policy analysis and are more aligned with undergraduate economics. Graduates of these programs typically work in policy institutions or government roles. When researching these programs, look at the job placements of their graduates to gauge the program's focus and quality.