# **ECONOMICS, PHD**

## Chair

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# **Program Description**

The Ph.D. in Economics at Syracuse is a STEM designated, researchoriented degree, designed for those who want to do applied economics in an academic setting, government, international agencies, independent research organizations, or private businesses with a substantial research mission. The Graduate Program reflects the Department's focus on research in Labor Economics, Public Economics, International Trade, Urban Economics and Econometric Theory. Note that the PhD program begins in the summer, typically the first week of July.

Entering graduate students should have had at least one year of calculus, a course in mathematical statistics, and a course in linear algebra. In their class work, Ph.D. students take a course in mathematical economics, three courses in microeconomic theory, one course in macroeconomic theory, at least four courses in econometrics, two-course sequences in two separate fields, as well as breadth requirements and electives for a total of 51 credits.

Counting dissertation hours, the total number of credits in the program is 72 hours. Students may choose two fields from among five: labor economics, international economics, public economics, urban economics and econometrics. Students with particularly strong theoretical interests may take fields in microeconomic theory or macroeconomic theory. A student wishing to take a field in an area other than the five just mentioned must receive the approval of the Director of Graduate Studies

A distinguishing feature of our Ph.D. program is that we have a tradition of providing close faculty guidance and support that helps students learn how to shape their work in ways that facilitate opportunities to present at professional conferences and publication of dissertation work in select peer-reviewed journals. Many Ph.D. students co-author some of their work with faculty advisors. In addition, some graduate students participate in the Future Professoriate Program, a special university program that helps form good teaching practices. Syracuse University is one of a few universities that provide graduate students with a formal program to learn about college-level teaching practices.

# **Admissions Requirements**

of the economics department.

Applications from all interested individuals are welcome. Current graduate students have varied undergraduate backgrounds, including economics, other social sciences, and mathematics. Completion of a master's degree in economics is not required to enter a Ph.D. program.

Individuals interested in pursuing the Ph.D. should complete the application form found on the admissions website (https://www.maxwell.syr.edu/admission/)and have three letters of recommendation sent on their behalf. Applications with supporting materials must be received by January 15 to ensure full consideration.

Applicants should also submit scores from a recent general Graduate Record Examination (GRE) and transcripts from all collegiate and post-collegiate work. An applicant whose first language is not English should submit the results of a recent Test of English as a Foreign Language

(TOEFL) examination. The Economics Department will also accept the academic module of the International English Language Testing System (IELTS) examination in place of TOEFL.

# **Financial Support**

Merit-based financial aid awards are available to support study in the Ph.D. program in the form of fellowships and graduate assistantships. Financial support is renewed each year for five years of study, subject to maintaining satisfactory performance in the Ph.D. program. To ensure full consideration for a University Fellowship or a graduate assistantship, applications to the PhD program must be received by January 15. Applications received after that date will be considered provided space and resources allow.

### **Fellowships**

One University Fellowship is typically awarded to an entering member of the economics class, supplemented in some years by other types of university fellowships that may be awarded to additional students. For the University Fellowship, recipients in good standing typically receive fellowship support in their first and fifth years of study and receive a graduate assistantship in their second, third and fourth years in the program. Fellowship support includes a stipend (\$25,290 in 2022-2023) and a full-tuition scholarship. Fellowship students typically take 9 hours of course credit fall and spring semesters, and an additional 6 hours of credit for summer courses or dissertation credit. Different from assistantships, fellowship recipients have no service responsibilities to the University during the years in which they are on fellowship. Also different from assistantships, fellowships do not directly cover health care insurance but University health care insurance is made available at a modest fee. Fellowship stipends are taxable under the state and federal government laws.

#### **Graduate Assistantships**

The Economics doctoral program typically provides entering and continuing students in good standing with either a teaching assistantship or a research assistantship. As a teaching assistant, students gain experience by helping to prepare and grade exams, by running recitation sessions, and by holding office hours. Many students also teach their own class during one of the summer sessions. The program encourages all interested students to teach at least one summer class before going on the job market.

After the first year, many graduate students choose to compete for research assistantships. Research assistantships are typically offered by individual faculty and are funded through research centers in the Maxwell School, such as the Center for Policy Research and the Aging Studies Institute, or directly by faculty members who have externally sponsored research projects or other sources of funding.

Graduate assistantships (teaching or research) are renewed each academic year on the basis of satisfactory progress in the Ph.D. program and recent performance as a teaching or research assistant. Assistantships include a stipend for the academic year (\$22,750 in 2022-2023) and a subsidy toward health insurance coverage. Assistantships require 20 hours of service per week both as teaching and research assistants. A full graduate tuition scholarship for 24 credits of course work per year is also awarded with the assistantship. Students with assistantships take 9 credits (three classes) fall and spring semesters, and use their remaining 6 credits during the summer to register for additional courses or for dissertation credit. Graduate

stipends are subject to state and federal government taxes, but are not currently subject to the social security payroll tax.

#### **Summer Support**

The economics department offers opportunities for teaching, research, and summer fellowship support. Summer funding is also available to graduate students through externally funded research projects. All summer support is subject to taxation by the state and federal governments but, at this time, is not subject to the Social Security payroll tax.

## **Transfer credits**

A student who has taken graduate course work at another institution and wishes to matriculate in our Ph.D. program can transfer course credits to Syracuse University. A student may transfer up 24 credits of course work from another institution. A graduate course is eligible for transfer credit if the grade in the course is 3.0 (on a 4.0 scale) or better. Students who transfer courses should review their programs of study with the Director of Graduate Studies before they begin coursework at Syracuse, so that courses are not repeated.

## **Fields**

The department regularly offers five fields. These fields are labor economics, international economics, public economics, urban economics, and econometric theory. A field in econometrics requires two courses (in addition to ECN 620 Foundations of Econometrics, ECN 621 Econometrics I, ECN 622 Econometrics II, ECN 623 Econometrics III) consisting of two separate offerings of ECN 720 Topics in Econometrics.

## **Special Fields**

Students with particularly strong interests in microeconomic theory or macroeconomic theory may also pursue a field in these areas subject to approval of the Director of Graduate Studies of the economics department. In such instances, course work in the proposed field is selected in consultation with a professor who will assume responsibility for supervision of the second year field comprehensive examination or research paper.

## **Secondary Field**

Students typically fulfill their second field requirement through course work provided a grade average of B+ or better is achieved in the two-course field sequence. If the grade average is not sufficient, students can meet the second field requirement by passing the comprehensive exam or paper in that field.

# **First Year Qualifying Examinations**

Students take the qualifying examinations in May, after one year of study. By that time, students will have completed courses in Microeconomic Theory (ECN 605 Mathematics for Economists, ECN 606 Microeconomic Analysis, ECN 611 Microeconomics I, and ECN 612 Microeconomics II) and Econometrics (ECN 620 Foundations of Econometrics, ECN 621 Econometrics I, ECN 622 Econometrics II, ECN 623 Econometrics III). An average grade of B or better in these courses is normally required to take the qualifying examination, although the Director of Graduate Studies can make exceptions for unusual cases. Students who do not pass either qualifying examination in late May, may retake the examination July of the same year. Additional retakes of the exams are not allowed.

# **Primary Field Hurdle**

To attempt the primary field hurdle in a given field, at least two courses must first be completed in the field with grades of B or better in both courses. Typically, just prior to the summer following the second year, students commit to attempting their primary field hurdle in one of the fields supported by the department. For some fields, this requires taking a field comprehensive examination in May with a retake of the exam if needed offered in July. In other fields students are required to write a research paper. Students who do not complete the field hurdle in their chosen area by August 15 are considered to have failed their field attempt. Exceptions to the August 15 deadline must be approved by the faculty supervising the field hurdle and the Director of Graduate Studies. Students who do not pass their primary field hurdle are allowed to attempt the field hurdle in an alternate field. At most, two fields may be attempted. The primary field hurdle must be passed before the start of the fourth year to remain in the program.

## Dissertation

The dissertation involves original, independent (though guided) research, using economic theory and quantitative methods to solve research problems of interest to the student and the profession. Our program is designed so that students begin planning dissertations during their third year (or earlier) and aim to finish them by the end of their fifth year.

# **Satisfactory Progress and Departmental funding**

Only students making satisfactory progress are eligible for departmental support.

A student is making satisfactory progress as of the beginning of the second year if he or she has:

- Passed all first year core courses.
- · Maintained a cumulative average of 3.0 or better.
- Passed both the econometric and microeconomic qualifying examinations

A student is making satisfactory progress at the beginning of the third year if he or she has:

- · Earned a grade of B or better in ECN 613 Macroeconomics I
- · Passed all second year core courses;
- Maintained a cumulative average of 3.0 or better
- · Passed the primary field hurdle

A student is making satisfactory progress at the beginning of the fourth year if he or she has:

- · Maintained a cumulative average of 3.0 or better
- · Passed the primary field hurdle
- · Completed the secondary field requirements

**Total Credits 72** 

# **Student Learning Outcomes**

Competently use economic and econometric theory for the analysis
of social science phenomena and the policies affecting such
phenomena

- Develop competency in two economics subfields of choice offered by the Department to a level at which research contributions to the subfield can be made
- 3. Develop expertise in academic writing and the skillful presentation of complex economic concepts and ideas
- 4. Develop the necessary skills to carry out original economic research, from conception to execution and completion
- 5. Demonstrate expertise in the teaching of economic material to undergraduate and graduate students

# **Degree Requirements**

The Ph.D. degree in Economics at Syracuse is designed to be completed in five years. Students also typically receive a master's in economics as part of that process. After the initial summer session and three subsequent semesters of study, students will generally have earned at least 30 credits of graduate course work in economics and typically qualify for a master's degree in economics at that time.

Successful completion of the Ph.D. program includes the following requirements:

- Satisfactory performance on the first-year qualifying examinations in microeconomic theory and econometrics, and satisfactory performance on the second-year field hurdle which is administered either as a comprehensive examination or research paper depending on the field.
- 2. Completion of graduate course work totaling the necessary number of minimum credit hours with an average grade of B or better.
- 3. Submission and successful defense of the dissertation

## Coursework

For students entering with no prior graduate work, the course work generally consists of 2-1/2 to 3 years (51 credits) of graduate work credits and 21 hours of dissertation credit hours. The program builds on a set of core courses and includes elective courses that allow for breadth of study in economics.

Code	Title	Credits
ECN 605	Mathematics for Economists	3
ECN 606	Microeconomic Analysis	3
ECN 611	Microeconomics I	3
ECN 612	Microeconomics II	3
ECN 613	Macroeconomics I	3
ECN 620	Foundations of Econometrics	3
ECN 621	Econometrics I	3
ECN 622	Econometrics II	3
ECN 623	Econometrics III	3

The courses ECN 605 Mathematics for Economists and ECN 620 Foundations of Econometrics are taken in the initial summer just prior to the students' first fall semester. In addition to the core courses, students also complete two-course Ph.D. sequences in two different fields to satisfy the primary and secondary field requirements. Additional Ph.D. breadth courses in econometrics and the applied fields are taken to complete the credit hour requirements for the program. Students should consult about fulfilling the breadth requirements with the Director of the Graduate Studies as well as with other economics faculty members who may serve as graduate advisors.

Code	Title	Credits
ECN 605	Mathematics for Economists	3
ECN 606	Microeconomic Analysis	3
ECN 611	Microeconomics I	3
ECN 612	Microeconomics II	3
ECN 613	Macroeconomics I	3
ECN 620	Foundations of Econometrics	3
ECN 621	Econometrics I	3
ECN 622	Econometrics II	3
ECN 623	Econometrics III	3

## **Course Schedule**

A typical course schedule for a student in the Ph.D. program is as follows:

Course	Title	Credits
Entering Summer		
ECN 605	Mathematics for Economists	3
ECN 620	Foundations of Econometrics	3
	Credits	6
Year 1		
Fall		
ECN 606	Microeconomic Analysis	3
ECN 611	Microeconomics I	3
ECN 621	Econometrics I	3
	Credits	9
Spring		
ECN 612	Microeconomics II	3
ECN 622	Econometrics II	3
ECN 623	Econometrics III	3
Qualifying examinations i	n microeconomics theory and econometrics.	
	Credits	9
Year 2		
Fall		
ECN Field I, Course 1		3
ECN Field II, Course 1		3
ECN 613	Macroeconomics I	3
	Credits	9
Spring		
ECN Field I, Course 2		3
ECN Field II, Course 2		3
ECN Breadth I		3
	Credits	9
Summer		
Field examination or rese	arch paper	
	Credits	0
Year 3		
Fall or Spring		
ECN Breadth II		3
ECN Breadth III		3
ECN Breadth IV,		3
	Credits	9
	Total Credits	51