

# DOCTOR OF PHILOSOPHY (PHD) DEGREE IN THE FIELD OF ECONOMICS AND A MAJOR CONCENTRATION IN ECONOMICS AND FINANCE

## Program Learning Outcomes for the PhD Degree in the field of Economics and a Major Concentration in Economics and Finance

Upon completing the PhD degree in the field of Economics and a major concentration in Economics and Finance, students will be able to:

1. Carry out independent research in economics and finance, using mathematical, statistical, econometric, and computational tools.
2. Write an independent and original thesis that is of sufficient quality to merit publication in a top economics or finance journal.
3. Conduct a focused review of the literature and develop a research design to carry out independent research.
4. Defend their research design and modeling choices by presenting their paper in a seminar environment.
5. Communicate their research effectively by writing clearly, concisely, and cogently.
6. Read critically and assess research manuscripts related to their field of study and in other fields.

## Requirements for the MA and PhD Degrees in the field of Economics MA Degree Program

The MA degree is a non-thesis master's degree. For general university requirements for non-thesis masters degrees, please see [Non-Thesis Master's Degrees \(https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-non-thesis-masters-degrees/\)](https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-non-thesis-masters-degrees/). For additional requirements, regulations, and procedures for all graduate programs, please see [All Graduate Students \(https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-all-degrees/\)](https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-all-degrees/). Although students are not normally admitted to study for an MA, graduate students may earn the MA along the way to the PhD. In order to obtain the MA Degree in the field of Economics, students must:

- Pass the first year core courses with a grade point average of 2.67 or better.
- Complete 6 field courses with passing grades.
- Earn a satisfactory grade in ECON 700 in the last two semesters before graduation.

Students pursuing the PhD degree in the field of Economics, or a PhD degree in the field of Statistics, have the opportunity to also earn a Master of Arts (MA) degree in either the fields of Statistics or Economics, respectively. For additional information, see the [Opportunities \(https://ga.rice.edu/programs-study/departments-programs/social-](https://ga.rice.edu/programs-study/departments-programs/social-sciences/economics/economics-concentration-quantitative-phd/#opportunities)

[sciences/economics/economics-concentration-quantitative-phd/#opportunities](https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-doctoral-degrees/) tab.

The requirements listed in the General Announcements (GA) satisfy the minimum requirements for this degree program. In certain instances, courses (or requirements) not officially listed here may be substituted upon approval of the program's academic advisor, or where applicable, the department or program's Director of Graduate Studies. Course substitutions or any exceptions to the stated official curricular requirements must be approved by the [Office of Graduate and Postdoctoral Studies \(https://graduate.rice.edu/\)](https://graduate.rice.edu/). Students and their academic advisors should identify and clearly document the courses to be taken.

## Summary

Code	Title	Credit Hours
	Total Credit Hours Required for the MA Degree in the field of Economics	30

## Requirements for the PhD Degree in the field of Economics PhD Degree Program

For general university requirements, please see [Doctoral Degrees \(https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-doctoral-degrees/\)](https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-doctoral-degrees/). For additional requirements, regulations, and procedures for all graduate programs, please see [All Graduate Students \(https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-all-degrees/\)](https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-all-degrees/). Candidates for the PhD usually spend from 2 to 2-1/2 years in full-time coursework and at least 1 year writing the thesis; 5 years is a reasonable goal for completing the program. For the PhD degree in the field of Economics, students must:

- Complete the online *Statistics* and *Mathematics* camps (hosted by the Economics department and Rice Online Learning) before starting their first year courses.
- Perform satisfactorily on the required coursework.
- Complete 6 core courses and 1 elective course (first year of study).
- Complete ECON 504 *Computational Economics* (second year of study).
- Complete field coursework from one major field and one minor field.
- Complete ECON 800 *Graduate Research* throughout the second year of study (and all subsequent years).
- Complete ECON 593 *Workshop in Microeconomics* and ECON 594 *Workshop in Economics II* (in the second and third years of study).
- Complete and present a third-year paper (3YP) by the end of the third year of study.
- Defend a doctoral thesis proposal no later than the spring semester of the fourth year of study.
- Complete and defend the doctoral thesis (with at least two chapters).
- Complete a minimum residency enrollment of four years of full-time graduate study at Rice University.

When applicable, students working as a teaching assistant (TA) for the department must enroll in ECON 700 *Departmental Service Course* during that academic year

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## Summary

Code	Title	Credit Hours
Total Credit Hours Required for the PhD Degree in the field of Economics		90

## Proposed Plan-of-Study

The following plan-of-study represents the sequence in which it is recommended that students pursuing the PhD in the field of Economics complete the requirements for the degree.

Code	Title	Credit Hours
<b>First Year of Study</b>		
Complete the online Statistics and Mathematics camps (hosted by the Economics department and Rice Online Learning) before starting the first-year courses (i.e., in the summer before the first year begins).		
Complete all coursework in the first-year core curriculum.		
Complete one elective (supplemental) course, approved by the Director of Graduate Studies (DGS).		
<b>Second Year of Study</b>		
ECON 504	COMPUTATIONAL ECONOMICS *	3
ECON 593	WORKSHOP IN MICROECONOMICS	1
ECON 594	WORKSHOP IN ECONOMICS II	1
ECON 800	GRADUATE RESEARCH (under the supervision of a second-year faculty mentor)	1-12
Work on second-year research project(s) under faculty guidance.		
Doctoral-level (PhD) field coursework.		
Choose an advisor for the third-year paper (3YP) and submit 3YP proposal.		
<b>Third Year of Study</b>		
ECON 593	WORKSHOP IN MICROECONOMICS	1
ECON 594	WORKSHOP IN ECONOMICS II	1
ECON 800	GRADUATE RESEARCH (under the supervision of a third-year paper (3YP) advisor)	1-12
Complete 3YP and present it in a departmental seminar or conference.		
Select a doctoral thesis committee, including a committee chair (or thesis advisor) and at least two other faculty members.		
<b>Fourth Year of Study</b>		
ECON 596	RESEARCH SEMINAR (to receive feedback on doctoral thesis progress.) *	0.5

ECON 800	GRADUATE RESEARCH (under the supervision of the thesis advisor)	1-12
Defend doctoral thesis proposal through a public presentation (open to all faculty and graduate students).		
<b>Fifth Year of Study (and subsequent years)</b>		
ECON 596	RESEARCH SEMINAR (to receive feedback on doctoral thesis progress) *	0.5
ECON 800	GRADUATE RESEARCH (under the supervision of the thesis advisor)	1-12
Complete the doctoral thesis under the supervision of the thesis advisor.		
Petition for doctoral candidacy.		
Pass the oral examination in defense of the doctoral thesis.		
<b>Total Credit Hours</b>		<b>Minimum of 90</b>

## Footnotes and Additional Information

\* If either ECON 504 or ECON 596 is not available in a particular academic year, then students may take them in a subsequent academic year.

## Requirements for the Major Concentration: Economics and Finance

Students pursuing the PhD degree program in the field of Economics and a major concentration in Economics and Finance must:

- Achieve a minimum grade of B (3.00 grade points) in each of the 10 required courses (32 credit hours), including Microeconomics, Macroeconomics, Econometrics, Real Analysis, Computational Economics, and Financial Economics.
- Successfully complete Corporate Finance and Empirical Methods in Finance.
- Successfully complete 6 credit hours of elective requirements from the following courses: BUSI 524, BUSI 525, BUSI 526, and BUSI 527.
- Successfully pass a comprehensive exam on Asset Pricing, Corporate Finance, and Empirical Methods administered by the Finance faculty at the end of the Fall semester of the second year.
- Write and present a paper in the third year of the program. The paper and its presentation must be approved by two faculty advisors, one of whom must be in the Economics department and one of whom must be a member of the Finance group in the Business school.
- Write and defend a thesis. The thesis committee must include at least one member from the Economics department and at least one member from the Finance group in the Business School.

## Summary

Code	Title	Credit Hours
Total Credit Hours Required for the Major Concentration: Economics and Finance		38

## Degree Requirements

Code	Title	Credit Hours
<b>Core Requirements <sup>1</sup></b>		
ECON 501	MICROECONOMICS I	3
ECON 502	MACROECONOMICS	3

ECON 504 / STAT 604	COMPUTATIONAL ECONOMICS	3
ECON 505 / BUSI 521	FINANCIAL ECONOMICS I	3
ECON 508	MICROECONOMICS II	5
ECON 510 / STAT 610	ECONOMETRICS I	3
ECON 511 / STAT 611	ECONOMETRICS II	3
MATH 321	INTRODUCTION TO ANALYSIS I	3
BUSI 522	CORPORATE FINANCE	3
BUSI 523	EMPIRICAL METHODS IN FINANCE	3
<b>Elective Requirements</b>		
<i>Select a minimum of 6 credit hours from the following:</i>		6
BUSI 524	FINANCE: SPECIAL TOPICS I	
BUSI 525	FINANCE: SPECIAL TOPICS II	
BUSI 526	FINANCE: SPECIAL TOPICS III	
BUSI 527	FINANCE: SPECIAL TOPICS IV	
<b>Total Credit Hours</b>		<b>38</b>

## Opportunities for the PhD Degree in the field of Economics

### Additional Information

For additional information, please see the Economics website: <https://economics.rice.edu/>.

### Footnotes and Additional Information

<sup>1</sup> Each of the 10 core requirements (32 credit hours) must be completed with a minimum grade of B (3.00 grade points) or above.

## Policies for the PhD Degree in the field of Economics

### Department of Economics Graduate Program Handbook

The General Announcements (GA) is the official Rice curriculum. As an additional resource for students, the department of Economics publishes a graduate program handbook, which can be found here: [https://gradhandbooks.rice.edu/2024\\_25/Economics\\_PhD\\_Graduate\\_Handbook.pdf](https://gradhandbooks.rice.edu/2024_25/Economics_PhD_Graduate_Handbook.pdf).

### Admission

**Preparation for PhD Program:** Applicants to the PhD program should have a strong background in mathematics and statistics. All applicants are required to take the Graduate Record Exam (GRE).

### Transfer Credit

For Rice University's policy regarding transfer credit, see [Transfer Credit \(https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-all-degrees/#transfer\)](https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-all-degrees/#transfer). Some departments and programs have additional restrictions on transfer credit. Requests for transfer credit must be approved for Rice equivalency by the appropriate academic department offering the Rice equivalent course (corresponding to the subject code of the course content) and by the Office of Graduate and Postdoctoral Studies (GPS). Students are encouraged to meet with their academic program's advisor when considering transfer credit possibilities.

### Additional Information

For additional information, please see the Economics website: <https://economics.rice.edu/>.