UNIVERSITY OF HOUSTON GRADUATE STUDY IN ECONOMICS

The Department of Economics offers a program leading to the Ph.D. degree in Economics designed to provide students rigorous training in economic theory and quantitative skills as well as an intensive exposure to several specialized areas of Economics. The Ph.D. training provides skills needed in academic, government, or business careers.

Graduate students in the University of Houston - Department of Economics are subject to all regulations of the Graduate School and the College of Liberal Arts and Social Sciences. The rules are found in the University of Houston Graduate Catalog, which can be found online at http://www.uh.edu/grad_catalog/. The requirements discussed below are additional requirements that apply to graduate students in Economics.

The following requirements apply to students starting in the program in Fall 2017 and after.

ADMISSION TO THE PHD PROGRAM IN ECONOMICS

Application Deadline: February 1. Applications are not accepted for spring or summer enrollment. For information regarding the program and admission requirements, visit <u>http://www.uh.edu/class/economics/graduate/doctorate/</u>. For information on applying to the University of Houston, visit <u>http://www.uh.edu/graduate-school/prospective-students/how-to-apply/</u>.

To be admitted to the graduate program, a student

- 1. whose native language is not English must receive a score of at least 79 (internetbased) or 550 (paper-based) on the Test of English as a Foreign Language (TOEFL) or an overall score of 6.5 on the IELTS. This requirement is waived for students with a degree from a U.S. college or university.
- 2. must satisfy the requirements of the Graduate School and the College of Liberal Arts and Social Sciences.
- 3. must be accepted by the Graduate Faculty of the Department of Economics.

Mathematical preparation is a significant factor in the faculty's decision to admit students, and is a crucial factor in student success. The department recommends the following courses (or the equivalent material be mastered) prior to enrolling. The courses are listed in order of importance.

- 1. Calculus I, II, and III (MATH 1431, 1432, 2433)
- 2. Linear Algebra (MATH 2331)
- 3. Probability (MATH 3338) and Statistics (MATH 3339)
- 4. Differential equations (MATH 3331)
- 5. Introduction to Real Analysis (MATH 4331)

Credit will not be given toward the M.A. or Ph.D. for courses taken to satisfy mathematics deficiencies.

DEGREE REQUIREMENTS

Ph.D. Requirements

- 1. 48 hours of course work composed of the following:
 - a. Core courses (21 hours)
 - i. Microeconomics I,II ECON 7341 and 7342
 - ii. Macroeconomics $\mathsf{I},\mathsf{II}-\mathsf{ECON}\ 7343$ and 7344
 - iii. Statistics ECON 7330
 - iv. Econometrics I,II ECON 7331, 8331
 - b. Electives (27 hours) subject to the following restrictions:
 - i. 6 hours maximum in ECON 7390 (Independent Study)
 - ii. 6 hours maximum in courses taken outside the department
 - iii. Additional hours outside the department or in independent study may be allowed subject to the discretion of the Graduate Director.
- 2. 18 hours in workshops ECON 8361/8362/8363
 - a. ECON 8361 is required both semesters of the third year. All 3rd year students enroll in the same section of this course.
 - b. ECON 8362 and 8363 are required in both semesters of the 4th and 5th year, respectively. Sections of these workshops vary by subject matter.
- 3. 12 hours in seminars ECON 7301/7302
 - a. Seminar enrollment is required in every semester beginning in the fourth year and continuing until the Ph.D. is awarded
 - b. Students may substitute an elective course for a seminar
- 4. 12 hours in dissertation hours ECON 8399
- 5. Grade point average in graduate classes of at least 3.0 (4.0=A)
- 6. Successful completion of the comprehensive exams at the PhD level
- 7. Successful completion of a 2nd year project.
- 8. Successful completion of the 3rd year paper.
- Successful completion of end of year presentations in May of the 3rd year, December of the 4th year, and May of the 4th year
- 10. Successful completion and defense of the dissertation.

M.A. Requirements

For students who decide to leave the program before fulfilling the Ph.D., or do not fulfill the requirements to continue in the Ph.D. program, an M.A. degree will be awarded upon the completion of the following requirements.

- 1. 36 hours of course work composed of the following:
 - a. Core courses (21 hours)
 - i. Microeconomics I,II ECON 7341 and 7342
 - ii. Macroeconomics I,II ECON 7343 and 7344
 - iii. Statistics ECON 7330
 - iv. Econometrics I,II ECON 7331, 8331

- b. Electives (15 hours) subject to the following restrictions:
 - i. 3 hours maximum in ECON 7390 (Independent Study)
 - ii. 3 hours maximum in courses taken outside the department
 - iii. Additional hours outside the department or in independent study may be allowed subject to the discretion of the Graduate Director.
- 2. Grade point average in graduate courses of at least 3.0 (4.0=A).
- 3. Successful completion of the comprehensive exams at the MA level
- 4. Doctoral research hours do not count toward the 36 hours of course work.

OUTLINE OF PROGRAM

	Fall Semester	Spring Semester	Summer
1 st Year	ECON 7341 – Micro I	ECON 7342 – Micro II	Comprehensive Exams
	ECON 7343 – Macro I	ECON 7344 – Macro II	
	ECON 7330 – Statistics	ECON 7331 – Metrics I	
2 nd Year	ECON 8331 – Metrics II	Elective	2 nd year project
	Elective	Elective	
	Elective	Elective	
3 rd Year	ECON 8361	ECON 8361	Dissertation research
	Elective	Elective	
	Elective	Elective	
		3 rd year paper due in May	
4 th Year	ECON 8362	ECON 8362	Dissertation research
	ECON 7301/02 - Seminar	ECON 7301/02 - Seminar	
	ECON 8399 -	ECON 8399 -	
	Dissertation	Dissertation	
	Presentation in December	Presentation in May	
5 th Year	ECON 8363	ECON 8363	
5 1001	ECON 7301/02 –	ECON 7301/02 –	
	Seminar	Seminar	
	ECON 8399 –	ECON 8399 -	
	Dissertation	Dissertation	
		Thesis Defense	

COURSE LOAD

All graduate students receiving financial aid from the department are required to register for nine hours each semester during the regular academic year and six hours in the summer (if they are funded for the summer).

Full-time graduate students not receiving financial aid must register for a minimum of 9 hours each semester during the regular academic year.

COMPREHENSIVE EXAMINATIONS

Written examinations in micro and macro theory are required after the completion of the second regular semester of full-time course work. The first set of exams are given late May or early June. Each exam is graded anonymously according to the following scale:

- 1. "Superior". The student demonstrates mastery of the material examined.
- 2. "Good". The student demonstrates understanding of the material examined, but there are some deficiencies.
- 3. "Poor". The student demonstrates significant deficiencies in their understanding of the material examined.
- 4. "Fail". The student does not take the test, or demonstrates no understanding of the material examined.

Following the first set of exams, the Graduate Committee, acting on recommendations from the Graduate Director, will make a determination of each student's status as follows:

- 1. If the student achieves a Superior on all exams, the student has completed the comprehensive exam requirement at the PhD level.
- 2. If the student has not achieved a Superior on all exams, the Graduate Committee may determine that the student's totality of work, including grades, is sufficient to warrant advancement and the student has completed the comprehensive exam requirement at the PhD level.
- 3. If the student has not achieved a Superior on all exams, and the Graduate Committee does not feel the student's body of work warrants advancement, it will inform the student of which individual exams must be retaken in order to advance.

A second set of examinations are given in the week before classes begin in August. These exams are graded on the same scale as above. Following the second set of exams, the Graduate Committee, acting on recommendations from the Graduate Director, will make a final determination of each student's status as follows:

- 1. If the student has, accounting for both sets of exams, achieved a Superior on all exams, the student has completed the comprehensive exam requirement at the PhD level.
- 2. If the student has not achieved a Superior on all exams, the Graduate Committee may determine that the student's totality of work, including grades, is sufficient to warrant advancement and the student has completed the comprehensive exam requirement at the PhD level.
- 3. If the student has not achieved a Superior on all exams, and the Graduate Committee does not feel the student's body of work warrants advancement to PhD candidacy, but did show sufficient understanding, it will inform the student that they have completed the comprehensive exam requirement at the MA level. The student is allowed to continue taking courses in their second year, and can receive the MA degree if they fulfil the remaining requirements.
- 4. If the student does not fall into any of the first three categories, then the student has not completed the comprehensive exam requirement at either PhD or MA level, and will not be awarded a degree.

No further attempts at the examinations are allowed after August following the first year of study at UH.

2nd YEAR PROJECT

By the final day of class of May following their 2nd year, each student must have a written project proposal signed by a faculty advisor who has agreed to oversee the project. The proposal should be created in collaboration with the faculty advisor, and specifies the required work to be completed over the summer following the 2nd year. The exact nature of this work is up to the faculty advisor and student, and could include, but is not limited to, the following: a detailed presentation of core papers in a given field, replication of an existing empirical or quantitative paper, collection of new data, or a paper based on an original idea.

The project is due prior to the first day of classes in August following the student's 2nd year of study. The project will be evaluated by the faculty advisor, who will inform the Graduate Director if the student's project was satisfactory or not by the first day of September.

If the project was determined to be unsatisfactory by the advisor, then the Graduate Committee will evaluate the project, and at their discretion, may issue a "revise and resubmit" to the student. In this case, the student has until the last day of classes of the fall semester of their 3rd year to complete a new version of the project. If the Graduate Committee, who will solicit the input of the original advisor on the revision, find the new version satisfactory the student will be allowed to continue towards the PhD. If the Graduate Committee, either at the initial submission in August, or at the revised submission, decide that the project is not satisfactory, then the student will not be allowed to complete the PhD. A student with an unsatisfactory 2nd year project may remain in classes throughout their 3rd year if they wish. They would be eligible to graduate with the MA as early as December of their 3rd year.

3rd YEAR PAPER

The paper will be evaluated by a reading committee of three faculty members selected by the student and approved by the Graduate Director. The 3rd year paper must be original research done by the student on a topic of their choice.

A list of the three faculty members on the reading committee must be submitted by the student to the instructor of the ECON 8361 workshop during the first meeting of that class in the Spring semester. The paper itself is due on the final day of class in the Spring semester of the students 3rd year of study and will be turned in to both the instructor of ECON 8361 and the students reading committee. The instructor of ECON 8361 will collect the recommendation of the reading committee and will issue a grade of "Satisfactory" if the reading committee approves the paper. The recommendation of the committee must therefore be received before the final day that grades are due for the Spring semester, as set by the University calendar.

If the reading committee finds the paper unsatisfactory, then the instructor of ECON 8361 will issue an "Incomplete" grade to the student. The Graduate Committee will evaluate the paper, and issue a decision by the end of May. At their discretion, they may issue a "revise and resubmit" to the student. In this case, the student has until August 1st of that same year to complete a new version of the paper. That paper will be evaluated again by the reading committee, who will make a recommendation to the Graduate Committee by August 15th on whether the revision is satisfactory. The Graduate Committee, the student will be allowed to continue in the program. The Graduate Committee will make their decision by the first day of class in August. If the revision is satisfactory, the instructor of ECON 8361 will change the student grade to "Satisfactory".

If the paper is deemed unsatisfactory at either the initial submission in May, or at the revised submission in August, the student may remain in classes for their 4th year if they wish. They would be eligible to graduate with the MA as early as December of their 4th year. The instructor of ECON 8361 will change their grade to "Unsatisfactory".

3rd AND 4th YEAR PRESENTATIONS

Shortly after the end of classes in May of the 3rd year, and both December and May of the 4th year, students will be expected to give a presentation of their current research in progress to the entire faculty. The time allotted for the presentations will be set by the Graduate Director.

DISSERTATION DEFENSE

The dissertation will be supervised by a committee agreed upon by the student, the primary faculty dissertation advisor, and the graduate director. The committee must include one member from outside the department. The committee is typically composed of the primary faculty advisor (committee chair), two other faculty advisors from the department, and the member from outside the department. The Ph.D. degree is awarded when the student has successfully defended the dissertation before the graduate faculty of the department and turned in the completed dissertation to the appropriate university office.

LEAVE OF ABSENCE

A student may apply for a leave of absence if he or she intends to withdraw from the department for a specific period of time after which studies will be resumed. A leave of absence is only granted for a stated time period, not to exceed one year, except for military service. A previously enrolled student who is not currently registered in the Department, and has not applied for a leave of absence, will be automatically dropped from the program. To resume academic work, the dropped student must apply for reinstatement to the graduate program. The university may also impose a financial penalty.

CHANGE IN REQUIREMENTS

Students may petition the graduate director for permission to deviate from particular program requirements. Such petitions must be in writing and should include a justification for the proposed change.

TRANSFER STUDENTS

The Economics department allows a maximum of 6 hours to be transferred from graduate courses taken at other schools toward an M.A. in Economics. The graduate director will determine the transferability of credits. The university allows more credits to be transferred toward a Ph.D. at the discretion of the graduate director.

The department encourages students who have received their M.A. elsewhere to enroll in the Ph.D. program. If a student has an M.A. in Economics from another university, equivalent courses may be waived and credit transferred toward a Ph.D. However, the doctoral transfer student must still receive a grade of "PhD Pass" on both parts of the theory examination administered by the University of Houston Economics Department.

Transfer students who have successfully completed first-year courses at another Ph.D. program are allowed to take the theory examinations in the summer prior to their enrollment at the

University of Houston. If they receive a "PhD Pass" grade on an examination (micro or macro) they do not have to complete the first-year course in that area. This attempt at the theory examinations does not count towards their two formal attempts.

OFFICE SPACE AND FACILITIES

The Department provides most funded graduate students with office space for study and interaction with other students. The department also runs a fully equipped graduate student computer lab with state-of-the-art personal computers and software.

FINANCIAL AID

The department offers several assistantships for academic support, research, or teaching in the first year. These positions pay a monthly stipend and allow tuition to be waived and fees to be paid at in-state rates. These stipends cover the 9-month school year and very often some or all of the summer months. Summer support, however, is not guaranteed. All financial support is allocated by the department graduate director and is contingent upon available funding.

In return for financial support, and as part of graduate training in economics, graduate assistants help with instruction and research. Compensation is directly related to hours of work and level of responsibility. Teaching assistants work 20 hours per week supporting faculty teaching and research. Teaching fellows teach a section of introductory economics. All assistantships are awarded on a competitive basis under the following guidelines:

Entering Students. Only students with outstanding transcripts, GRE scores and other favorable credentials are offered aid in the first year. The Graduate Committee allocates these assistantships. Supplemental funding is also available, on a competitive basis, from the Office of Graduate and Professional Studies.

Second through Fifth Year. Any full time student on financial aid making satisfactory progress in the program is assured partial aid in the second through the fourth year.

A student who was awarded aid in the first year is eligible to receive aid in the second year if the student has taken the theory exams and maintained a 3.0 grade point average. Students who receive a superior on the theory examinations and maintain satisfactory progress are eligible for financial aid in their third and fourth years. Aid in the fifth year is provided if the candidate is making good progress on the dissertation.

Only senior graduate students with the requisite academic performance and communication skills are assigned as teaching fellows.

Responsibilities and Progress. Students are expected to perform their research and teaching responsibilities in a professional manner. Poor performance can result in the loss of financial aid.