# Doctor of Philosophy in Economics

The Ph.D. program in economics provides a solid foundation in modern economic analysis, develops expertise in two fields in economics, provides milestones and incentives for dissertation research, and supports graduate student professional development and placement. The department has a long-standing tradition of producing Ph.D. economists with strong foundational skills and expertise. Please visit the department website (https://economics.ku.edu/phd-program/) for additional information.

## Admission to Graduate Studies

#### **Admission Requirements**

- All applicants must meet the requirements outlined in the Admission to Graduate Study (https://policy.ku.edu/graduate-studies/admissionto-graduate-study/) policy.
- Bachelor's degree: A copy of official transcripts showing proof of a bachelor's degree (and any post-bachelor's coursework or degrees) from a regionally accredited institution, or a foreign university with equivalent bachelor's degree requirements is required.
- English proficiency: Proof of English proficiency (https:// gradapply.ku.edu/english-requirements/) for non-native or non-nativelike English speakers is required. There are two bands of English proficiency, including Admission and Full proficiency. For applicants to online programs, Full proficiency is required.

## **Graduate Admission**

The economics department seeks well-trained economists with strong quantitative skills for its Ph.D. program. In particular, applicants should have taken the equivalent of a minimum of three courses in calculus and a course in linear algebra (twelve to fifteen semester hours). A course in real analysis is not required, but exposure to logical mathematical derivation is very useful.

The department strives to provide a comprehensive financial aid package to strong applicants. This typically includes a paid graduate teaching assistant (GTA) position for up to five years. A GTA position also includes a full tuition waiver and other benefits such as subsidized health insurance. Outstanding applicants may receive a fellowship that reduces or eliminates teaching commitment for one or two semesters and may include funding for summer research. The department also strives to provide some financial support for students to present research at academic conferences every year.

Non-native speakers of English must meet English proficiency requirements (https://gradapply.ku.edu/english-requirements/). Please note that the requirements for admission are different from those for a teaching/research assistant.

The deadline for an applicant to be considered for admission and financial aid is **January 5**. Applicants should submit a graduate application online (https://gradapply.ku.edu/apply/).

## Ph.D. Degree Requirements

### **Course Work Requirements**

Code	Title	Hours
ECON 800	Optimization Techniques I	3
ECON 801	Microeconomics I	3
ECON 802	Microeconomics II	3
ECON 810	Macroeconomics I	3
ECON 811	Macroeconomics II	3
ECON 817	Econometrics I	3
ECON 818	Econometrics II	3
ECON 816	Probability and Statistics	3
ECON 910	Economic Theory Seminar-Workshop	3
12 hours of field courses		12
9 hours of electi	ves at the 700+ level	9
Total Hours	48	

## **Qualifying Examinations**

Each Ph.D. student is required to pass written qualifying examinations in microeconomics and macroeconomics after completion of the core courses in these areas at the end of the first year of study. A student who does not pass a qualifying examination may be permitted one retake, ordinarily within a few weeks of the first attempt.

In order to demonstrate competency in econometrics, each Ph.D. student must complete ECON 817 and ECON 818, with a combined grade point average of 3.0. A student who does not achieve the 3.0 combined grade point average is required to pass, without retake, a written comprehensive examination in econometrics.

Upon successful completion of the qualifying examinations and 30 credit hours of coursework, Ph.D. students will be awarded a master's degree.

Any student who does not meet the qualifying exam requirement will be moved to the M.A. program, and an M.A. will be awarded as soon as the master's degree requirements, as outlined in the academic catalog (https://catalog.ku.edu/liberal-arts-sciences/economics/ma/ #requirementstext), have been met.

## **Fields Courses and Electives**

Each student must demonstrate competence in at least 2 fields in economics by completing 2 field courses in each of their chosen fields. In addition, each student takes 3 elective courses in economics totaling nine credit hours. Fields courses and elective courses are selected in consultation with the advisor.

Code	Title	Hours			
Field Courses					
Econometrics (E), Industrial Organization (IO), Macroeconomics (M), Financial Economics (FE), Game Theory (GT), Economic Theory (ET), Health Economics (HE), Labor Economics (LE), Environmental Economics (EE)					
ECON 716	Econometric Forecasting (E)	3			
ECON 730	Topics in Industrial Organization (IO)	3			
ECON 769	Financial Economics (FE)	3			
ECON 770	Economics of the Labor Market (LE)	3			
ECON 790	Game Theory and Applications (GT or ET)	3			

ECON 791	Game Theory and Applications II (GT or ET)	3
ECON 830	Game Theory and Industrial Organization (IO, GT, or ET) $% \left( {{\rm{IO}},{\rm{GT}},{\rm{GT}}} \right)$	3
ECON 854	Advanced Environmental Economic Theory (EE)	3
ECON 869	Advanced Financial Economics (FE or ET)	3
ECON 870	Applied Microeconomics (HE, LE, or EE)	3
ECON 901	Advanced Economic Theory I (ET)	3
ECON 911	Applied Macroeconomics (M)	3
ECON 912	Advanced Macroeconomics (M)	3
ECON 913	Monetary Economics (M)	3
ECON 914	Computational Methods for Economics (M or E)	3
ECON 915	Advanced Econometrics I (E)	3
ECON 916	Advanced Econometrics II (E)	3
ECON 917	Advanced Econometrics III (E)	3
ECON 918	Financial Econometrics (E or FE)	3
ECON 919	Advanced Health Economics (HE)	3
Additional Electi	ves (Do not count as field courses)	
ECON 705	Development of Economic Thought	3
ECON 718	Elementary Financial Econometrics	3
ECON 719	Digital Economics	3
ECON 740	Theory of Economic Growth and Development	3
ECON 780	Topics in Economics:	1-3
ECON 809	Optimization Techniques II	3
ECON 880	Advanced Topics in Economic Theory:	1-3
ECON 950	Special Problems in Economics	1-3

#### **Seminar Workshops**

Beginning in Year 3, each student is required to enroll in ECON 910 and attend the weekly department seminars for 5 continuous semesters or until graduation (whichever is earlier).

## Second-Year Paper

Under the supervision of this advisor, the student writes a single-author research paper and presents it to the

second-year paper committee before the end of classes in year 2, spring semester.

## Third-Year Paper

Under the supervision of this advisor, the student writes a single-author research paper and presents it to the

third-year paper committee before the end of Year 3, spring semester.

## **Research Skills and Responsible Scholarship**

The University requires that every doctoral student receive training in responsible scholarship pertinent to the field of research and obtain research skills pertinent to the doctoral level of research in their field(s). These requirements must be completed by the end of the semester that the student takes the oral comprehensive exam. For students in the Economics PhD Program, this requirement is satisfied by completion of:

- 1. Enrollment in one semester of ECON 910.
- 2. successfully completing the third year paper requirement.

## **Comprehensive Oral Examination**

Once the student has passed their qualifying exams and completed the required coursework, second-year paper, third-year paper, and the research skills and responsible scholarship requirements, they can then proceed with taking the comprehensive oral examination. This exam should be successfully completed by the end of the eighth semester (fourth year) of study; it is strongly recommended that a student pass this exam by the end of the seventh semester.

The comprehensive oral exam is intended to ensure that at a minimum the following three conditions are satisfied:

- the student demonstrates in a written proposal that the dissertation research is an important and significant contribution to the literature of economics;
- the student demonstrates in the oral defense of the written proposal sufficient competency to undertake and complete the dissertation research;
- the student demonstrates both in the written proposal and in the oral defense a thorough knowledge of related literature pertinent to the dissertation research.

For more information please see the full Graduate Studies policy on Doctoral Degree Comprehensive Oral Exams. (https://policy.ku.edu/ graduate-studies/doctoral-oral-exams/)

## **Post-Comprehensive Enrollment**

Upon passing the comprehensive examination, the student becomes a candidate for the Ph.D. degree and is approved to proceed with their dissertation research and project. Starting the semester following successful completion of the oral comprehensive exam, students must enroll in accordance with the Office of Graduate Studies' Doctoral Candidacy Policy. This enrollment includes, but is not limited to, at least 1 dissertation hour (ECON 999) every semester until graduation. For more information, please see the full Graduate Studies policy on Doctoral Candidacy (https://policy.ku.edu/graduate-studies/doctoral-candidacy/ #:~:text=Doctoral%20candidates%20are%20required%2C%20after %20passing%20the%20comprehensive%20oral%20examination,possible %20the%20candidate%E2%80%99s%20demands%20on%20faculty %20time%20and%20university%20facilities).

#### Dissertation

Following successful completion of the comprehensive oral examination, the candidate must organize and write a dissertation on their chosen topic under the supervision of a dissertation committee. The dissertation must be an original work of research that advances the field of economics and complies with the Office of Graduate Studies' Doctoral Dissertation policy (https://policy.ku.edu/graduate-studies/doctoral-dissertation/).

## **Final Oral Examination**

Upon approval by the student's committee that the student's dissertation research and written document is complete, the student must defend the dissertation before all committee members in the "final oral examination," or dissertation defense. The final dissertation defense includes a public presentation of the dissertation research by the candidate and concludes with a period of questioning by the committee. After posing questions to the student about the dissertation work, committee members deliberate and vote on a grade of Satisfactory or Unsatisfactory. A grade of Satisfactory requires a majority vote, and may be contingent on the completion of specific revisions by a designated due date. The committee may also recommend that a student earning a satisfactory grade be considered for honors by the department. Honors are conferred

at graduation by the department, reflecting outstanding work in all aspects of the doctoral program.

At the completion of this program, students will be able to:

- Employ sound economic research methodoloyg and analysis to produce original, valid, and publishable research in their specific field or subfield.
- Critique and evaluate original research and novel ideas/ questions in economics using broad knowledge of theory and research across multiple fields.
- Critique and evaluate original research and novel ideas/ questions in economics using specialized knowledge of one area of expertise.
- Communicate economic knowledge effectively to professional, academic, and public audiences.