



 **PhD in Applied Economics**
Program in Detail

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PROGRAM DETAILS

The PhD in Applied Economics (APEC) at the University of Saskatchewan is a collaborative program offered by the Departments of Economics, Agricultural and Resource Economics, Finance and Management Science, and the Johnson-Shoyama Graduate School of Public Policy.

A PhD in applied economics will give you the skills to conduct research for businesses, governments, think tanks and other research organizations, as well as to train the next generation of applied economics professionals as an academic.

The PhD program combines advanced courses in applied economics (years 1-2) followed by a major research dissertation (years 3-5). The core of the program coursework focuses on microeconomic theory and quantitative methods, with an advanced course in macroeconomics. The student and their advisory committee determine the remainder of the student's field courses.

Coursework and comprehensive examinations (Years 1 and 2)

While the minimum course requirement is 27 credit units (CUs)¹, students will typically take **36 credit units** (CUs) (or 12 courses) over two years, and will sit two comprehensive examinations

Year 1 courses and first comprehensive examination

Students will take the following²:

- 6 CUs (2 courses) in Microeconomics (from ECON 800, ECON 873, AREC 842; ECON 850, or course approved by the APEC graduate committee)

The Microeconomics requirement will typically be met by taking ECON 800.3 (Microeconomic Theory) and ECON 873.3 (Advanced Microeconomic Theory), both of which are offered annually. Depending on their background (e.g., if they have obtained an MA in Economics from the University of Saskatchewan and have already taken this course), students may be allowed to substitute AREC 842.3 (Agricultural Market Organizations), ECON 850.3 (Game Theory, Strategic and Co-operative Choices) or a course recommended by the student's advisory committee and approved by the APEC graduate committee.

- 6 CUs (2 courses) in Econometrics (from ECON 808, ECON 809, or course approved by the APEC graduate committee)

The Econometrics requirement will typically be met by taking ECON 808.3 (Econometrics I) and ECON 809.3 (Econometrics II), both of which are offered annually. Depending on their background, (e.g., if they have obtained an MA in Economics from the University of Saskatchewan and have

¹ Typically one course is equivalent to 3 credit units

² Details of individual courses are provided in the Appendix

already taken this course), students may be allowed to substitute a course recommended by the student's advisory committee and approved by the APEC graduate committee.

- 3 CUs (1 course) in Macroeconomics (from ECON 801, ECON 874, or course approved by the APEC graduate committee)
The Macroeconomics requirement will typically be met by taking ECON 801.3 (Macroeconomic Theory), which is offered annually. Depending on their background (e.g., if they have obtained an MA in Economics from the University of Saskatchewan and have already taken this course), students may be allowed to substitute ECON 874.3 (Advanced Macroeconomic Theory) or a course recommended by the student's advisory committee and approved by the graduate committee.
- 3 CUs (1 course) – a field course approved by the APEC graduate committee and/or student's program advisory committee
- APEC 990 – Seminars
Students will participate in applied economic seminars (APEC 990) throughout their program, and will be required to make a presentation to APEC 990 at least once during their program. The APEC 990 seminars will be made up of a mix of student presentations, faculty presentations, and presentations from invited guests, some of which will be specifically designated as applied economic seminars, while others will be appropriately chosen from seminars being given in the units that comprise the program (e.g., AREC 990, ECON 990, FIN 990 and JSGS 990) or other units on campus.

Year 1 comprehensive exam

Students successfully completing these courses will write the first comprehensive exam at the end of the first year. This exam will have three components.

- a) The first component is a written exam requiring students to apply the microeconomic theory they have taken in their courses.
- b) The second component takes the form of a **research paper** on a topic approved by the advisory committee that focuses on the use of the theory and empirical tools taught in the first year (students are expected to complete the paper with minimal input from faculty). In this paper students are expected to show their independent ability to apply economic theory and methods to an examination of a problem they have chosen.
- c) Students will also be given an oral examination of the paper and the exam (the oral exam constitutes the third component).

Students must receive a Pass on all three components in order to pass the first comprehensive exam. To receive a Pass, students must achieve a score of Very Good (80-85) or Excellent (85+).

By the end of the first year of study, the student will have an approved supervisor and advisory committee. Advisory committees must include members from at least two of the participating academic units.



Year 2 courses and 2nd comprehensive exam

- 18 CUs (6 courses) of field courses (and APEC 990)

In consultation with their advisory committee, students will develop a program based on their applied field. Selection of the courses in the second year is driven by the student's applied topic area and must be recommended by the advisory committee and approved by the APEC graduate committee. Students are expected to take courses from at least two of the participating academic units.

Students will be required to submit for approval a program of studies that presents the field courses they will take, as well as an explanation for how these courses will give them the background and skills to undertake their proposed dissertation research, while at the same time exposing them to at least two areas of applied economics. *Specifically, the program of studies must include two courses that are core to their dissertation topic; in addition, the program of studies must include at least two courses that are outside this core area.*

Year 2 comprehensive exam

Students will take a second comprehensive exam after completion of the required credit units of coursework. This exam will have two components.

- a) The first component is a **second research paper** that is due by the end of the second academic year (students are expected to complete the paper with minimal input from faculty). The focus of the paper will be approved by the advisory committee and will be directed towards the material found in the student's two core field courses (the core field requires a minimum of two approved courses). The research paper is designed to demonstrate the student's ability to structure a research problem and apply techniques appropriate to their proposed field; in doing this, students will be expected to integrate material from across their field courses using the material in their theory economic theory and econometrics courses.
- b) The second component is an oral exam on this paper.

To receive a Pass on the second comprehensive exam, students must achieve a score of Very Good (80-85) or Excellent (85+) on both the research paper and the oral exam.

Students must receive a Pass on both the first (year one) and the second (year two) comprehensive exam in order to receive a pass on the overall comprehensive exam and move onto their thesis research.



Research (years 3 – 5)

The program expects students to use the manuscript-style model for the dissertation. Students will be required to produce a minimum of three papers (manuscripts) of publishable quality for inclusion in the thesis. While it is not required that the papers be published before completion of the thesis, it is expected that students will have at least one or two papers under review at the time of completion. Students may use material and ideas from the two research papers they wrote for the first and second comprehensive exams in one or more of the final papers they include in the thesis. Students will be required to meet the College of Graduate and Postdoctoral Studies (CGPS) guidelines for minimum requirements for the creation of a manuscript-style thesis.

Students in the Applied Economics PhD have a wide variety of research areas in which to focus, each with a multidisciplinary component that spans across the four academic units. Areas of focus include:

- Applied econometrics
- Behavioural and experimental economics
- Environmental and resource economics
- Finance and financial economics
- Health and labour economics
- Industrial organization, strategy and firm behaviour
- International economics
- Policy and governance
- Regional and development economics



APPENDIX – COURSE DETAILS

CORE

Microeconomic Theory (2 courses)*

ECON 800.3	Microeconomic Theory
ECON 873.3	Advanced Microeconomic Theory
AREC 842.3	Agricultural Market Organizations
ECON 850.3	Game Theory, Strategic and Cooperative Choices

* ECON800.3 and ECON873.3 typically constitute the core microeconomic theory requirements, however, depending on their background, students may be allowed to substitute Econ 850.3 and AREC 842.3 to satisfy the microeconomic requirement

Macroeconomic Theory (1 course from:)

ECON 801.3	Macroeconomic Theory
ECON 874.3	Advanced Macroeconomic Theory

Econometrics (2 courses)

ECON 808.3	Econometrics I
ECON 809.3	Econometrics II

FIELD COURSES**

Health and labour

ECON 823.3	Labour Economics
ECON 833.3	Economic Evaluation Methods in Health Services Research
ECON 834.3	Health Economics

Industrial organization, strategy and firm behaviour

ECON 850.3	Game Theory, Strategic and Cooperative Choices
ECON 870.3	Behavioural Economics
AREC 825.3	Research Issues in Agribusiness Management
AREC 840.3	Economics of Agri-Food Marketing
AREC 842.3	Agricultural Market Organizations
JSGS 865.3	Decision Making in Organizations



International

ECON 811.3	International Trade Theory
ECON 812.3	International Monetary Economics
AREC 855.3	International Agricultural Trade Policy

Policy

ECON 830.3	Public Finance
AREC 845.3	Transportation Economics and Regulatory Policy
AREC 851.3	Agricultural Policy
JSGS 862.3	Political Economy
AREC 832.3	Rural Development

Finance

FIN 801.3	Advanced Corporate Finance
FIN 802.3	Advanced Investment Theory
FIN 803.3	Empirical Methods in Finance
FIN 805.3	Fixed Income Securities

Other applied economics courses

ECON 804.3	Research in Econometrics
ECON 805.3	Mathematical Analysis in Economics
AREC 820.3	Applied Microeconomic Theory

** The grouping of field courses by area is illustrative, and some courses are applicable to more than one area (for example, AREC 855.3 has both a trade and policy focus, ECON 830.3 encompasses finance and public policy, etc.). The availability of field courses will change from year to year, and additional field courses may also become available.