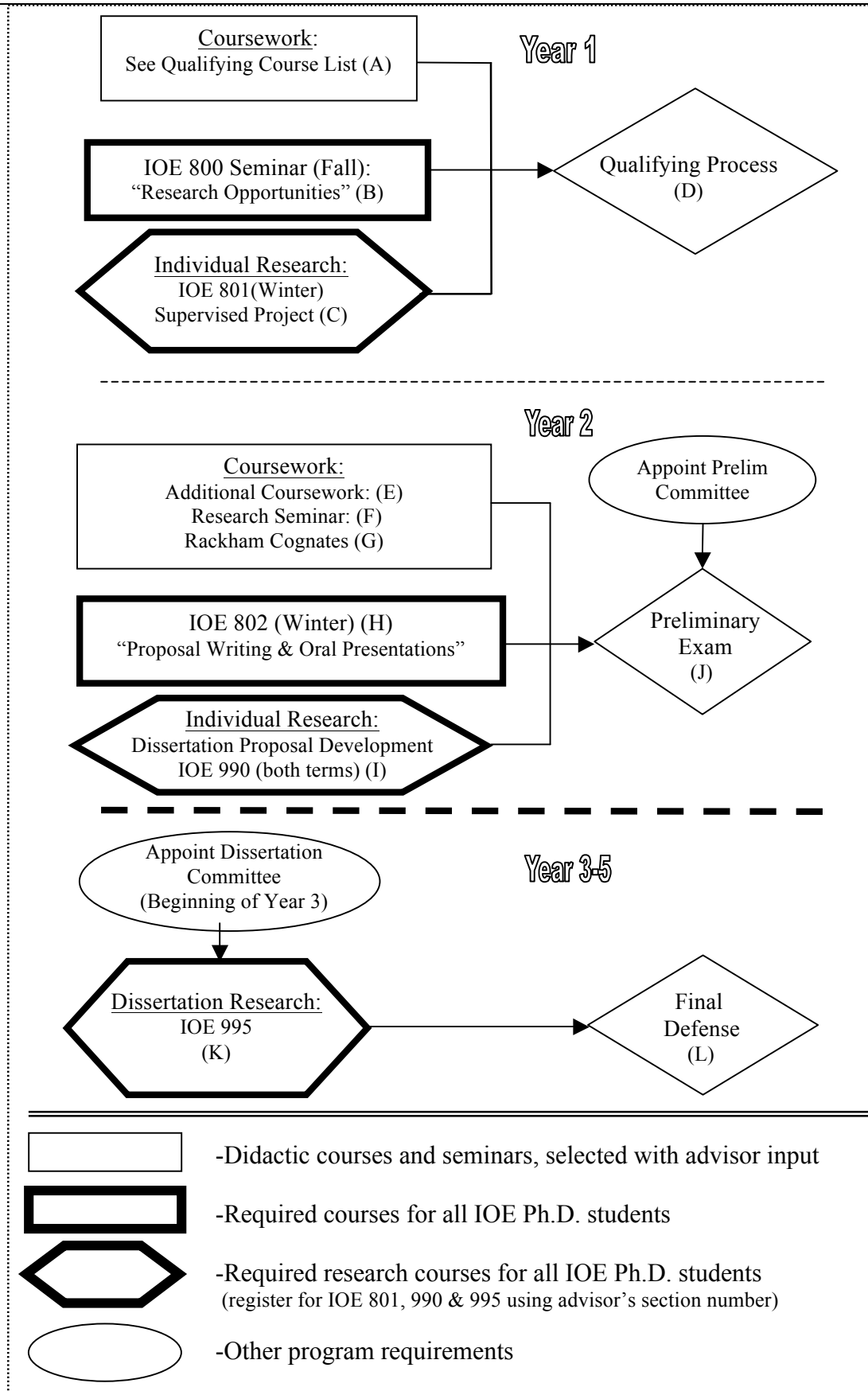


FLOW CHART FOR PROGRESSION THROUGH PH.D. PROGRAM UPDATED 2016



Footnotes for IOE Ph.D. Flowchart

- A. Year 1 – General Course Preparation: Each student works with his/her advisor to develop a two-year plan of courses to prepare for dissertation research and the IOE Preliminary Examination. When developing the two-year plan, the student should select Year 1 courses to satisfy requirements for the IOE Qualifying Process. (See Note D.)
- B. Year 1 – Fall Term: All Ph.D. students must complete IOE 800 “First-year Doctoral Seminar.” Students hear a brief presentation from each IOE faculty member describing research opportunities. In addition, each student prepares a proposal that outlines preliminary ideas for the dissertation research and completes Responsible Conduct of Research and Scholarship (RCRS) training offered by the College of Engineering.
- C. Year 1 – Winter Term: Each Ph.D. student must register for IOE 801 “Directed Research,” and complete a research project under the direction of his/her advisor. A written report is submitted at the end of the term.
- D. Year 1 – Qualifying Process: The Qualifying Process includes a holistic assessment of a student’s potential for successfully completing the PhD degree. It is performed by the full IOE faculty following the completion of the first year of doctoral study.
- E. Year 2 – Additional Courses: Working with the advisor, the student selects advanced courses to develop the knowledge and skills required to perform the dissertation research. All students must complete at least eight didactic courses prior to taking the Preliminary Exam. (A didactic course is a 3-credit course that has regularly scheduled class meetings, formal examinations, and is graded on an A-E scale. Seminars and directed research classes (e.g., IOE 590, 801, 899, 990, etc.) are not didactic courses.)
- F. Year 2 – Research Seminar: Each student must register for and successfully complete at least one Research Seminar (e.g., IOE 836, IOE 837, or IOE 899) before taking the Preliminary Examination. Note: Students are encouraged to register for research seminars on a regular basis during their Ph.D. studies.
- G. Year 2 – Rackham Cognates: Students must complete at least two non-IOE courses to satisfy Rackham requirements.
- H. Year 2 – Winter Term: Second-year students must complete IOE 802 “Proposal Writing and Oral Presentation.” Each student prepares either an NSF- or NIH-style research proposal. This proposal is submitted to the Preliminary Examination committee.
- I. Year 2 – Fall and Winter: Each student registers for IOE 990 “Pre-Candidacy Research.” Working closely with the faculty advisor, the student performs preliminary dissertation and prepares a dissertation proposal.
- J. Year 2 – Preliminary Exam: The Preliminary Exam determines if the student has identified a suitable dissertation topic, and if the student is fully-prepared to perform the dissertation research. The examination process includes an oral defense of the dissertation proposal.
- K. Years 3-5 (all terms): Each student registers for IOE 995 “Candidacy Research.” Working closely with the Dissertation Committee, the student performs doctoral research and writes the dissertation.
- L. Final Defense.