

Ph.D. Course Work Plan

Student's Name: _____
Email Address: _____
Semester of Enrollment: _____
Field of Specialization: _____
Advisor's Name: _____
M.S. Degree (when received, field): _____
Today's Date: _____

General:

The Ph.D. Course Work Plan sets forth the entire program of study that will be undertaken to satisfy the objectives of the degree. Copies of the plan are obtainable in the ME Graduate Office (2168 Martin Hall). They may also be downloaded from the web site http://www.enme.umd.edu/graduate/pdf/phd_plan.pdf. The plan must be prepared in consultation with the student's advisor, who must sign the plan, thus signifying his/her approval. The plan should then be submitted to the ME Graduate Office for approval by the Director of Graduate Studies at the start of the first semester of study.

Changes to the plan are permitted, but must be approved by the student's advisor and the Director of Graduate Studies prior to their implementation. A new plan reflecting the changes must be filed with the ME Graduate Office every time changes are made.

At the completion of the course work, the plan is submitted for approval by the department's Graduate Committee.

In the space below, the student should indicate, in one or two sentences, the type of problem he/she wishes to research. The choice of electives (see page 2) should be focused to provide a technical foundation and training for this research.

Advisor's Approval:

My signature attests that I have actively advised this student in the selection of the courses making up the attached Course Work Plan. I have made sure that the courses selected fulfill the requirements described on page 2, and that they provide a coherent focus for this student's classroom work at the University of Maryland. I have also verified the level of coursework completed at other academic institutions and I am ready to justify this plan before the Graduate Committee.

Advisor's Signature

The following definitions are to be employed:

CORE COURSES – Core courses collectively educate a student in mechanical engineering. The list of core courses is given below:

- ENME 600 Engineering Design Methods (formerly known as Advanced Mechanical Design)
- ENME 605 Advanced Systems Control
- ENME 616 Computer-Aided Manufacturing
- ENME 632 Advanced Convection Heat Transfer
- ENME 633 Advanced Classical Thermodynamics
- ENME 640 Fundamentals of Fluid Mechanics
- ENME 662 Linear Vibrations
- ENME 664 Dynamics
- ENME 670 Continuum Mechanics
- ENME 690 (formerly ENME 808Z) Mechanical Fundamentals of Electronic Systems
- ENME 695 (formerly ENME 808K) Failure Mechanisms and Reliability

It is strongly recommended that students select core courses across the four technical areas to broaden their mechanical engineering knowledge, rather than confining themselves to core courses from their technical area.

MATHEMATICS COURSES – These are courses that provide the student with the fundamental mathematical background appropriate to the content of the courses that will be undertaken. A list of courses which have been predetermined to satisfy this requirement has been posted on the department's web site (www.enme.umd.edu/graduate/courses/mathematics.html) or can be obtained from the ME Graduate Office. Also included on the list are courses that satisfy the elective course requirement described below.

ELECTIVES – Electives are intended to provide specific knowledge in the selected technical area relevant to the student's research.

Requirements:

The Ph.D. Course Work Plan must contain a minimum of 42 credits of graduate course work. A minimum of 18 credits of course work must be taken at the University of Maryland. Students with a Master's degree from another accredited institution may, upon approval of the student's advisor, transfer up to 24 credits of graduate work. Plans that include graduate work completed at other academic institutions must be accompanied by appropriate documentation to verify the level of work, and to confirm that the work will not be duplicated by the courses that will be taken at the University of Maryland.

Except for 400-level mathematics courses, all credits must be derived from courses taken at the 600 level or above. Non-math 400-level courses are allowed only if: (1) taken per advisor's recommendation; and (2) taken as graduate courses when no graduate equivalents exist. Course work plans that include such courses must be accompanied by a statement from the advisor justifying the recommendation or by a statement from the instructor that the course was taken at the graduate level.

The Ph.D. Course Work Plan must additionally satisfy the following criteria:

Core Courses: A minimum of 9 credits of core courses is required.

Mathematics Courses: A minimum of 9 credits of mathematics courses is required.

Electives: Electives are taken as necessary to complete the course work plan.

A list of course descriptions is available in the ME Graduate Office. That, as well as class schedules for the current and next three semesters, may be found at the web site www.enme.umd.edu/graduate/courses/index.html.

#	COURSE TITLE	COURSE #	INSTITUTION (Complete Name)	Date	Credit Hours
#	CORE COURSES				
#	MATHEMATICS COURSES				
#	ELECTIVES				

APPROVED BY:

Director of Graduate Studies: _____
Signature and Date

Graduate Committee: _____
Signature and Date