Plan of Study

Department of Civil and Environmental Engineering
Master of Science in Civil Engineering
Specialization in Structures

The Plan of Study is a contract for the degree of Master of Science in Civil Engineering at the University of Illinois at Urbana-Champaign. All students admitted to the Structures Program are required to submit a Plan of Study. This plan assumes the completion or demonstrated proficiency in the following courses (and all prerequisites assumed by these courses):

CEE 460 Steel Structures, I
CEE 461 Reinforced Concrete, I
CEE 470 Structural Analysis

Graduate credit will be granted for CEE 470, but not for CEE 460 or CEE 461. CEE 470, if taken, should be listed on the Plan of Study.

A revised program can be proposed at any time prior to graduation by submitting a new Plan of Study for approval. You will be eligible to graduate only when the courses you have successfully taken (along with any thesis requirements) match those listed on your approved Plan of Study.

Student's Name (please type or print)

Student ID Number

Anticipated Degree Date

E-mail Address

Mailing Address

Academic Advisor

Thesis Option (check one): ☐ Thesis ☐ Non-Thesis

Course Selections

Core Courses

The recommended core courses are:

CEE 462 Steel Structures, II
CEE 463 Reinforced Concrete, II
CEE 471 Structural Mechanics
CEE 472 Structural Dynamics
CEE 570 Finite Element Methods

If you elect not to take a listed core course, please explain (e.g. indicate proficiency in that subject) on the reverse side under *Notes and Comments*.

Other Courses

The program, including core courses, must total 36 hours (HR) of graduate credit for the non-thesis option and 32 hours of graduate credit (up to 8 of which can be CEE 599M) for the thesis option. Courses can be selected from the pre-approved list (see reverse). Proposed courses not on the pre-approved list must be justified on the reverse side of this form under *Notes and Comments* and are subject to approval by the Structures Faculty. Any undergraduate course taken for credit (A-F) will count towards your GPA but not towards the graduate credit requirements.

Course Number	Credit (HR)

Total Credit

Required Signatures

[for office use only]

Student Date

Academic Advisor Date

Notes on filling out the Plan of Study

List any transfer courses by course number at offering institution (these courses must be approved, by petition, by the Graduate College). A brief description of these courses should be included on the reverse side under *Notes and Comments*. This form must be filled out in ink.

Return completed and signed forms to 1108 Newmark Civil Engineering Laboratory.

Pre-Approved Courses

CEE Structures Courses:
467 Masonry Structures
468 Prestressed Concrete
469 Wood Structures
491 Decision and Risk Analysis
560 Steel Structures, III
572 Earthquake Engineering
573 Structural Dynamics, II
574 Probabilistic Loads and Design
575 Fracture and Fatigue
576 Nonlinear Finite Elements
598 Special Topics

Other CEE Courses:
401 Concrete Materials
483 Soil Mechanics and Behavior
484 Applied Soil Mechanics
580 Excavation and Support Systems

Theoretical and Applied Mechanics Courses (TAM):
424 Mechanics of Structural Metals
427 Mechanics of Polymers
428 Mechanics of Composites
456 Experimental Stress Analysis
470 Computational Mechanics
518 Wave Motion
524 Micromechanics of Materials
541 Mathematical Methods, I
542 Mathematical Methods, II
545 Advanced Continuum Mechanics

TAM Courses (continued):
551 Solid Mechanics, I
552 Solid Mechanics, II
554 Plasticity
555 Fracture Mechanics
574 Advanced Finite Element Methods

Mechanical Science and Engineering Courses (ME):
530 Fatigue Analysis
532 Fracture Resistant Design
570 Nonlinear Solid Mech Design

Material Science Courses (MSE):
406 Thermal-Mech Behavior of Materials
440 Mechanical Behavior of Materials
540 Advanced Mechanical Behavior

Math Courses:
442 Intro Partial Differential Equations
446 Applied Complex Variables
481 Vector and Tensor Analysis
487 Advanced Engineering Math
488 Math Methods in Engineering
556 Methods of Math Physics, I
557 Methods of Math Physics, II

Computer Science and Engineering Courses (CSE):
401 Numerical Analysis
510 Numerical Methods for PDEs
511 Iterative & Multigrid Methods
512 Parallel Numerical Algorithms

Notes and Comments

(Include descriptions of transfer courses and justification of deviations from the pre-approved course list. Use additional sheets if necessary.)

Review Comments

(This section is reserved for comments by the faculty advisor or the structures review committee.)