# **Department of Civil & Environmental Engineering** University of Connecticut, Storrs, CT

# **Structures and Applied Mechanics Technical Group** (STAM - TG)

### (February 07, 2010)

List of courses for graduate programs in the Structures and Applied Mechanics Technical Group:

#### **Focus Area: Applied Mechanics** (A) (Graduate School Area of Concentration: Applied Mechanics)

#### Core Courses --- (must take all three)

CE 5122 (CE 322) - Advanced Mechanics of Materials CE 5150 (CE 359) -Structural Vibrations CE 5164/ME 5520 (CE 366/ME 380) - Finite Element Methods in Applied Mechanics I

## Elective Core courses (Courses from other related Focus Area or Area of Concentration in the CEE Department) --- (must take at least one)

CE 5128 (CE 326) -Elastic Stability CE 5380 (CE 352) -Bridge Structures CE 5610 (CE 355) - Advanced Reinforced Concrete Structures CE 5620 (CE 353) - Advanced Steel Structures CE 5640 (CE 354) - Prestressed Concrete Structures

#### Suggested List to fill remaining course requirement

CE 5128 (CE 326) -Elastic Stability (if not taken under Elective Core course above) CE 5151-- Experimental Structural Dynamics CE 5163 -- Fracture Mechanics CE 5166/ME 5521 (CE 367/ME 381) -Finite Element Methods in Applied Mechanics II CE 5541 (CE 341) - Advanced Soil Mechanics CE 5543 (CE 343) – Advanced Foundation Design CE 5380 (CE 352) -Bridge Structures (*if not taken under Elective Core course above*) CE 5610 (CE 355) - Advanced Reinforced Concrete Structures (if not taken under Elective Core course above) CE 5620 (CE 353) -Advanced Steel Structures (if not taken under Elective Core course above) CE 5640 (CE 354) - Prestressed Concrete Structures (if not taken under Elective Core *course above*) ME 5105 (ME 305) – Basic Concept of Continuum Mechanics ME 5507 (ME 307) – Engineering Analysis I ME 6508 (ME 308) - Engineering Analysis II and other courses in related areas as determined appropriate for the student's thesis/dissertation research or other educational goals 1

# (B) <u>Focus Area: Structural Engineering</u> (Graduate School Area of Concentration: Structural Engineering)

#### <u>Core Courses</u> ----(must take all three)

CE 5122 (CE 322) - Advanced Mechanics of Materials CE 5164/ME 5520 (CE 366/ME 380) –Finite Element Methods in Applied Mechanics I CE 5610 (CE 355) - Advanced Reinforced Concrete Structures or CE 5620 (CE 353) -Advanced Steel Structures

## <u>Elective Core courses</u> (Courses from other related Focus Area or Area of Concentration in the CEE Department) --- (must take at least one)

CE 5150 (CE 359) -Structural Vibrations CE 5151-- Experimental Structural Dynamics CE 5163 -- Fracture Mechanics CE 5166/ME 5521 (CE 367/ME 381) –Finite Element Methods in Applied Mechanics II

#### Suggested List to fill remaining course requirement

- CE 5128 (CE 326) -Elastic Stability
- CE 5150 (CE 359) -Structural Vibrations (if not taken under Elective Core course above)
- CE 5151-- Experimental Structural Dynamics (*if not taken under Elective Core course above*)
- CE 5163 -- Fracture Mechanics (if not taken under Elective Core course above)
- CE 5166/ME 5521 (CE 367/ME 381) –Finite Element Methods in Applied Mechanics II *(if not taken under Elective Core course above)*
- CE 5541 (CE 341) Advanced Soil Mechanics
- CE 5543 (CE 343) Advanced Foundation Design
- CE 5380 (CE 352) -Bridge Structures (if not taken under Elective Core course above)
- CE 5610 (CE 355) Advanced Reinforced Concrete Structures (*if not taken under Core course above*)
- CE 5620 (CE 353) -Advanced Steel Structures (*if not taken under Core course above*)
- CE 5640 (CE 354) Prestressed Concrete Structures

ME 5105 (ME 305) - Basic Concept of Continuum Mechanics

- ME 5507 (ME 307) Engineering Analysis I
- ME 6508 (ME 308) Engineering Analysis II

and other courses in related areas as determined appropriate for the student's thesis/dissertation research or other educational goals