ELECTIVES

The following course offerings are subject to change. For CEE course offerings, please refer to the CEE Projected Course Offerings and the Preliminary Time Schedule which can be found on the CEE Department website.
Refer to the UW Time Schedule when it becomes available for up-to-date information.

For courses outside the CEE Department, refer to the UW Time Schedule or the offering department for course offering details.

500-level Structural Engineering and Mechanics (SEM)

- ☐ CESG 505 Engineering Computing, 3 CR
- ☐ CESG 506 Nonlinear Analysis of Structural Sys, 3 CR
- ☐ CESG 507 Structural Stability, 3 CR
- ☐ CESG 508 Materials Modeling, 3 CR
- ☐ CESG 509 Reliability and Design, 3 CR
- ☐ CESG 521 Advanced Reinforced Concrete, 3 CR
- ☐ CESG 522 Prestressed Concrete Design, 3 CR
- ☐ CESG 523 Advanced Structural Systems, 3 CR
- ☐ CESG 524 Advanced Steel I, 3 CR
- ☐ CESG 526 Earthquake Engineering I, 3 CR
- ☐ CESG 527 Earthquake Engineering II, 3 CR
- ☐ CESG 528 Wind Engineering Design, 3 CR
- ☐ CESG 529 Bridge Engineering, 3 CR
- ☐ CESG 599 Advanced Steel II, 3 CR
- ☐ CESG 599 Elasticity, 3 CR
- ☐ CEE 599 Math Foundation of Continuum Mech, 3CR

To meet the requirement of additional coursework, students may take courses from the SEM list above, or from the following list of *approved electives* (including CEE, AA, ME, MSE and AMATH).

CEE Electives

- ☐ CESG 563 Advanced Foundations, 3 CR
- ☐ CESG 566 Geotechnical Earthquake Eng, 3 CR
- ☐ CESI 588 Energy and the Environment, 3 CR

College of Engineering Electives

- ☐ AA 532 Mechanics of Composite Materials, 3 CR
- ☐ AA 538 Intro to Structural Optimization, 3 CR
- ☐ AA 543 Computational Fluid Dynamics, 3 CR
- ☐ ME 515 Life Cycle Assessment, 3 CR
- ☐ ME 541 Fatigue of Materials, 3 CR
- ☐ ME 551, 552 Elasticity I, II, 3 CR
- ☐ ME 556 Experimental Stress Analysis I, 3 CR
- ☐ ME 557 Experimental Stress Analysis II, 3 CR
- ☐ ME 559 Introduction to Fracture Mechanics, 3 CR
- ☐ ME 564, 565 Mechanical Eng Analysis I, II, 3CR
- ☐ ME 588 Dynamics and Vibrations, 3CR
- ☐ MSE 431 Failure Anal and Durability of Matls, 3 CR
- ☐ MSE 462 Mechanical Behavior of Materials II, 3 CR
- ☐ MSE 475 Introduction to Composite Materials, 3CR

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ELECTIVES (continued)

College of Arts and Sciences Electives

- ☐ AMATH 501 Vector Calculus and Complex Variables, 5 CR
- ☐ AMATH 502 Intro to Dynamical Systems and Chaos, 5 CR
- ☐ AMATH 503 Methods for Partial Diff Equations, 5 CR
- ☐ AMATH 506 Applied Probability Statistics, 4 CR
- ☐ AMATH 515 Fundamentals of Optimization, 5 CR
- ☐ AMATH 516 Numerical Optimization, 3 CR
- ☐ AMATH 567 Aplied Complex Analysis, 5 CR
- ☐ AMATH 568, 569 Applied Analysis and Adv Methods for Ordinary and Partial Diff Equations, 5 CR
- ☐ AMATH 581, 582, 583 Sci Computing, 5 CR
- ☐ AMATH 585 Numeric Analysis of Boundary Value, 5 CR
- ☐ AMATH 586 Num Analysis of Time Depend Prob, 5 CR

Students may take one elective from the list below. More than one course is allowed <u>only with prior approval by their faculty advisor and the SEM grad-uate advisor.</u>

College of the Built Environment Electives

- ☐ ARCH 537 Traditional Bldg Methods: New Adapt, 3 CR
- ☐ ARCH 538 Building Reuse Seminar, 3 CR
- ☐ ARCH 578 Case Studies in Contemporary Arch 3 CR
- ☐ CM 404 (ARCH 404) Integrated Des/Bld Studio, 6 CR
- ☐ CM 450 Construction Project Management, 5 CR
- ☐ CM 500 (ARCH 574) Design and Construction Law, 3 CR
- ☐ CM 510 Advanced Construction Technique, 3CR
- ☐ CM 515 Innovative Project Mang Concepts, 3 CR
- ☐ CM 530 Project Economics and Risk Analysis, 3 CR
- ☐ CM 540 Sustainable Construction, 3 CR
- ☐ CM 560 Design-Building Project Management, 3 CR
- ☐ CM 580 Temporary Structures, 3 CR

Graduation Quarter Checklist

- ☐ Review Graduate School Dates and Deadlines
- ☐ Submit the online Master's Degree Request
- ☐ Update your Program Plan and submit to the Graduate Advising Office.
- ☐ Submit signed Master's Degree Warrant to Graduate Advising Office.
- ☐ Prior to leaving the department, *submit online CEE Final Checkout form and Exit Questionnaire*
- ☐ Allow 3-4 months for your diploma to arrive. Update your mailing address in MyUW if necessary.