## **Minimum 5 Electives**

## **DESIGN-BASED** (minimum of 1 from this list)

COURSE #	TITLE
CE 334	Structural Design in Steel
CE 335	Structural Design in Concrete
CE 422	Open-Channel Flow
CE 427	Computer Applications in Hydraulics
CE 429	Special Topics in Hydraulics & Water Resources Engineering
CE 432	Advanced Structural Design in Steel
CE 434	Design of Wood and Masonry Structures
CE 435	Prestressed Concrete Structures
CE 437	Advanced Structural Design Concrete
CE 438	Behavior and Design of Structural Systems
CE 441	Earth Structures in Geotechnical Engineering
CE 442	Ground Improvement
CE 445	Geoenvironmental Engineering
CE 446	Geotechnical Earthquake Engineering
CE 448	Numerical Methods in Geotechnical Engineering
CE 462	Traffic Engineering and Operations
CE 463	Traffic Flow & Capacity Analysis
CE 464A	Integrated Highway Bridge Design Using LRFD Methodology
CE 466	Highway Geometric Design
CE 482	Construction Project Planning, Scheduling and Control
CE 426 (ABE)	Watershed Engineering
CE 455 (ABE)	Soil and Water Resources Engineering
CE 456 (ABE)	Irrigation Systems Design
CE 476A (CHEE)	Water Treatment System Design
ANALYSIS- BASED	TITI E

## TITLE

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COURSE #	Construction Engineering Management
CE 381	Introduction to Finite Elements Methods
CE 402	Probability in Civil Engineering
CE 410	Hydrology
CE 423	Advanced Structural Analysis
CE 433	Special Topics in Geomechanics
CE 444	Special Topics in Transportation Engineerimg
CE 460	Public Transit Planning and Operations
CE 462A	Urban Transportation Planning
CE 468	Travel Demand Modeling
CE 469	Construction Cost Estimating
CE 483	Construction Equipment and Methods
CE 485	Statistical Hydrology
CE 449 (HWR)	Soil, Wetlands and Wastewater Reuse
CE 458 (ABE) CE	Wastewater Treatment system Design System
476B (CHEE) CE	Introduction To Hazardous Waste Management
478 (CHEE)	Water Chemistry for Engineers
CHEE 400R GEN	Geomechanics
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