CIVIL ENGINEERING BS PROGRAM TECHNICAL ELECTIVE CHOICES **1/17/08**
FOR THE 2008-2009 CATALOG

GENERAL PROGRAM

MUST HAVE A TOTAL OF 18 UNIQUE CREDITS FROM THE FOLLOWING THREE CATAGORIES

1) **Emphasis Capstone:** CEE 431, CEE 443, CEE 456, CEE 457 or CEE 481
2) **Structural Design:** Take CEE 480 or CEE 481
3) **Technical Electives**: Select at least 12 credits from the following list *(At least one † Course-this will provide you with at least two design classes including CEE 480 or CEE 481):*

CEE 404†	Open Channel Flow (3)
CEE 414†	Water Resources Engineering II (3)
CEE 417†	Introduction to Environmental Quality & Analysis (3)
CEE 418†	Principles of Water Quality Modeling (3)
CEE 420†	Advanced Portland Cement Concrete (3)
CEE 428†	Urban Engineering (3)
CEE 431†	Pavement Design (3) – *be sure you do not double count towards18 unique credits*
CEE 443†	Geotechnical Engineering: Foundations (3) – *be sure you do not double count towards18 unique credits*
CEE 445†	Geotechnical Engineering: Retaining Structures (3)
CEE 446†	Geosynthetics (3)
CEE 456†	Design of Water Treatment Facilities (3) – *be sure you do not double count towards18 unique credits*
CEE 457†	Design of Wastewater Treatment Facilities (3) – *be sure you do not double count towards18 unique credits*
CEE 459R†	Hazardous & Solid Waste Management & Control (3)
CEE 463†	Traffic Engineering (3)
CEE 480†	Concrete Structure Design (3) – *be sure you do not double count towards18 unique credits*
CEE 481†	Structural Steel Design (3) – *be sure you do not double count towards18 unique credits*
CEE 482†	Design of Timber Structures (3)
CEE 483†	Prestressed Concrete Design (3)
CEE 484†	Bridge Engineering I (3)
CEE 486†	Structural Analysis II (3)
CEE 487†	Reinforced Concrete Design II (3)
CEE 488†	Advanced Structural Steel Design (3)
CEE 411	Environmental Law (3)
CEE 453	Environmental Microbiology (3)
CEE 458	Fundamentals of Environmental Chemistry (3)
CEE 460	Construction Engineering (3)
CEE 479	Earthquake Engineering (3)
EE 220	Circuits I (3) – *If not taken as a part of the general BS requirements.*
ME 311	Engineering Thermodynamics I (3) - *If not taken as a part of the general BS requirements.*

ENVIRONMENTAL EMPHASIS

Courses Changes from General Program: Take CHEM 220A instead of CEE 371

Restricted Science Elective: Take CHEM 202 (CHEM 122 accepted)

MUST HAVE A TOTAL OF 18 UNIQUE CREDITS FROM THE FOLLOWING THREE CATAGORIES

1) **Emphasis Capstone:** CEE 456 or CEE 457
2) **Structural Design:** Take CEE 480 or CEE 481
3) **Technical Electives:** Select at least 12 credits from the following list *(At least one † Course-this will provide you with at least two design classes including CEE 480 or CEE 481):*

CEE 404†	Open Channel Flow (3)
CEE 414†	Water Resources Engineering II (3)
CEE 417†	Introduction to Environmental Quality & Analysis (3)
CEE 418†	Principles of Water Quality Modeling (3)
CEE 428†	Urban Engineering (3)
CEE 456†	Design of Water Treatment Facilities (3)
CEE 457†	Design of Wastewater Treatment Facilities (3)
CEE 459 R†	Hazardous & Solid Waste Management & Control (3)
CEE 411	Environmental Law (3)
CEE 453	Environmental Microbiology (3)
CEE 458	Fundamentals of Environmental Chemistry (3)
ATMS 412	Introduction to Air Pollution (3)

CEE 461P, 462P, 463P, 464P, 465P, 466P, 467P and 468P are not permitted to be used as Technical Electives for a BS Degree in Civil Engineering or Environmental Engineering. These courses are only applicable to the Post Baccalaureate Degree Programs in Construction Engineering and Construction Management.