MASTER OF SCIENCE IN CIVIL ENGINEERING
WATER RESOURCES ENGINEERNIG

At least 9 cr. required from:

CE 654 - Design of Groundwater Flow Systems
CE 751 - Hydraulics of Open Channels
CE 752 - Advanced Hydrology
CE 803 - Numerical and Analytic Techniques for Engineers
CE 854 - Analysis of Groundwater Flow

At least 6cr. required from:

CE 625 - Principles of Geoenvironmental Engineering
CE 725 - Seepage in Permeable Materials
CE 760 - Environmental Engineering Seminar
CE 762 - Water Treatment Processes
CE 766 - Wastewater Engineering: Biological Processes
CE 768 - Geoenvironmental Engineering Design
CE 861 - Environmental Engineering Chemistry
CE 863 - Water Supply and Wastewater Collection Systems
CE 864 - Unit Operations and Processes in Environmental Engineering
CE 866 - Advanced Wastewater Treatment
CE 970 - Advanced Topics in Environmental and Water Resources Engineering

CE Water Resources Electives:

CE 680 - Economics of Design and Construction
CE 703 - Responsibility in Engineering: Codes & Professionalism
CE 704 - Responsibility in Engineering: Leadership & Diversity
CE 723 - Designing with Geosynthetics
CE 728 - Advanced Geotechnical Design
CE 786 - Land Development for Civil Engineers and Planners
CE 790 - Problems in Civil Engineering
CE 816 - Selected Topics in Civil Engineering
CE 823 - Engineering Properties of Cohesive Soils
CE 824 - Strength and Deformation of Geo-materials
CE 825 - Environmental Geotechnology
CE 828 - Advanced Soil Mechanics
CE 916 - Advanced Topics in Civil Engineering
GRAD 740 - Water and Society: Interdisciplinary Foundation

Additional Water Resources Electives:

AGEC 525 - Natural Resource Economics
AGEC 825 - Natural Resource Policy
AGRON 655 - Site Specific Agriculture

AGRON 706 - Remote Sensing of the Environment
AGRON 746 - Physical Properties of Soils
AGRON 816 - Soil Physics
AGRON 820 - Plant Water Relations
AGRON 893 - Agricultural Simulation Modeling
AGRON 900 – Micrometeorology
AGRON 901 - Environmental Instrumentation
AGRON 916 - Advanced Soil Physics
BAE 665 - Ecological Engineering Design
BAE 669 - Watershed Modeling
BAE 865 - Advanced Ecological Engineering Design
BAE 869 - Advanced Watershed Modeling
BIOL 612 - Freshwater Ecology
BIOL 818 - Advanced Aquatic Ecology
CHE 642 - Fundamentals of Conversion of Biorenewable Resources
CHE 650 - Hazardous Waste Engineering Seminar
CHE 663 - Environmental and Ecological Risk Assessment
CHE 670 - Sustainability Seminar
CHE 725 - Biotransport Phenomena
CHE 862 - Advanced Transport Phenomena I
CHE 867 - Advanced Transport Phenomena II
CIS 734 - Introduction to Genomics and Bioinformatics
GEOG 508 - Geographic Information Systems I
GEOG 608 - Geographic Information Systems II
GEOG 700 - Quantitative Analysis in Geography
GEOG 725 - Geography of Water Resources
GEOG 740 - Fluvial Geomorphology
GEOG 890 - Advanced Spatial Analysis Techniques
GEOL 611 - Hydrogeology
GEOL 711 - Water Resources Geochemistry
GEOL 870 - Groundwater Contaminant Remediation
HORT 820 - Quantitative Agricultural Remote Sensing
IMSE 822 - Advanced Engineering Economy
LAR 720 - Public Lands and Natural Resources Law
MATH 630 - Introduction to Complex Analysis
MATH 632 - Elementary Partial Differential Equations
MATH 705 - Computational Math
MATH 655 - Elementary Numerical Analysis I
MATH 656 - Elementary Numerical Analysis II
ME 720 - Intermediate Fluid Mechanics
ME 831 - Boundary Layer Theory
PHYS 639 - Computations in Physics
PHYS 801 - Mathematical Methods of Physics
STAT 704 - Analysis of Variance
STAT 705 - Regression and Correlation Analyses
STAT 716 - Nonparametric Statistics
STAT 770 - Theory of Statistics I
STAT 771 - Theory of Statistics
STAT 880 - Time Series Analysis