College of Engineering
UNIVERSITY OF WISCONSIN–MADISON

Department: Civil and Environmental Engineering
Form: Proposed Pathway C, MS Program Plan for students without engineering Bachelor's degrees
Name: _____ Student ID #: _____
CEE Area of Study: _____ Advisor:_____
Master's Pathway (i.e., A. Thesis or B. Adv. Independent Study): _____
Term and Year Admitted to Pathway C, M.S. Program: _____
Previous Degrees (i.e., Degree(s) and Major(s)): _____
Institution Attended: _____ Date Earned: _____
**The exact number of deficiency courses and credits completed before and after admission will be determined by the faculty advisor. All pre-requisite courses must be taken for a letter grade.

Deficiency Requirements for Pathway C, MS Programs in CEE: **No** Graduate Credit Awarded for the Completion of These Courses			
Requirement	**Term and Year**	**Institution**	**Grade**
Math/Statistics Requirements			
Math 221: Calculus & Analytic Geometry (5 cr.) or equivalent			
Math 222: Calculus & Analytic Geometry (5 cr.) or equivalent			
Math 234: Calculus-Functions of Several Variables (3 cr.) or equivalent			
Math 319: Techniques in Ordinary Differential Equations (3 cr.) or equivalent			
Statistics 224: Introductory Statistics for Engineers (3 cr.) or equivalent			
Natural Sciences Requirements			
EMA 201: Statics (3 cr.) or equivalent			
EMA 202: Dynamics (3 cr.) or equivalent			
Physics 202: General Physics (5 cr.) or equivalent			
Chemistry Requirement			
Chemistry 109: Advanced General Chemistry (5 cr.) or equivalent			
Civil and Environmental Engineering Requirements (Area Specific)			
Environmental Engineering: 1) CEE 310: Fluid Mechanics (3 cr.) or equivalent 2) CEE 311: Hydroscience (3 cr.) or equivalent 3) CEE 320: Environmental Engineering (3 cr.) or equivalent			
Geoengineering: 1) CEE 330: Soil Mechanics (4 cr.) or equivalent			
Materials: 1) CEE 395: Materials for Constructed Facilities (3 cr.) or equivalent			
Structural Engineering: 1) EMA 303: Mechanics of Materials (3 cr.) or equivalent 2) CEE 340: Structural Analysis (4 cr.) or equivalent 3) CEE 395: Materials for Constructed Facilities (3 cr.) or equivalent			
Transportation Engineering / Geo-Spatial Information: 1) CEE 370: Transportation Engineering (3 cr.) or equivalent			
Water Resources / Environmental Fluid Mechanics: 1) CEE 310: Fluid Mechanics (3 cr.) or equivalent 2) CEE 311: Hydroscience (3 cr.) or equivalent 3) CEE 320: Environmental Engineering (3 cr.) or equivalent 4) CS 302: Introduction to Programming (3 cr.) or equivalent			

The courses entered into the following two tables comprise Pathway C, MS program within CEE. Students must complete a minimum of 30 graduate level credits (300 and higher) within CEE graduate-level credits. In addition to the 30-credit minimum requirement, students will meet with their faculty advisor to determine the courses and total credits required to fulfill the deficiency requirements.

CIVIL AND ENVIRONMENTAL ENGINEERING Minimum Degree Requirements and Satisfactory Progress

CIVIL AND ENVIRONMENTAL ENGINEERING, M.S.

Deficiency Requirements for Pathway C, MS Programs in CEE: Graduate Credit **Awarded** for the Completion of These Courses						
Civil and Environmental Engineering Requirements (Area Specific)	**Term and Year**	**Institution**	**Credits**	**Grade**	**MS Credits**	**CEE Credits**
Construction Engineering and Management: 1) CEE 491: Legal Aspects of Engineering (3 cr.) or equivalent 2) CEE 492: Integrated Project Estimating and Scheduling (3 cr.) or equivalent 3) CEE 498: Construction Project Management (3 cr.) or equivalent						
Environmental Engineering: 1) 3 cr. CEE Design Course: CEE 426: Design of Wastewater Treatment Plants (3 cr.), or CEE 427: Solid and Hazardous Waste Engineering (3 cr.), or CEE 428: Water Treatment Plant Design (3 cr.), or CEE 522: Hazardous Waste Management (3 cr.), or equivalent						
Geoengineering: Geotechnics: 1) CEE 310: Fluid Mechanics (3 cr.) or equivalent 2) EMA 303: Mechanics of Materials (3 cr.) or equivalent Geoenvironmental: 1) CEE 310: Fluid Mechanics (3 cr.) or equivalent 2) CEE 320: Environmental Engineering (3 cr.) or equivalent						
Structural Engineering: 1) CEE 330: Soil Mechanics (4 cr.) or equivalent 2) CEE 445: Steel Structures (3 cr.) or equivalent 3) CEE 447: Concrete Structures (3 cr.) or equivalent						
Transportation Engineering / Geo-Spatial Information: 1) CEE 571: Urban Transportation Planning (3 cr.) 2) CEE 573: Geometric Design of Transport Facilities (3 cr.) 3) CEE 574: Traffic Control (3 cr.) 4) CEE 579: Seminar-Transportation Engineering (1 cr.)						

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Faculty Advisor Signature Date Director of Graduate Studies Signature Date

Civil & Environmental Engineering: Master's Degree (M.S.)
Requirements & Graduate Curriculum Form

- **Pathway C: An option for students who do not have a bachelor's degree from an ABET-accredited engineering program or from a recognized international**. In addition to the total deficiency credit requirement, Pathway C requires a **minimum of 30 credits** of graduate work. Students can select either a Thesis Option or Advanced Independent Study Option, consistent with the requirements of Pathway A or B described above, to complete the non-deficiency requirements of Pathway C. For example, **a student with 10 credits of deficiency requirements will require a total of 40 credits to complete their degree**, **10 deficiency credits and 30 graduate credits**. Students should meet with their faculty advisor to determine which option is most appropriate for their degree plan. Deficiency credits cannot be applied to fulfill the 30-credit degree requirement. Selection of a program depends on the candidate's educational objectives.