CIVIL AND INFRASTRUCTURE ENGINEERING BS – STEM TRACK
Fall 2008 – Spring 2009

CONTACT INFORMATION

- Honors Program Advisor: Kathleen Alligood (alligood@gmu.edu)
- Department Chair: Michael Bronzini (mbronzin@gmu.edu)
- Department Undergraduate Coordinator: Mohan Venigalla (mvenigal@gmu.edu)
- Please see CIE Undergraduate Coordinator for advising as soon as possible

REQUIRED HOURS

- Hours Required in Major: 51
- Hours Required in Honors: see honors advisor
- This major requires a total of 120 credits to graduate, 45 of which must be at the 300-level and above.

ADVISING SHEET

- o Honors Program Requirement
- ♦ Department Requirement
- ⅄ College Requirement

1st Year – 1st Semester (Fall)	Credits
o HNRS 110: Introduction to Research (grade C or better required)	4
o MATH 113: Analytic Geometry and Calculus I (designated placement score required)[1]	4
♦ ENGR 107: Introduction to Engineering	2
♦ ENGR 183: Engineering Computer Graphics	3
♦ Department-approved elective [3]	3
Semester Total	16
1st Year – 2nd Semester (Spring)	
o HNRS 122: Reading the Arts	3
♦ MATH 114 or 114H: Analytic Geometry and Calculus II (prerequisite: C or better in MATH 113) or MATH 116: Honors Analytic Geometry and Calculus II	4
♦ CS 112: Introduction to Computer Programming	4
♦ PHYS 160 or 160H: University Physics I[2]	4
♦ Department-approved elective [3]	3
Semester Total	18
2nd Year – 1st Semester (Fall)	
o HNRS 131: Contemporary Society in Multiple Perspectives	3
♦ MATH 213: Analytic Geometry and Calculus III	3
♦ CHEM 251 or CHEM 211 or 211H: General Chemistry for Engineers	4
♦ PHYS 260H and 261: University Physics II (Corequisite: MATH 213) [2]	4
Semester Total	14
2nd Year – 2nd Semester (Spring)	
♦ ECON 103 or 103H: Contemporary Microeconomic Principles [2]	3
♦ MATH 214: Elementary Differential Equations	3

♦ PHYS 266: Introduction to Thermodynamics	1
♦ ENGR 210: Statics and Dynamics	3
♦ CEIE 230: Hydraulics	3
♦ STAT 344 or MATH 351: Probability	3
Semester Total	16
3rd Year – 1st Semester (Fall)	
o HNRS 240: Reading the Past	3
♦ ENGR 310: Mechanics of Materials	3
♦ CEIE 290: Engineering Computation and Design	3
♦ CEIE 301: Engineering and Economic Models in Civil Engineering	3
♦ CEIE 340: Water Resource Engineering	3
Semester Total	15
3rd Year – 2nd Semester (Spring)	
o HNRS 353: Technology in the Contemporary World (grace of C or better required)	3
♦ Technical Elective (see Department listings)	3
♦ CEIE 305: Soil Mechanics	3
♦ CEID 311: Structural Analysis	3
♦ CEIE 360: Introduction to Transportation Engineering	3
Semester Total	15
4th Year – 1st Semester (Fall)	
♦ CEIE 367: Behavior of Concrete and Steel Structures	3
♦ CEIE 400: Civil Engineering Planning and Management	3
♦ CEIE 440: Water Supply and Distribution	3
♦ CEIE 455: Introduction to Environmental Engineering	3
♦ CEIE Transportation Technical Elective (see Department listing)	3
Semester Total	15
4th Year – 2nd Semester (Spring)	
♦ CEIE 463: Construction Systems	3
♦ CEIE 490: Senior Design Project	3
♦ CEIE Technical Elective (see Department listing)	3
♦ CEIE Environmental Technical Elective (see Department listing)	3
♦ Elective	3
Semester Total	15
Total Hours	124

NOTES

1. MATH 113, HNRS 125 or 226 all fulfill the quantitative reasoning requirement for the Honors Program
2. To complete the STEM Track, students must take two (2) of the following courses:
    - BIOL 213H
    - ECON 103H

- CHEM 211H
- CHEM 212H
- CS 211H
- MATH 116
- PHYS 160H
- PHYS 260H
- PHYS 262H

3. College requirements (VS) include 24 credit hours of department-approved liberal arts and social science electives.