February 27, 2012

Prof. Dale Eric Wurster
Senior Associate Dean of Academic Affairs
Graduate College
University of Iowa

Dear Dale,

The Departments of Mechanical and Industrial Engineering (MIE) and Civil & Environmental Engineering (CBE) propose a joint BS/MS program for students interested in an interdisciplinary degree that focuses on environmental engineering.

We have attached a description of the plan. It is designed after the existing BS/MS in CBE with the exception that the student meets requirements from the undergraduate program in MIE.

I hope you will approve this degree plan.

Thank you for your help.

Yours truly,

Michelle M. Scherer
DEO, Civil & Environmental Engineering

Andrew Kuslak
DEO, Mechanical & Industrial Engineering
BS/MS Joint Degree Program
The Department of Mechanical & Industrial Engineering
and the
The Department of Civil & Environmental Engineering
February 2012

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1. Introduction

In an effort to serve the most able undergraduate engineering students at The University of Iowa, the Department of Mechanical & Industrial Engineering (MIE) and the Department of Civil & Environmental Engineering (CEE) support a combined Bachelor of Science and Master of Science degree program to serve students planning a BS in ME and an MS in Environmental Engineering and Science from CEE (BS-ME/MS-CEE). Students admitted to this program will be allowed to: apply three engineering courses (9 s.h.) towards the requirement from both the B.S. in ME and M.S. in CEE; take an additional 3 s.h. of graduate coursework before completing their BS; attend and participate in the departmental graduate seminar; and may begin to work on master’s thesis or project research with a EES faculty member starting as early as the summer following the junior year of undergraduate studies. The intention of the program is to enhance the opportunities for graduate study for our most able students.

2. Eligibility

To be eligible for the BS-ME/MS-CEE program, an undergraduate ME student must:
- complete at least 80 semester credit hours towards their BS degree from the College of Engineering;
- earn a minimum cumulative GPA of 3.25; and
- identify an EES faculty member as his/her potential graduate advisor.

3. Admissions and Acceptance:

http://www.uiowa.edu/admissions/graduate/apply/index.html

Students are encouraged to begin the online application in the spring of the junior year. The complete on-line application for the BS-ME/MS-CEE program, including final GRE scores, must be received by the Office of Graduate Admissions before the beginning of the senior year (summer or winter break). To facilitate admission, the supporting documents must be in the CEE departmental office for review immediately after submitting the on-line application to Admissions. Admission to the M.S. program is subject to review by the CEE Departmental Executive Officer.

4. Graduation Requirements:

http://www.mie.engineering.uiowa.edu/undergrad-program/
http://www.cee.engineering.uiowa.edu/gradprogram.php/

Successful completion of the graduate degree requires advice and approval from the student’s graduate advisor.

A student in the joint BS-ME/MS-CEE degree program must complete all the graduate requirements of both the undergraduate program in ME and the graduate program in CEE. However, 9 s.h. of 100 level courses may be counted toward both the BS and MS degrees and an additional 3 s.h. of graduate courses may be taken before BS graduation. Thirty semester hours of graduate courses
are required. Students entering the BS-ME/MS-CEE degree program in environmental engineering are required to enroll in the environmental engineering graduate seminar each semester (53:192) and may be excused from Professional Seminar upon request to ME.

Students in the combined BS-ME/MS-CEE program are required to produce and defend a scholarly product in the form of a manuscript submitted to a peer-reviewed scientific archival journal, a completed design report, or an M.S. thesis. The research work associated with this product usually requires 10-20 hours per week throughout the years of enrollment.

The MS must be completed within 2 years from completing the BS degree. If a student withdraws from the joint BS-ME/MS-CEE joint degree program, or does not complete the MS two years after completing the BS, no graduate credit will be given for any portion of the semester hours eligible for joint counting that have been completed. The hours will be applied as undergraduate electives.

5. Tuition and Fees

Tuition is assessed at the undergraduate level for seven semesters (112 s.h.) of undergraduate study. The eighth semester, tuition will be assessed at the graduate level. Thereafter, tuition will be assessed at the graduate level.

Research and/or Teaching Assistantships and other forms of financial aid are not routinely provided to BS-ME/MS-CEE students. However, students are encouraged to discuss this with their graduate advisor.

6. Example Plans of Study: ME BS/CEE-EES MS

The following table is an example of coursework for the BS-ME/MS-CEE. Graduate courses often change. The current offering of graduate required and elective courses may not include courses in the table below. See ISIS.uiowa.edu for up to date information.

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Course Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engr Analysis Alternative Energy Systems</td>
<td>58:133</td>
</tr>
<tr>
<td>Air Pollution Control Tech</td>
<td>58:155</td>
</tr>
<tr>
<td>Wind Power Management</td>
<td>56:155</td>
</tr>
<tr>
<td>Groundwater</td>
<td>53:102</td>
</tr>
<tr>
<td>Environmental Engineering Design</td>
<td>53:157</td>
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<tr>
<td>Environmental Microbiology</td>
<td>53:154</td>
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<tr>
<td>Environmental Chemistry Laboratory</td>
<td>53:153</td>
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<tr>
<td>Water Resources Engineering</td>
<td>53:171</td>
</tr>
<tr>
<td>Physical-Chemical Processes</td>
<td>53:156</td>
</tr>
<tr>
<td>Biological Treatment Processes</td>
<td>53:151</td>
</tr>
<tr>
<td>EES Grad Seminar each semester</td>
<td>53:192</td>
</tr>
</tbody>
</table>

Table 1. Example curriculum for a BS-ME/MS-CEE (non-thesis) degree.

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