# 2014-2015 Short Signature Sheet

**Date:** October 17, 2014  
**Subject:** Proposed CMET Courses  
**Originating Department:** Engineering Technology and Construction Management

<table>
<thead>
<tr>
<th>Date Received</th>
<th>Date Forwarded</th>
<th>Comments: Approved, Approved with Revisions, etc.</th>
<th>Signatures</th>
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<tbody>
<tr>
<td></td>
<td>10/14/14</td>
<td></td>
<td>PERSON ORIGINATING PROPOSAL: [Signature] [Print name here: John Hildreth]</td>
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<tr>
<td>10/24/14</td>
<td>10/24/14</td>
<td>Approved</td>
<td>DEPARTMENT CHAIR: [Signature] [Print name here: Anthony Brizendine]</td>
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<td>10/29/14</td>
<td>10/29/14</td>
<td>Approved</td>
<td>COLLEGE CURRICULUM COMMITTEE CHAIR: [Signature] [Print name here: Michele M.]</td>
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<td>10/29/14</td>
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<td>Approved</td>
<td>COLLEGE DEAN: [Signature] [Print name here: Robert Johnson]</td>
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<td>GENERAL EDUCATION: [Signature] [Print name here: ] (if applicable; for General Education courses only)</td>
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<td>HONORS COLLEGE: [Signature] [Print name here: ] (if applicable; for Honors courses &amp; programs)</td>
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<td>UNDERGRADUATE COURSE &amp; CURRICULUM COMMITTEE CHAIR: [Signature] [Print name here: ] (for undergraduate courses only)</td>
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<td>GRADUATE COUNCIL CHAIR: [Signature] [Print name here: ] (for graduate courses only)</td>
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<td>FACULTY GOVERNANCE ASSISTANT: [Signature] [Print name here: ] (received and processed in Academic Affairs)</td>
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Revised 05/06/14  
OAA/mjw
To: Kim Harris, Chair
Undergraduate Course & Curriculum Committee

From: John Hildreth, Associate Chair
Dept. of Engineering Technology and Construction Management

Date: October 17, 2014

Re: Proposed CMET Courses

**SUMMARY:**

The Department of Engineering Technology and Construction Management proposes the creation of the following three new elective courses to be cross-listed with existing similarly named 5000-level courses:

**CMET 4135 Building Information Modeling (3)** Prerequisite: ETCE 3271 and ETCE 1104 or ETGR 1104. The creation, management, and application of building information models to the construction, operation, and maintenance of a facility. Focus on 3D and 4D computer models of building components, renderings, animations, and interfacing with analysis tools. *(On demand)*

**CMET 4150 Green Building (3)** Prerequisite: Senior standing. Sustainable design and construction. Topics include: sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, innovation in design, and regional priority. *(On demand)*

**CMET 4290 Temporary Structures in Construction (3)** Prerequisite: ETCE 3163. Temporary structures used to support construction operations such as concrete formwork, scaffolding systems, shoring systems, cofferdams, underpinning, slurry walls, and construction dewatering systems. *(On demand)*

**FOR CONSULTATION WITH OTHER DEPARTMENTS:**

1. Does the proposed change affect other departments (including additions and/or changes to degree requirements or prerequisites offered in other departments)?

   _______ Yes  X  No
2. If Yes, please list the other departments affected by the proposed change:

3. Have you consulted with each department listed in item 2 regarding the proposed change?
   
   Yes  No

Result(s) of Consultation(s) (please attach documentation):

Not applicable

4. For a new course or for major modification of an existing course, include Consultation on Library Holdings.

   Evidence of library consultation concerning the new courses has been attached to this proposal.

5. For proposals involving Honors courses or programs, include written consultation with the Honors Council.

**RESOURCES:**

1. For a new course or revisions to an existing course, check all the statements that apply:
   
   X  This course will be cross listed with another course.
   X  There are prerequisites for this course.
   ____ There are co-requisites for this course.
   ____ This course is repeatable for credit.
   ____ This course will affect the number of credits hours for its program.
   ____ This proposal results in the deletion of an existing course(s) from the degree program and/or catalog.
   ____ This proposal will alter an agreement with a North Carolina community college.

   For all items checked above, applicable statements and content must be reflected in the proposed catalog copy.

2. Indicate the additional resources required, if any, to implement and maintain the proposed change.

   No additional resources are required to implement this proposal.

**CREDIT HOUR (Mandatory if new and/or revised course in proposal):**

Review statement and check box once completed.

X  The appropriate faculty committee has reviewed the course outline/syllabus and has determined that the assignments are sufficient to meet the University definition of a credit hour.

**PROPOSED CATALOG COPY:** For existing courses copy and paste the current catalog copy and use the Microsoft Word “track changes” feature (or use red text with “strikethrough” formatting for text to be deleted, and adding blue text with “underline” formatting for text to be added). For new courses, draft comprehensive catalog copy.

**CMET 4135 Building Information Modeling (3)** Prerequisite: ETCE 3271 and ETCE 1104 or ETGR 1104. The creation, management, and application of building information models to the
construction, operation, and maintenance of a facility. Focus on 3D and 4D computer models of building components, renderings, animations, and interfacing with analysis tools. (On demand)

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**Academic Plan of Study (Undergraduate only):** Does the proposed change impact an existing Academic Plan of Study?

☐ Yes. If yes, please provide updated Academic Plan of Study in template format.

☒ No.

**Student Learning Outcomes (Undergraduate & Graduate):** Does this course or curricular change require a change in SLOs or assessment for the degree program?

☐ Yes. If yes, please provide updated SLOs in template format.

☒ No.

**Textbook Costs:** It is the policy of the Board of Governors to reduce textbook costs for students whenever possible. Have electronic textbooks, textbook rentals, or the buyback program been considered and adopted?

☒ Yes. Briefly explain below.

☐ No. Briefly explain below.

All appropriate formats for course materials and texts have been considered.
Attachment A – Library Consultation Documentation

J. Murrey Atkins Library
Consultation on Library Holdings

To: John Hildreth
From: Jeff McAdams
Date: 10/14/14
Subject: Proposed CMET courses: 4135, 4150, 4290

Summary of Librarian's Evaluation of Holdings:
Evaluator: Jeff McAdams Date: 10/14/14

Check One:
1. Holdings are superior
2. Holdings are adequate
3. Holdings are adequate only if Dept. purchases additional items.
4. Holdings are inadequate

Comments:
Library holdings should be adequate to support student research for this course (see list of items held by subject heading below). Students will have access to relevant databases including Engineering Village, Science Direct, Web of Science, Business Source Complete, ASCE Digital Library, CRC ENGRnetBASE, and many others.

<table>
<thead>
<tr>
<th>LC Subject Heading</th>
<th>Books</th>
<th>Journals</th>
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<tbody>
<tr>
<td>Building Information Modeling</td>
<td>8</td>
<td>0</td>
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<tr>
<td>Sustainable buildings – Design and Construction</td>
<td>60</td>
<td>1</td>
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<tr>
<td>Green Building</td>
<td>1011</td>
<td>5</td>
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<tr>
<td>Buildings, Temporary</td>
<td>13</td>
<td>0</td>
</tr>
</tbody>
</table>

Evaluator's Signature

10/14/14

Date

Revised 05/06/14
OAA/mjw