Memo

To: Undergraduate Council
From: Hassan Moghaddam
       Instructional Professor Construction Management/Surveying and Mapping
Date: 10/12/2006
Re: Changes to Construction Management Technology/Surveying and Mapping Degree plan

Change title of degree plan from Construction Management Technology/Surveying and Mapping to Surveying Engineering Technology. (See attached non substantive program name change form.)

Change rubric (identifier from CNST to SURY to reflect change in focus from Construction Management to Surveying

<table>
<thead>
<tr>
<th>Course Changes:</th>
<th>New Courses</th>
<th>Existing:</th>
<th>Proposed:</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURY 2371</td>
<td>CNST 2461</td>
<td>CNST 3362</td>
<td>SURY 2461</td>
<td>Rubric</td>
</tr>
<tr>
<td>SURY 3373</td>
<td>CNST 3363</td>
<td>CNST 4364</td>
<td>SURY 3462</td>
<td>Add one hr</td>
</tr>
<tr>
<td>SURY 3205</td>
<td>CNST 4369</td>
<td>CNST 4363</td>
<td>SURY 3363</td>
<td>Rubric</td>
</tr>
<tr>
<td>SURY 3342</td>
<td>CNST 4364</td>
<td>CNST 4364</td>
<td>SURY 4363</td>
<td>Rubric</td>
</tr>
<tr>
<td>SURY 4397</td>
<td>CNST 4369</td>
<td>CNST 4364</td>
<td>SURY 4364</td>
<td>Rubric</td>
</tr>
<tr>
<td>SURY 4198</td>
<td>CNST 3161</td>
<td>CNST 3161</td>
<td>SURY 4361</td>
<td>Rubric, Add 2 hrs.</td>
</tr>
<tr>
<td>SURY 4398</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Degree Plan Changes;

Change Math requirement from:
TMTH 3360
To: MATH 1432 or TMTH 3360

Add:
TELS 4372
(3 hrs.) Free Elective
SURY 3205
SURY 4170
SURY 3342
SURY 4361
(9 hrs.) Technical Elective

Drop:
CNST 1301
CNST 3331
CNST 4305
CNST 4312
CNST 4351
CNST 3161 Changes to SURY 4361
MECT 2354
MECT 3355
MECT 3155
TELS 2360

No Changes to minors.
No effect on other College programs
No substantive Program Name Change Request

**Bachelor of Science in**
Surveying Engineering Technology

University of Houston Central Campus - College of Technology

I. **Describe briefly the change request.**

The College of Technology and the Engineering Technology Department respectfully request a change in the name of the Bachelor of Science in – Construction Management Technology/Surveying and Mapping to Bachelor of Science in – Surveying Engineering Technology

II. **Provide a rational for the proposed change.**

The Construction Management Technology/Surveying and Mapping program has been offered for a number of years as an option within the Construction Management area. The Department believes that the program name change will make marketing of the program easier resulting in increased enrollment. Also, student confusion with Engineering programs bearing a “Construction Management” title will be eliminated. The proposed change will qualify the program for ABET accreditation. At present Construction Management program is applying for ACCE accreditation.

III. **Include the assessment of its effect on the administrative unit(s) involved or the institution as a whole.**

The change in name of the program and its related degree will not result in any increase in administrative burden.

IV. **Summarize implications for classes, distribution of personnel, availability of facilities, and availability of equipment.**

Personnel and facilities are in place to instruct the various courses.

V. **Give information regarding and additional costs or savings.**

There will be no material change in costs associated with maintaining the program.

VI. **Provide Library Staff’s Assistance of Library Resources Necessary for the Proposal Program.**

No extraordinary library resources are required. Existing M.D. Anderson Library databases, etc., are more than adequate to fulfill any undergraduate research material needs.
UNIVERSITY OF HOUSTON CENTRAL CAMPUS  
BACHELOR OF SCIENCE in SURVEYING ENGINEERING TECHNOLOGY

Display how proposed program(s) would appear on the Coordinating Board program inventory. Include Texas CIP code designation(s).  
Bachelor of Science, major in Surveying Engineering Technology  
Relevant CIP - 15.1001.00 19

How would name(s) of program(s) appear on student diplomas?  
Bachelor of Science  
Surveying Engineering Technology

How would name(s) of program(s) appear on student transcripts?  
Bachelor of Science  
Surveying Engineering Technology

Administrative unit(s) responsible for the program(s);  
Engineering Technology Department  
College of Technology  
University of Houston

Proposed date for implementation of program:  
August 2007

Persons to be contacted for further information about proposed program(s)  
Hassan Moghaddam, Coordinator, Construction Management Technology/Surveying and Mapping Program  
713.743.7620, hmoghaddam@uh.edu

Enrique Barbieri, Chair, Engineering Technologies Department 713.743.4073,  
EBarbieri@Central.UH.EDU

Signatures:

______________________________________________________________________________
Campus Chief Executive Officer Date

______________________________________________________________________________
System Chief Executive Officer Date

Governing Board approval date:
Proposed Catalog Description

Surveying Engineering Technology (SET)

Instruction in Surveying Engineering Technology emphasizes theoretical principles as well as practical applications of advanced surveying and mapping techniques, related computational procedures, geodesy, map compilation, and photogrammetry.

Surveying Engineering Technology, in its broadest sense, includes making precise measurements of the earth's surface using sophisticated optical and electronic instruments, determining the boundaries between adjacent land-owners, working as a field engineer for a general contractor establishing the location of new construction, establishing transportation routes, and mapping the earth's surface.

The program is committed to attaining the following goals:

- Provide an educational experience that prepares the student for the challenges of the surveying and mapping profession.
- Employ state-of-the-art technologies in the surveying and mapping curriculum.
- Provide opportunities for the student to exhibit creativity, leadership and team-building abilities, cultural appreciation, and an understanding of global and social issues.
- Incorporate interdisciplinary concepts and problem-solving exercises in the program.
- Provide broad educational experience including communication skills, mathematics and basic sciences, and preparation for life-long learning.

Surveying Engineering Technology Requirements

ACCT 2331. Accounting Principles I - Financial
CNST 2341. Construction Documents
CNST 2361. Construction Management I
CNST 2365. Site Development
MECT 3341. Computer-Aided Drafting I
SURY 2461. Surveying I
SURY 3205. Surveying Safety
SURY 3342. Computer Aided Surveying
SURY 3462. Surveying II
SURY 3363. Surveying III
SURY 4361 Surveying Practicum
SURY 4363 Legal Aspects of Surveying
SURY 4364. Surveying IV
SURY 4369, Survey Analysis
SURY 4170, Ethics in Professional Surveying
TELS 4372, Proposal and Project Writing

Pre-approved Electives
(Select 9 SH minimum)
SURY 2371, Global Positioning Systems
SURY 3373, Subdivision Planning & Design
TELS 3345, Human Resources in Technology
TELS 3346, Wage and Salary Administration
GEOL 4331, Introduction to Geographic Information Systems
Free electives (3 semester hours)

Technology and Other Requirements
Math/Reasoning (13-14 SH which includes university core)
MATH 1310, College Algebra
MATH 1330, Precalculus
MATH 1431, Calculus I
MATH 1432, Calculus II or TMTH 3360, Applied Technical Statistics
Natural Sciences (8 SH which includes university core)
PHYS 1301/1101, Introductory General Physics I and Lab
GEOL 1330/1130, Physical Geology and Lab
General Technology and College Core (12 SH)
CNST 1330, Graphics I
TELS 3340, Organizational Leadership and Supervision or
    HDCS 3300, Organizational Decisions in Technology
TELS 3363, Technical Communication or
    TELS 3372, Communicating Science, Engineering, and Technology Issues and Trends
Within the Global Workplace
ITEC 1301, Introduction to Computer Application Technology

Social/Behavioral Sciences
(6 SH which includes university core)
ECON 2304, Microeconomics or
    ECON 2305, Macroeconomics
3 hours core approved writing intensive social science

Degree awarded: Bachelor of Science
Major: Surveying Engineering Technology
Current Catalog Description

Construction Management Technology - Surveying and Mapping (CMT/SM)

Instruction in the surveying and mapping concentration emphasizes theoretical principles as well as practical applications of advanced surveying and mapping techniques, related computational procedures, geodesy, map compilation, and photogrammetry.

Surveying and Mapping, in its broadest sense, includes making precise measurements of the earth's surface using sophisticated optical and electronic instruments, determining the boundaries between adjacent land-owners, working as a field engineer for a general contractor establishing the location of new construction, establishing transportation routes, and mapping the earth's surface.

The program is committed to attaining the following goals:

- Provide an educational experience that prepares the student for the challenges of the surveying and mapping profession.
- Employ state-of-the-art technologies in the surveying and mapping curriculum.
- Provide opportunities for the student to exhibit creativity, leadership and team-building abilities, cultural appreciation, and an understanding of global and social issues.
- Incorporate interdisciplinary concepts and problem-solving exercises in the program.
- Provide broad educational experience including communication skills, mathematics and basic sciences, and preparation for life-long learning.

Construction Management Technology - Surveying and Mapping Requirements

ACCT 2331. Accounting Principles I - Financial
CNST 1301. Construction Materials and Methods
CNST 2341. Construction Documents
CNST 2361. Construction Management I
CNST 2365. Site Development
CNST 2461. Surveying I
CNST 3161. Surveying Practicum
CNST 3331. Construction Planning and Scheduling
CNST 3362. Surveying II
CNST 3363. Surveying III
CNST 4305. Construction Safety Management
CNST 4312. Construction Finance Management
CNST 4351. Construction Estimating
CNST 4363. Legal Aspects of Surveying
CNST 4364. Surveying IV
CNST 4369. Survey Analysis
TELS 2360. Business Law
MECT 2354. Introduction to Mechanics
Mect 3341. Computer-Aided Drafting I
MECT 3355. Strength of Materials
MECT 3155. Strength of Materials Lab

---

Technical Electives
(Select 3 SH minimum)
TELS 3345. Human Resources in Technology
TELS 3346. Wage and Salary Administration
TELS 4350. Industrial and Environmental Safety

---

Technology and Other Requirements
Math/Reasoning (13 SH which includes university core)
MATH 1310. College Algebra
MATH 1330. Precalculus
MATH 1431. Calculus I
TMTH 3360. Applied Technical Statistics
Natural Sciences (8 SH which includes university core)
PHYS 1301/1101. Introductory General Physics I and Lab
GEOL 1330/1130. Physical Geology and Lab
General Technology and College Core (12 SH)
CNST 1330. Graphics I
TELS 3340. Organizational Leadership and Supervision
or
HDCS 3300. Organizational Decisions in Technology
TELS 3363. Technical Communication
or
TELS 3372. Communicating Science, Engineering, and Technology Issues and Trends Within the Global Workplace
ITEC 1301. Introduction to Computer Application Technology

Social/Behavioral Sciences
(6 SH which includes university core)
ECON 2304. Microeconomics

or

ECON 2305. Macroeconomics

3 hours core approved writing intensive social science

Degree awarded: Bachelor of Science in Technology - Surveying and Mapping
Major: Construction Management Technology
March 3, 2008

Dr. Donald Foss
Sr. Vice President for Academic Affairs and Provost
University of Houston
214 E. Cullen Building
Houston, TX 77204-2019

Dear Dr. Foss:

I am pleased to approve at the staff level the request from University of Houston to change the name of the Bachelor of Science (BS) degree in Construction Management Technology-Surveying and Mapping to a Bachelor of Science (BS) degree in Surveying Engineering Technology.

Enclosed is an Information Sheet for your reporting official that reflects an implementation date of March 3, 2008.

Sincerely,

[Signature]

Joseph H. Stafford

Enclosure

c: Chancellor/President Renu Khator
INFORMATION SHEET

The following information is provided in connection with recent action(s) taken by the Texas Higher Education Coordinating Board and reported to your institution in a letter from Joseph H. Stafford dated March 3, 2008.

ACTION: UNIVERSITY OF HOUSTON

On March 3, 2008, the Coordinating Board approved at the staff level the request from the University of Houston to change the name of the Bachelor of Science (BS) degree in Construction Management Technology-Surveying and Mapping to a Bachelor of Science (BS) degree in Surveying Engineering Technology.

<table>
<thead>
<tr>
<th>Administrative Unit Affected:</th>
<th>Academic Unit #</th>
<th>Action</th>
<th>Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Engineering Technology</td>
<td>0980</td>
<td>Phase out and create programs</td>
<td>March 3, 2008</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program Affected:</th>
<th>CIP Code</th>
<th>Action</th>
<th>Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS in Construction Management Technology- Surveying and Mapping</td>
<td>15.1102.00</td>
<td>Phase out program</td>
<td>March 2, 2008</td>
</tr>
<tr>
<td>BS in Surveying Engineering Technology</td>
<td>15.1102.00</td>
<td>Create program</td>
<td>March 3, 2008</td>
</tr>
</tbody>
</table>

Notes:

These changes will affect the way your institution reports courses, programs, and degrees to the Coordinating Board. Please inform the appropriate reporting personnel of these changes.

If you have any questions about this action or about your institution’s program inventory, please contact:

Kevin Lemoine
Director, Academic Programs
Academic Affairs and Research Division
(512) 427-6226
E-Mail: Kevin.Lemoine@thecb.state.tx.us