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# Memo

RECEIXED OCT 1 3 2006

APPROYED MAR 21 2007

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

Course Changes:	New Courses	Existing:	Proposed:	Changes
	SURY 2371	CNST 2461	SURY 2461	Rubric
	SURY 2372	CNST 3362	SURY 3462	Add one hr
	SURY 3373	CNST 3363	SURY 3363	Rubric
	SURY 3205	CNST 4363	SURY 4363	Rubric
	SURY 3342	CNST 4364	SURY 4364	Rubric
	SURY 4397	CNST 4369	SURY 4369	Rubric
	SURY 4198	CNST 3161	SURY 4361	Rubric, Add 2 hrs.
	SURY 4398			,

#### Degree Plan Changes;

Change Math requirement from:

TMTH 3360

O: IVIA

MATH 1432 or TMTH 3360

Add:	Drop:
TELS 4372	CNST 1301
(3 hrs.) Free Elective	CNST 3331
SURY 3205	CNST 4305
SURY 4170	CNST 4312
SURY 3342	CNST 4351
SURY 4361	CNST 3161 Changes to SURY 4361
(9 hrs.) Technical Elective	MECT 2354

MECT 3355 MECT 3155 TELS 2360

No Changes to minors.

No effect on other College programs



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No substantive Program Name Change Request

Bachelor of Science in Surveying Engineering Technology

University of Houston Central Campus - College of Technology

1. L. 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. 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. 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.

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# 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 designations(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 programs(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:	

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#### **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 teambuilding 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

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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



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#### **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 teambuilding 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

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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. Introductions 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

01

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)

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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



Joseph H. Stafford, Ph.D. Assistant Commissioner Academic Affairs and Research joseph.stafford@thecb.state.tx.us

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TEXAS HIGHER EDUCATION COORDINATING BOARD

Academic Affairs and Research
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Academic Affairs

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

Joseph H. Stafford

Enclosure

c: Chancellor/President Renu Khator

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#### 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.

Administrative Unit Affected:	Academic Unit #	Action	Effective Date
Department of Engineering Technology	0980	Phase out and create programs	March 3, 2008
Program Affected:	CIP Code	Action	Effective Date
BS in Construction Management Technology- Surveying and Mapping	15.1102.00	Phase out program	March 2, 2008
BS in Surveying Engineering Technology	15.1102.00	Create program	March 3, 2008

#### Notes:

7,

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