

UC 10487-09F



UNIVERSITY OF HOUSTON
COLLEGE OF TECHNOLOGY
ENGINEERING TECHNOLOGY DEPARTMENT

APPROVED MAR 24 2010

MEMORANDUM

RECEIVED OCT 15 2009

TO: University Undergraduate Council

FROM: Dr. Heidar Malki 
Chair, Engineering Technology Department 

DATE: October 5, 2009

RE: Changes to Surveying Engineering Technology Degree Plan

Surveying Engineering Technology: This curriculum change is in response to the state mandated 120 credit hours. ABET, the accrediting body for Engineering Technology, specifies a minimum of 124 credit hours for all engineering technology programs. The curriculum submitted for approval raises the number of required credits from 120/121 to 124. This was accomplished by moving TELS 3363 - Technical Communication from departmental/college requirements to university core requirements as it has been submitted for approval as a "Writing in the Discipline" course. This drops the number of hours from 120 to 117. CNST 1361 and CNST 2341 were move from required courses to elective courses and were replaced by SURY 2371 and SURY 3373 which were previously electives. CNST 4265 and TELS 4372 were removed from the degree plan. SURY 2372 has been added to the major requirements and the free electives count has gone from 3 hours to 9 hours.

Surveying Engineering Technology Major

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.

Students pursuing a major in Surveying Engineering Technology must complete the following requirements in addition to the university core and general college requirements.

Surveying Engineering Technology Major Requirements

ACCT 2331. Accounting Principles I - Financial

~~MECT 3341. Computer-Aided Drafting I.~~

SURY 2361. Surveying I

Deleted: CNST 1361. Construction Management I

SURY 2371. Global Positioning Systems
SURY 2372. Geographic Information Surveying
 SURY 3205. Surveying Safety
 SURY 3342. Computer Aided Surveying
 SURY 3462. Surveying II
 SURY 3363. Surveying III
SURY 3373. Subdivision Planning and Design
 SURY 4361. Surveying Practicum
 SURY 4363. Legal Aspects of Surveying
 SURY 4364. Surveying IV
 SURY 4369. Survey Analysis
 SURY 4170. Ethics in Professional Surveying

Deleted: CNST 2341. Construction Documents

Deleted: CNST 4265. Site Development and Environmental Issues

Deleted: MECT 3341. Computer-Aided Drafting I ... [1]

Deleted: TELS 4372. Proposal and Project Writing ... [2]

PRE-APPROVED ELECTIVES

(Select 12 SH minimum)

CNST 1361. Construction Management I
 CNST 2341. Construction Documents
 TELS 3345. Human Resources in Technology
 TELS 3346. Wage and Salary Administration
TELS 3365: Project Leadership
TELS 3365: Team Leadership
TELS 4371: Leading Change in the Workplace
TELS 4372: Proposal and Project Writing

Deleted: 9

Deleted: SURY 2371. Global Positioning Systems ... [3]

Deleted: GEOL 4331. Introduction to Geographic Information Systems

PROGRAM REQUIREMENTS

Math/Reasoning (13 SH which includes university core)

MATH 1310. College Algebra
 MATH 1330. Precalculus
 MATH 1431. Calculus I
MATH 3360. Applied Technical Statistics, students may substitute MATH 1432. Calculus II

Deleted: -14

Deleted: MATH 1432. Calculus II or

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 (9 SH)

CNST 1330. Graphics I
 TELS 3340. Organizational Leadership and Supervision
 or
 HDCS 3300. Organizational Decisions in Technology
 ITEC 1301. Introduction to Computer Application Technology

Deleted: 12

Deleted: TELS 3363. Technical Communication
 or
 TELS 3372. Communicating Science, Engineering, and Technology Issues and Trends Within the Global Workplace ... [4]

Deleted: 3

Free elective (3 semester hours)

Social/Behavioral Sciences

(3 SH which includes university core)

ECON 2304. Microeconomics

or

ECON 2305. Macroeconomics

Writing in the Discipline

TELS 3363: Technical Communications

Deleted: 3 hours core approved
Writing in the Discipline Core Course

Degree awarded: Bachelor of Science

Major: Surveying Engineering Technology

Page 2: [1] Deleted	klambert	10/15/2009 11:36:00 AM
MECT 3341.Computer-Aided Drafting I SURY 2361. Surveying I		
<hr/>		
Page 2: [2] Deleted	klambert	10/15/2009 11:42:00 AM
TELS 4372. Proposal and Project Writing		
<hr/>		
Page 2: [3] Deleted	klambert	10/15/2009 11:38:00 AM
SURY 2371. Global Positioning Systems SURY 3373.Subdivision Planning and Design		
<hr/>		
Page 2: [4] Deleted	klambert	10/15/2009 11:41:00 AM
TELS 3363. Technical Communication or TELS 3372. Communicating Science, Engineering, and Technology Issues and Trends Within the Global Workplace		

SURVEYING ENGINEERING TECHNOLOGY (SET)

UNIVERSITY of HOUSTON
COLLEGE OF TECHNOLOGY

ENGINEERING TECHNOLOGY
BACHELOR OF SCIENCE

NAME _____ UHID _____

UNIVERSITY CORE REQUIREMENTS (52 SH)

	GR	SH	AH
<u>Communication (6 SH)</u>			
ENGL 1303 English Composition I	_____	_____	_____
ENGL 1304 English Composition II	_____	_____	_____

Writing In The Discipline* (3 SH)

TELS 3363 Technical Comm.	_____	_____	_____
---------------------------	-------	-------	-------

History/Government (12 SH)

HIST 1376 or 1377 US History to 1867	_____	_____	_____
HIST 1378 or 1379 US History since 1867	_____	_____	_____
POLS 1336 US & TX Const/Politics	_____	_____	_____
POLS 1337 US Government	_____	_____	_____

Humanities* (3 SH)

_____	_____	_____	_____
-------	-------	-------	-------

Visual/Performing Arts* (3 SH)

_____	_____	_____	_____
-------	-------	-------	-------

Social/Behavioral Sciences* (3 SH)

ECON 2304 Micro or ECON 2305 Macro	_____	_____	_____
------------------------------------	-------	-------	-------

Math/Reasoning (13 SH)

MATH 1310 College Algebra	_____	_____	_____
MATH 1330 Elementary Functions	_____	_____	_____
MATH 1431 Calculus I	_____	_____	_____
TMTH 3360 Applied Technical Statistics	_____	_____	_____
Students may replace TMTH 3360 with MATH 1432 Calculus II			

Natural Sciences (8 SH)

PHYS 1301/1101 Intro. Gen. Phys I & Lab	_____	_____	_____
GEOL 1330/1130 Physical Geology & Lab	_____	_____	_____

DEPARTMENTAL & COLLEGE REQUIREMENTS

General Technology and College Core (9 SH)

CNST 1330 Graphics	_____	_____	_____
TELS 3340 Org Leadership & Supervision	_____	_____	_____
Or HDCS 3300 Orgnztnl Decisions in Tech.			
ITEC 1301 Intro to Computer Apps Tech	_____	_____	_____

36 advanced (3000- or 4000-level) semester hours must be completed.

TSI requirements must be met.

Total hours required: 124 semester hours

For graduation with Honors, see Undergraduate Catalog.

*Refer to class schedule for lists of courses which satisfy University requirements.

MAJOR REQUIREMENTS (43 SH)

	GR	SH	AH
ACCT 2331 Accounting Princ. I-Financial	_____	_____	_____
MECT 3341 Computer Aided Drafting	_____	_____	_____
SURY 2361 Surveying I	_____	_____	_____
SURY 2371 Global Positioning System	_____	_____	_____
SURY 3205 Surveying Safety	_____	_____	_____
SURY 3342 Computer Aided Surveying	_____	_____	_____
SURY 3462 Surveying II	_____	_____	_____
SURY 3363 Surveying III	_____	_____	_____
SURY 3373 Subdivision Plan & Design	_____	_____	_____
SURY 4361 Surveying Practicum	_____	_____	_____
SURY 4363 Legal Aspect of Surveying	_____	_____	_____
SURY 4364 Surveying IV	_____	_____	_____
SURY 4369 Surveying Analysis	_____	_____	_____
SURY 4170 Ethic in Professional Surveying	_____	_____	_____
SURY 2372 Geographic Information Sym.	_____	_____	_____

Approved Electives (12 SH)

CNST 1361 Construction Management I	_____	_____	_____
CNST 2341 Construction Documents	_____	_____	_____
TELS 4372 Proposal and Project Writing	_____	_____	_____
TELS 3345 Human Resources in Tech.	_____	_____	_____
TELS 3346 Wage & Salary Admin.	_____	_____	_____
TELS 3355 Project Leadership.	_____	_____	_____
TELS 3365 Team Leadership	_____	_____	_____
TELS 4371 Leading Changes Workplace	_____	_____	_____

Free Elective (9 SH)

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

APPROVALS:

Student _____ Date _____

Advisor _____ Date _____

Department Chair _____ Date _____

SURVEYING ENGINEERING TECHNOLOGY (SET)

UNIVERSITY of HOUSTON
COLLEGE OF TECHNOLOGY

ENGINEERING TECHNOLOGY
BACHELOR OF SCIENCE

NAME _____ UHID _____

UNIVERSITY CORE REQUIREMENTS (52 SH)

	GR	SH	AH
<u>Communication (6 SH)</u>			
ENGL 1303 English Composition I	_____	_____	_____
ENGL 1304 English Composition II	_____	_____	_____

Writing In The Discipline* (3 SH)

History/Government (12 SH)

HIST 1376 or 1377 US History to 1867	_____	_____	_____
HIST 1378 or 1379 US History since 1867	_____	_____	_____
POLS 1336 US & TX Const/Politics	_____	_____	_____
POLS 1337 US Government	_____	_____	_____

Humanities* (3 SH)

Visual/Performing Arts* (3 SH)

Social/Behavioral Sciences* (3 SH)

ECON 2304 Micro or ECON 2305 Macro	_____	_____	_____
------------------------------------	-------	-------	-------

Math/Reasoning (13-14 SH)

MATH 1310 College Algebra	_____	_____	_____
MATH 1330 Elementary Functions	_____	_____	_____
MATH 1431 Calculus I	_____	_____	_____
MATH 1432 Calculus II or	_____	_____	_____
TMTH 3360 Applied Technical Statistics	_____	_____	_____

Natural Sciences (8 SH)

PHYS 1301/1101 Intro. Gen. Phys I & Lab	_____	_____	_____
GEOL 1330/1130 Physical Geology & Lab	_____	_____	_____

DEPARTMENTAL & COLLEGE REQUIREMENTS

General Technology and College Core (12 SH)

CNST 1330 Graphics	_____	_____	_____
TELS 3340 Org Leadership & Supervision	_____	_____	_____
Or HDCS 3300 Orgnztnl Decisions in Tech.			
TELS 3363 Technical Comm. Or	_____	_____	_____
TELS 3372 Comm in Sci, Eng & Tech	_____	_____	_____
ITEC 1301 Intro to Computer Apps Tech	_____	_____	_____

MAJOR REQUIREMENTS (45 SH)

	GR	SH	AH
ACCT 2331 Accounting Princ. I-Financial	_____	_____	_____
CNST 1361 Construction Management I	_____	_____	_____
CNST 2341 Construction Documents	_____	_____	_____
CNST 4265 Site Dev & Env Issues	_____	_____	_____
MECT 3341 Computer Aided Drafting	_____	_____	_____
SURY 2361 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 Aspect of Surveying	_____	_____	_____
SURY 4364 Surveying IV	_____	_____	_____
SURY 4369 Surveying Analysis	_____	_____	_____
SURY 4170 Ethic in Professional Surveying	_____	_____	_____
TELS 4372 Proposal and Project Writing	_____	_____	_____

Pre-Approved Electives (9 SH)

SURY 2371 Global Positioning System	_____	_____	_____
GEOL 4331 Intro. Geographic Inf. Sym.	_____	_____	_____
SURY 3373 Subdivision Plan & Design	_____	_____	_____
TELS 3345 Human Resources in Tech.	_____	_____	_____
TELS 3346 Wage & Salary Admin.	_____	_____	_____

Free Elective (3 SH)

Total hours required: 120-121 semester hours

For graduation with Honors, see Undergraduate Catalog.

*Refer to class schedule for lists of courses which satisfy University requirements.

APPROVALS:

Student Date

Advisor Date

Department Chair Date

36 advanced (3000- or 4000-level) semester hours must be completed.

TSI requirements must be met.

ORIGINAL