

2006-2008

ABET ADVISING AID

**Undergraduate Program Leading to Degree of
Bachelor of Science in Civil Engineering**

The undergraduate program in Civil Engineering currently is accredited by the Accreditation Board for Engineering Technology (ABET). The minimum ABET criteria are an appropriate combination of MATHEMATICS and BASIC SCIENCES (32 hours), ENGINEERING TOPICS including ENGINEERING SCIENCE and ENGINEERING DESIGN (48 hours), and GENERAL EDUCATION including HUMANITIES AND SOCIAL SCIENCES (16 hours).

Completion of a program of study in engineering which is accredited by ABET at time of graduation is considered to meet the education requirements for registration as a Professional Engineer by the Texas Board of Professional Engineers.

Students should note that in selecting Civil Engineering Level I and Level II Electives that a MINIMUM OF ONE TECHNICAL ELECTIVE FROM EACH OF THREE DIFFERENT AREAS of specialization must be included in each student's program. AT LEAST ONE LEVEL II ELECTIVE MUST BE TAKEN.

Students must register for Level I & Level II Electives that will combine with their required courses to provide the needed hours in Engineering Topics (48 hours) to meet ABET criteria. The required number of hours in the Math & Basic Science and General Education categories are already met in the required courses.

The curricular distribution (ENGINEERING TOPICS, etc.) of all courses required in the Civil Engineering curriculum, including electives, is identified on the attached sheets.

	Math & Basic Science	Engr. Science	Engr. Design	Hum. & SS	Other
Mathematics					
M 408C	4				
M 408D	4				
M 427K	4				
Mathematics/Science Elective	3 or 4				
Math/Science/Engr. Science Elective	3 or 4	OR	3 or 4		
Basic Science					
CH 301	3				
CH 302	3				
PHY 303K	3				
PHY 103M	1				
PHY 303L	3				
PHY 103N	1				
English/Humanities/Social Science					
RHE 306					3
E 316K				3	
GOV				3	
GOV				3	
HIS				3	
HIS				3	
Fine Arts/Humanities				3	
Social Science				3	
Thermodynamics (ME 320)		3.0			
Engineering Mechanics					
EM 306	0.5	2.5			
EM 311M	0.3	2.7			
EM 319	0.2	2.8			
Mechanical Engineering					
ME 210		1.0	1.0		
Civil Engineering					
ARE 323K		3.0			
CE 301		1.5	1.5		
CE 311K	1	2			
CE 311S	2	1			
CE 314K (W)		2	1		
CE 319F		3			
CE 321		2	1		
CE 329		3			
CE 333T (W)			0.5		2.5
CE 341		2	1		
CE 356		2	1		
CE 357		2	1		
Sub-Total Required Courses	≥33 or ≥36	≥35.5 or ≥38.5	8.0	21	5.5

Level I Electives	<u>Math & Basic Science</u>	<u>Engr. Science</u>	<u>Engr. Design</u>	<u>Hum. & SS</u>	<u>Other</u>
Const. Engr. & Proj. Mgmt.					
ARE 350	0.5	0.5	2.0		
ARE 358		1	2		
ARE 366		1			2
Environmental Engineering					
CE 342		1.5	1.5		
CE 346		1.0	2.0		
CE 346K		1.0	2.0		
CE 369L		1.0	2.0		
CE 370K		2.0	1.0		
Geotechnical Engineering					
CE 375			3.0		
Structures					
ARE 345K		1.0	2.0		
ARE 362L			3.0		
CE 331		0.5	2.5		
CE 335		0.5	2.5		
CE 363	1	2			
Construction Materials					
CE 351		1	2		
CE 366K	1	1	1		
Transportation					
CE 367P		1	2		
CE 367T		2	1		
Water Resources					
CE 358		1.5	1.5		
CE 374K		1.5	1.5		
CE 374L		2.0	1.0		

	Math & Basic Science	Engr. Science	Engr. Design	Hum. & SS	Other
Level II Electives (Design)					
CE 360K			3		
CE 362M			3		
CE 362N			3		
CE 364			3		
CE 365K			3		
CE 367			3		
CE 376			3		
Total Minimum ABET Required	32	Engr. Topics* ≥48		16	0
UT Required	≥33 or ≥36	See footnote*	See footnote*	≥21	≥5.5

(W) Denotes substantial writing component course.

*** Note: The Total ABET required for Engineering topics, which includes Engineering Science and Engineering Design, is 48 hours.** Students must register for Level I & Level II Electives that will combine with their required courses to provide the needed hours in Engineering Topics. The required number of hours in the Math & Basic Science and General Education categories are already met in the required courses.