

## Safety Engineering Certificate

Goal: Prepares student for positions in several areas of safety engineering.

Requirements:

- 15 credit hours of courses, including:
  - SENG 310 (3 credits)
  - SENG 312 (3 credits)
  - SENG 321 (3 credits)
  - SENG 489 or 689 (3 credits)
  - 6 credit hours of approved technical electives
- 3.0 GPR on required certificate courses

<http://essap.tamu.edu/safety.htm>



## Other Certificate Programs

Although not housed in the College of Engineering, the following certificate program is available only to engineering students.

### Business Management Certificate for Engineering Students

Goal: Provide students with instruction in Accounting, Finance, Management and Marketing as it relates to Engineering.

Requirements:

- Junior, Senior or Graduate Level Classification
- Program Fee (\$750.00 in 2007)
- Mandatory class attendance from 8:00 am - 5:00 pm for 3 weeks in the summer

<http://essap.tamu.edu/bmc.htm>



Business Management Certificate Recipients - 2006

## Future Certificates in Development

The college is currently working to develop the following additional engineering certificates:

- Engineering Entrepreneurship Certificate
- Engineering Leadership Certificate
- Engineering Public Policy Certificate
- Engineering Space Junior and Senior Certificates

## More of What Industry Has to Say...

"A student working toward obtaining a certificate (or a student that has obtained a certificate) in a specific course area sets that student apart from the rest. In addition, a certificate helps with marketing yourself in this highly competitive job market and shows you are in tune with that particular subject matter."

~ *Xchelsia Bledsoe, GE Energy*

## For more information about engineering certificates, please contact:

Dwight Look College of Engineering  
Engineering Student Services & Academic Programs  
204 Zachry Engineering Center  
3127 - Texas A&M University  
College Station, TX 77843-3127

<http://essap.tamu.edu/cert-programs.htm>

Email: [essap@tamu.edu](mailto:essap@tamu.edu)

Phone: (979) 847-8887 Fax: (979) 847-8654

TEXAS A&M ENGINEERING

# CERTIFICATE PROGRAMS



Academic enrichment opportunities for undergraduate students in the Dwight Look College of Engineering at Texas A&M University



## Why Should You Pursue a Certificate?

Certificate programs are designed to provide students an edge over other students who have similar interests, but do not pursue a certificate program that complements that interest. Essentially, certificates are of great value to both students who pursue them and potential employers who seek candidates who acquire them. Students who obtain the certificates from the College of Engineering should anticipate the following benefits:

- Get more than just a degree
- Advance rapidly in the workplace
- Gain multidisciplinary instruction
- Experience education, training and culture in another country

## Which Certificate Should You Select?

Students should consider their interests, the type of industry they would like to work for, the position they would like to have and the certificate required/approved courses. Students who have an interest in working for an energy company in another country may want to consider pursuing the Energy Engineering and or International Engineering Certificates. In addition, those who desire a position in a manufacturing facility should consider the Engineering Project Management, Systems Safety Engineering Specialty or Polymer Specialty Certificates. Finally, students must visit with their department advisor about the certificate courses that will count towards their degree program and multiple certificates. The credit hours required to obtain a certificate ranges from 12 to 18, but keep in mind that pursuing a certificate program will not necessarily extend students' graduation dates. With careful planning students can graduate within their expected graduation date or a semester later.

## What Does Industry Have to Say About Our Engineering Certificates?

The majority of the certificates were created based on feedback of the needs from industry members such as ConocoPhillips, Dow, GE and Schlumberger. They understand that the areas covered under each certificate have great importance by adding value to a student's engineering education. Industry members comment that they look forward to recruiting engineers in the future that have earned a certificate.

## Engineering Certificate Programs

The Look College of Engineering has designed the following certificate programs to offer ambitious students the opportunity to go beyond the traditional curriculum and gain specific knowledge in a concentration area. For specific information on each certificate available, visit the appropriate certificate web site.

### Energy Engineering Certificate

Goal: Help students face the challenges of world energy supply/demand and learn how to ensure a sustainable energy future. The program will educate students about all energy sources, their development, generation, conversion, transmission and use.

Requirements:

- 13 semester credit hours, including:
    - ENGR 101-Energy: Resources, Utilization and Importance to Society (4 credits)
    - 9 credit hours from a specified list of approved courses
  - 3.0 GPR on required certificate courses
- <http://essap.tamu.edu/energy.htm>

### Engineering Project Management Certificate

Goal: Help students understand complex engineering projects, project organizations and project management methods; and advance more rapidly within a project management organization.

Requirements:

- 12 credit hours of Engineering and Business courses including:
    - CVEN 333 or ISEN 333 or MEEN 333 or CVEN 349 (3 credits)
    - MGMT 309 (3 credits)
    - 6 hours of approved technical electives
  - 3.0 GPR on required certificate courses
- <http://essap.tamu.edu/project-mgmt.htm>



At graduation, students who successfully complete the engineering certificate requirements receive a printed and signed certificate from the college. The designation of certificate completion is also noted on the official university transcript.

## Engineering Scholars Program Honors Certificate

Goal: Challenge students beyond the regular coursework in an effort to develop an Extra Scholastic Perception or sixth sense needed to invent, imagine, create, explore, inspire, or heal within their engineering college career.

Requirements:

- 18 honors hours, including:
    - ENGR 281 & 381 - two required ESP seminar courses (1 credit each - 2 credits total)
    - an independent study/undergraduate research course (3 credits)
    - 13 additional hours of honors courses
  - 3.5 GPR on required certificate courses
- <http://www.tamu.edu/esp>

## International Engineering Certificate

Goal: Provide a strong interdisciplinary educational program for students wanting to pursue a career with multinational companies and foreign organizations.

Requirements:

- 18 credit hours, including:
    - Language Component (6 credits)
    - International Component (6 credits)
    - Global Engineering and Design Component (3 credits)
    - International Experience Component (3 credits)
  - 3.0 GPR on required certificate courses
- <http://essap.tamu.edu/international-cert.htm>



## Polymer Specialty Certificate

Goal: Provide a strong interdisciplinary educational program for students to advance more rapidly within an industrial workforce that produces and uses polymers.

Requirements:

- 12 credit hours of courses, including:
    - MEEN 458 (3 credits)
    - CHEM 466 (3 credits) OR CHEN 451 (3 credits)
    - 6 credit hours of approved technical electives
  - 3.0 GPR on required certificate courses
- <http://essap.tamu.edu/polymer.htm>