



EVP2013-05-6320
96-196

THE FACULTY SENATE

May 28, 2013

MEMORANDUM

TO: Dr. R. Bowen Loftin, President

FROM: John N. Stallone, Speaker *John N. Stallone*

SUBJECT: Approval of Undergraduate Curriculum Committee Items (FS.30.156)

At its regular meeting on May 13, 2013, the Faculty Senate approved the following items from the Undergraduate Curriculum Committee. The Faculty Senate submits for your approval. Attached is a copy of the material sent to our Senators.

**Undergraduate Curriculum Committee
Change in Curriculum
International Engineering Certificate**

Thank you for your time and consideration. Please inform me of your action in this matter.

Attachment

FACULTY SENATE AGENDA ITEM REVIEW

cc: Karan Watson
Pamela Matthews
Michael Benedik
Sandra Williams
M. Katherine Banks

This item has been reviewed by the Office of the Provost (OP). Below are recommended action(s): RE: FS.30.156

<i>Presidential Action:</i> <input checked="" type="checkbox"/> Recommend Approval <input type="checkbox"/> Review Only	<i>OP Recommended Action</i> <input type="checkbox"/> Hold for Further Review <input type="checkbox"/> Hold Released <input type="checkbox"/> System Review/Submission <input type="checkbox"/> BOR Approval <input type="checkbox"/> THECB Approval/Notification <input type="checkbox"/> SACSCOC Approval/Notification
---	--

Approved: Reviewed:

R. Bowen Loftin

R. Bowen Loftin, President

7/1/13

Date

4. Change in Curriculum

Dwight Look College of Engineering
International Engineering Certificate

CHANGE IN CURRICULUM

CHANGE IN CURRICULUM

DWIGHT LOOK COLLEGE OF ENGINEERING
INTERNATIONAL ENGINEERING CERTIFICATE

Texas A&M University Request for a Change in Curriculum

1. Request change for: Degree Program Minor Certificate
2. Request submitted by (*Department or Program Name*): Dwight Look College of Engineering
3. Program Designation and Name
(*e.g., B.A. in History, Minor in History, Certificate in European Union*): International Engineering Certificate
4. Brief description of change: Reduce foreign language requirement from 6 credit hours to 3 credit hours.

5. Rationale for change: The six hours of language is not adding to the purpose of the certificate and is preventing students who have taken international intensive courses from getting the certificate. The purpose of the certificate is to recognize the students who have taken a certain number of classes involving international experience giving them knowledge to work in international environment. In this sense, knowing how to work with different cultures, and solve international problems is what matters.

Use the checkboxes below to make sure that all information is included.

6. a. Proposed curriculum attached. Yes No
- b. Current catalog curriculum with handwritten edits attached. Yes No
- c. Current Howdy degree evaluation with handwritten edits attached. Yes No
Please make sure the attached proposed curriculum, catalog and Howdy degree evaluation match.
7. a. Will degree program hours change (increase/decrease) due to the proposed curriculum changes? Yes No
- b. If yes, degree program hours will change from: _____ to: _____
- c. If yes, is the Texas Higher Education Coordinating Board form attached? Yes No
<http://www.thecb.state.tx.us/index.cfm?objectid=A0F9F7FA-9A92-4F11-2756AD3BBFF01D60>
8. If proposed changes affect other unit(s), are letters of support attached? Yes No

IMPORTANT NOTE: Curriculum changes submitted through the approval process and **fully approved** by February (*December-UCC/GC, January-Faculty Senate, February-President*) will be effective in the next academic year. Changes requiring approval beyond the University should complete the internal approval process early in the fall semester whenever possible in order to ensure timely implementation.

Approval recommended by:

Robin L. Autenrieth *Autenrieth*
Department Head or Program Chair (*Type Name & Sign*) Date

Robin L. Autenrieth 2-8-13
Dean of College Date

Robin L. Autenrieth *Autenrieth*
Chair, College Review Committee Date

2-8-13
Chair, GC or UCC Date



*Not in Howdy.
zw*

The Engineering Scholars Program Honors Certificate is administered through the Office of the Dean of Engineering in close collaboration with each engineering department. A departmental coordinator in each degree program is responsible for setting policy and advising and mentoring the honors students in their department.

For further information, contact the Engineering Scholars Program Honors Certificate coordinator or the Engineering Student Services and Academic Programs Office, Room 204 Zachry Engineering Center, (979) 845-7200.

International Engineering Certificate

Advances in communications and transportation technologies coupled with a historical trend of nations moving towards market economies have made it possible for companies to function using the best locations and resources no matter where in the world. The resources available are of a wide variety including money, state-of-the-art technologies, know-how and scientific discoveries, raw materials, components, and human resources. An effective engineer in this global environment is one that complements his/her core technical knowledge with excellent cross-cultural competence and international exposure. The certificate program prepares graduates for positions in multinational companies and foreign organizations. The International Engineering Certificate consists of ~~6~~ ³ credits from language courses, 6 credits from International and Cultural Diversity courses, 3 credits from Global Engineering Design courses and 3 credits of international experience. Candidates must complete a total of 15 credit hours to earn the certificate.

Polymer Specialty Certificate

The Polymer Specialty Certificate is designed to provide a strong interdisciplinary educational program for undergraduate engineering and suitably prepared science students interested in pursuing a polymer career. The certificate will also provide knowledge to reduce the training time required to turn Texas A&M students into productive members of the industrial workforce. This program is the first of its kind offered in the State of Texas and is administered by the Polymer Technology Center. No schools in the State of Texas offer a formal polymer curriculum, despite the significant role the polymer industry plays in the state's economy. The Polymer Specialty Certificate consists of (4) three-hour courses for a total of 12 credit hours. The required courses are MEEN 458 and CHEM 466 or CHEN 451. In addition, the remaining six hours are to be selected from a list of approved courses of which three hours can be substituted with an approved individual research experience. Completion of the certificate will be recorded on the student's University transcript.

For further information, contact the Polymer Specialty Certificate coordinator or the Engineering Student Services and Academic Programs Office, Room 204 Zachry Engineering Center, (979) 845-7200.

International Engineering

Advances in communications and transportation technologies coupled with a historical trend of nations moving towards market economies have made it possible for companies to function using the best locations and resources no matter where in the world. The resources available are of a wide variety including money, state-of-the-art technologies, know-how and scientific discoveries, raw materials, components, and human resources. An effective engineer in this global environment is one that complements his/her core technical knowledge with excellent cross-cultural competence and international exposure. The certificate program prepares graduates for positions in multinational companies and foreign organizations. To earn the certificate, which is noted on the student's permanent transcript, students are required to satisfy the following:

Three (3)

- **Language Component** [See note 1]: ~~Six (6)~~ credits of at least 200 level course in a single language (excluding English).
- **Internationalization Component** [See note 2]: Six (6) credits from the International and Cultural Diversity courses in the university core curriculum.
- **Global Engineering Design Component**: Three (3) credits from one of the following:
 - ENGR 410 Global Engineering
 - Design course in an engineering department with a significant international component
- **International Experience Component** [See note 3]: Three (3) credits. The international experience component is individualized and must be approved by the College of Engineering.

Notes

This

1. Students could place out of these courses with AP credit or by showing proficiency by exam. These courses can be taken in or outside the US. However, immersion language to gain this basic level of language learning will not count for the International experience.
2. At least one course must have significant focus on international diversity.
3. May be satisfied by an approved study abroad program, international internship, directed study or research experience, or another approved course or field experience. The minimum time period to be abroad is one summer term. Students are encouraged to go abroad in programs that are appropriate to their academic and career objectives.

Guideline

Students should complete and submit certificate application to the Engineering International Programs office (~~320~~ **(121 Zachry)**) ~~Wisniewski Engineering Research Center~~ prior to registering for any of the certificate courses.

Requirements

- Be in good academic standing within major department.
- Obtain a "C" or better in each course taken towards certificate program.
- Achieve an overall GPR of 3.0 in approved certificate program coursework.
- Submit completed certificate worksheet to the Engineering International Programs office upon registering for final course(s) to complete certificate requirements.
- It is recommended that students take 6 hours of coursework above what is required for their degree program.
- Consult with an academic advisor prior to submitting the application for the certificate.

Course Requirement Summary

Credit	Course
6 3	Language courses
6	International and Cultural Diversity courses in the university core curriculum
3	ENGR 410 Global Engineering -OR- a design course in an engineering department with significant international component
3	International experience

Certificate Application



Application

For more information

Maria Alves

Director, Engineering International Programs

Texas A&M Engineering

121 Zachry Engineering Center

3126 - Texas A&M University

College Station, TX 77843-3126

Email: malves@tamu.edu

Phone: (979) 862-1880

or

Dawna Rosenkranz

Engineering International Programs

Texas A&M Engineering

121 Zachry Engineering Center

3126 - Texas A&M University

College Station, TX 77843-3126

Email: d-rosenkranz@tamu.edu

Phone: (979) 845-9588

Fax: (979) 845-4925

TEXAS A&M ENGINEERING

International Engineering Certificate Application

First, Middle, Last Name: _____ Date: _____

UIN: _____ TAMU Overall GPR: _____

Major: _____ Expected Graduation Date: _____

Email: _____

Cell Phone Number: _____

Students must meet and adhere to the following requirements and guidelines in order to earn the International Engineering Certificate:

Requirements:

1. Be in good academic standing within major department.
2. Obtain a "C" or better in each course taken towards certificate program.
3. Achieve an overall GPR of 3.0 in approved certificate program coursework.
4. Submit completed certificate program worksheet to the Engineering International Programs Office (121 Zachry) upon registering for final course(s) to complete certificate requirements.
5. Consult with academic advisor prior to submitting application for certificate.

Guideline:

Students should complete and submit certificate program application to the Engineering International Programs Office (121 Zachry) prior to registering for any of the certificate courses.

Student Signature

The student has discussed his or her desire to pursue this certificate program with me.

Academic Advisor: _____ Date: _____

For the Engineering International Programs Office

Approved by: _____ Date: _____