

1-1 By: Zaffirini S.B. No. 1249
1-2 (In the Senate - Filed March 2, 2009; March 17, 2009, read
1-3 first time and referred to Committee on Higher Education;
1-4 April 20, 2009, reported adversely, with favorable Committee
1-5 Substitute by the following vote: Yeas 5, Nays 0; April 20, 2009,
1-6 sent to printer.)

1-7 COMMITTEE SUBSTITUTE FOR S.B. No. 1249 By: Duncan

1-8 A BILL TO BE ENTITLED
1-9 AN ACT

1-10 relating to the creation of a pilot program to improve curricula
1-11 alignment between junior colleges and general academic teaching
1-12 institutions for engineering degree programs.

1-13 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

1-14 SECTION 1. Section 61.821, Education Code, is amended by
1-15 amending Subdivision (1) and adding Subdivision (4) to read as
1-16 follows:

1-17 (1) "Core curriculum" means the curriculum in liberal
1-18 arts, humanities, and sciences and political, social, and cultural
1-19 history that all undergraduate students of an institution of higher
1-20 education are required to complete before receiving a bachelor's
1-21 ~~[an academic undergraduate]~~ degree.

1-22 (4) "Statewide articulated transfer curricula" means,
1-23 with respect to engineering disciplines, sets of courses, up to the
1-24 level of an associate's degree, that will satisfy the
1-25 lower-division requirements for bachelor's degrees in specific
1-26 engineering disciplines, including biomedical, chemical, civil,
1-27 computer, electrical, environmental, industrial, mechanical,
1-28 nuclear, and petroleum engineering at a general academic teaching
1-29 institution.

1-30 SECTION 2. Subsection (b), Section 61.822, Education Code,
1-31 is amended to read as follows:

1-32 (b) Each institution of higher education shall adopt a core
1-33 curriculum of no less than 42 semester credit hours, including
1-34 specific courses comprising the curriculum. The core curriculum
1-35 shall be consistent with the common course numbering system
1-36 approved by the board and with the statement, recommendations, and
1-37 rules issued by the board. The minimum core curriculum requirement
1-38 for all academic associate's degrees shall be 42 semester credit
1-39 hours, except for programs designated under board-approved field of
1-40 study curricula or statewide articulated transfer curricula. An
1-41 institution may have a core curriculum of other than 42 semester
1-42 credit hours only if approved by the board.

1-43 SECTION 3. Subchapter S, Chapter 61, Education Code, is
1-44 amended by adding Section 61.833 to read as follows:

1-45 Sec. 61.833. STATEWIDE ARTICULATED TRANSFER CURRICULA FOR
1-46 ENGINEERING DISCIPLINES; PILOT PROGRAM. (a) The board shall
1-47 establish a pilot program to develop and assess methods to increase
1-48 the number of students earning a baccalaureate degree in
1-49 engineering. The program shall:

1-50 (1) develop levels of academic attainment, including,
1-51 if feasible, standard associate's degrees:

1-52 (A) for specific engineering disciplines,
1-53 including biomedical, chemical, civil, computer, electrical,
1-54 environmental, industrial, mechanical, nuclear, and petroleum
1-55 engineering; or

1-56 (B) that provide a foundation in any engineering
1-57 discipline;

1-58 (2) develop a well-defined process for transitioning
1-59 students who earn an associate's degree or other level of academic
1-60 attainment in an engineering discipline into an accredited
1-61 engineering degree program at a four-year institution; and

1-62 (3) establish methods to provide orientation and
1-63 advising to support students in choosing an engineering discipline

2-1 and in completing a baccalaureate degree in engineering.

2-2 (b) Not later than January 1, 2011, the board, with the
 2-3 assistance of advisory committees equitably composed of
 2-4 representatives of institutions of higher education, shall develop
 2-5 statewide articulated transfer curricula for the purpose of
 2-6 developing levels of academic attainment, including, if feasible,
 2-7 standard associate's degrees, for engineering disciplines. Each
 2-8 university system or independent institution of higher education
 2-9 that offers a degree program for which a statewide articulated
 2-10 transfer curriculum is proposed may nominate an individual to
 2-11 participate on the advisory committee for that particular
 2-12 engineering curriculum.

2-13 (c) The statewide articulated transfer curricula shall:

2-14 (1) have the same rigor and content as the equivalent
 2-15 course work at an engineering program accredited by ABET,
 2-16 Incorporated, that is offered at a general academic teaching
 2-17 institution;

2-18 (2) minimize the time and course work required to
 2-19 complete a baccalaureate degree in engineering; and

2-20 (3) be consistent with:

2-21 (A) the common course numbering system approved
 2-22 by the board; and

2-23 (B) the recommendations and rules of the board.

2-24 (d) Each institution of higher education that offers an
 2-25 undergraduate degree program in an engineering discipline may
 2-26 participate in the pilot program by adopting the statewide
 2-27 articulated transfer curriculum for that discipline.

2-28 (e) A student who meets institutional and engineering
 2-29 degree program admission requirements and successfully completes
 2-30 the statewide articulated transfer curriculum for an engineering
 2-31 discipline developed by the board under the pilot program:

2-32 (1) may transfer the credit hours earned under that
 2-33 curriculum and apply those credit hours to a participating
 2-34 four-year institution's engineering degree program in a discipline
 2-35 for which the curriculum was developed; and

2-36 (2) shall receive full academic credit toward that
 2-37 engineering degree program for the credit hours transferred.

2-38 (f) A student who meets institutional and degree program
 2-39 admission requirements and who transfers from one institution of
 2-40 higher education to another without completing the statewide
 2-41 articulated transfer curriculum developed by the board for that
 2-42 engineering discipline shall receive full academic credit from a
 2-43 participating institution for each of the courses that the student
 2-44 has successfully completed in the statewide articulated transfer
 2-45 curriculum. Following receipt of credit for each of those courses,
 2-46 the student shall be required to satisfy any additional course
 2-47 requirements in the degree program of the receiving institution.

2-48 (g) The board, with the assistance of advisory committees
 2-49 established under this section, shall periodically evaluate
 2-50 whether the statewide articulated transfer curricula for
 2-51 engineering disciplines:

2-52 (1) effectively facilitate the transition of junior
 2-53 college students and students of other two-year institutions of
 2-54 higher education into accredited four-year engineering degree
 2-55 programs; and

2-56 (2) have contributed to increasing the number of
 2-57 transfer students who successfully complete baccalaureate degree
 2-58 programs in engineering.

2-59 (h) Not later than January 1, 2011, the board shall report
 2-60 to the legislature regarding the board's progress in developing and
 2-61 evaluating statewide articulated transfer curricula for
 2-62 engineering disciplines required by this section.

2-63 (i) This section expires January 1, 2017.

2-64 SECTION 4. This Act does not make an appropriation. A
 2-65 provision in this Act that creates a new governmental program,
 2-66 creates a new entitlement, or imposes a new duty on a governmental
 2-67 entity is not mandatory during a fiscal period for which the
 2-68 legislature has not made a specific appropriation to implement the
 2-69 provision.

3-1 SECTION 5. This Act takes effect immediately if it receives
3-2 a vote of two-thirds of all the members elected to each house, as
3-3 provided by Section 39, Article III, Texas Constitution. If this
3-4 Act does not receive the vote necessary for immediate effect, this
3-5 Act takes effect September 1, 2009.

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