April 15, 2019

Dr. Kelly M. Quintanilla
President
Texas A&M University - Corpus Christi
6300 Ocean Drive, Unit 5756
Corpus Christi, TX 78412-5756

Dear Dr. Quintanilla:

Thank you for your letter of December 14, 2018, conveying the prospectus for the Bachelor of Science in Industrial Engineering degree program with the revised implementation of fall 2020, as verified by email on April 5, 2019. The program supports various strategic plan areas, and program need is supported by state and national workforce projection data, projections by local industry, and a student interest survey. Appropriate program approval at the institutional level and by the Texas A&M University System was noted. Program approval by the Texas Higher Education Coordinating Board is pending. Provide verification of program approval by The Texas Higher Education Coordinating Board when received.

As part of the review of the notification, additional information was requested by email. The institution’s response has been incorporated into the originally-submitted materials.

The 123-credit hour program is designed to satisfy requirements of Engineering Accreditation Commission/Accreditation Board for Engineering and Technology, Inc. (EAC/ABET). Courses will be offered on the main campus through face-to-face delivery, and the prospectus included a program of study and course descriptions. The program encompasses the following focus areas:

- 12 credit-hour certificate in Autonomous Mobility (initiated two years following program implementation)
- 13 credit-hour certificate in UAS (unmanned aircraft systems) Applications—consists of technical electives
- Master of Business Administration option—five-year joint program requiring 9 hours of prescribed electives
- Competency-based education courses—teaching paradigm expanded to viable courses determined by program faculty
- Internships and co-op programs encouraged
- Follows THECB Voluntary Transfer Compact for Industrial Engineering—smooth pathway for transfer students from two-year colleges
- No course credits recognized by examination or professional/work experience
Student learning outcomes were delineated and will be assessed as other ABET-accredited engineering programs. Sample assessments noted assessment tools such as exams, capstone project report/presentation, homework assignments, and others. Students will first be admitted to the university and then reviewed by the Engineering Admission Committee with input from the Program Coordinator who completes initial screening of applicants. Admission criteria for first-year (freshmen) students and transfer students were described. International students must satisfy all requirements outlined and the language competency requirement set by the University.

The program will be housed in the College of Science and Engineering and coordinated by the Engineering Department Chair who reports to the Associate Dean of the College. Current core and support faculty in the Department of Engineering will teach in the program, and three new core faculty positions will be added, one each year beginning in the second year of the initiative. A Faculty Roster Form included existing core and support faculty and anticipated new hires; faculty qualifications appear appropriate.

An assessment report of library resources to support the program included discussion of paper and electronic resources with specific examples. Library funding over five years was identified to support additional monographs; journals and databases adequately cover the discipline. Resources are enhanced with borrowing privileges through the Texshare program. Electronic resources are available 24/7 and remotely through a proxy server. The Library provides information literacy instruction regardless of time and place, and students may contact librarians in person, via phone, email, and chat reference. The Library’s distance learning web page includes an overview of services, tutorials, web links, and other tools.

A new student orientation provides students with information on support services such as career guidance and supplemental instruction. All students are required to meet with the academic advisor and faculty mentor prior to each registration period, and the student’s academic progress and study plan will be reviewed twice a year by the advisor and faculty mentor. A campus-wide early alert and intervention program is also in place.

The program will share classrooms and lab facilities with Mechanical Engineering, Electrical Engineering, Mechanical Engineering Technology, and the proposed Civil Engineering programs. All classrooms are equipped with appropriate instructional technology, and each laboratory in the Engineering Lab building is equipped with a computer-embedded plasma touch screen. A list of capital equipment purchased over the last five years to support engineering programs was provided, and major equipment for upper-level courses of the curriculum will be acquired through grant funding. A 30-seat computer laboratory will also be added to existing engineering computer laboratories to support the new program. A five-year budget was provided with delineation of cost categories and funding sources; funding for the first year of the initiative will largely come from reallocation of existing resources. Financial resources appear adequate.
All educational programs complete an annual assessment using outcomes indicators. An existing ABET Steering Committee will be expanded to include one faculty member from the Industrial Engineering program to oversee accreditation requirements for the new program. Semi-annual assessment meetings evaluate the level of attainment of student outcomes and become part of the annual review process. An alumni survey will be regularly conducted for summative feedback, and an Industrial Engineering Industrial Advisory Committee will help assess the effectiveness of the program and advise on curriculum matters. The program will conduct a self-study when it has its first graduates and is ready for EAC/ABET accreditation. Following successful accreditation, a self-study will be conducted every six years thereafter.

We defer action on the Bachelor of Science in Industrial Engineering program pending verification of program approval by the Texas Higher Education Coordinating Board.

Enclosed is an invoice for $500 to help defray the cost of review of the prospectus.

Sinceuly,

Kevin W. Sightler, Ph.D.
Director of Substantive Change

KWS/MAC:efk

Enclosure

cc: Mr. Bryan G. Baker, Institutional Effectiveness Officer
Dr. Nuria M. Cuevas