DATE: March 21st, 2017

TO: Randy Hannum, Chair

College Council Curriculum Committee

FROM: Curriculum Subcommittee

Jennett Ingrassia, Benito Mendoza, Wm. Edward Roberts (Chair)

RE: Final Report for Proposal 16-04: New Course TCET-4182 Telecommunications Capstone Project I and other changes

**NEW COURSE**

1. **Course title: TCET-4182 Telecommunications Capstone Project I**

Course credits, hours: 2 credits, 1 hour lecture and 2 hours lab

Prerequisite: CST-2403

First part of a two-semester senior design course sequence that introduces programming of embedded systems, research and development methodology, project management, technical writing, and presentation. Students present an introductory level final project incorporating telecommunications engineering designs that are fully documented and prototyped.

Additionally, the proposers are

- substituting TCET 4182 Telecommunications Capstone Project I for TCET 4120 Legal and Regulatory Issues in Telecommunications

-removing ACC 1162 from the program and replacing with TCET 4132

-modifying TCET 4282 course name, description, contact hour and pre/co-requisite

**RATIONALE:**

ABET requires Capstone/ Senior Design course (ABET/ETAC 2016-2017 Accreditation Criteria, page 4) for B. Tech degree. The proposed new course (TCET 4182 Telecommunications Capstone Project I) is the first part of the two-semester course sequence. This course will provide the Telecommunications engineering technology students with the necessary hands-on experience for next capstone course.

**Strengths**

The committee feels that the course design, along with the hands on lab work, and assignments will provide a stimulating and rigorous course that is based on Telecommunications engineering technology principles, coding, problem solving skills. Students will exercise research and development methodology as well as utilize other relevant skills such as troubleshooting, teamwork, and project management. The final product/prototype will be from any kind of Telecommunications technology, including wireless and optical networking technology.

**Weaknesses**

None

1. The removal/replacement of TCET 4120 by TCET 4182 is rational. Because, compared to TCET 4182, TCET 4120 has very little bearing on a student obtaining work as a technologist. The replacement of ACC 1162 with TCET 4132 as a required course is imperative in our modern day “always connected” society. Furthermore, as a TCB graduate, students are expected to know not only how wireless signals operate, but also the details of specific systems to stay ahead of the cutting edge of developing wireless systems. ACC 1162 is very specific for students who pursue a career in accounting and not necessarily those pursuing a career in telecommunications engineering technology. (ECON 1101 is still a mandatory course as it imperative that students understand how economics functions as a system.)

**Subcommittee activities**

The subcommittee suggested minor modifications. A revised course proposal was provided.

The subcommittee and proposers also met with Provost Bonne August, Associate Provost Pamela Brown, and Kim Cardascia. Changes and suggestions were made and these were implemented into the final version of the proposal.