CE Program Advisory Committee Meeting
Information Technology/
Computer Infrastructure and Support

July 20, 2021
Zoom Virtual Meeting Room
Meeting Convened at 5:05 p.m.
Meeting Adjourned at 6:33 p.m.
Facilitator: Jared Baker

COMMITTEE MEMBERS	EX-OFFICIO
Charlotte Augenstein, Regional Director of Employer Engagement - ICT-Digital Media **Jon Caffery**, Regional Director of Employer Engagement – Energy, Construction & Utilities **Brian Dozer**, President, Vital Link **David Foster**, STEM Coordinator/CE OCDE **Ken Hopkins**, Chief Operating Officer, AER Technologies **Curtis Horn**, Control Systems Engineer, OC Sanitation District **Paul Jasser**, IT Director, Precision Optical **Kunle Obafemi**, Sr. Systems Engineer, Nutanix **Scott Raymond**, Chief Information Officer, NetApp **Robert Segovia**, Director Information Technology, Memorial Care Health System **Omar Shepherd**, STEM/CE, OCDE	**Jared Baker**, Faculty, OCC **Elaine Devlin**, K14 Pathways Coordinator, OCC **Christina Anchondo** – Outreach Specialist, CTE - OCC **Lisa Knuppel**, DeanCareer Education/Career Services and Business & Computing Division, OCC **Daniel Shrader**, Dean, Technology, OCC

ADVISORY COMMITTEE MEETING SUMMARY

1. **Welcome & Introductions**
   - Committee members introduced themselves and confirmed their respective titles and roles at their respective companies and organizations.
   - Jared Baker thanked the committee members for the attendance and contribution of time and expertise. He reviewed the role and responsibilities of the committee, as follows:
     - Review the structure, program-level outcomes and curriculum of the Information Technology/Computer Infrastructure and Support Program;
     - Review proposals and ratify or recommend changes to program structure, Program-Level Student Learning Outcomes (PSLOS) and curriculum so that the program and curriculum align to stated occupational outcomes and industry needs and requirements.
     - Make recommendations for program improvement.

2. **Review of New Program Proposals/Developments**
   - Jared Baker presented information about the recent history and current status of the OCC IT program to provide context and foundation for the pending requests and for the committee's recommendations, as follows:
     - The former full-time faculty and program coordinator William Saichek retired in June of 2020. Mr. Saichek was the only full-time faculty in the program, and his departure left a significant void in program oversight and administration because there is no other full-time faculty in the Computer Science/Computer

Information Systems department (where the program is currently housed) with the necessary background and expertise in Information Technology or Computer Infrastructure and Support to properly supervise the program or maintain the existing program.

- The Coast Community College District is currently operating under a hiring freeze, and the FT faculty position vacated by Professor Saichek was not filled/replaced, and will not be in the foreseeable future, at least until the hiring freeze is lifted.
- As a result, the Department Chair of the Computer Science/Computer Information Systems (CIS) department, together with the existing full-time faculty in the department, proposed to retire all certificate programs and essentially terminate the IT program.
- Before allowing termination of the program, the Curriculum Committee and Vice President of Instruction requested a review of the program, including enrollment history, labor market information indicating the job and wage outlook for skilled IT/Network Infrastructure and Support professionals, and supply/demand data to show if the regional can support employment of program completers at or above the living wage for the region. The regional Center of Excellence for Labor Market Research rendered reports endorsing the programs, based on sufficient regional demand for skilled workers in the IT and Network Security/Cybersecurity fields, and the access to high-wage, high-demand jobs by program completers.
- Furthermore, the Deans of both the Business and Computing and the Technology Divisions met and conferred with the part-time faculty teaching classes in the existing program, to create a proposal to preserve and re-build the program in a new context.
- Part-time faculty Jared Baker agreed to act as Program Coordinator and shepherd the program and curriculum going forward, pending the lifting of the district's hiring freeze and possible replacement of a full-time faculty position in the future.

- Proposal for Divisional realignment:
  - Jared Baker and Deans Knuppel and Shrader presented a proposal to move the existing IT/CIS certificate programs from the Business and Computing Division to the Technology Division, with the following rationale:
    - The focus of the Computer Science/CIS programs where the IT program is currently housed has historically been and continues to be on programming languages and skills, with the goal of preparing students to transfer to a four-year college, whereas the Informational Technology (IT) program is a true career/technical education (CTE) program which is skilled based, hands-on and aligned to industry, and maintaining employment and/or job advancement as its primary outcome goal. This difference provides a fundamental misalignment which does not optimally support the IT program success.
    - The programs in the Technology Division are almost entirely CTE, with student outcomes specifically related to job/career readiness and workforce development, and better align with the IT program.
    - The Technology Division has many different departments and programs such as the Automation program that provide important synergies and potential to enhance and complement the IT programs.
    - The IT program would be aligned more programmatically in the Technology Division with the goal of training people with skills that would enable them to become employed right away at high wages.
    - The program could align skills with academics nicely under the Technology Division.
  - Following discussion of these points, the committee ratified the proposal and recommended that the Informational Technology/Computer Infrastructure and

Support (IT) certificate programs be realigned and moved for administrative purposes out of the Business and Computing Division over to the Technology Division, and supports the proposal to align the programs under the title of Computers and High Technology.

- Program Status and Curriculum Review:

  - Jared Baker briefly reviewed the intent and the curriculum of the current certificates, noting that Network Technician and Network Professional certificates are "stackable certificates," with the Network Professional being intended for students with no previous experience in the workplace, and Network Technician being intended as professional growth to add skills for incumbent workers. Both certificates prepare students for jobs as IT desktop technicians.
  - Jared Baker, as acting Program Coordinator and supervising faculty, proposed to retire several of the existing certificates, and to retain those which have students currently "in the pipeline," have shown favorable enrollment and/or completion and employment trends in the past, and/or which have potential to provide necessary training to meet regional industry need.
  - After significant and in-depth discussion of the different certificates and outcomes, and current industry needs, the committee recommended that the following certificates programs be retained or retired:

  - Certificates to be retained:
    - Network Technician
    - Network Professional
    - Virtualization and Cloud Computing
    - Network Security

  - Certificates to be retired:
    - Network Infrastructure Certificate of Specialization
    - Enterprise Routing Certificate of Specialization
    - Linux Certificate of Specialization
    - Network Services and Applications Certificate of Specialization
    - Network Administration and Operations Certificate of Specialization
    - Network Administration- Windows Certificate of Specialization

  - It was noted that the program can "reinvent" itself to provide additional training pathways and other certificates and courses in addition to the small number being retained in the current program after the realignment and curriculum "cleanup" have been completed.

  - The committee reviewed and recommended the following TOP Codes for the certificates that are to be retained.
    - Network Technician: (TC 0708.00)
    - Network Professional: (TC 0708.00)
    - Virtualization and Cloud Computing: (TC 0702.00)
    - Network Security: (TC 0708.00)
      - It was suggested to change the title of the Network Security certificate to IT Security.

  - The committee reviewed the program outcome statements (PLOs) for the certificates recommended to be retained, and they recommended that the current outcomes be revised to include statements/information clarifying the occupational goals/outcomes of each certificate, as well as any industry certifications that each training program will prepare students for.

o The committee agreed to convene again in the near future to provide additional and more in-depth guidance to Jared Baker, the other faculty in the program, and Dean Shrader for curriculum/program review and revision, including (but not limited to) program level outcomes, and curriculum review.

3. **Industry Update & Employment Trends**
- Emerging technologies and industry developments
  o Virtualization and Cloud Computing is where everyone in the industry is going.
  o Industrial networking people need to have a course in network security.
- Industry hiring and advancement practices and trends for IT professionals
  o Students would get jobs right away with a certification in network security.
  o The committee affirmed that network security and Virtualization and Cloud Computing are highly needed in the industry at this time.

4. **Summary of Advisor Recommendations**
- The committee ratified and recommended that the Informational Technology/Computer Infrastructure and Support (IT) certificate programs be realigned and moved for administrative purposes out of the Business and Computing Division over to the Technology Division.
- The committee recommended that the following certificates be retired:
  - Network Infrastructure Certificate of Specialization
  - Enterprise Routing Certificate of Specialization
  - Linux Certificate of Specialization
  - Network Services and Applications Certificate of Specialization
  - Network Administration and Operations Certificate of Specialization
  - Network Administration-Windows Certificate of Specialization
- The committee recommended that the following certificates be retained and are reaffirmed, and approved with revisions as appropriate:
  - Network Technician
  - Network Professional
  - Virtualization and Cloud Computing
  - Network Security (To be re-named IT Security)

- The committee recommended that the current program level outcome (PLOs) be revised to include statements/information clarifying the occupational goals/outcomes of each certificate and any industry certifications that each training program will prepare students for.

- The committee recommended that funding be allocated to support curriculum revision and program revitalization, program marketing/outreach to both students and regional employers, and for infusion of new industry-standard technology and equipment in the program labs and facilities.

- Other recommendations for program improvement include:
  o Outreach/Marketing to build the program
    - Align program outcomes and marketing/outreach collateral and efforts to build the program
    - Program outcome statements to be goal oriented to use as our advertisement for the certificates
    - Increase diversity
  o New equipment/technology infusion
  o Offer bootcamps and programs to prepare students for industry certification tests. Charlotte Augenstein will share free tools that prepare students for these exams.

        o   Offer bootcamps for K-12 students as a pathway to the program.

5.   Closing Remarks

Jared will take the lead and the committee agreed to reconvene to further discuss program outcome statements, curriculum, and to align language for our communication with prospective students. Committee can email Jared Baker at jbaker@occ.cccd.edu with feedback and ideas for the program.