CTEC Advisory Board Meeting
October 1, 2020
Attendees

Bill Allred, Citizens
Ahmed Arara, BPCC
Megan Bange, BPCC
Wes Bange, BPCC
Pam Burch, General Dynamics
Ron Cotsopoulos, Kobus Technologies
Bryan Dickens, Cybint Solutions
Lee Doughty, BPSTIL
Stormy Epps, BPCC
Holly French-Hart, BPCC
Chuck Gardner, Cyber Innovation Center
Zach Glass, Eatal
Randy Haley, BPCC
Sandra Harvey, BPCC
Eddie Horton, Northwestern State
Scott Isaacs, LSUS
Donna Johnson, LA Tech
Jay Johnson, General Dynamics
Marie Kalmbach, BPSTIL
Holly Lawrence, ECS
Monica Lawrence, BPCC
Cesar Marrero, Xentient Technologies
Jen McCoy, BPCC
Lynne McCoy, BPCC
Rhonda Neil, BPCC
Curtis Penrod, Northwestern State
Brandi Pickett, Ingalls
Wendi Plants, BPSTIL
Madison Poche, BPCC
Chris Rondeau, BPCC
Amy Russell, BPCC
Neli Sichwart, BPCC
Dave Smith, EAP
Garrett Spear, General Dynamics
Jayda Spillers, BPSTIL
Paul Spivey, BPCC
Chris Stephens, General Dynamics
Mark Summers, General Dynamics
Stewart Thompson, Bossier Parish Schools
Steven Turner, BPCC
Travis Venable, Seven Networks
Richard Watson, LSUS
Paul Weaver, BPCC
Angie White, NLEP Economic Development
Thomas Woods, Magee Resources

The meeting was held virtually through Zoom due to Covid restrictions. Megan Bange, Dean of Technology, Engineering and Mathematics, called the meeting to order. Megan welcomed all that were in attendance and thanked them for their flexibility with the change of platform for the meeting.

The following agenda was built for this meeting:

Welcome and Program Updates

- Welcome and Covid Impact on programs – Megan Bange
- Step Up Program – CTC Help Desk & New Program – CTC Network Security – Paul Spivey
- LACEC (Louisiana Cyber Education Center) – Megan Bange/Bryan Dickens (Cybint)

Discussion Items

- Covid related impact on industry – Board Members
- First Semester Mapping – Paul Spivey/Board Members
- Overview of program/job mapping - CIS jobs, expectations, skills – Jen McCoy/Board Members
- Current and future hiring needs – Board Members

- Skills gaps and successes – Board Members
- Certification – Board Members

Voting items were sent via surveymonkey to the advisory board. Listed below are the voting items and the result of the vote.

Vote 1: **APPROVED – AAS Computer Information Systems**
Approve of Computer Information Systems degree being 60 credit hours.

Vote 2: **APPROVED – AAS Cyber Technology (Programmer Analyst)**
Replace CTEC Elective with CTEC 102 (Problem Solving and Programming Techniques).

Rationale: Adding CTEC 102 1) gives CIS students an introduction to programming and 2) it also establishes the common first semester among programs.

Vote 3: **APPROVED – AAS Cyber Technology (Programmer Analyst)**
Approve of Cyber Technology (Programmer Analyst) degree being 60 credit hours.

Vote 4: **APPROVED – AAS Cyber Technology (Programmer Analyst)**
Replace SPCH 110 (Public Speaking) with CTEC 107 (Skills for IT Success).

Rationale: Replacing with CTEC 107 1) provides students with a class that covers the oral communication competencies for General Education requirements, and 2) it establishes the common first semester among programs.

Vote 5: **APPROVED – AAS Cyber Technology (Programmer Analyst)**
Redesign CTEC 259 (Server-Side Web Development) and replace CTEC Elective

Rationale: CTEC 259 as it currently stands is closely tied to specific web technologies that have been losing popularity recently, and has attempted to cover too much material in a short span. The redesigned course is language-agnostic to provide better flexibility as new technologies become popular and focuses outcomes towards core web development competencies.

Vote 6: **APPROVED – AAS Cyber Technology (Programmer Analyst)**
Separate the degree from Cyber Technology and create a new degree named Software Development.

Rationale: The two concentrations are 11 classes different and are no longer concentrations by the definition. Also the new name is more in line with industry.

Vote 7: **APPROVED – AAS Cyber Technology (Programmer Analyst)**
Change CTEC 260 (Interactive Program Design) definition to be language agnostic, shifting focus to programming in a Game Engine such as Unity.

Rationale: Java-specific course details are now being covered in CTEC 150 and 151. This will better reflect tools used by developers in the gaming industry and removes the Java specific language, focusing more on Unity.

Vote 8: **APPROVED – AAS Cyber Technology (Network Security)**
Approve of Cyber Technology (Network Security) degree being 60 credit hours.

Vote 9: **APPROVED – AAS Cyber Technology (Network Security)**
Change the name of Cyber Technology (Network Security) to Cyber Security.

Rationale: With the Programmer Analyst concentration changing, the Cyber Technology program only has one concentration. The renaming will simplify the program name.

Vote 10: **APPROVED – AAS Cyber Technology (Network Security)**
Replace SPCH 110 (Public Speaking) with CTEC 107 (Skills for IT Success).

Rationale: Replacing with CTEC 107 1) provides students with a class that covers the oral communication competencies for General Education requirements, and 2) it establishes the common first semester among programs.

Vote 11: **APPROVED – AAS Systems Administration (Cloud Computing)**
Approve of Hours - Systems Administration (Cloud Computing) degree being 60 credit hours.

Vote 12: **APPROVED – AAS Systems Administration (Cloud Computing)**
Update Program Learning Outcomes to:

A. read and interpret technical literature and convey technical information through verbal written communication;
B. apply the concepts, characteristics, delivery models, and benefits of cloud computing;
C. demonstrate an understanding of access controls used in on-premise and cloud networks;
D. utilize critical thinking skills to collect, analyze, and interpret system logs and user audits; and
E. apply best security practices to secure cloud and on-premise hosts, and the network infrastructure.

Rationale: With the change in concentration name to Cloud Computing, the PLOs are better aligned with a cloud computing position.

Vote 13: **APPROVED – AAS Systems Administration (Cloud Computing)**
Create course focusing on big data - CTEC 275.

Rationale: This course allows students to organize unstructured data using hadoop & elasticsearch frameworks and will incorporate a heavy presentation component based on student findings and proposals.

Vote 14: **APPROVED – AAS Systems Administration (Cloud Computing)**
Create course focusing on advanced cloud topics CTEC 264.

Rationale: This will provide an advanced cloud course within the cloud computing concentration that builds on previous cloud classes (mapped to CompTIA Cloud Essentials and Cloud+)

Vote 15: **APPROVED – AAS Systems Administration (Cloud Computing)**
Replace CTEC 112 (IT Hardware Support), CTEC 262 (Introduction to Cloud Computing), CTEC Elective, and SPCH 110 (Public Speaking) with CTEC 101 (Skills for IT Success), 272 (Advanced Topics in Linux), and newly created CTEC 264 and 275 focusing on advanced cloud and big data.

Rationale: This 1) establishes partial common first semester sequence and 2) adds an intro IT course (ITF+), an advanced Linux course (RedHat), an advanced cloud course, and a course in big data.

Vote 16: **APPROVED – AAS Systems Administration (DevOps)**
Approve of Hours - Systems Administration (DevOps) degree being 60 credit hours.

Vote 17: **APPROVED – AAS Systems Administration (DevOps)**
Replace CTEC 112 (IT Hardware Support), CTEC 114 (IT Software Support), and SPCH 110 (Public Speaking) with CTEC 101 (Information Technology Principles) and 2 CTEC Electives choosing between CTEC 107 (Skills for IT Success), CTEC 275 (Big Data), and CTEC 259 (Server-Side Web Development).

Rationale: This 1) establishes partial common first semester sequence and 2) adds an intro IT course (ITF+), and two electives giving them an option to learn about big data or core web development competencies. CTEC 107 and 275 cover the oral communication competencies for General Education requirements.

Vote 18: **APPROVED – Course Development**
Create a project based capstone CTEC course – CTEC 298.

Rationale: With internships locations being limited (especially since Covid) this allows a student to pull together everything they have learned into one overarching capstone project.

Vote 19: **APPROVED – CTS Health Information Technology**
Change program name to Health Information Security.

Rationale: The change will help for better placement where previously students mistake this degree for medical coding. With the sensitivity of medical information, security will be a bigger component of the program.

Vote 20: **APPROVED – CTS Health Information Technology**
Update program description to the following: The Certificate of Technical Studies in Health Information Security provides students with the skills and qualities needed to fulfill the multifaceted role of an information technology specialist in the healthcare industry. The program includes instruction on technologies to keep network assets, secure, conducting forensic analysis, cloud computing, electronic health records, interoperability of systems, and safely handling healthcare information. Students will develop the attitudes and principles which will encourage continued growth in a profession that is rapidly expanding in scope.

Rationale: This change will better reflect the emphasis on security.

Vote 21: **APPROVED – CTS Health Information Technology**
Update program learning outcomes to the following:

A. effectively safeguard protected medical information;
B. utilize innovative technologies in the management of healthcare-related information
C. investigate, critically analyze, and solve issues relating to the legal and ethical principles of basic healthcare and information technology; and
D. interpret and convey technical and medical information using written, digital, and oral forms of communication.

Rationale: These outcomes will better reflect the new direction of the program.

Vote 22: **APPROVED – CTS Health Information Technology**
Replace BLGY 110 (Medical Terminology), HCM 201 (Introduction to Healthcare Management), CTEC 101 (Information Technology Principles), MOS 107 (Medical Office Administration), CTEC 282 (IT Project Management), CTEC 200 (Network Defense) courses with CTEC 114 (IT Software Support), CTEC 170 (Microsoft Windows Server), CTEC 263 (Cloud+), CTEC 279 (Information Assurance), CTEC 280 (Computer Forensics), CTEC 287 (Network Security Design) courses.

Rationale: These additions allow for better stacking into the AAS programs and give students exposure to software (A+ Core 2), windows servers, cloud, information assurance, computer forensics, and network security. Previously students were not enrolling into this program because it was such a deviation from the other IT pathways that students did not want to limit themselves to only working an IT job in the healthcare setting.

Vote 23: **APPROVED – CTS Information Systems Security Professionals**
Replace CTEC 110 (Ethics in IT) with CTEC 107 (Skills for IT Success).

Rationale: Allows for better stacking into other programs and gives students exposure to the IT speech component.

Vote 24: **APPROVED – CTS Programming for Digital Gaming**
Replace CTEC 110 (Ethics in IT) with CTEC Elective options between CTEC 104 (Introduction to Scripting), CTEC 107 (Skills for IT Success), CTEC 170 (Microsoft Windows Server), CTEC 172 (Linux Server), CTEC 243 (Data Structures), CTEC 259 (Server-Side Web Development), CTEC 263 (Cloud+), CTEC 270 (Relational Database Coding).

Rationale: Gives more flexibility to choose from scripting, IT team skills, windows servers, Linux servers, data structures, web development, cloud, or SQL.

Vote 25: **APPROVED – CTC Cisco Certified Network Associate**
Remove CTEC 258 (CCNA IV) and update from 16 to 12 hours.

Rationale: Cisco updated their course sequence mapping to CCNA going from 4 courses (16 hours) to 3 courses (12 hours).

Vote 26: **APPROVED – CTC Software Applications**
Update the program summary to: A program that focuses on the general writing and implementation of generic and customized programs to drive operating systems and that generally prepares individuals to apply the methods and procedures of software design and programming. Includes instruction in software design, high-level languages and program writing; program customization; prototype testing; troubleshooting; and related aspects of operating systems and networks.

Rationale: We recently changed the CIP code on the program moving it from a Microsoft Suite focus to software design and programming.

Vote 27: **APPROVED – CTC Software Applications**

Replace CTEC 100 (Computer Concepts), CTEC 111 (Internet Technology), CTEC 144 (Advanced Microsoft Word), and CTEC 145 (Advanced Microsoft Excel) with CTEC 102 (Problem Solving and Programming Techniques), CTEC 150 (Introduction to Programming with Java), CTEC 151 (Advanced Java Programming), and CTEC Elective option between CTEC 250 (Programming with C#), CTEC 235 (Mobile App Development), and CTEC 243 (Data Structures).

Rationale: Replaces Microsoft Suite courses with ones focusing on intro python, intro java, advanced java, and an elective option between C#, mobile app development, or data structures.

Vote 28: **APPROVED – CTC Web Design**
Add CTEC 259 (Server-Side Web Development) and CTEC 101 (Information Technology Principles) as an elective options and remove CTEC 110 (Ethics in IT).

Rationale: In addition to learning intro python, HTML/CSS3, and JavaScript, the 4th class will now provide an option between web app development, adobe Photoshop, intro java, and intro IT (ITF+). Additionally, adding CTEC 101 adds a class that is widely used in high schools and dual enrollment.

Vote 29: **APPROVED – New Program**
Pursue the development of an IT transfer degree for students strictly wanting to pursue a bachelor's degree.

Rationale: With current articulation agreements being anywhere from 50-75% of coursework, this will provide a transfer of 100% of their courses (60 credit hours) for those pursuing a bachelors.

Vote 30: **APPROVED – New Program**
Pursue the development of a CTC in Cloud Computing.

Rationale: With the rise in cloud computing, this would create a small CTC program (2-4 courses) allowing someone to transition to an entry level cloud associate position.

PowerPoint and voting item slides are available upon request.