Comprehensive Program Review Report (Narrative)
College of the Sequoias
Program Review - Information Technology

Prepared by: Frank Tebeau & Thad Russell

What are the strengths of your area?:
1. The current program has close alignment with industry standards and certification requirements.
2. The current program has close alignment with the needs of local industry based on advisory committee, employer, and hired student feedback.
3. Matriculating students report close alignment between content and practical learning at COS, and the expectations of upper-division course requirements at CSU and UC Bachelor programs.
4. Current Instructors in the program have extensive industrial experience that matches with the content areas each instruct.
5. The CISCO Academy program this year was honored as being in the top 25 percent of student success rates in the world, from among over 9,000 academies in 165 countries, and over 900,000 active students.
6. The college's decision with retiring faculty with one-year, full-time, temporary faculty has allowed program to continue meet all SLOs / PLOs and strengthen alignment with institutional goals.

What improvements are needed?:
1. The COMPTIA A+ program needs to be compressed to fewer classes, and a simpler certificate created to reflect changes in the local, regional, national, and international market.
2. The COMPTIA Network + program needs to convert to a more server and security-based curriculum to reflect changes in the local, regional, national, and international market.
3. Modern Equipment and Software should be purchased to support existing and new classes.
4. The electronics program should be expanded to include micro-robotics, and micro physics to reflect changes in the local, regional, national, and international market.
5. Micro-controller and mobile device programming and interfacing courses should be created that reflect changes in the local, regional, national, and international market.
6. New certificates should be created, and existing certificates should be modified to reflect changes in the curriculum.
7. An associate degree should be created to improve employ-ability of our graduated. The name of the new program should be: Information and Communication Technologies (ICT)
8. Full-time, tenure-track faculty

Describe any external opportunities or challenges:
1. STEM funding and new K-12 partnerships are now possible.
2. UC and CSU partnerships may possibly be created.
3. Short courses and seminars for local middle and high-school students in STEM courses should be sponsored at COS.
4. Coordinated funding, purchases, and sharing of facilities should reduce duplication of resources.
5. Current instructor retirement will challenge the development and offering of the existing and new courses and programs.

Overall Outcome Achievement:
1. The program enjoys a high-level of employment and certificate achievement.
2. Students are successful in gaining employment, and the reputation of the program is highly regarded in the community.
3. The content and practical learning of the program (as measured by program and student learning outcomes), are in line with the expectations of the employers of the community, and with transfer requirements.
4. An active advisory committee is recommending improvements and additions to the program based on changes in the local, regional, national, and international market.

Changes based on outcome achievement:
1. Immediate modification of existing courses and certificates should be completed.
2. Additional courses and certificates should be planned, and supplies, material fees, and equipment should be acquired.
3. An associate ICT degree should be developed, and implemented.

Outcome cycle evaluation:
1. Update and modify existing courses and certificates.
2. Create additional courses and certificates.
3. Create an associate ICT degree.

Action: Existing course and certificate modification

Update and modify existing courses and certificates.
COMPTIA A+, IT 210, IT 211, IT 212
COMPTIA Network +, IT 220, IT 221, IT 222, IT 223

**Add Resource Request for Action**

<table>
<thead>
<tr>
<th>Resource Description</th>
<th>Why is this resource required for this action?</th>
<th>Notes (optional)</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty time for updating courses and certificates.</td>
<td>The advisory committee has requested significant updating and modifying of the existing program</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

**Link Actions to District Objectives**

**District Objectives: 2013-2015**

* 2013-2015: District Objective #7 - District Objective #7 for 2013 - 2015: Allocate resources based on an accountable and systematic District-wide planning and budget development process that links this allocation to Institutional Program Reviews and the Strategic Plan.

**Action: Creation of new courses and certificates**

Create additional courses and certificates.

**Implementation Timeline:** 2015 - 2016

- **Start Date:** 01/14/2015
- **Completion Date:** 01/14/2016

**Person(s) Responsible (Name and Position):** Ramyar Alavi-Moghaddam

**Rationale (With supporting data):**

- **Priority:** High
- **Safety Issue:** No
- **External Mandate:** Yes

**Mandate Explanation:** Advisory committee recommendations

**Action: Creation of an ICT associate degree program**

Create an associate ICT degree.

Research the need for and industry application of ICT Associate of Science degree with development of degree as stated goal.

**Implementation Timeline:** 2016 - 2017

- **Start Date:** 01/14/2015
- **Completion Date:** 05/25/2016

**Person(s) Responsible (Name and Position):** Ramyar Alavi-Moghaddam

**Rationale (With supporting data):**

- **Priority:** High
- **Safety Issue:** No
- **External Mandate:** Yes

**Mandate Explanation:** Advisory committee recommendations

**Identify related course/program outcomes:** Need for an AS degree in ICT.

**Person(s) Responsible (Name and Position):**
Rationale (With supporting data): See attached documents

Priority: High
Safety Issue: No
External Mandate: Yes
Mandate Explanation: Advisory committee recommendation

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<td>Full-time, tenure-track faculty member</td>
<td>A properly staffed program is necessary to explore and develop an industry approved and directed ICT degree and to strengthen and maintain certificates within the ICT program.</td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

Resource Type: Faculty - New/Replacement

Link Actions to District Objectives

District Objectives: 2015-2018

* District Objectives - 1.1 - Increase overall enrollment by 1.75% annually
* District Objectives - 2.1 - Increase the number of students who are transfer-prepared annually.
* District Objectives - 2.2 - Increase the number of students who earn an associate degree or certificate annually.
* District Objectives - 2.4 - Increase Career Technical Education course success rates and program completion annually.

Action: Improve student success, strengthen and maintain industry ties and course and program relevancy

Through the hiring of a full-time faculty member, student success will be strengthened and courses, including SLOs and PLOs will be updated to reflect industry demands and needs. Thereby better preparing students for gainful employment in the sector.

Implementation Timeline: 2016 - 2017
Start Date: 11/13/2014
Completion Date: 05/25/2016
Status: Continued Action

Person(s) Responsible (Name and Position):
Thad Russell

Rationale (With supporting data):
See attached documents
Priority: High
Safety Issue: No
External Mandate: No
Mandate Explanation: Replacement Position

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<td>Research indicates clear positive correlation in student success when students are engaged with faculty beyond the classroom (Astin, CCSSE, O'Banion). In CTE disciplines the potential for long-term relationships with students well beyond graduation increases industry support. Adjunct instructors do not have the time or resources to develop and nurture relationships with industry partners or students which fosters the vitality of the program. Adjuncts have limited access and ability to maintain updated curriculum, SLOs, PLOs and assessments, which are vital to a successful program. All CTE programs benefit from a stable, lead or champion instructor. Linking to District Objectives: District Objective 1.1 - The ICT program has consistently high enrollment. A full-time, tenure-track instructor is necessary to maintain and increase these numbers based upon the necessity for updating and improving the program to meet industry standards. District Objective 2.2 - As noted above, research supports the necessity of a full-time instructor and the commitment of the division to a given program to maintain or increase student attainment of degrees or certificates. District Objective 2.4 - As noted above, research supports the necessity of a full-time instructor and the commitment of the division to a given program to maintain or increase student attainment of degrees or certificates. See attached...</td>
<td>Astin, A. W. (1993). What matters in college? Four critical years revisited. San Francisco, CA: HarperCollins. Center for Community College Student Engagement. (n.d.). Academic and social support network. O'Banion, T. (2013). Completion begins and ends in the classroom. Community College Daily. <a href="http://www.ccdaily.com/Pages/Campus-Issues/Completion-begins-and-ends-in-the-">http://www.ccdaily.com/Pages/Campus-Issues/Completion-begins-and-ends-in-the-</a></td>
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**Related Documents:**
- FT Instr.docx

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* District Objectives - 2.4 - Increase Career Technical Education course success rates and program completion annually.
* District Objectives - 3.1 - Reduce the achievement gap of disproportionately impacted student groups annually, as identified in the Student Equity Plan.
**Unit Assessment Report - Four Column**

**College of the Sequoias**

**Program Review - Information Technology**

Prepared by: Frank Tebeau & Thad Russell

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### Actions
- Program Review - Information Technology - Existing course and certificate modification - Update and modify existing courses and certificates.
- COMPTIA A+, IT 210, IT 211, IT 212
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**Add Resource Request for Action & Why is this resource required for this action? / Tasks**

**Resource Description:** Faculty time for updating courses and certificates.

**Resource Type:** Faculty- New/Replacement

**Updates**

**Update on Resource Allocation Effectiveness & Additional Comment**
<table>
<thead>
<tr>
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**Implementation Timeline:**
2014 - 2015

**Start Date:**
01/14/2014

**Completion Date:**
01/14/2015

**Status:**
Completed

**Person(s) Responsible (Name and Position):**
Ramyar Alavi-Moghaddam

**Rationale (With supporting data):**
See attached documents

**Priority:**
High

**Safety Issue:**
No

**External Mandate:**
Yes

**Mandate Explanation:**
Advisory committee recommendations

Program Review - Information Technology - Creation of new courses and certificates - Create additional courses and certificates.

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**Rationale (With supporting data):**
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No

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**Mandate Explanation:**
Advisory committee recommendations

Program Review - Information Technology - Creation of an ICT associate degree program - Create an associate ICT degree.
Research the need for and industry application of ICT Associate of Science degree with development of degree as stated goal.

**Resource Description:**
Full-time, tenure-track faculty member

**Resource Type:**
Faculty - New/Replacement

**Why is this resource required for this action?:**
10/21/2015 11:27 AM

Generated by TracDat a product of Nuventive.
### Program Review - Information Technology - Improve student success, strengthen and maintain industry ties and course and program relevancy - Through the hiring of a full-time faculty member, student success will be strengthened and courses, including SLOs and PLOs will be updated to reflect industry demands and needs. Thereby better preparing students for gainful employment in the sector.

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Thad Russell

**Rationale (With supporting data):**
See attached documents

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**Safety Issue:**
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**Linking to District Objectives:**
District Objective 1.1 - The ICT program has consistently high enrollment. A full-time, tenure-track instructor is necessary to maintain and increase these numbers based upon the necessity

10/21/2015 11:27 AM

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<td><strong>Cost Estimate:</strong></td>
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