

# Comprehensive Program Review Report



## Program Review - Information Technology

### Program Summary

#### 2022-2023

**Prepared by:** Ramyar Alavi-Moghaddam

**What are the strengths of your area?:** The ICT program is having a banner Fall 2022. I had two introductory courses with waiting lists as a result a second section was added which filled up to the required capacity. Have continued to place students into internship opportunities and in some cases full time position in industry.

**What improvements are needed?:** Focused effort on having IT in person tours for various IT facilities through my industry advisory members. Looking at replacing some courses to make sure my program stays relevant with industry needs. This will be achieved through direct interaction with the Industry Advisory committee. Their feedback and recommendations are crucial to this end.

**Describe any external opportunities or challenges.:** 1. Working with K-12 institutions to promote my program and possibly have students take ICT courses at COS.

**Outcome cycle evaluation:** Currently the program outcomes are inline with COS ILOs. Students in the ICT program are working in industry through internship, project based opportunities, and full time positions (refer to the ICT website for a list of students currently employed in industry).

**Overall SLO Achievement:** SLOs have been entered into TracDat and will be completed in 2021-2022.

**Changes Based on SLO Achievement:** None

**Overall PLO Achievement:** PLOs have been entered into TracDat and will be completed in 2021-2022.

**Changes Based on PLO Achievement:** None

### Action: 2022-2023 Provide updated curriculum to students by replacing outdated courses

Work on changing out ICT-211, and 212 with possibly Introductory course in Linux OS. Moving ICT-235 form an elective to requirement.

**Leave Blank:**

**Implementation Timeline:** 2022 - 2023

**Leave Blank:**

**Leave Blank:**

**Identify related course/program outcomes:** Provide an overview of Linux operating system which is utilize in larger size networks. Having background in virtualization is a key component to success in industry when it comes to network support. The combination of these to course offering will provide a better chance for student employment after completion of certificates and/or the A.S. in Information Communication Technology.

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

**Rationale (With supporting data):** My industry advisory have voiced a need for students to understand virtualization at a basic level. Furthermore, they have asked about the possibility of adding a course in Linux since they utilize this technology at various areas in their network.

**Priority:** High

**Safety Issue:** No

**External Mandate:** Yes

**Safety/Mandate Explanation:** I will have to put these changes through Course Leaf for approval once my industry advisory members approve the change. It may take a year or so before full implementation.

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## Link Actions to District Objectives

District Objectives: 2018-2021
<b>District Objective 2.1</b> - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years
<b>District Objective 2.4</b> - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points
District Objectives: 2021-2025
<b>District Objective 2.4</b> - Increase the percentage of CTE students who achieve their employment objectives by five percentage points (job closely related to field of study and attainment of a livable wage) and the number of CTE students who successfully complete 9+ CTE units in a single year by 10% from 2021-2025.

## Action: 2022-2023; Increase enrollment by marketing the ICT Program

Grow the ICT program through partnering with high schools. This will include coordination with I & T high school liaison to share what is available in terms of programs, and industry job opportunities.

**Leave Blank:**

**Implementation Timeline:** 2022 - 2023

**Leave Blank:**

**Leave Blank:**

**Identify related course/program outcomes:**

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

**Rationale (With supporting data):** This action will improve enrollment in the ICT program. It will also provide valuable information regarding local internship and job opportunities.

**Priority:** High

**Safety Issue:** No

**External Mandate:** No

**Safety/Mandate Explanation:**

## Link Actions to District Objectives

District Objectives: 2018-2021
<b>District Objective 2.1</b> - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years
<b>District Objective 2.4</b> - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points
District Objectives: 2021-2025
<b>District Objective 1.1</b> - The District will increase FTES 2% from 2021 to 2025.
<b>District Objective 2.1</b> - Increase the number of students who earn an associate degree or certificate (CTE and non-CTE) by 5% from 2021-2025.

## Action: 2022-2023 ICT marketing and increase WBL opportunities for students

Provide informational tours twice a year (Fall and Spring semesters) for students. Have a system of referring students to industry partners for internship, job shadowing, and volunteer opportunities .

**Leave Blank:** Continued Action

# Program Review - Information Technology

**Implementation Timeline:** 2022 - 2023

**Leave Blank:**

**Leave Blank:**

**Identify related course/program outcomes:** Provide industry experience through internships, job shadowing, and volunteer work with industry partners.

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

**Rationale (With supporting data):** Two year technology degrees will be the main component in economic growth in the south valley for the coming years.

**Priority:** High

**Safety Issue:** No

**External Mandate:** No

**Safety/Mandate Explanation:**

## Link Actions to District Objectives

District Objectives: 2018-2021
<b>District Objective 2.1</b> - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years
<b>District Objective 2.4</b> - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points
District Objectives: 2015-2018
<b>District Objectives</b> - 1.1 - Increase overall enrollment by 1.75% annually
<b>District Objectives</b> - 2.1 - Increase the number of students who are transfer-prepared annually.
<b>District Objectives</b> - 2.4 - Increase Career Technical Education course success rates and program completion annually.
District Objectives: 2021-2025
<b>District Objective 2.4</b> - Increase the percentage of CTE students who achieve their employment objectives by five percentage points (job closely related to field of study and attainment of a livable wage) and the number of CTE students who successfully complete 9+ CTE units in a single year by 10% from 2021-2025.

## Action: 2020-2021 Pursue training in Cyber Security to provide up to date curriculum and course work in the ICT program.

Seek out training opportunity, and building curriculum toward offering relevant course work that meets Industry demands. In this case Cyber Security which is an important part of every IT departments responsibility in an organization.

**Leave Blank:** Continued Action

**Implementation Timeline:** 2020 - 2021, 2021 - 2022

**Leave Blank:** 09/03/2021

**Leave Blank:** 12/31/2022

**Identify related course/program outcomes:** This course will show teach students the most effective steps to prevent attacks and detect adversaries with actionable techniques on network systems. They will learn tips and tricks designed to help you win the battle against the wide range of cyber adversaries that want to harm a given IT environment.

**Person(s) Responsible (Name and Position):** Ramyar Alavi-Moghaddam ICT full time faculty

**Rationale (With supporting data):** Courses work is currently offered (ICT-230 Network Security Fundamentals). However this will provide any updates needed and access if additional course offerings are warranted.

**Priority:** High

**Safety Issue:** No

**External Mandate:** No

**Safety/Mandate Explanation:**

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**Equipment - Non-Instructional** - Training to keep abreast of latest developments and demands for Cyber Security professionals. (Active)

**Why is this resource required for this action?:** Cyber Security is an important part of an IT departments overall responsibility. In order to protect an organizations technology assets it's crucial for students to have relevant training and experience in this area.

**Notes (optional):** It is important to keep our current course offering up to date. Additionally we need to evaluate if providing additional course work is warranted while trying to remain relevant to industry demands.

**Cost of Request (Nothing will be funded over the amount listed.):** 10000

## *Link Actions to District Objectives*

District Objectives: 2018-2021

**District Objective 2.1** - Increase the percentage of students who earn an associate degree or certificate (CTE and Non-CTE) by 5 percentage points over three years

**District Objective 2.4** - By 2021, Increase the percentage of CTE students who achieve their employment objectives by 5 percentage points

District Objectives: 2015-2018

**District Objectives** - 2.4 - Increase Career Technical Education course success rates and program completion annually.

**District Objectives** - 3.2 - Increase training for academic and student services staff and faculty to respond to the unique needs of our student population.