Santa Ana College

Computer Science (CS/CIS) Dept. Advisory Meeting Minutes

Friday, July 21st, 2023 6:30 pm - 8:30 pm Zoom

Meeting Purpose: Business professionals, faculty, administrators, and students provide guidance and feedback as partners to improve curriculum development, delivery, and promotion of academic programs for the departments to achieve quality and relevance.

I. Introductions

- a) Jason Sim, CA Dept. Co-Chair 6:30 pm
- b) Hugh Nguyen, CIS Dept, Co-Chair 6:30 pm
- c) Ernest Garrison, CIS Dept, Instructor 6:30 pm
- d) Attendance list included at the end of the minutes.

II. Advisory Committee Member Introductions

a) All attendees introduced themselves with their names and job title.

III. Department Introduction - CS and CIS

- a) Jason Sim & Hugh Nguyen introduce.
- IV. CS Courses & Programs (Jason Sim)

a) Backend Engineering - Certificate of Achievement

- i) CMPR112 Java Programming
- ii) CMPR113 Advanced Java Programming
- iii) CMPR114 Python Programming
- iv) CMPR168 Advanced Access Database
- v) CMPR169 SQL
- b) Motion to approve: All committee members.
- c) Approved unanimously.
- d) Summary: it was concluded that client server programming is in demand, and employers are looking for a technical specialist who has knowledge of front-end applications, and back-end databases.

V. CS – Courses & Programs (Jason Sim)

a) Artificial Intelligence- Certificate of Achievement

- i) CMPR114 Python Programming
- ii) CMPR115 Python Data Analytics
- iii) /CMPR158 Intro to AI
- iv) CMPR159 Intro to Machine Learning
- v) CMPR160 Intro to Neural Networks
- b) Motion to approve: All committee members.
- c) Approved unanimously.
- d) Summary: It was concluded that the future of tech is in Machine Learning and AI. Students can be prepared to enter the workforce or transfer to a four-year university. According to the panel, an estimated 5% of companies use some kind of AI platform, however, in 2030 that is expected to grow to 50%.

VI. CS - Courses & Programs (Ernest Garrison)

a) IoT - Certificate of Achievement

- i) CMPR212 Designing and Integrating IoT Devices
- ii) CMPR114 Python Programming
- iii) CMPR138 CompTIA Network +
- iv) CMPR139 Intro to Cloud
- v) CMPR175 CompTIA Security +
- b) Motion to approve: All committee members.
- c) Approved unanimously.
- d) Summary: It was concluded that IoT is in demand and will only increase as billions of devices are connected to the Internet, and networks.

VII. CS - Courses & Programs (Hugh Nguyen)

a) Program revision: Enterprise Systems to IT Cloud Engineer – Certificate of Achievement, 15 units

- i) CMPR 138 CompTIA Network+ Guide to Networks
- ii) CMPR 139 Introduction to Cloud Computing (Cloud+ & AWS Cloud Practitioner)
- iii) CMPR 175 CompTIA Security+ Guide to Network Security
- iv) CMPR 176 Linux Administration (can be developed, if not, what course?)
- v) CMPR 247 Windows Server Operating System (revise to CompTIA Server+ to include Linux Administration?)
- e) Motion to approve: All committee members.

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f) Approved unanimously.

Summary: More Python programming/scripting/automation content; feedback about renaming Windows Operating System/Server Operating System is still in the talks

Hugh's question to the committee: Which Linux certification should the Linux Administration course be based on?

- A. CompTIA Linux+
- B. Linux Professional Institute (LPI) LPIC-1
- C. Red Hat System Administration
- D. Other?

No conclusive answer from the committee since they are not fully aware of the different certifications.

VIII. CS – Courses & Programs (Hugh Nguyen)

a) IT Offensive Security Engineer - Certificate of Achievement, 15 units

- i) CMPR 138 CompTIA Network+ Guide to Networks
- ii) CMPR 139 Introduction to Cloud Computing (based both Cloud+ & AWS Cloud Practitioner/some Azure & GCP)
- iii) CMPR 175 CompTIA Security+ Guide to Network Security
- iv) CMPR 176 Linux Administration (can be developed)
- v) CMPR 177 Ethical Hacking (PenTest+ and parts of Certified Ethical Hacker)
- g) Motion to approve: All committee members.
- h) Approved unanimously; geared towards Offensive Security; gearing students towards Offensive Security material from Kali Linux creators.

IX. CS – Courses & Programs (Hugh Nguyen)

a) IT Cyber Engineer - Certificate of Achievement & Associate of Science

- i) CMPR 114 Python Programming
- ii) CMPR 134 Microsoft Windows Operating System
- iii) CMPR 138 CompTIA Network+ Guide to Networks
- iv) CMPR 139 Introduction to Cloud Computing
- v) CMPR 153 A+ Essentials Hardware
- vi) CMPR 155 A+ Essentials Software
- vii) CMPR 175 CompTIA Security+ Guide to Network Security
- viii) CMPR 176 Linux Administration (being developed)

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- ix) CMPR 177 Ethical Hacking
- x) CMPR 238 IT Capstone Project (2 units) (being developed)

Total units: 29 units

- a) Motion to approve: All committee members.
- b) Approved unanimously.
- VII. Questions and Comments for and from Advisory Board

The Industry Advisory Board reviewed and approved the certificates for Artificial Intelligence, Client Server Programming, and IoT.

Recommendations from board

- Change the name for Client Server Programming to Backend Engineering.
 - o Add POSTGRES and MYSQL to Client Server Programming.
 - Add AWS for the database courses. Companies are looking for database cloud skills.
 - Add topics for deployment of the project. Companies want incoming employees to have knowledge of project deployment.
 - Add a capstone project course, companies are looking for real-life projects that students can share on GIT HUB. Digital Portfolios are sought after.

VIII. Adjournment of Meeting – Entered the time by Jason Sim, the meeting ended at 8:30 pm

Computer Science Advisory Meeting Attendance

Attendance taking through Zoom.

7 attended.

First Name	Last Name	Title	Company/Organization	Email
Jason	Sim	Co-Chair/Associate Professor	Santa Ana College	Sim Jason@sac.edu
Hugh	Nguyen	Co-Chair/Associate Professor	Santa Ana College	Nguyen_Hugh@sac.edu
Ernest	Garrison	Instructor	Santa Ana College	Garrison_Ernest@sac.edu
Sean	Falconer	Senior Solutions Architect	AWS	sean.falconer@gmail.com
Quiyet	Brul	Software Engineer	Google	qbrul0514@gmail.com
Alicia	Ramos	Student Coordinator	Santa Ana College	alicia.a.ramos@gmail.com
Alex	Koster	Tech Director	Langer Juice Co.	kostera@uci.edu

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I.	Call to Order	Jason Sim	6:30
II.	Introductions	Jason Sim, Hugh Nguyen,	
		And Ernest Garrison	6:40
III.	Department Introduction – CS	Jason Sim	6:45
IV.	Department Introduction – CIS	Hugh Nguyen	6:50
٧.	Committee Introductions	Advisory Board	7:10
VI.	Review and Approve Agenda	ALL	7:20
VII.	Review and Approve Minutes	All	7:30
VIII	. Questions for Advisory	Advisory Board	7:45
IX.	CS Program	Jason Sim	7:50
Χ.	CIS Program	Hugh Nguyen	8:00
XI.	CIS Program	Ernest Garrison	8:10
XII.	Adjournment	All	8:30