

## **Minutes for Cybersecurity Industry Advisory Board (CIAB) Meeting**

**Friday April 16<sup>th</sup>, 2021 at 11:00am in Dr. Farag's Zoom Room**

**Attended by:** Dr. Waleed Farag, Dr. Xinwen Wu, Dr. Ezekiel, Mr. Robert Buckingham, Mr. Nigel Wright, Dr. Fredrick Adkins, Dr. Francisco Alarcon, Mr. Kevin Dodds, Mr. Tom Dugas, and Mr. Edward Pykosh

### **Previous Minutes:**

1. Amendment to Section 4 of Introductions
  - a. Change Kevin Dodds CIO to CSO
2. Dugas motions to approve previous minutes with amendments.
  - a. Seconded by Dodds.
  - b. The Motion passes unanimously!

### **Review of IUP Cybersecurity Programs:**

1. Purpose of these programs and this board is to better prepare IUP Students for their careers after graduating IUP
  - a. BS in Computer Science – Cybersecurity Track
  - b. Minor in Cybersecurity
  - c. Relevant COSC Courses

### **CIAB Recommendations Discussion:**

1. Minor in Criminology Requirement
  - a. Program was initial designed quite a while ago in conjunction with the Criminology Department hence this requirement.
  - b. Considered outdated and not determining factor for Cybersecurity.
  - c. Having it is an option is nice but limits the number of courses in Cybersecurity the student can take due to 120 credits limit.
  - d. Criminology minor would not be as highlighted for a hiring manager as compared to Offense Security and Penetration Testing courses - *Dugas 2<sup>nd</sup> by Dodds.*
  - e. Removing Criminology minor allows for more Cybersecurity based courses to focus more on more technical aspects of Cybersecurity.

- Note of 60 credits limit to major program – *Dr. Alarcon*
- f. Some CRIM courses that are useful for Cyber could stay instead of minor – *Adkins*.
- Examples would Digital Forensics - *Dugas*
    1. This is a COSC course that is currently being offered every 3 semesters.
    2. Potential move to a required course.
    3. Add Digital Forensics to Criminology 321.
- g. Make a certificate requirement instead for Criminology – *Dr. Alarcon*.
- Compensates for removal of minor and loss of IUP faculty due to enrollment and IUP restructure.
  - Less credits needed than a minor.
2. Removal and additions of various programming and scripting languages
- a. Removal of COBOL (COSC 220)
- Course will only be offered every 2 or 3 semesters.
    1. Recommended by Dr. Alarcon.
    2. Made as an elective for Computer Science students.
  - Appropriate administrative changes will be made for new and existing students.
- b. Idea to bring COSC 362 (Unix System) as requirement instead of elective, Dr. Farag.
- Only course that has a scripting focus as other courses focus on other programming languages.
  - Rewrite course description as current COSC 362 catalog description does not reference scripting as well as it could. – *Buckingham*.
  - Can replace COSC 473's spot as a required course.
3. Include Offensive Security such as Penetration Testing and Vulnerability Assessments as part of Cybersecurity requirement.
4. Track needs the addition of Cybersecurity Leadership, Governance, and Policy
- a. Exists partially in some courses (COSC 454, 216) but should be expanded upon as a unique course or more content in another course – *Drs. Wu and Farag*

5. Program must maintain its CAE requirements and standards throughout its changes – *Dr. Farag.*
6. Opinions on requirement of internship or capstone
  - a. Capstone and/or internship is valuable.
    - But only so many credits to go around.
    - But is helpful for students to transfer into a professional life.
  - b. Requiring an internship can be difficult but should be recommended for an internship.
  - c. 12 credits internship currently substitutes COSC 473 as an option.
7. Accreditation Query
  - a. We currently satisfy accreditation and have a nice amount of room to move courses around – *Dr. Farag*
  - b. Current weak point is Operating Systems course as a requirement and we had recently updated the track to make COSC 432 as a required course.

**Vice Chair for CIAB to serve as a backup chair of the Board:**

1. Duties:
  - a. Provide written recommendations and/or feedback on how we can improve our curriculum so that IUP graduates will better meet the needs of the industry.
    - i. Within two months of this meeting
  - b. Also, a backup chair for the CIAB
  - c. Vice Chair Shall be Tom Dugas!

**Meeting was adjourned at 11:55am**

**The next meeting of the IUP CIAB shall be Fall 2021 (2<sup>nd</sup> week of October - *Avoid October 12*) TBA**

Respectfully Submitted By: Edward Pykosh and Dr. Waleed Farag