

CYBER SECURITY PROGRAMMING
Business and Leadership Council Meeting Minutes

CHAIRPERSON: Karen Boatman		
MEETING DATE: SEPTEMBER 27, 2024	MEETING TIME: 3:30 PM	MEETING LOCATION: IO, ROOM 114
RECORDER: Collette DiAngi		PREVIOUS MEETING: 1 st Meeting

MEMBERS PRESENT: (P = Present) Add nonmembers to bottom of table with heading "Others Present."

P	Name and Title (List all)	Business Affiliation	Email	Best contact number
P	Tiffany LaFleur	Pantex	Flafleur21@actx.edu	806-679-2375
P	Ashley Golden	BSA	Ashley.golden@bsahs.org	806-212-8552
P	Star Rayburn, Owner	Skylabs Tecnology LLC	star@skylabstechnology.io	480-343-5451
P	Jeff Stoughton, Instructor	AMTech	Jeff.stoughton@amaisd.org	806-231-7008
P	David Neeley, Card Sys Mgr	Valero Payment Services	David.neeley@valero.com	806-324-4516
P	Zack Newbill, Sr. Software Dev.	AQHA	Znewbill41@gmail.com	Zack Newbill, Sr. Software Dev.
P	Trever Wagner, Instructor	AMTech	Trever.wagner@amisd.org	806-881-9733
P	Chandler Turner, Sr. Software Dev.	AQHA	contact@chandlerturner.com	806-223-3213
P	Shiloh Inthirath, IT Desktop Mg	BSA	Shiloh.inthirath@bsahs.org	806-930-9870
P	Zack Newbill, Sr. Software Dev.	AQHA	Znewbill41@gmail.com	Zack Newbill, Sr. Software Dev.
P	Kyla Collier, CTO/Owner	Kamino	kyla@kaminotech.com	806-576-8709
P	Karen Boatman, CIS Coordinator	Amarillo College	keboatman@actx.edu	806-371-5930

Advisory Board / Business and
Leadership Council

Program Name
Networking & Programming BLC Orientation

Date
September 27, 2024

P	Dr. Adrine Harrell-Carter, BCIS Department Chairperson	Amarillo College	ajharrellcarter@actx.edu	806-371-5671
P	Lynn Kenney, CIS Instructor	Amarillo College	L0504159@actx.edu	806-371-3249
P	Delane McUne, CIS Instructor	Amarillo College	S0059629@actx.edu	806-371-5220
P	Joseph Melius, CIS Instructor	Amarillo College	jamelius@actx.edu	806-371-5213
P	Timothy Vo, CIS Instructor	Amarillo College	Tvo212@actx.edu	806-371-5217
P	Imelda Saavedra	Amarillo College	I0339516@actx.edu	
P	Ryan Francis, Coordinator	Amarillo College	rfrancis@actx.edu	
P	Holly Hicks	Amarillo College	hlhicks@actx.edu	806-371-5383
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Minutes	
Key Discussion Points	Discussion
	N/A
Continuing Business:	N/A
Welcome:	The meeting commenced at 3:39 pm with a welcome by Karen Boatman and an opening up of the session by requesting each attendee to introduce themselves, stating their name, title, and company.
New Business:	<p>Karen stated that they would go over the program and inform them of any changes that were made over the past two years. Then they will proceed and talk about the build, what it means, how they will need to interact with them, and what they can do to help them. She then turned it over to Joseph Melius to discuss the program.</p> <p style="text-align: center;"><u>PROGRAMMING OVERVIEW:</u></p> <p>Joseph: explained that the Cybersecurity and Networking Program has two main components. One focuses on programming, specializing in application development and database topics, while the other side focuses on cybersecurity and networking. Joseph specifically discussed the programming aspect. This is the program's second run through of the VLC process, and it consists of three main portions.</p> <ol style="list-style-type: none">1. General Education requirements—we can't modify those, but those are our basics, like Math, English, Humanities, etc....2. Major course requirements—this is the bigger bulk of the degree; it consists of 11 courses.3. Four courses that are specifically for a student's major concentration selection, what they decided they want to do in addition to their normal core requirements.

It used to be inside of our full stack of specializations, but now it has moved to our core requirements. So, everyone takes this as a programming major.

Here are the four major course requirements known as our core classes. Firstly, we have the business computer application course, which provides a basic understanding of productivity applications. We also offer an Excel-centric application software problem-solving class, which now includes a focus on Python and GIT as per the committee's recommendations. Our beginning web page class and database programming class remain unchanged. However, we have introduced a new advanced database programming class, which has become a requirement for all programming majors.

The advanced database programming includes SQL, MYSQL, and no SQL topologies such as Mongo, so students will get exposure to a variety of technologies. We will introduce a new class to replace the old Computer Programming course. This change will take us back to the fundamental idea of application development. The new 16-week course will focus on Visual Studio C Sharp. The intermediate web page remains the same as in the previous round. Additionally, we have extended the advanced web programming course to 16 weeks and included a semester project for students to work on a BLC-driven project. Further details about the programming side of things will be discussed later in the process, including reaching out to industry leaders to provide a good project for the students to complete in our object-oriented programming class, which is brand new. This advanced course is also 16 weeks long and delves deeply into design paradigms for our programming students.

Our IT Essentials class remains unchanged but has been moved. Previously, students used to take this class right away in the first semester. Now, programming students will take it slightly later, when they are more committed to the program, and then have the option to choose their specializations. We offer the computer science specialization, and we have replaced the previous class in our mobile application development slot with an advanced mobile class. This change aims to provide computer science students with a more comprehensive application development focus, covering full stack development instead of just the command line side. We have also introduced a new class, systems analysis and design, which will serve as a capstone course, allowing students to create a fully well-rounded application at the end of their full stack development journey. The Game Design course remains unchanged. The IT track now includes our UNIX course and our Information Technology Security course, providing a more focused approach to IT-centric ideas. Additionally, our cloud computing course is located within the IT track.

We are working on moving the majority of our programming classes to 16 weeks. While most of our classes are still eight weeks long, we have successfully converted several to 16 weeks, with four classes currently in development. Two of these are finishing up their development cycles, and we are redesigning two new courses in the spring. On the industry affiliation side, our networking and cybersecurity courses heavily focus on certification matching. However,

we lack this luxury on the programming side, though some classes do offer certifications such as Office Productivity courses, Microsoft MOS, and advanced certifications in IT essentials. Students following the IT track can pursue A+ and Security certifications, as well as SECURITY+ and AZURE fundamentals and SE 900 certifications. We are open to suggestions for more certifications that we could potentially include for programming students.

CYBERSECURITY PROGRAMMING OVERVIEW:

Delane: discussed various components of the program. Firstly, we have multiple industry affiliations. We are partnered with CompTIA and are part of the CompTIA Academy Partnership Program. As part of this partnership, our students receive discounted vouchers for any CompTIA test they take, allowing us to encourage certifications more effectively, as students can obtain them at a lower cost while they are still students, compared to industry pricing. Additionally, we are a Cisco Networking Academy, with a primary focus on Cisco, a leading provider of networking. Our AMTech partners also work with Cisco and offer a similar program. We have three different Cisco courses with the necessary equipment for students to go through labs and practical work with Cisco. We are also partnered with Microsoft Learn for Educators, primarily for Cloud Computing. After initially focusing on Amazon, we switched to Azure based on the recommendations of the BLC and our business partners. Delane also provided an overview of the different classes in the program. The first one is BCIS 1305, which is the same for all students, regardless of their specialization in programming, networking, or cybersecurity. Additionally, we offer CMT and IT Essentials as essential classes for all CIS students.

First, we start with the CCNA I, which is the initial Cisco class and is linked to our Network+ certificates. Students can obtain these certificates at our AMTech partner as well. Next, we offer an IT Security class tied to our Security+ certification. Both classes are taught at AMTech, where students can also obtain the certifications. Students can complete an entire certificate at AMTech before coming to Amarillo College. Then, we move on to the Server Plus, our Advanced Networking class. Following that, we have the Cisco with IPCC, our second Cisco class, which does not have a certification but prepares students for the CCNA after the third class. We also discussed the teaching of the UNIX class at our last BLC meeting, emphasizing the need to establish the right foundations for the course. The UNIX class is similar to other classes at AMTech, and we are still ensuring that students have the necessary foundation before progressing. Additionally, we offer Digital Forensics and Digital Forensics tools. Currently, we do not offer a certification in that area. However, we are exploring options related to it as it is a growing field. Our Legal Studies students also take those two classes. Additionally, we have a Digital Forensics certificate. We've made significant changes to the Intrusion Detection course from the last time we reviewed it. This course is linked to one of the CompTIA certifications, and students can obtain their CYSA+ certification there. The Intrusion and Detection class is taken in the second year and has been extended to 16 weeks. In the second half of the course,

students have the opportunity to participate in an internship, and we are closely collaborating with the HIS stem grant team. We completed our first cycle of these internships last fall, which was a great success and the students loved it. Some students also participated in summer internships with HIS. We are expanding our internship program to provide students with the opportunity to gain experience in their desired field before graduation. We have revamped the entire course to include these internships.

We are focusing on two areas of Azure: Azure fundamentals, which is for the AZ 900 exam for Microsoft, and SC900, which covers the Security Compliance aspect necessary for certification with Microsoft Azure. These topics are taught in the fundamentals of Cloud course. In the following semester, students will take Advanced Cloud, where they will learn about Cloud Administration and prepare for the AZ 104 Certification, as well as the third Cisco class, CCNA III, which prepares them to take the CCNA exam. Additionally, they will take an advanced LINUX class after completing the UNIX class, and will also prepare for CompTIA certification and study Security Management Practices.

We have introduced the Pen Test Plus, which involves conducting penetration testing. Unlike the programming side, we don't have specific tracks. We believe that these classes are essential for students to become well-rounded in networking and cybersecurity. We debated whether our coding students should take the A+ exam and initially removed the A+ requirement. However, due to a new funding model in the State of Texas for community colleges, which rewards certifications, we will be reinstating the A+ certification requirement in the upcoming spring. All students in the CIS program will be required to take both the A+ exams, Core I and II, while they are taking the course. They will have the opportunity to take advantage of the CompTIA discount. If this approach is successful, we will consider implementing similar requirements for our cybersecurity and networking courses. Passing the A+ exams are not mandatory. We have a rubric, created by Mrs. Boatman and a previous instructor, Mr. Douglas, which is based on a pass/fail grade. If a student scores 100 on the final exam part one (which accounts for 20% of their grade) and passes the second part, they will receive an A in the class. This is our way of ensuring students' success.

Delane confirmed that all the information discussed in the meeting was provided in the portfolios. She, Joseph, and Karen's contact information was also included in case anyone had any questions. Delane also inquired about which side of the house the participants would prefer to participate in: the Programming BLC or the Networking and Cybersecurity BLC. She mentioned that this was the only meeting they would have together, and after this, there would be separate BLC meetings. Participants were asked to fill out the contact form located in the portfolio. The portfolio also contains a list of all the certificates offered in both programs. The blue certificates are for Programming, and the ones in green text and green boxes are for Cyber Security. The program provides stackable credentials, meaning participants receive lower-level certificates as they progress through the program and work towards their Associate Degree. They will receive all certificates except on the programming side. For example, game students will receive the game design certificate, and full stack students will receive the full stack certificate, among others.

Karen introduced Timothy Vo who teaches the programming and networking side.

Timothy: stated if you want AmTech certifications, the one thing that we can give our students is the computer network essentials that want to know they can actually leave our program with all of those, and so if they can come here with A+ and Security+ already done before they get to Amarillo College.

Question from the floor: “If a student comes in with a security+ without a formal education, do you give them credit”?

Delane: “We do. If they have a current valid one. But if they have any of the certifications that we offer, including an MOS certification, we give them credit for that course. There’s a process by licensure, and we go through the process of credit by licensure, and it costs them, about \$5 a credit hour or something like that to get that credit. So, it’s a good way of doing it. We’ve had lots of people come in with some of those certifications and can skip those courses.

Karen: Veterans come in that have already been trained and they will bring those certifications to us and we will just transfer those right in and get them on the right track.

Delane: It’s very easy to do, especially on the networking cybersecurity side, because we have aligned them so well.

BLC PROCESS:

Ryan: How can we streamline the process for students to acquire the necessary skills, potentially with your help as employers, and ensure that they are properly equipped? Let's reflect on your initial job in the industry. How can we make that process easier for you to learn the skills that are in line with industry requirements? I would like to commend the faculty for engaging in discussions yesterday and today, and for learning from the previous Business Leadership Council (BLC) cycle. Who participated last year? How beneficial was the process? It was truly remarkable, right? It's great to see how much the faculty cares about the students and values your feedback. You have heard from all the information just presented how they have implemented your suggestions and are committed to continuous improvement. For those who are new to the process, welcome. I will provide a brief overview of what this process entails with the Business Leadership Council. I understand that we love acronyms in education. How many more acronyms can we have, right? However, this is our Business Leadership Council, similar to advisory boards, but far more deliberate, focused, and dedicated to processing feedback and putting it into action. I will provide a quick overview, especially for those who are new, so you understand what to expect and the significance of your feedback, and where it leads. The purpose of the Business Leadership Council, which today is an orientation meeting, is to establish lasting relationships that ensure curriculum design and credentials meet industry needs. You are not just

passive participants. You are actively involved. Feel free to interrupt me at any time. This is your meeting. This is the most we will speak because it's an orientation. We are orienting you, so thank you for listening. You are co-leaders, guiding us to where we need to be because you are where the students are headed. We want increased engagement, achieved through strategically scheduled meetings throughout the year. We aim to shape the curriculum to produce graduates ready for the workforce, which I'm sure you understand by now, and also to provide business value if you work in HR. Recruitment is costly, complex, and a comprehensive process, and we want you to not have to worry about that. Just come to us. We've got someone for you, right? That's our focus. Ensuring that our students have the skills the workforce requires in your industry, so that when you approach us, we have suitable candidates ready. You are supporting the reform of Workforce Education, contributing to our regional economy, and serving as thought leaders who understand your industry better than anyone else in our area, addressing specific workforce needs, which will be essential when I discuss KSAs (knowledge, skills, and abilities), enhancing the link between education and business partnerships. I know that as a result of the previous BLC cycle, you introduced a work-based learning course and an internship course. How much does that help a student in securing a job when they have completed an internship? This is a result of your feedback, improving the alignment, as I mentioned, and addressing your constantly changing and evolving needs. How do we keep up with the fast pace of business? Well, we need businesses to be a major part of the conversation. We will figure out the educational aspects. Tell us what you need so that if you're in HR, you can reduce your recruiting and training budgets. We will train individuals the way you need them to be trained, saving you a lot of hassle so they can hit the ground running. Through collaborative sector-based networks, I have participated in numerous programs across different sectors. Many times, businesses gain significant value just from being in a room with other businesses. Sometimes they form collaborations out of the blue. And we won't charge you for that. Isn't that great? You get to exchange ideas and discuss what's happening in the sector, creating a steady, sustainable talent pipeline. We want to be your top choice. We want to be the first ones you think of when you're considering your next employee. Above all, we want to serve the students. That's what I hear from the faculty, from the staff, and that's what you know AC is about. That's why we have a culture of caring, right? They come to us because they want value from the relationship with AC, and the best way we can provide that is by equipping them with the right skills. So how does that process facilitates that level of engagement with you and getting feedback. Well, frequency, we know when those meetings are going to be scheduling them out and having them consistently so that we can get that feedback and keep that relationship. Specificity!

"We are currently having intense conversations about specific skills. We are in the process of revamping the Knowledge, Skills, and Abilities (KSAs) from last year. The KSAs will look different and will be more specific while still addressing broader concepts. We want to bridge the gap between overall concepts and specific skills and gather feedback to improve. Input during the KSA meeting is crucial, and we encourage everyone to speak up, especially now that the KSAs will be more specific. The depth of input in the discussion during the KSA meeting is incredibly

valuable, and we appreciate the insight from industry leaders. The last point to consider is being industry-led. Does anyone have any questions about what I've said so far?

Now, I'll provide a brief overview of KSAs. Has anyone heard of Knowledge, Skills, and Abilities and how they are included in resumes? I've noticed that it's a trend with HR and resumes. Knowledge describes what the student needs to know and be aware of; for example, being introduced to object-oriented programming concepts. Skills refer to the student's ability to carry out the work, such as writing efficient and maintainable code, debugging, and troubleshooting. Abilities are more innate skills, like customer service, which is kind of up to the individual. We're interested in hearing about what you look for when hiring.

With our KSA process, you'll be scoring the KSAs, and then we'll send out the voting. We'll have discussions about how the scores were determined, which will provide valuable insights. This process helps us understand more about our regional economy and employers, and your input is crucial. Thank you for being part of the process and for your valuable input. I hope you see the impact of your involvement. Does anyone have any questions or need further clarification on any of the points I've covered?"

Delane: Clarified the definition of the Business Leadership Council and also

We are currently working on the list of cases, as Ryan mentioned. One of the things we're going to do is use a Google form for voting instead of the program called calibrate that we used last time. Ryan is creating the form for us. It will handle all the calculations, so we only need to export the data into Google and take care of the other details. It's going to be a smoother process for us this time. We didn't hate using calibrate; it was actually a very useful tool for us at the time. But I'm glad to see that we're moving on. So, because we're working on that, if we go to the bottom of the agenda, it says that voting will be sent out the week of October 21, but I believe it's actually going to be on the 28th. The 21st is right after fall break, and we want to give ourselves a week to come back and make sure everything is okay. So, the agenda is correct; the voting will open on the 28th. We'll give you two weeks to vote, and voting will close on November 8. This will give us a chance to have about a week or so, and then we'll have two separate meetings, probably in mid-November, before the holiday season starts. This will give us a chance to get the KSAs from you and work on them. We can then have a meeting in February or early March to go over them. This will allow us to go through the cycle a lot quicker than in previous cycles.

Karen: The idea behind this is that if we need to make any curriculum changes, we still have time to go to our school's curriculum committee, get the changes submitted and processed, and hopefully get them implemented in the fall. We're aiming to speed up this process a little bit. Education is typically slow, but we're hoping to speed things up.

Delane: As you are thinking about your contact form. Please make sure that the dates listed for the BLC are dates that you can commit to the ones? So, if you're going to do the networking cybersecurity, it would be on the 15th. If

	<p>you were doing the programming, it would be on the 22nd of November. Are there any major conflicts that we would have that we wouldn't be able to do them on those days?</p> <p>Karen: "We'll have to send this out via email. Several people couldn't attend today because they were traveling. They asked to be kept on the list because they didn't want to miss the orientation. We'll need to send out an email to confirm if the proposed dates work for everyone."</p> <p>Delane: "I mean, at least we have a target for it now, and hopefully that's far enough out. We're a couple of months away, so I'm hoping we can get it on people's calendars early enough. Also, I wanted to ask if Friday's work for everyone, as we assume it's the best day. We teach Monday through Thursday, so it's hard for all of us to get in the same room those days, but Friday works for us. We also want to ensure that the timing is good for everyone. Are our Fridays good for you? Is late afternoon, like 3:30 or 3:00, ideal?"</p> <p>Karen gave reasoning for a few committee members absences for the meeting and others that rsvp'd that should have been there but something came up and could not attend the meeting.</p> <p>Speaker 3: mentioned he would like to get his companies new management person on board. And Delane stated "we need to get them through the orientation process before the voting starts.</p> <p>Delane: If you can think of someone for internships as you are going through the process, someone you know, not just necessarily in your organization, but if you know of a peer that be good for us that we think you know because we are really interested in getting what does our industry need? It's you know we can, we can look, ok, this what they're hiring for in Dallas. And I know that good amount of our students will end up not necessarily staying in Amarillo, but if we keep can keep them here with jobs that are here we can build the right skill set for them, for the jobs that are here.</p> <p>Karen & Delane: Any further questions, comments, or concerns?</p>
Curriculum Decisions:	

Advisory Board / Business and
Leadership Council

Program Name
Networking & Programming BLC Orientation

Date
September 27, 2024

Other:	
Adjourn:	Meeting Adjourned at 4:23 pm

Committee Chairperson: Karen E. Boatman	MEETING DATE: 9/27/2024	NEXT MEETING:
Recorder's Signature: Collette DiAngi <i>Collette V. DiAngi</i>	02/14/2025	
DEPARTMENTAL CHAIRPERSON SIGNATURE: <i>Karen Boatman</i>	DATE: 02/14/2025	
DIVISION DEAN'S SIGNATURE <i>Edie Carter</i>	DATE: 02/14/2025	