Does anyone have any cybersecurity competition resources as a course or can someone direct us to a link with such resources?

Bay Area Community College Consortium: I have attached to course outline templates for our summer CyberPatriot summer camps.
See attached: Template_CyberCamp_Advance_Course_Outline, Template_CyberCamp_Introductory_Course_Outline

College of Marin: I and several others instructors have used NCL, National Cyberleague as courses. There is a coach’s or instructor’s dashboard which gives you reports on students’ status and points earned. Very easy to convert into grades. Other thing good about NCL is in one class you can have beginners, intermediate and advanced students all in the same class. If you make a four-sequence class, Cybersecurity 150, 151, 152, 153 you can deal with the repeatability issue.
What they don’t have is a course description or syllabus. For that just use one for any cyber security course such as CompTIA’s security + class. If your college has a no text book initiative this class does not need a text book.
If you run NCL as a class you will automagically see students start working in groups to solve problems. And with no textbook it forces them to do research on their own. The other good think about NCL is there is no beginning and end, meaning it’s not linear. Students can work on any of the problems in any order there is no sequence they have to follow. This is good because if you have students who know nothing about cyber security they can pick the questions they might have some interest or exposure to.
Other thing I make students do is give mini-presentations throughout the semester on a cybersecurity tool they used to solve one of the questions. This allows other students to ask questions and learn. Don’t make it a formal presentation. I do it in the format of a team or department meeting as if they had a job and needed to explain what they found to other employees and senior management.
After having done this for several semesters I can tell you this works and students loved it. I mean really love it. You will find student who might not have any interest or experience with cyber security are now interested. Feedback from potential employers is they love it too because students have actual hands-on experience using the tools to solve actual cybercrimes.
If you offer this class once, you will find students talk and the class will be filled or over capacity following semesters. Or at least that has been my experience.
Your challenge is going to be to get your administration to support you. This is not a traditional class where you lecture and students do a lab. It’s more flipped. Students are given the problem and then you lecture so they understand the technology. The advantage here for you as an instructor is the students want to hear your lecture to solve the problem.
Having now done this for many semesters I can tell you this works and my students are getting jobs. No certifications needed. NCL provides students with a National ranking number. It’s where they stand in relation to other students nationally. That number they can use on their resume and transcript.
I hope you find this helpful. There are other cyber competitions out there I encourage my students participate in, but they don’t have a coach’s console. Sam Bowne at City College San Francisco has written a coach’s console but it will take you time to customize. More this than I care to invest so I just give students extra credit for participating and scoring points.
If there is one program you should teach your students to learn how to use for cyber security it is Microsoft’s OneNote. That is the one too, I have found that allows students to make notes, take screenshots, and insert programs and snippets of code so they can find it later when they need it. I have found this one program makes an enormous difference. And it’s free!
I would be happy to share my intro PowerPoints with any instructors or if you want remote lecturer to get your students interested/started let me know. I’ve been trying without success to start mentoring program for instructors who are in your exact situation to help you get your program going. The permitting would be willing to mentor you and your students to get you going and so you can learn from all of my mistakes and leverage my successes.

SUNY Erie Community College: You can subscribe to the CyberUSA newsletter. There are also numerous FREE resources available at their "not secured" site!  http://www.uscybersecurity.net/subscribe/

What topics should be covered in an “Intro to IT” course? The idea is to cover all areas of IT in order to help students identify and understand potential career paths.

South Plains College: In our BCIS 1305 class, which is mostly a Microsoft application course, we cover "Intro to IT" in the beginning of the course - our first exam. We use Pearson's Technology in Action textbook, which covers almost all aspects of IT, career opportunities, and emerging technologies. Here is a link to it and list of contents. https://www.pearson.com/us/higher-education/program/Evans-Technology-In-Action-Complete-15th-Edition/PGM1865372.html?tab=contents

University of North Texas: We have converted our old Intro course to follow the rubrics for the CS Principles course which can also be offered in High School to prep for the AP Exam. It covers Critical Thinking, Problem solving and basic computing principles like algorithm, data organization etc. There is existing curriculum from a couple different camps. We use the “Beauty and Joy of Computing” program from Berkley

Houston Community College: As Patrick mentioned, HCC has same BCIS 1305 class. We also cover introductory topics on IT at the beginning of the class. We are using Pearson's MyITLab with textbook “Exploring Microsoft Office 2016, Volume 1 By Poatsy, Mulbery, Krebs, Hogan, Cameron, Davidson, Lau, Lawson, Williams © 2017 by Pearson Education, Inc. ISBN 10: 0134563352 OR ISBN 13: 9780134563350
This Textbook bundle includes the following (3) items:
1. Office 2016 book AND
2. Required MyLab IT Access Code AND
3. Microsoft Office Trial Access Card (for those who don’t have Office 2016).

Tarrant County College: At Tarrant County College District, we have used many programs on the market over the years for two courses that we teach:  COSC 1301 – Introduction to Computing and BCIS 1305 –Business Computer Applications. For each course, we use a different textbook and different simulation hands-on projects for students. For the past three years, we have used SimNet by McGraw-Hill; MyITLab by Pearson three years before, and this fall we will be changing to SAM by Cengage Learning.
None of these products are better than the other (from our faculty point-of-view), as the objectives are similar. But we change our textbook for these courses every three years based on a presentation provided by the vendor and who can provide the lowest textbook and a simulation code price for our students. Attached is a copy of our district syllabus for each course.
The focus of both courses:
• Concepts
• Hands-on Projects with MS Office (current version; always subject to change)
• Completing in class real-world projects
See attached: BCIS1305 and COSC1301

SUNY Erie Community College: Anyone using the CompTIA IT Essentials (may have the name wrong) Intro course materials for their Intro to IT class? They say it is for tech and non-tech students. I didn’t review the materials yet.
Also, anyone teach an Advanced Excel course? Our workforce wants these skills and I’m wondering if I should develop a “new” course or just incorporate into an existing course. I don’t know if I really need a 3-credit class for this.

Calhoun Community College: We teach An Excel course that maps to Microsoft Office Excel expert exam and we’re looking at the CompTIA IT Fundamentals. We have to find a course to add to our curriculum that maps to it.

South Plains College: Same here - we teach an advanced spreadsheet course ITSW 2334 and it is structured for the MOS exam on Excel.

Herzing University: CompTIA IT Fundamentals is okay; Cisco Network Essential is also a good course for intro IT. Students will need add additional introduction to Windows 10 and AWS cloud. We do have advanced Excel class for business students. I suggest teaching Excel with Microsoft PowerBI (free software). Business students must learn the SQL, database and web design. This year at our BILT meeting one business owner said “when I hire new business employee, I need them know SQL and database.”

1. Is your college moving towards an eight-week course compare to the traditional sixteen-week course?
2. If your college is currently doing an eight-week course, how successful is it? Are the students passing the course or completing it? Is it better compare to the traditional sixteen-week format?

Waukesha County Technical College: Yes, we are being convinced that 8-week is more successful than 16-week, however, that does not seem to be what we see. Intro to Programming moved 16 to 8 and was not successful, moving back to 16 weeks in fall. Many of the Computer Support moved from 16- to 8- with lots of success; mixed success with Networking.
Evening networking more successful with the 8-week classes from working adults, but less successful with the younger students. We are doing 16-week day classes and 8-week evening classes. Fall will have a mix of 8 and 16 and I will be continuing to look at this as well.
We also did the 16-week, meet every other week. That was NUTS and we eliminated that completely. Those that were in that that every other week format moved to 8 week and are doing well and are mostly the Computer Support courses such as Emerging Technology and ITIL.

Metropolitan Community College: MCC is on the quarter system. We had been all 11-week but now mix in 10-week.

Cleveland Community College: We attempted first two Networking courses as stacked 8 week courses (NET 125 1st 8 weeks, NET 126 2nd 8 weeks). We moved it back to 16 weeks due to the lack of success. We have attempted other courses with mini-mester but students avoid or do not like the structure.

Tulsa Community College: TCC offers classes in both 16 week and 8 week formats, plus a variety of other durations.
Most of my Networking classes are 8 weeks blended, but most of the students are returning adults in their 30s, so this format works well for them. Most of the material is available online with weekly deadlines, and we come on-campus once a week for a 3-hour hands-on lab. I offer most of my 100% online courses in the 16-week format, which seems to work well. My Intro and Advanced Linux classes are examples. I require them to do labs at home on virtual machines.

Kirkwood Community College: Last year we tried a bit of an experiment, we actually took a programming sequence and shortened the delivery to four weeks of instruction.
The students registered and paid for:
3Cr CIS-207 Fundamentals of Web Programming
3Cr CIS-280 Client Side Scripting
The students, at the end of four weeks took a competency test (free) for:
3Cr CIS-121 Introduction to Programming Logic
# # #
We held no specific admissions requirements to our “Fast Track” although in reflection decided to screen for typing proficiency. Our learners included adults, recent HS graduates, transfer-back students from Uni, skills enhancement, degree/certificate seekers, and personal interest. Compared to our traditional formatted courses we had wins in each category we tracked. Student completion, performance, retention, satisfaction, etc.
# # #
I think it was less based on the “time” exclusively, but more so based on the curriculum design which highly concentrated on projectized learning in a cohort model. We do desire to replicate this model elsewhere within our department.

Grand Rapids Community College: GRCC has two 15 week semester and two 7 week sessions in the summer (May-June and July-August). Students love the accelerated pace of the summer but completion rates are lower than fall and winter.

SUNY Erie Community College: We offer our Oracle Academy and Cisco Academy courses (seated and online) as 7.5 week (.5 semester) hybrid/blended courses. The classes are 4 hours long, from 5:30-9:30pm, so we get a few sleepers. We are the ONLY department that does this but I think it is something that the school would like to move to in more areas.
- The material is intense and students with a technology background seem to do well but they still complain about the workload. Most of our students have families, jobs, etc. However, they like being able to take 7 Cisco courses in 4 semesters.
- I think for some students it would be better to have one class per semester but then they would never complete the program in 2 years.
- The courses were never offered in a 15-week format so I cannot provide comparison data.

South Plains College: In addition of having the course in 8 weeks, the students would meet Monday through Thursday OR extend the class times for the MW or TR. The problem that I see with this format is that some students work full time; so, they schedule their classes on MW or TR. My TR classes have the most students in it and we shut down most of the MW courses due to low enrollment. Having students meet Monday through Thursday for a class will lead to low enrollment since some students need to work in order to pay their bills, which means education becomes less important to them OR it will take them longer to complete their education. Extending the class times is also not effective because students get tired and start loosing interest in the course materials - students will need breaks.

Georgia Northwestern Technical College: We are doing some in spring and fall as 8-week but most as 16-week. Summer we have -5, 8- and 10-week sessions. My colleague and me do 8-week in summer as 5 week is too short and packed fro students and teachers in our opinion, 8 week is half of normal session so easier scheduling of course on sequence and also we are 12 month employees so more opportunity for a break for us and students with extra two weeks. Not seen difference on passing, understanding between 8 and 10 but several years ago when we converted quarters to semesters we had a 5-week summer session and at end of 5 weeks student and me were exhausted.
In the spring and fall I now do Cisco 3 and 4 as 8 eek classes so they can do both in one semester. However 1 and 2 I would not suggest doing normal as 8 week as too much info. Summer I do do 2, but my load and theirs is reduced so ok. We are moving to do some others not as heavy courses to 8 weeks. We do offer our intro to computers and office classes as 8 week every semester as students who miss admission deadline can enter in second half semester and we teach those to them ok, however generally they are only taking the two classes as only half semester attendees.
We are in the midst of trying to develop a cybersecurity degree program. Due to incidents such as Stuxnet, we believe that a Programmable Logic Controller (PLC) component to the degree would be very valuable. Does anyone in the CCN have something like this in place?

Anne Arundel Community College: From our cyber folks: I am sure they are discussed in the Intro courses and in the A+ courses...but not to the extent of stopping Stuxnet or similar attacks.

Gordon Snyder (CTC grant evaluator): I’ve been experimenting with PLCs and am really liking an online simulator called PLC Fiddle.
I’ve got some simple logic circuits simulated in this blog post http://www.gordostuff.com/2018/09/online-ladder-logic-simulator.html and have been playing around with some other PLC simulations. This could be an interesting way to teaching some physical layer network material. It could also make for a very interesting project proposal.

Gateway Technical College: Yes, we have added two courses to address IOT devices, IOT connected Devices and IOT Securing Devices. Rebecca Marschner is our resident security expert. Her email is marschner@gtc.edu

Trident Technical College: In our Cyber degree design, we went with Python as the only Logic/Scripting. We have investigated PLC only when looking at adding some sort of “cyber for critical infrastructure” curriculum. However, we determined that would be years down the road. Either way, I would consult with your Electronic Engineering department to see if they already teach it.

Tarrant County College: Yes. I use Python in cybersecurity class for scripting also.

Wisconsin Indianhead Technical College: We use Python as well in two of our three IT programs.

South Plains College: We will be starting Python in the fall. Right now, as a programming course.

Sinclair Community College: At Sinclair we have a new Python for Data Analytics. It is in a few degrees and will also be used by the Health and Nursing departments.
Outline - This course introduces students to analyzing data using Python. The basics of Python will be taught. Students will learn how to obtain, cleanse and prepare data for analysis. Data analytic and statistical tools will be used to visualize data, predict outcomes and categorize data.

SUNY Erie Community College: I teach a Digital Forensics Course (I use the same materials they use in the Master’s program at our local University – I just don’t require the students to write all the reports) and I can share my info with anyone that is interested. Shoot me an email.

South Plains College: We are looking into Data Analytics. If possible, can you share with us what your college is doing in this area and maybe your curriculum on it?

Florida State College at Jacksonville: We have a track in our AS degree for Data Science. We are currently building a full AS degree in Data Science as well as a BAS in Data Science.
Link to program: https://www.fscj.edu/academics/areas-of-study/information-technology/computer-information-technology-as
These are the courses in our Data Science AS track
Data Science Track
- CIS 2349C - Introduction to Big Data Using Hadoop 3
- COP 2034C - Programming in Python 3
- COP 2551C - Introduction to Object-Oriented Programming with Java 3
- COP 2073C - Introduction to Statistical Programming with R 3
- CAP 2787C - Data Warehousing 3
- CTS 2456C - Introduction to SAS Programming 3
Sinclair Community College: We have an AAS, a One Year Certificate and a Short-term Certificate in Data Analytics.
The links to the program specifics are below:
http://www.sinclair.edu/program/params/programCode/DATA-S-AAS/
http://www.sinclair.edu/program/params/programCode/DA-S-CRT/
http://www.sinclair.edu/program/params/programCode/DF-S-STC/
Sinclair also has a One Year Certificate in Healthcare Data Analytics in our Allied Health division:
http://www.sinclair.edu/program/params/programCode/HDA-S-CRT/

Gateway Technical College: Yes, we created a Data Analytics degree. If you have questions, please contact our IT Chair, Takis (Ty) Kinis at kinist@gtc.edu.
See attached 10-156-3 IT – Data Analytics Specialist 2019-20

South Plains College: I have been looking over the information. It seems that data analytics and science can be done in multiple ways for each different industries and even regions. For us, it would be agriculture (cotton industry), government, medical, banking, and education.
Maybe we should create a data analytics or science program that is not specific in design for one industry; but, it should have the core foundation of what a data analytics or scientist should know after completing the program.
Even looking at Python, this computer language can be taught at different approaches – I know some networking students are interested in python for create scripts. Python can be use to create web sites and for other purposes. Python is integrated in a lot of software products, by itself, Microsoft Visual Studio, Anaconda, etc…. Anaconda seems interesting and is geared towards data scientists – makes it ease to bring in third party software programs. Its constantly changing and updating with new tools to use.
I’m glad to see that CCN is offering multiple tracks in several different emerging technologies, like blockchain (We have a guy in town that is doing blockchain in C# for the cotton industry), Cloud computing, cyber security, Internet of Things, and data analytics this summer. We had discussed this before as a group of how these technologies can work together = Using Internet of Things devices to gather data while security the devices, networks, and the data (data stored in a blockchain for record keeping) and storing this data in the cloud and use programming to analyze the data in order to make better decisions and obtain to new information and knowledge.
I don’t know about you. But, I learn something from my students every once in a while – they have a different perspective of the world and look at things differently when using technology and how we should use it.
A student in my class showed me this video = just watch the first few minutes of it about horses
https://www.youtube.com/watch?v=bJ6QmZ48jY4
From the “Answers with Joe Scott” series (again someone’s perspective of the world). But, his discussion about the usage of horses and how quickly we stop using them when the automobile was created for us – this is a good example of the similar situation where we are currently at – the beginning of something new that will change every aspects of lives, industries, economy, etc….. It might come faster with the help of artificial intelligence and new technologies in computing.

Tarrant County College: Do your college have an articulation agree with four-year colleges for this certificate/degree? Are there entry level jobs for this certificate/degree?

South Plains College: We have an articulation agreement with Texas Tech University and other universities in the region. But, we do not have a degree or certificate in Data Analytics, yet - there is interest in it from our advisory board. I have a student in my class that is working at UMC (hospital) and does patient records or something with data in Excel. He mentioned that his boss is looking for some way to analyze the data to find something new in it. Something that we should explore further. According to Indeed.com, there are 36 entry-level positions in data analyst, 4 pages on data scientist jobs, and 35 jobs that require PowerBI.

Does anyone have pre - Developed NDG Labs and instructions for Windows Server 2016 they don’t mind sharing with our Network Systems Management Department at Trident Technical College? We are currently using Wiley MOAC.
Waukesha County Technical College: We are also using MOAC and would love other labs as well.

Bay Area Community College Consortium: Our SF Bay Area Community College Consortium (BACCC) shared NETLAB+ administrator and his team have developed a series of Server 2016 labs (aligned to the three certification exams). CSSIA is serving as the repository for the VMs. These are not MOAC labs. We modeled our labs off of the green official Microsoft exam ref books (https://www.amazon.com/70-740-Installation-Storage-Compute-Windows/dp/0735698821) and was developed so that 1 exam is half a semester class. I believe that you might be able to try out some of the lab at HI-TEC this summer. Let me know if you are interested in have a sooner look and I will put you in contact with our NETLAB team.

Orange Coast College: I know that Ernie Friend at Florida State College, Jacksonville is working with BACCC to create an entire set of Server 2016 (maybe 2019 also) for Netlab. He has shown them at HITEC for the past couple of years. I have seen and worked on several of them, and they are VERY good. If you are interested, you should get in contact with Richard Grotegut.

Does anyone have advice or best practices for the development of a framework for starting an internship for credit within Networking and Cybersecurity programs?

Georgia Southern University: We have been requiring an internship in the IT major for over 15 years. In the beginning, it was hard for students to find internships. Word of mouth from successful placements meant more internships but also more hires after graduation. This built a database of possible places for our students to look for internships and jobs. Evaluations of the students by the organization have become very important to insure that the individual student did what they need to during the internship but also as to show how well the students are prepared to start working - immediate feedback on how well were doing in the classroom.

Some things we learned:
1. Give course credit for the class. We originally had no credit given to the student but required they complete an internship. Students would not take it seriously. Students now have to sign up for the three hour course (requires 280 work hours along with reports).
2. Have contracts for the student and the employer to sign. While not legally binding, they give both parties an idea of what is expected to be successful.
3. Work towards paid internships. Organizations that were just looking for free labor became issues for interns and hires. School systems will often offer unpaid internships that are very productive for both parties but as a rule, try to get them paid. The student and the organization will take it much more seriously.
4. There is a lot of work that goes into a successful internship program and should be recognized by the administration. Finding, vetting, and communicating with employers is very rewarding but is real work. Make sure the administration of your school recognizes it as such.
5. Be flexible. We run on Quarter or Semester start and end times but businesses don’t. Explore how to have flexible start and end times before you start the class.
6. Think about how to handle a student that is "fired" and for a company that must be abandoned before it happens, because it will. Neither of these are optimal outcomes but can be teachable moments.

I don’t teach the course and I know there is much more that could be said. A link to what we tell the students is at https://cec.georgiasouthern.edu/it/students/forms/ and you are welcome to look around.

Texas State Technical College: We have an Internship elective for the degree as well. It is worth 3 credit hours and requires the student to complete 120 hours with time sheets identifying what activities the student has completed. We also do the contract between student and organization and it has been working well. Most often, the interns are offered employment by the organization. Once the 120 hours have been completed along with the appropriate time sheets, course credit is given.

Gallatin College: I do have industry looking for interns and they do pay my dilemma will be finding the format of said contract and scheduling. I greatly appreciate your advice and will take all advice I can get at this point!
Is anyone running an Algorithms and Data Structures class? We are rebuilding ours and my faculty wants to know what syllabi at other institutions looked like.

Louisiana Delta Community College: In response to the question regarding a data structures class, we at Louisiana Delta Community College have only taught the class once but for what it’s worth, the textbook we will use next time around is: https://www.zybooks.com/catalog/data-structures-essentials/.

Course Description: This course represents the related theory for representing and accessing information using a higher level programming language. Studies concepts of data types, data abstraction, data structures and advanced programming techniques.

Learning Outcomes: 1. Define and practice basic principles for software engineering and design using the software life cycle; 2. Develop and implement abstract data types, classes and objects using an object-oriented programming language; 3. Describe data storage techniques and apply these techniques to solve a problem; 4. Describe the basic concepts of design and analysis of algorithms with an emphasis on searching and sorting algorithms; 5. Define and apply basic data structures; 6. Using an object-oriented programming language, develop program to solve problem.

What we call computer science 2 is our data structures class. Syllabus attached. See attached CTP 250 course outline 2018

Is anyone running one-credit IT career exploration class for community colleges students (not high school students)? We are developing one now and would like to see what others might be doing.

Tulsa Community College: TCC does not offer such a course for IT. Instead, all IT students must take 4 core IT classes to help them decide which path to take: Computer Concepts & Applications, Network Fundamentals, HTML & CSS, and Intro to Programming.

Georgia Northwestern Technical College: GNTC does not offer a course to do this. We do have an introduction to computers class students take in all CIST programs that introduces terminology and basic of different areas and equipment, but never saw it as a exploration course. CIST 1001. This course is separate from the intro to MS Office they must also take that is our literacy course and almost all students at college take.

Herzing University: We do not offer this introduction class. If I develop a one-credit IT career exploration class for community colleges students, I will use a cloud intro class, which could use AWS Academy's first class Cloud Fundamentals or Microsoft's Cloud Fundamentals free training class.

All of our IT courses are 4-unit classes. Weekly, they require three hours of lecture and four hours of lab. We need some input on how other colleges conduct their lab time and requirements.

1. Do you require a set amount of lab time/work for ALL of your IT classes?
   1. If so, what content do you conduct during those labs?
   2. If not, do you host an open lab staffed by your faculty or a lab assistant outside of class?
2. How do you monitor and verify online lab time has been completed…
   1. ...by students?
   2. ...by faculty?
3. Do you host an open lab in addition to your required class lab time?
4. Are faculty present for all four hours of lab time for each class every week?
5. Do you create your own content for lab time associated with your class(es), or do you use tools from external resources (Cengage, Pearson, McGraw-Hill, YouTube, Udemy, open source, etc.)
6. Any other thoughts or creative implementations of lab time for your students?
Waukesha County Technical College: Most of our classes are 3 credit classes that meet weekly for four hours.

1. Do you require a set amount of lab time/work for ALL of your IT classes? No, we do not; however, students do have hands on lab time in class with additional labs with NetLabs or Packet Tracer each week.
   1. If so, what content do you conduct during those labs?
   2. If not, do you host an open lab staffed by your faculty or a lab assistant outside of class? We have an IT Student Center that is open from 7:30 am – 8 pm Mon – Thur and 8 am to 2 pm on Fri. This is staffed by student workers in the IT degree programs.

2. How do you monitor and verify online lab time has been completed…
   1. …by students? This is recorded by NetLabs or Packet Tracer.
   2. …by faculty? No

3. Do you host an open lab in addition to your required class lab time? We have an IT Student Center that is open from 7:30 am – 8 pm Mon – Thur and 8 am to 2 pm on Fri. This is staffed by student workers in the IT degree programs.

4. Are faculty present for all four hours of lab time for each class every week? They are present for the four hours of in class time.

5. Do you create your own content for lab time associated with your class(es), or do you use tools from external resources (Cengage, Pearson, McGraw-Hill, YouTube, Udemy, open source, etc.)? No, mostly MOAC, Cisco, NetLabs.

What do other institutions call their IT curriculum department? It seems to be confusing here on campus to have two IT departments – one for curriculum and the other as a service department under the CIO. Our degree programs are all IT, then the focus.

North Arkansas College: We have a similar situation: an Academic IT department with two emphases, and an administrative IT department. The administrative IT program changed their name a couple of years ago to IT Services, which provides a bit of clarity. We're a small enough college that there's little confusion once a staff member's name is mentioned.

It's interesting to note that the great staff in the administrative IT Services dept has kept our academic IT program going over the last two years while the academic IT lead was dealing with health issues. So three staff in IT Services now teach and help lead the academic program. This is a collaboration that I hope to maintain after we are back in the position of having a fulltime academic lead.

Ozarks Technical Community College: We re-named our department to Networking Technology about 15 years ago to spare the confusion with the campus IT department. Like Dr. Berry's situation, we have had IT dept. employees teach adjunct when health issues crop up; generally they are very good instructors.

Wisconsin Indianhead Technical College: We house IT instruction under the Technology and Industry Division- and also all of our program names start with IT- then the program name. IT Services is the administrative IT portion

Lansing Community College: At Lansing Community College our department is CIT (Computer Information Technology) instead of IT. That eliminates most of the confusion.

Houston Community College: At Houston Community College, our department is Digital & Information Technology.

Lone Star College: At Lone Star College and similar to Lansing, our department is CIT (Computer Information Technology).

Georgia Northwestern Technical College: We are part of the Business Technologies Division. The computer classes all start with CIST. Not a formal separate department for just the CIST

Riverside City College: We are Business, Information Systems and Technology (BIST).
SUNY Erie Community College: At SUNY Erie (in Buffalo, NY NOT Pennsylvania) we are the Information Technology Department. We have a Computer Science and a Computer Repair Department. We also have an Industrial Technology Department (IT) and since it uses the IT acronym for its classes many students get very confused. Our internal computer technical/support department is Information Technology Services (ITS) so people always call me for help. Too confusing.

Sinclair Community College: At Sinclair, the instructional department is CIS (Computer Information Systems) and the administrative department is ITS (Information Technology Services).

Florida State College at Jacksonville: We moved to a “schools of” model so all IT related programs are under the School of Technology and Industry. In the past our college was decentralized and each campus president and dean were responsible for managing the courses for the IT programs as well as any other workforce program at the campus. Now we are centralized with one college wide dean for each program area. Being centralized provides a much more efficient process to manage and support the IT programs.

Eastfield College: Honestly, I never thought about this issue until you posed the question. Our academic program is called Computer Information Technology, better known to most as simply Tech Support. However, I appreciate this conversation as all of you sharing your program names provides excellent food for thought for thought to rebrand our academic program as we work to improve it. Thank you all for contributing!

SUNY Erie Community College: I love this idea and recommended it at our institution. We have a bargaining unit (Union), actually our school has SIX, so it caused numerous issues from a union perspective. Does your school have a faculty union?

Waukesha County Technical College: Yes, we just recertified the faculty union.

Metropolitan Community College: We tried for one year to combine IT and business until someone realized that one dean was trying to handle the two largest degree granting programs at the College. Academics goes by IT or INFO (prefix) while the administrative side has always been IT Services or ITS.

My institution (Volunteer State Community College) is exploring the possibility of building a Cyber Range. The idea is to host it on our campus. This concept is at its infant stage but my College’s administration is really serious about it. I was wondering if you know any CTC member institution that might have a similar facility and might want to share their experience/perspective.

Eastfield College: I do not know of a member institution, BUT… just yesterday I was at a P>TECH Conference in NYC where Linda Larson, the Director of Education Outreach at Southeastern New England Defense Industry Alliance (SENDIA, https://members.senedia.org/contact/) spoke openly about the Cyber Range they host and moderate with a variety of high school and community college students. I know she would be a perfect and generous resource for you. Good luck!

Georgia Northwestern Technical College: I am not sure if Augusta Technical College in Augusta Georgia is a member but the state of Georgia has built a large cybersecurity training center for them and Augusta University with the Army’s cyber people and has range etc. in it. Jim Poarch is chair of the department jpoarch@augustatech.edu

1. Are any community colleges offering the IT Support Professional Google Certificate using Coursera?
2. If so, is it a stand-alone certificate?
3. Do students receive College Credit for the courses?
4. Website URL to check out info.
Bay Area Community College Consortium: Yes. As Google is one of our local partners here in the SF Bay Area, we engaged early with their IT Certificate program offered through Coursera and managed by Jobs for the Future (JFF).
Las Positas College was the first to offer the program, for credit, by embedding the content into their existing IT Support certificate (A+, Net+, and Sec+). We have several other community colleges, up and down the state, that are doing the same.
Here's a link to LPC program:  http://www.laspositascollege.edu/cnt-google/index.php
I have a similar request from the partners regarding Cloud Computing. We are moving forward with a statewide program (114 community colleges) to address the gap in our programs and add the cloud computing competencies to our IT/IS and CS course offerings and/or to create new courses.
The AWS program figures big in this effort however, we do understand that cloud computing services can come from many sources. A 2018 McAfee report identified that "60% of enterprises now use 21 or more public cloud services"

Waukesha County Technical College: YES! We are offering the Google Certification. We have mapped the courses back to our college courses and integrating it into our Dual Enrollment classes for our high school students, offering it as a remote learning option for a local high school and online for the general public.
We are offering five one credit classes, we are also working with JFF like Richard is. We also will allow then to take a prior learning assessment to obtain additional credits for the knowledge that they have now gained in the program.
https://www.wctc.edu/academics/programs-courses/programs/google-it-support-professional/index.php
See attached Google IT Support Professional-flyer with courses

Lone Star College: Here is a link to the article how Community Colleges are offering Google IT Support courses. https://www.insidehighered.com/digital-learning/article/2019/10/15/google-expands-it-certificate-program-100-community-colleges?utm_source=Inside+Higher+Ed&utm_campaign=610f7e0a65-DNU_2019_COPY_01&utm_medium=email&utm_term=0_1fcbc04421-610f7e0a65-197557413&mc_cid=610f7e0a65&mc_eid=5770e430ab

Florida State College at Jacksonville: We have not adopted the Google content yet.

Georgia Northwestern Technical College: We have not done the Google Certificate. At this point we are not looking at as the state is redeveloping all curriculum standards in Georgia technical colleges this year and last year.

Prince George's Community College: Google IT cert is not a program of study as of now here.

El Centro College: We are offering the IT Support Professional Google Certificate Program. It is offered as both a standalone and part of the YEARUP Program. It is also offered as both Credit and CE.
Credit: www.schedule.dcccd.edu
CE: https://ceschedule.dcccd.edu/CE/ecc/?Term=Fall&Year=2019

We actually had Google's CEO Sundar Pichai and White House adviser Ivanka Trump come to El Centro and sign off the expansion of the Google IT Certificate Program.
https://youtu.be/Pizl5WVS2fU

Rhodes State College: We are currently not offering the Google IT Support Professional Certificate.

Tarrant County College: We are currently not offering the Google IT Support Professional Certificate.

Lansing Community College: We do not offer the Google IT certs at this time
Sinclair Community College: It is also not at Sinclair. I have been reviewing these certifications for a few years now and it seems like the best option is to embed them into the CompTIA classes. However, we are trying to build more hand on leaning in our CompTIA program with NetLabs and Necessary Skills Now (CORD) labs. I did not see where we could have extra room for this content. Also, in Ohio I have had no employer ask about or from them.

Houston Community College: We don’t offer Google Cert.

Is anyone teaching a course or have curriculum on Microsoft SQL server using Azure for the cloud services while using C# as the programming language in order to create websites that interact with databases?

Wisconsin Indianhead Technical College: I teach Microsoft SQL Server (2 semesters), C# (2 semesters), and a semester of PHP with MySQL. In the second semester of C# we write clients that talk to an SQL Server hosted on Amazon (RDS). In PHP we talk to local MySQL databases, but it would be a simple change to talk to either SQL Server or a MySQL database hosted on the internet.

1. How is your school handling the CCNA 7 changes to the Cisco Academy?
2. When will you implement the changes in your school?
3. In the past we offered each CCNA class as a separate class (3 credit, 4 contact). Please respond with the number of credit and contact hours for the courses.

Cleveland Community College:
1. We are still determining how to best handle the changes and are relying on our ASC/ITC to help with this. We will have to submit curriculum changes at the state level; course descriptions, name changes, etc before any is decided.
2. Since the first course is still mostly the same, I hope to offer the CCNA 7 curriculum for course 1, then add the bridging material to the 4th course.
3. We have also offered each CCNA class as a separate course.

Waukesha County Technical College: We are in the same boat: Planning to offer 1, 2, 3 starting in the fall 2020 as individual courses. Mostly keeping 1 and 2 in our Network and Security degrees and then offering 3 stand alone for the CCNA prep.
We currently offer 1 and 2 in the Network and Security and then 3 and 4 as stand-alone courses.
Still rethinking with much of the Security parts being moved to 3, we may need to offer 1, 2, and 3 in both programs. Lots to think about for changes that must also be submitted to the college by Dec. to implement next year.

Houston Community College: We currently have CCNA 1 - CCNA 1: Introduction to Networks, CCNA 2 - CCNA 2: Routing and Switching Essentials, CCNA 3 - CCNA 3: Scaling Networks and CCNA 4 - CCNA 4: Connecting Networks and planning to offer as 1, 2 and 3 starting Fall 2020.

Bay Area Community College Consortium: I should have weighed in on this topic earlier. I have been teaching the Cisco Academy courses since the beginning in 1997. I have been through all seven versions (the good and the bad). It has been 20+ years of mostly positive results. Personally, I was happy to hear about the changes. This new, pared down and focused, CCNA training program is exactly what the success of the program needed. 68 of our 114 California community colleges are Cisco Academies and all of them had the same questions that Erie CC posed. As the Director of our ASC, I wanted to make sure that faculty understand the change and the options available. We asked Greg Cote from Cisco present Version 7 changes during one of our weekly ICT Educator webinars. Here’s the link to the recording if Greg’s presentation “Cisco Update: A New Streamlined Certification Program”
http://ictdmsector.org/a-new-streamlined-certification-program-2/
I would be happy to discuss more. Our ICT Educators Conference in San Jose CA (Cisco HQ), January 6 and 7, has a number of breakout sessions devoted to CCNAv7.

We struggle with Perkins Funding. Our equipment is getting old yet I have to provide proof on how getting new servers for the program will attract under-represented populations into our technology programs. It seems my creative writing is not enough. Any suggestions or help would be appreciated.

Ozarks Technical Community College: I think the first point to make to management is that your department is intended to generate skilled and prepared graduates, but this isn’t possible on outdated hardware. Point out the increased costs associated with supporting outdated stuff. Provide a comparison with what similar schools have, and make the argument that your students deserve similar accommodations.

Texas State Technical College: We also have to provide justification for any new hardware purchases. I agree completely on providing details on maintaining old hardware, including EOL support. Generally speaking, any prospective student will be more interested in a program that is up to date on emerging technology and how the latest/greatest tech helps maintain the foothold IT has in our personal and business lives. Newer devices sometimes have difficulty connecting to legacy hardware. The overall gist is that staying with the old "hum-drum" will stale a program as students will immediately be able to see that you’re not staying current and therefore are more likely to believe the program will only cover learning on older topics. The student is coming in to learn new skills for a new career. They are likely to ask themselves "am I going to be able to get an IT job if all I learn about is old stuff and never get to lay hands on emerging tech?"

Prince George’s County Community College: As part of the report you’re developing to indicate why this is needed, you could do a little online research on the relationship between the state of today’s technology and number of available jobs. Technology is an ever-evolving field, where a lot of the material I teach now did not exist when I was a student or some (or a lot) of the material that I studied are not relevant any longer. That’s basically the nature of this "beast." There are always tech-related jobs; however, you also need to update your knowledge and stay current with the new technology.

In a nutshell, even though today’s technology got evolved from what was used decades ago, we don’t use mainframes or other technologies from those eras when it comes to teaching hardware/software. And, that’s why you’d need to have access to newer technologies so that your students could get the education needed to land those jobs that use these technologies.

SUNY Erie Community College: Purchasing equipment is an on-going challenge at SUNY ECC.
1) Our leaders are not tech savvy so they don’t understand why we always NEED new equipment.
2) I reach out to industry partners and ask if they would like to donate equipment (with many of them going to the cloud there is more surplus than before). We have been able to get routers, servers, etc.
3) Try to get support from your internal IT department. If they support your request you may have a better chance of getting the funding.
4) Budgets are tight for academics. This will continue to be a problem going forward. We have 150 students enrolled and we were denied a request for $50K in equipment. We have never had an equipment budget and always had to depend on grants for any purchases.