AGENDA

UW-GREEN BAY FACULTY SENATE MEETING NO. 3
Wednesday, November 13, 2019
1965 Room, 3:00 p.m.
Presiding Officer: Mark Klemp, Speaker
Parliamentarian: Steve Meyer

1. CALL TO ORDER

2. APPROVAL OF MINUTES OF FACULTY SENATE MEETING NO. 2
October 16, 2019 [page 2]

3. INTERIM CHANCELLOR'S REPORT

4. OLD BUSINESS
a. Request for Authorization to Implement a Master of Science Degree in Cybersecurity (second reading) [page 15]
Presented by CSET Dean John Katers

5. NEW BUSINESS
a. Academic Actions Committee Update
Presented by Joan Groessl, Academic Actions Committee Chair
b. Resolution on the Composition of the UW President Search and Screen Committee [page 26]
Presented by Jon Shelton
c. Request for Future Business

6. PROVOST'S REPORT

7. OTHER REPORTS
a. Academic Affairs Council Report [page 27]
b. Graduate Academic Affairs Council Report [page 30]
c. University Committee Report – Presented by UC Chair Jim Loebl
d. Faculty Rep Report – Presented by Jon Shelton
e. Academic Staff Report – Presented by Lynn Niemi
f. University Staff Report – Presented by Kim Mezger
g. Student Government Report – Presented by Abbie Wagaman

8. ADJOURNMENT

[draft]

MINUTES 2019-2020
UW-GREEN BAY FACULTY SENATE MEETING NO. 2
Wednesday, October 16, 2019
1965 Room, University Union

Presiding Officer: Mark Klemp, Speaker of the Senate
Parliamentarian: Steve Meyer, Secretary of the Faculty and Staff

PRESENT: Mike Alexander (Provost, *ex-officio*), Mandeep Bakshi (ALTERNATE-NAS), Illene Cupit (ALTERNATE-PSYCH), Toni Damkoehler (ALTERNATE-AND), Christin DePouw (EDUC), William Gear (ALTERNATE-HUB), Joan Groessl (SOCW), Amulya Gurtu (ALTERNATE-BUA), Stefan Hall (HUS), Richard Hein (NAS), Maruf Hossain (NAS), Amy Kabrhel (NAS), Mark Klemp (NAS-UC), Jim Loebl (BUA-UC), Kaoime Malloy (THEATRE), Tetyana Malysheva (RSE), Eric Morgan (DJS), Paul Mueller (HUB), Dianne Murphy (BUA), Val Murrenus-Pilmaier (HUS), Rebecca Nesvet (HUS), Megan Olson Hunt (NAS), Matthew Raunio (BUA), Stephanie Rhee (SOCW), Bill Sallak (MUSIC), Jon Shelton (DJS-UC), Courtney Sherman (MUSIC), Christine Smith (PSYCH-UC), Gail Trimberger (SOCW-UC), Katie Turkiewicz (CIS), Sheryl Van Gruensven (Interim Chancellor, *ex-officio*), Christine Vandenhouten (NURS), David Voelker (HUS), Dean VonDras (PSYCH), Aaron Weinschenk (PEA), Brian Welsch (NAS), and Julie Wondergem (NAS-UC)

NOT PRESENT: Ray Hutchison (PEA) and Sam Watson (AND)

REPRESENTATIVES: Kim Mezger (USC), and Sherri Arendt (ASC), and Abbie Wagaman (SGA)

GUESTS: Bryan Carr (CIS), Valleri Chandra (BUA), Matt Dornbush (Dean, AECSOB), Jeff Entwistle (THEATRE), Clifton Ganyard (Assoc. Provost), Guillermo Gomez (SGA), Doreen Higgins (Assoc. Prof., SOCW), Jenell Holstead (PSYCH), Ben Joniaux (Chief of Staff), John Katers (Dean, CSET), Ryan Martin (Assoc. Dean, CAHSS), Amanda Nelson (Assoc. Dean, CSET), Mary Kate Ontaneda (SOFAS Asst.), Chuck Rybak (Dean, CAHSS), Kris Vespia (PSYCH), Bob Wenger (Prof. Emeritus, NAS), and Mike Zorn (Assoc. Dean, CSET)

1. CALL TO ORDER.

With the more familiar wooden lectern back in place in the 1965 Room, Speaker Mark Klemp would like the record to show that with a mighty wallop he robustly gaveled the second Faculty Senate meeting of the 2019-2020 academic year to order at 3:02 p.m.

2. APPROVAL OF MINUTES OF FACULTY SENATE MEETING NO. 1, September 11, 2019

Everybody was cool with the minutes; they passed via consensus.

3. INTERIM CHANCELLOR'S REPORT

Interim Chancellor Van Gruensven took her place at the lectern for the first time to address Faculty Senate. She started with the good news that Governor Evers sent a letter to the National Oceanic and Atmospheric Administration (NOAA) expressing Wisconsin's interest in establishing a National Estuary Research Reserve (NERR) in Green Bay, identifying UWGB as

the overseeing state agency. We have received notification from NOAA that we are officially in the process, which takes approximately five years to complete. If Green Bay were to receive a NERR, it would come with significant funding (approximately $800K in base funding) for research, outreach, and education efforts.

UWGB is in the middle of conversations with the county to bring university programming to downtown Green Bay. This would include space in the Neville Museum (for the Lawton Gallery) and the Brown County Library (for the Executive MBA and for advising and recruiting).

The Joint Finance Committee approved $45M in capacity building for UW for 2019-21 ($22.5M each year); system is determining how that money will be distributed to the campuses. Some of that money will need to fund our PayPlan (likely a 2% increase in January of 2020 and 2021 – UWGB must fund 30% of that PayPlan).

Governor Evers signed the 2019-21 budget, which included two minor projects for UWGB – renovation of space for Electrical Engineering Technology in the IS Building and laboratory space for the Communications program (a combined $6M project). We also received $5M to renovate the exterior of MAC Hall and Wood Hall. We have already begun the process to make our capital requests for the next budget (2021-23). Our main request will be the Cofrin Library renovation, where we are currently in the process of predesign – scheduled to be completed by February. We are also in desperate need of new housing, both in terms of renovations and new residence halls – we are submitting a request for a 400-bed residence hall. We are also beginning the process to predesign a new Health Sciences building, which is gaining traction at the state and System level.

The Chancellor search will begin soon. The search committee's work on the prospectus is nearly complete and will be posted in the next two weeks. The goal is for the Board of Regents to approve the new Chancellor at their April meeting, with a start date of summer 2020.

Interim Chancellor Van Gruensven is working hard on improving communication. To achieve that goal, three University Business Meetings will be held annually (instead of just one); dates and topics would align with the updates provided to the Council of Trustee.

UWGB ended fiscal year 2019 on a positive note, we officially eliminated our 5-year, $3M deficit on the tuition fund – and we actually ended up $300K in the black! This revenue allows us to invest in some new positions in programs where the demand is exceeding our capacity to teach the courses.

System will soon be developing the new budget request for 2021-23. Capacity building priorities mentioned by President Cross will focus funding on freshwater initiatives, nursing, engineering, and data science. In addition, funding will better serve underrepresented and low-income students in the state. In the coming months, we will need to think about how we might submit proposals to System for that funding.

4. OLD BUSINESS

a. Reorganization of the Austin E. Cofrin School of Business (second reading)
Dean Matt Dornbush provided a recap of the information presented at the first reading in September, reiterating that the reorganization is part of the maturation of a Business Department into a stand-alone School of Business. Currently, undergraduate degrees are offered in Business Administration (BA) and Accounting, but there are eight emphases within the BA program that look like majors. Essentially, we are offering everything but we are not credentialing our students correctly, which makes it both confusing for external partners/stakeholders and difficult to market the program. In addition, having one chair manage a program with 1,400 enrolled students is too much for one person. The planned reorganization has been vetted through the faculty, the Student Advisory Committee, the external Cofrin Advisory Board, the accrediting agency, and the Graduate Academic Affairs Committee, Academic Affairs Committee, and Personnel Council.

Last year, permission was granted to elevate four of the emphases (finance, human resource management, marketing, and management) to majors, adding to the existing majors of business administration and accounting. These majors will help build a more comprehensive program array; also, by creating four additional majors, the Dean will be better able to communicate the needs of a particular unit.

Senator Gurtu moved acceptance of the proposal (Form K) to reorganize the Austin E. Cofrin School of Business (seconded by Senator Raunio) and the floor was opened for discussion/questions. Senator Murphy, a faculty member in BUA, voiced her enthusiasm for the planned reorganization. When another senator asked how student input was solicited, Dean Dornbush explained that faculty member Patricia Albers assembled all leaders from Business's student organizations into a leadership committee that meets monthly for an information exchange; Dean Dornbush also sends a monthly newsletter to all students in the Cofrin School of Business. With no other questions, the senate **unanimously voted to pass the motion 34-0-0.**

5. NEW BUSINESS
a. Request for Authorization to Implement a Master of Science Degree in Cybersecurity (first reading)
Computer Science Chair and CSET Associate Dean Mike Zorn provided some background on the planned M.S. in Cybersecurity. This will be a collaborative Masters program led by UW Extended Campus. The campuses involved in the collaborative program include Green Bay, Oshkosh, Platteville, Parkside, Superior, Stevens Point, LaCrosse, and River Falls, with Platteville serving as the lead campus. Green Bay will be responsible for two courses in the program (network security and software security); we have the resources in place to cover those courses. Tuition will be set at $850/credit with part of that cost supporting software platforms. In the market research process that takes place for each collaborative program, there was a huge demand for Cybersecurity. The projected start date is Fall 2020, so the approval process is aggressive. There will be four tracks under the program; 34 total credits needed to complete the program, seven core courses are required of every student, three courses in their chosen track, and a capstone course to complete the degree. Admission requirements include a Bachelor's degree with a minimum 3.0 gpa. UW Extended Campus (formerly known as UW Extension) assumes the financial risk for the first two years. Extended Campus also pays up front to cover the cost of the instructors as well as some of the administrative costs; once these are covered, any revenue generated is split equally among the collaborating campuses. UWGB's Computer Science major

has approximately 200 majors, three faculty, and one lecturer; so it is currently understaffed, but there is a tenure-track position posted right now (independent of this collaborative program), as well as some ad hoc positions, so resources are adequate at this time.

b. Resolution in Support of Shared Governance in the UWGB Chancellor Search and Screen Committee Selection Process

Prof. Jon Shelton first provided some context to the resolution, stating that UW had the strongest statutory provisions of any state until revised by the Walker Administration in 2015. Since then, UW has also seen a number of Regent Policies that have undermined shared governance. At one time, UW was nationally known for both its recognition of shared governance and its public higher education system – and it is not an accident that it was known for these two things together. Prof. Shelton cited a 1981 document from the AAUP Red Book related to faculty participation in the selection, evaluation, and retention of administrators, which stated "Faculty, (and every other constituency on campus) should be a major part of the selection process for Chancellors" and that "faculty (should) select representatives of their own choosing." This speaks directly against the Regent Policy adopted in 2017 that changed the composition of the Chancellor search and screen committee to ten members total: five Regents, two Faculty, one Staff, one Student, and one outside member. In essence, a composition that gives Regents a majority in the decision making process. While we have good Regents who want the best for UWGB, they are not "boots on the ground" members of UWGB.

This Fall, President Cross tasked the UC with selecting the names of up to five faculty to potentially serve on the Chancellor search and screen committee. The UC extensively searched for faculty who would be willing to serve in this capacity, eventually forwarding a list of four candidates to Cross. From that list of four, Cross selected one; he went off the list to select a second faculty member. Prof. Shelton made it abundantly clear that this is not about the faculty who were selected (both of whom are highly thought of, extremely respected colleagues), rather it is about the process of skirting the UC's recommendations for "representatives of their own choosing." This is the driving force behind this resolution. Thus, this resolution was drafted by the UC for two reasons: 1) historical context, going on record to make all UW institutions aware that this is the *modus operandi* of UW System administration, and 2) if campuses continue to push back against such tactics, the System President will have to acknowledge and take ownership his actions to skirt shared governance.

At this point, **Senator Hall moved acceptance of the resolution, seconded by Senator Malloy.** The discussion that followed raised two points, 1) whether a complaint/grievance ought to filed and 2) sentiment from a number of faculty members that the "vote of no confidence in the selection process" clause that was removed from the previous version of the resolution be reinstated. Senator Cupit read a prepared statement from Prof. Jenell Holstead that supported (and thanked the UC for) the revised resolution, as the original version contained language that potentially had unintended consequences in terms of damaging her reputation on campus and disrespecting her selection as a search committee member. With no other discussion, the senate **voted to support the resolution 34-0-1.**

c. Resolution to Extend the Deadline for Annual Reviews from November 30, 2019 to Coincide with the February 7, 2020 Deadline for Merit Reviews

UC Chair Jim Loebl related that each year Annual Reviews, based on Performance Activity Reports (PARs), are due by November 30, unless a Merit Review is performed which is due in early February (February 7 this year). Only one of these reviews is normally required per academic year. However, this year the Deans are required to determine whether the tenured faculty members in their respective Colleges are "research active" or "research and service active" based on the faculty member's annual review. Given some units are scheduled to have Merit Reviews this year, those units must actually perform both the Annual Review and the Merit Review. To reduce workload, those two reviews should have the same deadline, either November 30 or February 7. So for this year only, at the request of some administrators, the UC developed a resolution to allow the Annual Review deadline to be extended for the 2019-2020 academic year to February 7, 2020, so only one review actually needs to be completed to determine "research active" or "research and service active." This resolution would not prevent units that wish to complete their Annual Reviews by November 30 from doing so. This is a "Band-Aid" solution until a more permanent solution is developed regarding the number and scope of the reviews (i.e., fewer reviews, which is supported by Provost Alexander – I knew I liked that guy for some reason). **Senator Vandenhouten moved acceptance of the resolution, seconded by Senator Nesvet. The motion passed 34-0-0.**

d. Unit Nomenclature
This agenda item was withdrawn.

e. Memorial Resolution for Richard Sherrell
Prof. Jeff Entwistle wrote and presented an emotional and heartfelt resolution in the memory of colleague and mentor Prof. Dick Sherrell. With the approval of the senators, the resolution will be added to the collection kept in the Governance Office.

f. Request for future business
It's October, the time for haunting
Those ghosts can be downright daunting
Despite those few scares
And the raising of hairs
Our costumes, we will be flaunting
(there was no new business brought forward by the senators this month – BOO!!)

6. PROVOST'S REPORT
Provost Alexander updated senate on two searches currently being conducted. This week, the three finalists for the Associate Vice Chancellor for Graduate Studies position will be on campus. We are in the phone interview stage for the Assistant Vice Chancellor for Enrollment Services position, with on-campus interviews in mid-November. This week, candidates are on campus interviewing for our Distance Education Coordinator position.

Enrollment numbers look encouraging. On the Green Bay campus alone, in 2018 our headcount was 7383; in 2019 it is 8098. With the locations formerly known as Branch Campuses (unlike Prince, there is no symbol that represents these entities just the letters "Additional Locations"), headcount is at 8873, an overall increase of 5%. In terms of student FTE, we are up about 300. Now we need to work on retaining these students we have attracted to UWGB. Our growth this

year is attributed primarily to College Credit in High School (CCIHS); last year there were 1,000 students in the CCIHS program, this year there are over 1,700. Administration is also working closely with NWTC (in particular) and other TCs to create pathways to encourage technical college students to transfer to UWGB. Enrollment in our graduate programs has remained steady, but with 5-6 new graduate programs being unveiled next year, we expect an increase in graduate enrollment. Our goal is to eventually increase graduate student enrollment to 1,000.

Provost Alexander developed a Council of (Budgetary Unit) Chairs and he has empowered the Chairs to begin meeting on their own. From their position as Chairs, they have the unique view of what is happening at the academic/faculty level and what the administration is trying to accomplish, thus this council is an important line of communication with the Deans and the Provost. In addition, the Provost has promised to visit each budgetary unit each year so he can directly engage with the faculty.

At this point, the Provost took questions from the senate. The question of childcare came up, especially in light of increased enrollment from TC transfers. The Provost responded that one of the biggest problems we need to solve quickly is the kind of support we must provide our students to truly be an access institution. With only three months under his belt, he is trying to understand what areas we need to shore-up. But, he understands we cannot just recruit a student, but we must also provide them with an experience that makes it possible for them to stay enrolled. Childcare is one of the barriers we must address.

7. OTHER REPORTS

a. University Committee Report. UC Chair Loebl stated that the UC spent a fair amount of time working on the resolution related to the faculty selections for the Chancellor search committee. Chair Loebl thanked Jon Shelton for taking the lead on drafting the resolution. He also thanked the faculty at-large for their suggestions, the input helped in drafting a better resolution; in particular, Loebl thanked the Psychology faculty, stating they were excellent examples of what makes good colleagues. In the future, the UC will be looking at performance reviews; tuition plateaus, which apparently do not apply at the Additional Locations; and making accommodations for students for university-sanctioned events (and what constitutes a university-sanctioned event).

UWGB Faculty Representative Jon Shelton updated senate on the 20 September Fac Rep meeting in Madison. The UW System Legislative Liaison spoke about some of the bills that are in play this legislative cycle, two of which are capping student fees and restricting student fees from being used on building projects. Two senators are considering bringing forward legislation to permanently fund the freeze on tuition if there is support from the public. UW System's Shared Services wants to streamline the faculty and staff pay cycle so that everyone is paid every two weeks. They also want to equalize deductions for benefits throughout the year so large deductions are not taken out of paychecks at the end of the academic year to cover summer insurance payments. System has revised their Small Program Monitoring Policy (shout out to Christine Vandenhouten who authored many of the revisions to the policy during her time a UWGB's Fac Rep). The new draft policy eliminates language associated with metrics used for eliminating programs and also shifts the responsibility for creating a policy on program monitoring to the individual campuses. Each campus will need to report annually to System on their program monitoring, but System is no longer empowered to eliminate programs.

b. Academic Staff Committee Report. ASC Vice Chair Sherri Arendt related to senate that Provost Alexander met with the ASC regarding the Academic Affairs Strategic Priorities. The Academic Staff Winter Assembly will take place on Tuesday, December 3, 3:00-4:30 in the Christie Theatre. The ASC has also been discussing the Titling and Total Compensation project.

c. University Staff Committee Report. USC Chair Kim Mezger mentioned the USC's annual Professional Development Conference will be held this coming Friday, October 18. In attendance will be University Staff from across the UW System and Wisconsin Technical Colleges.

d. Student Government Association Report. SGA President Abbie Wagaman stated that Provost Alexander made the rounds, meeting with SGA about the Academic Affairs Strategic Priorities. Other efforts of the SGA include: examining their constitutional review to edit some of their governing documents, updating their website, working on the composting project, and meeting with the City Clerk to work out the logistics of getting early voting on the campus. Conversations are taking place with other UW institutions regarding dining and sustainability, comparing and evaluating our programs and services offered to our students. The Student Representatives (Presidents and Vice Presidents of all the UW schools) will be attending a meeting November 9 at UW-Waukesha, discussions will focus on sustainability and student access.

8. ADJOURNMENT at 4:43 p.m.

Respectfully submitted,

Steve Meyer, Secretary of the Faculty and Staff

REQUEST FOR AUTHORIZATION TO IMPLEMENT A
COLLABORATIVE ONLINE
MASTER OF SCIENCE
IN
CYBERSECURITY

ABSTRACT

The University of Wisconsin-River Falls, as lead campus and on behalf of the defined academic partners, UW-Green Bay, UW-La Crosse, UW-Oshkosh, UW-Parkside, UW-Platteville, UW-River Falls, UW-Stevens Point, and UW-Superior, proposes to establish a collaborative online Master of Science in Cybersecurity (M.S. in Cybersecurity). The development of this program responds to the recognized shortage of cybersecurity professionals throughout the state and region. This program represents a comprehensive, multidisciplinary curriculum that prepares students to advance their careers and pursue their academic ambitions through leadership and management positions within the cybersecurity field. The program will equip students with the skills needed to effectively develop, implement and maintain a security strategy within diverse organizations and industry sectors. Core courses provide students with a solid foundation in data and network security, compliance, strategic planning, program design and management, legal and ethical issues in cybersecurity, cryptography, risk management and technical communications. In addition, the program offers four unique tracks to assist students in tailoring their coursework to meet their career goals: digital forensics, cyber response, governance and leadership, and security architecture. The M.S. in Cybersecurity represents a fully online, asynchronous curriculum comprised of 34 credits to include a culminating, project-based Capstone experience. Graduates of the program will gain the core competencies required to assume a variety of roles across a wide range of industries to include cybersecurity analyst, security consultant, cybersecurity manager, computer system analyst, security application analyst, and information technology specialist. The curriculum was developed in alignment with defined requirements of the Center for National Centers of Academic Excellence in Cyber Defense (CAE-CD) and several established and recognized industry certifications to include the Certified Information Security Manager (CISM), Certified Information Systems Security Professional (CISSP), Certified Ethical Hacker (CEH) and CompTIA Security+ certifications.

PROGRAM IDENTIFICATION

Institution Name
University of Wisconsin-Green Bay
University of Wisconsin-La Crosse
University of Wisconsin-Oshkosh
University of Wisconsin-Parkside
University of Wisconsin-Platteville
University of Wisconsin-River Falls
University of Wisconsin-Stevens Point
University of Wisconsin-Superior
With administrative and financial support from the University of Wisconsin Extended Campus
Title of Proposed Program

Master of Science in Cybersecurity

Degree/Major Designations
Master of Science

Mode of Delivery
Collaborative and Distance Education (100% Online)

Projected Enrollments and Graduates by Year Five

Table 1 represents enrollment and graduation projections for students entering the program over the next five years and is based, in part, on experience with comparable University of Wisconsin collaborative online programs. It is assumed that the majority of students will enroll part-time. As shown, we are anticipating strong enrollments with 340 students enrolling in the program and 48 students having graduated from the program by the end of year five. Based on experience with similar collaborative online graduate-level programs across the UW System, it is anticipated that the average annual attrition rate will be approximately 20 percent once the program becomes established (Years 4 and 5).

Table 1: Five-Year Degree Program Enrollment Projections

Students/Year	Year 1	Year 2	Year 3	Year 4	Year 5
New Students	35	70	75	80	80
Continuing Students		31	83	126	152
Total Enrollment	35	101	158	206	232
Graduating Students	0	0	4	16	28

Tuition Structure

Program tuition for the M.S. in Cybersecurity program will be set at $850/credit for 2020–2021 and will be identical at all eight partner institutions. The tuition rate is based on market demand estimates as well as comparisons with other master's level online programs offered by the University of Wisconsin (UW) System and nationally, and will be charged outside the credit plateau, if approved by the Board of Regents. The pricing structure will follow the UW System pricing guidelines for distance education programs provided in UW System Administrative Policy (SYS) 130.[1] Segregated fees for students enrolled in this program would be waived by all of the partner institutions. Students will not be required to pay any additional fees as part of the program, except for the cost of their books. There is no tuition differential for out-of-state students.

Department or Functional Equivalent

[1] University of Wisconsin System (2001). UW System Administrative Policy 130: Programming for the Non-Traditional Market in the University of Wisconsin System. Retrieved from

https://www.wisconsin.edu/uw-policies/uw-system-administrative-policies/programming-for-the-nontraditional-market-in-the-uw-system/.

The schools/colleges and departments that will offer courses for this program at each institution are as follows:

- UW-Green Bay, College of Science, Engineering and Technology, Resch School of Engineering, Department of Computer Science
- UW-La Crosse, College of Arts, Social Sciences, & Humanities, Department of Communication Studies
- UW-Oshkosh, College of Letters and Science, Department of Computer Science
- UW-Parkside, College of Business, Economics, and Computing, Department of Computer Science
- UW-Platteville, College of Engineering, Math and Science, Department of Computer Science and Software Engineering
- UW- River Falls, College of Business and Economics, Computer Science and Information Systems Department
- UW-Stevens Point, College of Letters and Science, Department of Computing and New Media Technologies
- University of Wisconsin-Superior, Mathematics and Computer Science Department

UW Extended Campus will provide administrative and financial support for the program. UW-River Falls is seeking authorization from UW System and program accreditation through the Higher Learning Commission (HLC) on behalf of the academic partners.

Proposed Date of Implementation

September 2020 pending approval of the Higher Learning Commission (HLC)

DESCRIPTION OF PROGRAM

Overview of the Program

The M.S. in Cybersecurity represents a fully online, asynchronous curriculum comprised of 34 credits to include seven core courses, 3 concentration or track courses, a Capstone preparation course and a project-based Capstone course. Students will be able to complete more than one program track. Graduates of the program will gain the core competencies required to serve in a variety of cybersecurity roles within diverse organizations. UW-Green Bay, UW-La Crosse, UW-Oshkosh, UW-Parkside, UW-Platteville, UW-River Falls, UW-Stevens Point, and UW-Superior will offer the program jointly. The required capstone course, which represents the culminating experience in the program will provide students with the opportunity to apply skills acquired from coursework through a project-based experience in their track/concentration area.

Student Learning Outcomes and Program Objectives

Students completing the M.S. in Cybersecurity degree will gain the following core competencies and learning outcomes:

Competency A – Analyze and resolve security issues in networks and computer systems to secure an IT infrastructure

Upon completion of the program, students will be able to:

- Interpret and analyze operating system and machine level structures
- Interpret and analyze network protocols
- Design, evaluate, and test systems including networks, computers, and hardware for security requirements

Competency B – Design, develop, test, and evaluate secure software

Upon completion of the program, students will be able to:

- Implement best practices in secure software development
- Implement effective cryptographic systems and assess their vulnerabilities
- Assess security implications for emerging software technologies

Competency C – Develop policies and procedures to manage enterprise security risks

Upon completion of the program, students will be able to:

- Conduct security risk management assessments
- Develop and implement threat management framework
- Evaluate and create security policies and processes for an organization and apply appropriate security frameworks
- Implement identity and access management controls

Competency D - Evaluate and communicate the human role in security systems with an emphasis on ethics, social engineering vulnerabilities, and training

Upon completion of the program, students will be able to:

- Assess trends in computer criminology and social behaviors related to technology use including physical security
- Engage in ethical decision-making and apply ethical principles to cybersecurity
- Engage in professional collaboration and communication with technical and nontechnical stakeholders on issues related to security

Competency E – Interpret and forensically investigate security incidents

Upon completion of the program, students will be able to:

- Develop and implement an incident response strategy
- Identify and assess attacks through forensics
- Interpret legal implications of security incidents and conduct investigations using industry best practices

Program Requirements and Curriculum

Admission requirements for the M.S. in Cybersecurity program will include a Bachelor's degree and a 3.0 undergraduate GPA. Program prerequisites will include the following:

- Introduction to Computer Science
- Calculus or Statistics

It is expected that this program will draw students from diverse backgrounds. The intent of the program prerequisites is to ensure students have the necessary knowledge and mathematical / programming maturity to be successful across all courses. It is assumed that most students coming from a technical background will have completed a course in either Calculus or Statistics as part of their prior education. In addition, course sequencing and internal prerequisites within the MS in Cybersecurity program will enable students to build sufficient knowledge before they enroll in advanced courses. The Introduction to Computer Science course prerequisite should show evidence of programming and database competencies.

Students will be required to satisfy all program prerequisites prior to formal admission into the program. There will be no required aptitude tests for admission in the program (e.g. GRE, GMAT, other). Students must maintain an overall cumulative GPA of 3.0 or better to graduate.

Table 2 illustrates the 34 credit curriculum for the proposed M.S. in Cybersecurity program, Students will complete 7 core, 3 track, and 2 capstone courses (a one-credit capstone preparation course and a 3-credit capstone course) to satisfy degree requirements. There are four tracks offered within the curriculum. Students must complete one track, however, may choose to complete more than one track. The 3-credit capstone course requirement, which represents the culminating experience for relevant students, must be taken in the final semester of study. A capstone preparation course (1-credit) will be taken the semester prior to the capstone course and will provide the student the opportunity to prepare a capstone proposal for an applied project-based, self-directed experience.

The proposal will be reviewed and approved by the capstone instructor and home campus academic director for implementation in the capstone course. Students may implement and complete capstone projects within their current place of employment or through another host organization. The Program Advisory Board, made up of industry representatives, will have a significant role and responsibility for recommending possible projects and possibly hosting capstone students at their organizations.

Table 2: M.S. in Cybersecurity Program Curriculum

Course Number	Course Title	Number of Credits	Campus
Core Courses			
CYB 700	Fundamentals of Cybersecurity	3	UW-Superior
CYB 703	Network Security	3	UW-Green Bay
CYB 705	Sociological Aspects of Cybersecurity	3	UW-Stevens Point
CYB 707	Cybersecurity Program Planning and Implementation	3	UW-Parkside
CYB 710	Introduction to Cryptography	3	UW-Oshkosh
CYB 715	Managing Security Risk	3	UW-Platteville
CYB 720	Technical Communication in Cybersecurity	3	UW-La Crosse
Track 1 – Digital Forensics			
CYB 725	Computer Forensics and Investigations	3	UW-Stevens Point
CYB 730	Computer Criminology	3	UW-Stevens Point
CYB 735	Network Forensics	3	UW-Parkside
Track 2 – Cyber Response (Defense, Incident & Attack Response)			
CYB 740	Incident Response and Remediation	3	UW-River Falls
CYB 745	Secure Operating Systems	3	UW-Oshkosh
CYB 750	Offensive Security and Threat Management	3	UW-River Falls
Track 3 - Governance & Leadership (Communication, Management, Policy, Compliance)			
CYB 755	Security Administration	3	UW-River Falls
CYB 760	Cybersecurity Leadership and Team Dynamics	3	UW-La Crosse
CYB 765	Cybersecurity Management	3	UW-River Falls

Track 4: Security Architecture (Systems, Software, Data)			
CYB 770	Security Architecture	3	UW-Platteville
CYB 775	Applied Cryptography	3	UW-Superior
CYB 780	Software Security	3	UW-Green Bay
CYB 785	Cyber Physical System Security	3	UW-Platteville
Capstone Courses			
CYB 789	Cybersecurity Pre-capstone	1	UW-Superior
CYB 790	Cybersecurity Capstone	3	UW-Superior

Assessment of Outcomes and Objectives

The assessment of student learning outcomes for the M.S. in Cybersecurity degree program will be managed by the academic program directors from each partner campus as well as the UW Extended Campus (UWEX) program manager. This assessment team will identify and define measures and establish a rubric for evaluating how well students are meeting the program's five competency areas. The team will also identify what data will be needed and serve as the collection point for the data. As a part of the course development process, the assessment team will determine which examples of student work will be most appropriate to demonstrate competency.

The team will receive data collected from institutions by UWEX each semester. UWEX will also monitor data on new enrollments, retention rates, and graduation rates. The assessment team will compile these various sources of data and complete annual reports summarizing the data, the assessment of the data, and decisions regarding improvements to the curriculum, structure, and program delivery. The report will be shared with the faculty of the program and other stakeholders at each partner institution. The assessment team is responsible for ensuring that recommendations for improvement are implemented.

Diversity

The collaborative online program model was established, in part, to increase access to higher education for primarily nontraditional students and to maximize the educational benefits of diversity. Many students from underrepresented minority groups, first-generation Americans, first-generation college students, and low-income students are included in the definition of non-traditional students. Nontraditional students may have family or work responsibilities that prevent them from attending school in traditional formats. The online delivery format will provide opportunities to those students who are time and place bound, and do not reside within close proximity to an existing UW institution. The program design recognizes that non-traditional students come to the learning environment from diverse backgrounds, with unique knowledge and experiences, and looking for opportunities to share that knowledge with others. The strength of this program and the success of our students is, in large part, based on our ability to attract and retain a diverse adult student audience through program completion.

UWEX has several initiatives currently underway to attract more students from underrepresented groups into the UW System. Through UW HELP, brochures and materials specific to Hispanic and Hmong students are sent to those respective potential students groups.

The program manager for the M.S. in Cybersecurity program employed by UWEX will conduct outreach, working with employers to encourage and support the education of their employees, especially focusing on underrepresented minorities. In addition, a dedicated program advisory board (described below) will provide support in this area by helping the program extend its reach to diverse prospective students and communities.

Ensuring that diverse student populations enter the M.S. in Cybersecurity program is important, but equally important is providing the support services that enable all students to feel comfortable and to succeed. The UWEX success coach will work closely with all students to self-identify barriers to their success to either help them overcome those barriers directly or to point them to home campus and other resources that will be of assistance to them. UWEX will maintain online student environments that will allow individuals from diverse ethnic backgrounds to connect with other students over both cultural similarities and programmatic interests to help build points of commonality and understanding. The Student Resource Lounge serves to connect students with a wealth of resources and information to support their persistence in the program. Social media opportunities for student connection will be made available through Facebook, Twitter, and LinkedIn, to name a few. Simply put, an essential goal of this program is to increase both the access for diverse audiences to this degree and the success of those students once they enter the program.

While the proposed degree does not project a significant number of new faculty and staff, the partner institutions will continue to be committed to recruiting a culturally diverse campus community. The program will work toward achieving equity in the gender distribution of faculty, and faculty of color will be encouraged to participate in this program.

Collaborative Nature of the Program

The M.S. in Cybersecurity is a collaborative degree program that benefits from the shared academic and administrative resources of all partnering institutions. UW System encourages and supports system-wide cooperative and collaborative efforts among institutions as a means to develop need-based programs of mutual interest, benefit, and value to all partners; add to the existing base of quality academic offerings within the System; leverage limited resources; and more effectively and efficiently address the needs of both traditional and nontraditional learners, as well as employers within the state. This degree, like other collaborative programs currently offered within the System, provides each of the participating academic institutions the ability to offer a high-quality, sustainable graduate program without a requirement to extend significant local resources or a risk of compromising existing programs.

Faculty and staff from eight partner institutions (UW-Green Bay, UW-La Crosse, UW-Oshkosh, UW-Parkside, UW-Platteville, UW-River Falls, UW-Stevens Point, and UW-Superior) collectively developed and approved the program curriculum, program competencies, student learning outcomes, and admission requirements. These partner institutions will be responsible for identifying qualified faculty and instructional staff to deliver coursework, assess student learning and conduct program review.

Each partner institution will appoint an academic program director who will work with their respective academic units to implement the program. Collaboratively, these directors along

with a designated campus continuing education representative or designate and the UWEX program manager will comprise the program workgroup. This team will oversee the ongoing growth, development and performance of the M.S. in Cybersecurity degree program. The committee will meet quarterly in person and via teleconferencing, as needed. Instructional development and delivery of the online courses will be supported and hosted by UWEX. This cohesive development and offering of courses will ensure students have a consistent experience even though the faculty reside at multiple partner institutions.

Students will choose a home institution from where their degree will be conferred. All courses will be listed in each of the partner institutions course catalog and registration system. The student record will be maintained in the student information system of the home institution. Local program stakeholders, to include academic directors, continuing education staff, host department representatives, academic support office leads, and business office personnel from each institution will also meet biannually to review local processes and concerns, and to make adjustments as necessary. Program evaluation regarding the collaborative nature of the model will help assess processes critical to the success of the collaboration, such as the financial model, marketing, student recruitment and advising, admission and enrollment processes and trends, and curriculum and course design. UWEX will regularly report on program performance. All partners will share equally in the net revenues from the program, once realized.

UWEX will coordinate external engagement, input, and advice through a Program Advisory Board consisting of 12 to 15 representatives from industry who will also serve as advisors, ambassadors and referral agents to the program. The academic directors from each of the eight partner institutions will also hold seats on the board. The M.S. in Cybersecurity Advisory Board will meet biannually. The board members will play a critical role in ensuring that the program and curriculum stays relevant to trends in the field. They will be asked to help host students working on capstone projects, and to help create school-to-work transitions so that as students graduate from the program, they will move to gainful employment. The program manager will provide assistance to the board, coordinate meetings, and so on. The academic directors of the program and program manager will engage with board members and ensure that the board is connected to the program in constructive and positive ways. Board meetings will provide opportunities to present program progress and successes, and to gather feedback regarding changes in the industry and how those changes may affect program graduates.

One of the many recognized and significant benefits of the collaborative program model is the extended reach or scope of contacts provided through the involvement of multiple academic partners located within unique markets throughout the state. Our academic partners have established significant relationships, reputation, and strength-of-brand within their individual regions, which has proven valuable in identifying regional interest in the program and will help raise awareness of this opportunity throughout the state and expand program reach. This will ultimately result in greater success in reaching and serving students throughout the state, supporting student and regional business needs and interests, promoting program growth, and positioning the program for sustainability.

Projected Time to Degree

This program represents a non-cohort based offering where students may enter the program for the spring, summer, or fall semester and advance at their own pace. Based on experience with similar collaborative offerings within the System and the typical adult online student profile, it is assumed that most students will enroll part-time and take an average of three to four courses per year. At this rate, the majority of students would complete the program within 3 to 4 years. Students will be encouraged to take courses in sequence and as influenced by defined internal course prerequisites. The capstone, which represents the culminating experience for students, must be taken in the final semester of study.

Program Review

Program review and evaluation occur on a more frequent schedule than in traditional academic programs. As previously discussed, assessment relative to student learning will be reviewed each academic semester and annually. The M.S. in Cybersecurity program will go through an internal 3-year review focusing on program, administrative and fiscal matters. In addition, the program will conduct a comprehensive 5-year review. Academic directors, faculty, and administrators from all partners will have input into programmatic changes and upcoming needs. UWEX, as the fiscal agent for this program, will manage resources to ensure that funds are available to support scheduled program reviews and to invest in the program as deemed necessary and valuable. The decision about how to invest in the program will be made collaboratively by all partners, as will recommendations related to the continuation of the program. Data collected, analyzed, and reported as part of the above-defined processes will be shared with each of the partner institutions for inclusion in their unique local comprehensive academic program review processes.

Accreditation

Partners will be securing authorization to offer this program as a consortial online degree from the Higher Learning Commission, the regional accrediting body for all eight partner institutions. The program will also be pursuing external accreditations from organizations such as the National Centers of Academic Excellence in Cyber Defense (CAE-CD). This program is intended to provide the necessary background for students to achieve certifications such as the following:

- Certified Information Security Manager (CISSP)
- Certified Information Systems Security Professional (CISSP)
- Certified Ethical Hacker (CISM)
- CompTIA Security+

JUSTIFICATION

Rationale and Relation to Mission

The online M.S. in Cybersecurity degree program contributes directly to the institutional mission of the University of Wisconsin System which clearly defines a commitment *to discover and disseminate knowledge, to extend knowledge and its application beyond the boundaries of its institutions*. Students will develop advanced knowledge and skills that will enable them to serve an important function and role within the cybersecurity workforce. It is a degree targeted at adult and nontraditional students possessing a bachelor's degree and thus broadens access for alumni and others to advanced study within the UW System. The M.S. in Cybersecurity also supports the

institutional missions of the eight academic partner institutions by building upon the undergraduate experience of working adults in the state and region by advancing proficiencies in communication, critical thinking, problem solving, analytical, leadership, teamwork, and collaboration skills. Furthermore, this multidisciplinary degree will serve to build bridges between disciplines and develop students' abilities to think in terms of systems and interrelationships, and within complex organizations. Strong support for the degree has already been realized through interactions with leaders from over 30 state, regional and national companies, government agencies and professional associations.

Institutional Program Array

There is consensus among the eight academic partners that the M.S. in Cybersecurity degree program will serve as a valuable complement to the existing graduate program array at each of their institutions and will not compete with any program currently offered. Statements of support have been provided by each of the partner campuses as follows:

"At UW-Green Bay, the MS in Cybersecurity would be the first graduate program in the newly formed Resch School of Engineering. This degree provides a natural progression for undergraduate students in our rapidly growing computer science program, particularly those with an emphasis in cybersecurity."

"At UW-La Crosse, the proposed M.S. in Cybersecurity strongly aligns with its current graduate program array. UW-La Crosse has a strong history of academic success with its current graduate programs. With professional communication being one part of the core of the M.S. in Cybersecurity program, the Communication Studies department at UW-La Crosse will be a strong partner in this multi-disciplinary degree."

"At UW Oshkosh, the proposed M.S. in Cybersecurity aligns with the current program array within the College of Letters and Science, and the College of Business. UWO has successfully offered graduate programs in the STEM and professional fields, including existing graduate programs in Biology, Psychology, Data Science, and new graduate programs in Applied Biotechnology and Information Technology Management."

"At UW-Parkside, the proposed M.S. in Cybersecurity complements the current graduate programs offered by the Department of Computer Science in the College of Business, Economics, and Computing. The Computer Science department offers an MS in Computer Information Systems (MSCIS) and also an MS in IT Management (MS-ITM, a collaborative online degree). MSCIS is offered in the face-to-face delivery mode. MSCIS has a track in Cybersecurity; though it exposes students to concepts in cybersecurity, the curriculum is not as extensive as the proposed MS in Cybersecurity. MS-ITM has one course in cybersecurity. Because MS in Cybersecurity is delivered completely online and provides a rigorous curriculum with 34 credits for students who want a specialized, advanced degree in Cybersecurity, it is expected that this program will complement rather than compete with our existing programs."

"At UW-Platteville, the proposed M.S. in Cybersecurity aligns very well with its current and future program setting within the Department of Computer Science and Software Engineering (CSSE). The CSSE department currently offers a Bachelor of Science in Computer Science and

an ABET-accredited Bachelor of Science in Software Engineering major. Starting from spring 2021, a new Bachelor of Science in Cybersecurity will also be offered by the department. The proposed M.S. in Cybersecurity will provide the graduates from CSSE with a great opportunity to further their study in an area of computing this fast-growing and in high demand."

"At UW-River Falls, the proposed M.S. in Cybersecurity both complements and aligns with the current program array within the Department of Computer Science and Information Systems. UWRF has undergraduate programs in Computer Science, Information Systems, and Data Science that prepare students for career entry and graduate education. UWRF also has a Master of Science in Computer Science (MSCS) graduate program that provides students with skills in leading technologies such as Machine Learning, Data Science, Software Engineering, Cloud Computing, Mobile Computing and Information Security. The institution does not currently offer graduate level programs in Cybersecurity."

"At UW-Stevens Point, the proposed Master of Science in Cybersecurity program will complement the existing program array offered by the Computing and New Media Technologies department, which includes a traditional on-campus B.S. in Computer Information Systems with a track in Networking and Information Assurance, and the online programs in B.S. in Applied Computing, B.S. in Health Information Management and Technology, M.S. in Data Science, and M.S. in Information Technology Management. The institution does not currently offer online graduate programs for students to specialize in cybersecurity."

"At UW-Superior, the proposed Masters in Cybersecurity is a welcome addition to the suite of graduate programs offered by the campus community. UW-Superior serves a large geographic region in northern Wisconsin and contributing to this program establishes a resource for professionals to enhance their career prospects and build upon existing expertise. The online program also enables faculty to extend their expertise to a broad range of individuals seeking an advanced post-baccalaureate degree."

Other Programs in the University of Wisconsin System

There are currently no graduate degree programs in Cybersecurity offered within the UW System. In June 2019, UW-Whitewater distributed a Notice of Intent (NOI) to develop and offer a M.S. in Cybersecurity. They received responses from several of the UW institutions involved in the development of the collaborative online M.S. in Cybersecurity program expressing concerns regarding potential duplication with the developing collaborative offering which was introduced to campuses for interest in participation in January 2019. Based on follow-up discussions resulting from the NOI process, institutions from the two developing programs agreed to work together to distinguish the two degrees. Since that time, the two groups have engaged in formal communications to include the following:

- A presentation from the UW-Whitewater faculty to the collaborative online M.S. in Cybersecurity Curriculum Planning Workgroup (July 2019) on initial plans for the program to include core courses, specialty tracks/concentrations, program learning outcomes, faculty specializations, target audience(s), external partners, and additional program details.
- A follow-up teleconference in August 2019 following the conclusion of the curriculum planning process for the collaborative online M.S. in Cybersecurity where partners shared

similar information on the proposed program to include program competencies and student learning outcomes, course titles and descriptions, external and internal prerequisites, campus assignments, admission requirements and other information, and responded to questions from UW-Whitewater faculty and administrators on the program. There was also consensus established that the programs are presenting as unique and will serve to expand the UW's influence and reach, and provide prospective students with options in this high need and growing career field.

As expected, there are some similarities between the two proposed academic programs with the primary overlap occurring in the core courses which represents the common body of knowledge in the cybersecurity field. Based on the above discussions and planning to date, the primary differentiators between the two proposed offerings include the following:

- *Unique Professional Tracks:* The UW-Whitewater program will offer two primary specialization tracks for students; Security Engineering (technology track) or Cyber Resilience (management track). The collaborative online program offers four track options for students: Digital Forensics, Cyber Response, Governance and Leadership, and Security Architecture. Though the Governance and Leadership and Security Architecture tracks have some overlap with UW-Whitewater tracks, Digital Forensics and Cyber Response tracks offer curricular aspects that are distinct from UW-Whitewater programs.
- *Unique Target Audiences*: The UW-Whitewater program will serve both professionals and recent college graduates. The collaborative online program will primarily serve working adults/professionals with a statewide focus consistent with the geographical locations of the eight academic partners. The collaborative program will also allocate significant resources toward recruiting women into the program.
- *Unique Campus Specializations and Internal Resources*: UW-Whitewater serves as home to a specialty center, the Cyber Security Center for Small Business (CSCSB), which provides the institution with a unique connection to this niche audience and will likely translate to increased interest from professionals working in the small business environment.

Many of the UW campuses, to include those participating and those choosing not to participate in the collaborative online M.S. in Cybersecurity program, have resources and other non-M.S degree offerings in the area of cybersecurity. As demonstrated in the established curriculum for the collaborative online program, the comprehensive and combined resources of eight campuses participating in the collaborative online program have provided partners the opportunity to offer prospective students from throughout the state and region with unique options for professional specialization in this area.

Need as Suggested by Current Student Demand

It is anticipated that the online M.S. in Cybersecurity will predominantly attract adult and nontraditional students who possess a minimum of a completed bachelor's degree, currently work in the field, and have a desire to continue their education toward a master's degree primarily to expand knowledge and specialized skills in the field and for career advancement. Student demand for this degree is greatly influenced by market demand as indicated by current and future employment opportunities within the Cybersecurity field (see Market Demand data below). The degree addresses a recognized high-need area as supported by research that included extensive input from employers and industry representatives throughout the state. Similar to other need-

based collaborative online programs developed and administered through UWEX, the M.S. in Cybersecurity represents a program designed to satisfy a recognized workforce gap within the state and region as defined through research conducted and/or commissioned by UWEX to include industry focus groups and interviews with cybersecurity professionals, some of whom self-identified as prospective students for a M.S. in Cybersecurity degree program.

Need as Suggested by Market Demand

In fall 2018, UWEX commissioned the *Center for Research and Marketing Strategy* at the University Professional and Continuing Education Association (UPCEA) to conduct a Feasibility Analysis for the possible development of an online Master of Science in Cybersecurity. The analysis included a review of industry trends, occupational demographics, internet and library scans, an analysis of the competitive marketplace, and in-depth interviews with key opinion leaders from the cybersecurity industry representing a variety of organizations in several different states. Key findings from the report include the following:

- There is a strong demand for qualified cybersecurity professionals and that the University of Wisconsin is well positioned to develop a graduate degree program that responds accordingly.
- The state of Wisconsin is projected to experience a 9% increase in cybersecurity-related jobs over the next decade.
- Information security analysts have the highest forecasted growth between 2018 and 2028 with predictions of 25% growth in both the state and region.
- There is a significant shortage of women in global cybersecurity, accounting for only 11% of the global cybersecurity workforce.
- There is consensus among the opinion leaders interviewed that there is a significant need for a master's in cybersecurity that prepares working professionals to succeed in leadership and management positions within the industry and noted that it is often difficult to find qualified applicants for cybersecurity positions.
- A majority of opinion leaders surveyed do not feel that colleges, universities or others are meeting the current cybersecurity educational needs of students.
- Opinion leaders identified support for an online program based, in part, on its accessibility and flexibility for working professionals.
- The current competitive marketplace for a master's degree in cybersecurity is growing rapidly due to the job shortage of cybersecurity professionals.
- A favorable environment exists for launching the online graduate degree program in Cybersecurity.[2]

A recent real-time labor market report from Burning Glass Technologies on the current state of cybersecurity jobs identified a growing number of positions and a persistent talent shortage in this area. The report recognized that the number of cybersecurity job postings has grown 94% since 2013, compared to only 30% for IT positions overall. Nationally, the number of unfilled cyber security jobs grew to over 300,000 in 2018. Cybersecurity jobs account for 13% of

[2] University Professional and Continuing Education Association (UPCEA), Center for Research and Marketing Strategy (February 2019). *Feasibility Analysis: Online Master of Science in Cybersecurity*. Commissioned by the University of Wisconsin Extended Campus.

all information technology jobs. On average, however, cybersecurity jobs take 20% longer to fill than other IT jobs, and they pay 16% more. [3]

Finally, the Bureau of Labor Statistics reports that employment of information security analysts is projected to grow 28 percent from 2016 to 2026, much faster than the average for all occupations. Employment of information security analysts is projected to grow 56 percent in computer systems design and related services from 2016 to 2026. The median annual wage for information security analysts was $98,350 in May 2018.[4]

[3] Burning Glass Technologies (June 2019). *Recruiting Watchers for the Virtual Walls: The State of Cybersecurity Hiring*. Retrieved from https://www.burning-glass.com/research-project/cybersecurity/.

[4] Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*, Information Security Analysts, Retrieved from https://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm.

	A	B	C	D	E	F	G	H
1	**Master in Cybersecurity**			***** DRAFT *****				
2	**UW-Green Bay, La Crosse, Oshkosh, Parkside, Platteville, River Falls, Stevens Point, Superior**							
3								
4	**Financial Model**							
5		**2019-20**		**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**
6		**Forecast**		**Projection**	**Projection**	**Projection**	**Projection**	**Projection**
7	**Program Assumptions:**							
8	Number of Courses Developed	0		7	10	3	0	0
9	Number of Courses Revised	0		0	0	0	7	7
10	Degree Seeking Students	0		31	83	126	152	163
11	Course Enrollments	0		92	279	466	587	648
12	Course Sections Taught	0		9	19	25	30	32
13	Average Enrollments per Course Section	0		10	15	19	20	20
14	Student Credit Hours	0		276	837	1,398	1,761	1,944
15	Tuition per Credit	0		850	850	850	850	850
16								
17	**Program Tuition Revenues**							
18	Summer Semester	0		0	104,550	242,250	313,650	349,350
19	Fall Semester	0		91,800	288,150	464,100	601,800	678,300
20	Spring Semester	0		142,800	318,750	481,950	581,400	624,750
21	**Total Program Revenues**	**0**		**234,600**	**711,450**	**1,188,300**	**1,496,850**	**1,652,400**
22								
23	**Academic Activities:**							
24	Academic Director / Program Support	225,000		211,088	211,088	211,088	211,088	211,088
25	Faculty Course/Content Development	0		46,176	65,965	19,790	0	0
26	Faculty Course/Content Revisions	0		0	0	0	27,705	27,705
27	Faculty Course Instruction	0		106,863	225,600	296,843	356,211	379,958
28	Faculty Course Instruction Support	0		4,500	9,500	12,500	15,000	16,000
29	Student Services	0		52,772	52,772	52,772	52,772	52,772
30	Marketing - Local	0		56,000	56,000	56,000	56,000	56,000
31		**225,000**		**477,399**	**620,925**	**648,993**	**718,776**	**743,523**
32								
33	**Program Supports:**							
34	Program Management	69,030		66,925	66,925	66,925	66,925	66,925
35	Instructional & Media Design	0		180,851	180,851	180,851	135,030	135,030
36	Curriculum Software & Hosting	0		10,222	31,000	51,778	65,222	72,000
37	Student Engagement	0		47,162	47,162	47,162	47,162	47,162
38	Marketing & Recruitment	0		45,622	45,622	45,622	45,622	45,622
39	Marketing - Media Buys	0		80,000	80,000	80,000	80,000	80,000
40		**69,030**		**430,782**	**451,560**	**472,338**	**439,961**	**446,739**
41								
42	**Total Expenditures**	**294,030**		**908,181**	**1,072,485**	**1,121,331**	**1,158,737**	**1,190,262**
43								
44	**Cash Flow - Surplus / (Deficit)**	**(294,030)**		**(673,581)**	**(361,035)**	**66,969**	**338,113**	**462,138**

	A	B	C	D	E	F	G	H
1	**Master in Cybersecurity**			***** DRAFT *****				
2	**UW-Green Bay, La Crosse, Oshkosh, Parkside, Platteville, River Falls, Stevens Point, Superior**							
3								
4	**Course Offering Model**							
5		**2019-20**		**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**
6		**Projection**		**Projection**	**Projection**	**Projection**	**Projection**	**Projection**
7	**Courses Offered**							
8	Summer	0		0	3	5	6	6
9	Fall	0		3	8	10	10	10
10	Spring	0		6	8	10	10	10
11		0		9	19	25	26	26
12								
13	**Course Sections Taught**							
14	Summer	0		0	3	5	6	7
15	Fall	0		3	8	10	12	12
16	Spring	0		6	8	10	12	13
17		0		9	19	25	30	32
18								
19	**Course Enrollments**							
20	Summer	0		0	41	95	123	137
21	Fall	0		36	113	182	236	266
22	Spring	0		56	125	189	228	245
23		0		92	279	466	587	648
24								
25	***% Growth FY-to-FY***				***203.3%***	***67.0%***	***26.0%***	***10.4%***
26								
27								
28	**Average Course Enrollments per Course Section**							
29	Summer	0		0	14	19	21	20
30	Fall	0		12	14	18	20	22
31	Spring	0		9	16	19	19	19
32		0		10	15	19	20	20

* * * * * D R A F T * * * * *

University of Wisconsin-Collaborative
Costs and Revenue Projection For M.S. in Cybersecurity

	Items	Projections				
		FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25
		Year 1	Year 2	Year 3	Year 4	Year 5
I	**Enrollment (New Student) Headcount**	35	70	75	80	80
	Enrollment (Continuing Student) Headcount	-	31	83	126	152
	Enrollment (New Student) FTE	13	25	27	29	29
	Enrollment (Continuing Student) FTE	-	11	30	45	55
II	**Total New Credit Hours Enrolled**	276	837	1,398	1,761	1,944
	Courses Offered/Taught	9	19	25	30	32
	Course Student Enrollments	92	279	466	587	648
	Existing Student Credit Hours					
III	**FTE of Faculty/Instructional Staff**	2	4	4	4	4
	FTE of Admin Staff	3	6	6	6	6
IV	**Revenues**					
	From Tuition ($850 per credit)	234,600	711,450	1,188,300	1,496,850	1,652,400
	From Fees					
	Program Revenue - Grants					
	Program Revenue - Other					
	Allocation of GPR & Program Revenue Balances	673,581	361,035			
	Total Revenue	908,181	1,072,485	1,188,300	1,496,850	1,652,400
V	**New Expenses**					
	Salaries plus Fringes					
	UW Partner Institution Academic and Student Support Activities					
	Academic Director / Program Support	211,088	211,088	211,088	211,088	211,088
	Faculty Course/Content Development	46,176	65,965	19,790	0	0
	Faculty Course/Content Revisions	0	0	0	27,705	27,705
	Faculty Course Instruction	106,863	225,600	296,843	356,211	379,958
	Student Services	52,772	52,772	52,772	52,772	52,772
	UW Extended Campus Administrative Support					
	Program Management	49,030	49,030	49,030	49,030	49,030
	Instructional & Media Design	177,772	177,772	177,772	132,762	132,762
	Student Engagement	44,278	44,278	44,278	44,278	44,278
	Marketing & Recruitment	43,912	43,912	43,912	43,912	43,912
	Other Direct Expenses					
	Instructional Supplies and Expenses	4,500	9,500	12,500	15,000	16,000
	Curriculum Software and Hosting	10,222	31,000	51,778	65,222	72,000
	Marketing Supplies and Expenses	136,000	136,000	136,000	136,000	136,000
	General Supplies and Expenses	25,568	25,568	25,568	24,757	24,757
	Total Expenses	908,181	1,072,485	1,121,331	1,158,737	1,190,262
VI	**Net Revenue**					
		-	-	66,969	338,113	462,138

Notes to the Cost and Revenue Projections:

1. Program deficits, expenditures greater than revenues, will be absorbed and funded with UW Extended Campus carryforward funds.
2. Program surpluses, revenues greater than expenditures, will be shared equally among the nine partners with the intent of those funds to be reinvested back into growing the program.
3. See attached narrative for more information on the assumptions used to build the Costs and Revenue Projections.

Provost's Signature:	**Date:**
Please see Provost joint letter of commitment	

Joint Resolution on the Composition of the Search and Screen Committee for the University of Wisconsin System President

Whereas, the Board of Regents (hereafter "Regents") of the University of Wisconsin System (hereafter "System") formed a Search and Screen Committee for the University of Wisconsin System President on November 1, 2019, that consists of five Regents, one former Regent, two Chancellors, and one Provost, and includes no faculty, academic staff or university staff members, and no students, other than the non-traditional student Regent;

Whereas, just one week after UW System President Cross announced his retirement, the Regents announced the search and screen committee with no outreach to faculty, academic staff, university staff, or students regarding the composition of the committee;

Whereas, the composition of the Search and Screen Committee represents a significant departure from past practice, as past Search and Screen committees have included faculty, academic staff, university staff and student members consistent with the value of shared governance;

Whereas, the System President makes decisions that impact all aspects of life on the campuses;

Whereas, under the direction of the UW System President, the UW System Administration, according to its mission statement, "[m]odels and leads organizational learning and transformation through inclusive excellence, equity, and diversity, by engaging with students, faculty, staff, and a wide variety of external stakeholders, whose diverse viewpoints and experiences enrich the university's impact;"

Whereas, faculty, academic staff, university staff, and students are key stakeholders in the University of Wisconsin System, and can provide valuable perspectives on the role of the President that are distinct from those of the Regents and System administrators; and

Whereas, an inclusive and diverse search committee and process provides the incoming UW System President with the support of multiple stakeholder groups;

Now, Therefore, the Faculty Senate, Academic Staff Committee, University Staff Committee, and the Student Senate of the University of Wisconsin-Green Bay do hereby:

> Object to the existing composition of the Search and Screen Committee for the new UW System President, and
>
> Call on the University of Wisconsin System Board of Regents to restore representation of faculty, academic staff, university staff, and students, other than the non-traditional student Regent, on the new UW System President Search and Screen Committee before the committee begins its work.

Academic Affairs Council Report

At the 14 October 2019 meeting, the following actions were approved:

1. **ARABIC 102 : Introduction to the Arabic Language II** – added Global Culture Gen. Ed. designation
2. **CHINESE 102 : Introduction to the Chinese Language II –** added Global Culture Gen. Ed. designation
3. **CHEM-I : Chemistry Minor** – removed footnote on instrumental chemistry.
4. **COMM 301 : How to Create Great Social Media Content** - new course proposal
5. **COMM 382 : Public Relations Campaigns Writing** - change in course title
6. **DESIGN 431 : Graphic Design Studio III** - Update program, college and effective date of action. added to program description (Course is repeatable for credit; may be taken 2 times for a total of 6 credits.)Change repeatable for credit. Minor change to existing course.
7. **DJS 200 : Mentoring for Equity and Inclusion** – added to supporting courses
8. **ENGR 202 : An Introduction to Smart Cities** - new course proposal
9. **EDUC 282 : Conceptual Foundations of Elementary Mathematics II** - change effective date of action, change required prerequisites
10. **GERMAN 102 : Introduction to the German Language II** – added Global Culture Gen. Ed. designation
11. **HIMT 300 : Survey of Contemporary Computing** - Course Deactivation
12. **HIMT 301 : Digital Literacy in Healthcare** – new course proposal
13. **HISTORY 400 : Voyageur Magazine Practicum** - new course proposal
14. **HLTH_MGT : Healthcare Management in Health Systems Certificate** Change name of the certificate and OL emphasis.
15. **HUM-I Relg Studs : Religious Studies** - change effective catalog year, update college, added HUM STUD 384 to possible electives. add "HumStud 384 Topics in World Cultures: Contemporary Middle East in Lit and Film" to the Humanities Religious Studies track under UL electives
16. **MUSIC BA COMP : Composition** - MUSIC 102 change in requirement length (4 semester rather than 6) for all Music majors and minors.
17. **MUSIC BA INDIV : Individual Studies** - MUSIC 102 change in requirement length (4 semester rather than 6) for all Music majors and minors.
18. **MUSIC BA JAZZ : Jazz Studies** – MUSIC 102 change in requirement length (4 semester rather than 6) for all Music majors and minors.
19. **MUSIC BM EDCH : Music Education: Pre-K-12 Choral and General Music** - MUSIC 102 change in requirement length (4 semester rather than 8) for all Music majors and minors.
20. **MUSIC BM EDIN : Music Education: Pre-K-12 Instrumental and General Music** - MUSIC 102 change in requirement length (4 semester rather than 8) for all Music majors and minors.
21. **MUSIC BM INST : Instrumental Performance** – MUSIC 102 change in requirement length (4 semester rather than 8) for all Music majors and minors.
22. **MUSIC BM VOIC : Vocal Performance** – MUSIC 102 change in requirement length (4 semester rather than 8) for all Music majors and minors.
23. **MUSIC-I PERFORM : Music Performance** – MUSIC 102 added (4 semesters required)

24. **MUSIC 115 : Ear Training and Sight Singing I** - updated prerequisites (removed conc enr in Music 151)
25. **MUSIC 116 : Ear Training and Sight Singing II** - updated prerequisites (Music 115 Music 115;and 152 or Music 153 or concurrent enrollment)
26. **MUSIC 120 : Video Game Music** – new course proposal
27. **MUSIC 215 : Advanced Sight Singing and Ear Training** - updated prerequisites (Successful completion of MUSIC 116 with a grade of C or better and concurrent enrollment in MUSIC 253)
28. **MUS APP 11 : Keyboard Musicianship I** - change college, effective date of action, change required prerequisites.
29. **MUS APP 21 : Keyboard Musicianship II** - change effective date of action, change required prerequisites, change of recommended prerequisites.
30. **MUS APP 31 : Keyboard Musicianship III** - change college, effective date of action, change required prerequisites, change of recommended prerequisites.
31. **MUS APP 41 : Keyboard Musicianship IV** - change college, effective date of action, change required prerequisites, change of recommended prerequisites.
32. **NUT SCI 421 : Community Nutrition** - update College and effective date of action update required prerequisites
33. **NUT SCI 486 : Medical Nutrition Therapy II** – change in credit hours from 3 to 4 (adding a 1 credit discussion)
34. **ORG LEAD HLTH MGMT HEALTH MGT : Healthcare Management in Health Systems Emphasis.** Change program title.
35. **ORG LEAD ENV_PP : Environmental Policy and Planning Emphasis**. New course (PEA 431 added to electives).
36. **POL SCI 101 : American Government and Politics** - change default section size from 120 down to 75.
37. **PSYCH 401 : Psychology of Women and Gender** – merger between Psych 401 and Hum Dev 336, writing emphasis, perquisite change
38. **PU EN AF 301 : Environmental Politics and Policy** – change in periodicity.
39. **SOC WORK 213 : Human Trafficking** - new course proposal
40. **SOC WORK 395 : Special Topics in Social Work** – update effective date of action, update contant hours, repeatable if topics differ
41. **SPANISH 102 : Introduction to the Spanish Language II** – added Global Culture Gen. Ed. designation

At the 14 October 2019 meeting, the following actions were rolled back:

1. **FRENCH 102 : Introduction to the French Language II –** did not have the Global Culture Gen. Ed. designation.
2. **ENGR 402 : An Introduction to Smart Cities** - new course proposal. Requested clarification between the course content overlap between this course and ENGR 204 (which we approved).

At the 28 October 2019 meeting, the following actions were approved:

1. **ET 331 : Advanced Water ~~and Waste Water~~ Treatment** - Change in course title, required prerequisites (ET 203 instead of GEOSCI 202), cross-list with ENV SCI 335 removed.

2. **FRENCH 102 : Introduction to the French Language II – Update with general education categorization (Global Culture).** We approved this; however, the workflow on the request did not include the general education Council Chair (who has to approve it). Katrina said she would fix the issue.
3. **MATH 102 : Quantitative Reasoning -** Updated budgetary unit name, effective date of action, updated required prerequisites, added qualified instructor names.
4. **MUSIC 151 : Music Theory I** - Update College, Effective Date of Action, removed Prerequisites, added instructor names
5. **MUSIC 165 : Fundamentals of Recording Technology** - New Course Proposal
6. **MUSIC 166 : Digital Audio Overview** - New Course Proposal
7. **MUSIC 265 : Audio Engineering I** - New Course Proposal
8. **MUSIC 266 : Audio Engineering II** - New Course Proposal
9. **MUSIC 365 : Advanced Audio Mixing** - New Course Proposal
10. **MUSIC 366 : Live Sound Reinforcement** - New Course Proposal
11. **MUSIC 465 : Senior Audio Seminar I** - New Course Proposal
12. **MUSIC 466 : Senior Audio Seminar II** - New Course Proposal
13. **MUSIC BA : Audio Production** - New Program Proposal

At the 28 October 2019 meeting, the following action was rolled back:

1. **ORG LEAD 097 : Mathematics Preparation for Organizational Research and Statistics** -New Course Proposal. ORG LEAD 346 does not meet math competency then why are we creating a remedial math course in addition to UW system dictated Math 094?

Graduate Academic Affairs Council Report

At the 14 October 2019 meeting, the following actions were approved:

1. SOC WORK 731 : Research for MSW Practice- changed periodicity to ~~every fall~~ to every spring.
2. SOC WORK 721 : Advanced Practice: Multi-Level Family Systems- change periodicity to ~~every spring~~ to every fall.
3. SOC WORK 705 : Macro Practice Skills. ***Course deactivation,*** SOC WORK 703 : Direct Practice Skills. ***Course deactivation***,
4. SOC WORK 736: Advanced program Evaluation. ***Course deactivation***,
5. SOC WORK 738 : Advanced Practice: Community Empowerment. ***Course deactivation,*** Approved by Chair 10/25/19

Program Reviews

6. Approved Revised MSN Program Review. Sent to M. Dornbush 10/16/19
7. MSW Program Review completed.