

### Board of Trustees Academic & Student Affairs Committee Meeting

Wednesday, May 20, 2020, 9:30-10:00 AM Or upon the conclusion of the Board Workshop

Florida Polytechnic University TELE-CONFERENCE MEETING Dial In Number: 415-655-0001 | Access Code: 618 932 538#

Don Wilson, Board ChairDr. Earl Sasser, Vice-ChairHenry McCanceMark BostickDr. Victoria AstleyConnor CoddingtonRear Admiral Philip Dur

### AGENDA

- I. Call to Order
- II. Roll Call
- III. Public Comment
- IV. Approval of the February 25, 2020 Minutes \*Action Required\*
- V. Provost Report and Discussion
  - A. Admissions and Financial Aid
  - B. Faculty Hiring
  - C. Planning for the 2020-2021 Academic Year

VI. <u>Requested Committee Actions</u> (discussion of actions in Provost Report) \*Action Required\*

- A. B.S. Cyber Security Engineering Degree Approval
- B. Approval of Collective Bargaining Agreement, Revised Article 12: Salaries
- C. Approval of Memorandum of Understanding re COVID-19 Health Emergency
- D. Approval of Revised Regulation FPU-3.006 Student Code of Conduct
- VII. Closing Remarks and Adjournment

Don Wilson, Board Chair

Michele Rush

Don Wilson, Board Chair

Don Wilson, Board Chair

Dr. Terry Parker, EVP and Provost

Dr. Terry Parker, EVP and Provost

Don Wilson, Board Chair

### Florida Polytechnic University Board of Trustees

### **Academic and Student Affairs Committee Meeting**

### **DRAFT MEETING MINUTES**

Tuesday, February 25, 2020 1:00 PM - 2:30 PM

#### Florida Polytechnic University, Student Development Center 4700 Research Way, Lakeland, FL 33805

#### I. Call to Order

Committee Chair Adrienne Perry called the Academic and Student Affairs Committee meeting to order at 1:27 p.m.

#### II. <u>Roll Call</u>

Zaira Medina called the roll: Committee Chair Adrienne Perry, Committee Vice Chair Earl Sasser, Trustee Victoria Astley, Trustee Henry McCance, Trustee Ryan Perez, Trustee Mark Bostick and Trustee Philip Dur were present (Quorum).

Other trustees present: Board Chair Don Wilson, Vice Chair Cliff Otto, Trustee Frank Martin, Trustee Lou Saco and Trustee Gary Wendt.

Staff present: Provost Terry Parker, Ms. Gina Delulio, Mr. Mark Mroczkowski, Dr. Kathryn Miller, Dr. Tom Dvorske, Mrs. Maggie Mariucci, Mrs. Kris Wharton, Ms. Michele Rush, Mrs. Kim Abels and Mrs. Zaira Medina were present.

#### III. <u>Public Comment</u>

There were no requests received for public comment.

IV. <u>Approval of Minutes</u>

Trustee Henry McCance made a motion to approve the Academic and Student Affairs Committee meeting minutes of December 10, 2019. Trustee Mark Bostick seconded the motion; a vote was taken, and the motion passed unanimously.

V. 2018-20 Strategic Planning Committee Work Plan Review

The 2018-2020 Work Plan remains unchanged and no discussion occurred.

VI. <u>Provost Report</u>

Provost Terry Parker reviewed activity aligned with the Work Plan, which included Admissions and

Financial Aid, Student Affairs, four-year graduation improvement plan, degree program additions, faculty hiring status, student and faculty diversity, graduate programs, and technology and pedagogy.

Trustee Henry McCance inquired about the statement on the Completed Applications graph that indicates student applications have increased by more than 70% over prior year. BenMatthew Corpus stated the graph is incorrect; "applications" have increased by more than 31%; however, this graph should read "Applications" versus "Completed Applications." Completed Applications have increased 81%.

Board Chair Don Wilson inquired if the summer cohort program would help students in their 4-year graduation rate. Provost Parker responded affirmatively. Trustee Victoria Astley inquired if the students in the summer cohort is considered FTIC for graduation? As students are required to complete nine credits in a summer semester, the summer cohort will account for six of their credits and the graduation rate should improve. Additionally, Mr. Corpus clarified the First Year STEM Program students become part of the spring FTIC cohort.

Trustee McCance inquired if the 18 First Year STEM Program students who persisted received scholarship funds for the summer. Provost Parker stated they received scholarship funds in the fall semester as they transitioned into full time degree-seeking students. They will continue to receive \$2,000 per semester if they maintain their GPA.

Trustee Frank Martin inquired if the 18 faculty up for reappointment and promotion is consistent with the Collective Bargaining Agreement. Provost Parker confirmed there are exactly 18, that no one has been excluded from the process, and after these 18, there would be no more faculty in the pre-June 2017 group and the review of all faculty would be complete. Trustee Astley expressed concern if a great number of faculty are not reappointed. Provost Parker stated there is not an expectation of losing an enormous number of faculty, and that there is a transition period of one year after faculty are informed of non-reappointment.

Trustee Martin stated the need to recruit diverse faculty. Provost Parker affirmed diversity is appropriately considered in the hiring process. All universities struggle to hire diverse faculty because the pool of faculty in STEM degrees at the doctorate level is small.

Trustee Perry suggested undergraduate students may benefit from hybrid offerings for the summer cohort. Provost Parker agreed and stated this was investigated; however, the population who seeks participation do not live close enough to bring them in three Saturdays.

#### VII. Adoption of Regulation FPU-2.001 Admission to the University and Appeal Process – General

Ms. Melaine Schmiz provided an overview of Regulation FPU-2.001. Trustee Astley inquired who is the chief enrollment officer and is this defined anywhere? Ms. Schmiz confirmed that BenMatthew Corpus is the chief enrollment officer. The title is in lower caps; therefore, it is not an official title.

Trustee Henry McCance made a motion to recommend adoption of Regulation FPU-2.001 Admission to the University and Appeal Process – General to the Board of Trustees. Trustee Earl Sasser seconded the motion; a vote was taken, and the motion passed unanimously.

#### VIII. Closing Remarks and Adjournment

With no further business to discuss, the Academic and Student Affairs Committee Meeting adjourned at 2:19 p.m.



# **Provost's Report**

**Terry Parker** 

May 20, 2020



# Today's Discussion is a Review of Activity Aligned with the Work Plan

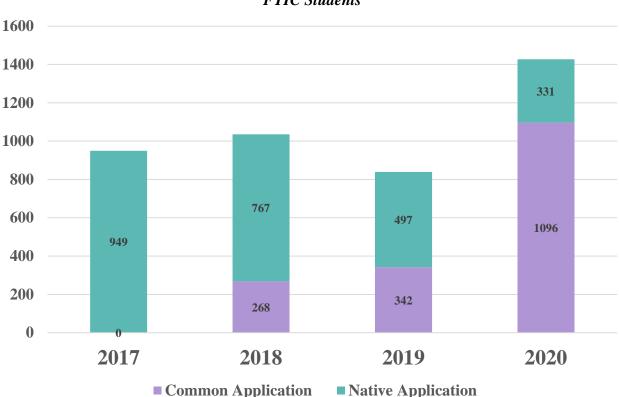
- Abbreviated Report for Remote Meeting: Highlights Only
- Admissions and Financial Aid: Current Status and projections
- Student Affairs: Student support in a remote environment
- Four year graduation improvement plan\*
- Degree Program Additions and Faculty Hiring Status
  - Cyber Security Engineering (request approval to proceed)
  - Faculty Hiring Status
- Student and Faculty Diversity
- Graduate Programs
- Technology and Pedagogy
  - Transition to Remote Instruction
- Other Items
  - Collective Bargaining: Salary Article and MOU regarding Spring 2020
  - Planning for the future

\* Gray colored titles not discussed at this meeting



# First Time In College (FTIC) Applications have increased

- Strong preference by prospective students to use the "common app"
- Reconfiguration of admission strategy has also increased application volume



### Completed Applications, Early May FTIC Students



# Admissions Metrics Have Increased in all Categories

<ul> <li>Data is for early May in each year</li> </ul>				
	Fall 2019	Fall 2020	Change	
UnG Admits	669	846	+ 177	
TOTAL Deposits	326	372	+ 46	
FTIC Deposits	294	320	+ 26	
Transfer Deposits	25	30	+ 5	
First Year Stem Program Deposits	24	60	+36	
Graduate Deposits	7	21	+ 14	
International Deposits	4	20	+ 16	
FTIC Female % Deposits	17.40%	19.20%	+ 1.8	
FTIC Latino % Deposits	18.10%	23.40%	+ 5.3	
FTIC Black % Deposits	4.80%	5.70%	+ .9	
SAT Deposits	1277	1310	+ 33	
ACT Deposits	28.40	29.90	+ 1.5	
HSGPA Deposits	4.02	4.29	+ .27	
		_		

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- The proposed revisions update the definition of hazing to comply with Board of Governor's regulation 6.021; update position titles, clarify and expand certain types of misconduct, add deferred determination as a method of non-formal resolution, and clarify the conduct of formal hearings and appeals.
- Proposed Resolution
  - The Board of Trustees approves the revised student code of conduct presented at this meeting



# Student Affairs: Student Life Activities While We Are "Remote"

- Created a Virtual Student Union: Organizes student resources, programs and services into one virtual location
- Career
  - Canvas Career Connect. Information on professionalism, preparing for interviews
- Phoenix Fun
  - Esports practices and tournament
  - Summer virtual Hack-A-Thon
- Student Government Association
  - Campus Labs (Organizes Club Activities online—SGA Elections for 2020-2021)
- Healthy Campus
  - Counseling available remotely
  - TAO Connect (Self-help resources focused on well-being)
  - Virtual Fitness Series

--Phoenix Fit Challenges (Challenges begin Monday and end on Fridays)

--Wellness Wednesday Workouts



# Student Affairs: Remote Activity to Support Students

- Advising
  - Registration Advising: Canvas Registration Assistance and TEAMS Advisor Appointments
  - Academic Improvement Program—TEAMS meetings.
     Success Coach Ryan Darley transitioned support for the Academic Improvement Program to a virtual environment, and 86% student success rate
  - Proactive Student Outreach for Summer and Fall course registration
  - Support for students who struggled with the transition
    - Phund-A-Phoenix (SGA initiative)
    - Cares Act Emergency Funds
    - Technology solutions



- 120 credit hour program
- Concentrations include
  - Industrial Control Systems Security
  - Smart-Grid Security
  - Hardware Security
  - Advanced Topics
- Includes all Florida Poly curricular components
  - Year-long Senior Capstone
  - Internship Requirement
  - 18-credits humanities
- Additional ABET requirements (will pursue)
  - Probability, statistics, cryptographic topics;
  - Discrete mathematics and information theory
  - Application of protective technologies & forensic techniques
  - Legal, regulatory, privacy, ethics, and human behavior topics



- Worldwide
  - 63% of IT professionals surveyed noted a shortage of cybersecurity staff; nearly 60% say their companies are at risk due to this shortage (2018 survey).
- The United States
  - 475% increase in national cybercrime reports in March 2020, demonstrating a high demand for cybersecurity jobs nationwide.
- Florida
  - Florida is #4 in the nation for high-tech employment nationally with more than 237,000 IT jobs.
  - Florida's High Tech Corridor employs more than 43,000 people, generating a payroll > \$3.4 billion annually.
  - 68% of organizations surveyed in Florida reported cyber security staff recruitment challenges.
  - The Florida Department of Economic Opportunity estimates additional growth of > 17% by 2024 across all cybersecurity-related positions.



# Student Demand & Florida Competition

- CS & CE are our two most popular majors; about 50% of student body
  - 21% of total majors pursue concentration in information assurance & cyber-security
- Dec 2019 internal survey 49% expressed interest in changing to this major
  - (n = 36/74)
- Extrapolating from national trends and fitting for Florida Poly admissions profile, approximately 40% of potential recruits are interested in technology-securityrelated majors.
- No other Cybersecurity Engineering programs in the SUS or in Florida.

11.1003	Computer Information Systems Security,	UWF-B,M; USFT-B,M; FIU-M
	Information Assurance	
43.0303	Critical Infrastructure Protection	USFT-M
43.0406	Cyber/Computer Forensics & Counterterrorism	FSU-B,M;
43.0406	Forensic Science & Technology	FGCU-B; FIU-M; UCF-B,M



- Formal approval is the next step for degree approval
- Proposed Resolution:
  - The Board supports and approves the proposed Bachelor of Science degree program "Cyber Security Engineering"
- Followed by formal review of proposal by Board of Governor's staff before inclusion in State's degree inventory.



- Faculty searches for next Fall:
  - the majority of searches are on hold due to travel and meeting restrictions
  - Visiting faculty appointments (one year, renewable) currently advertised to meet teaching needs
- Status for Searches:
  - Computer science: converted to visiting faculty searches, evaluating candidates
  - Data Science Business Analytics: converted to Visiting Faculty search, interviewing
  - Environmental Engineering: one candidate pending, one visiting faculty pending
  - Mechanical Engineering: converted to visiting faculty searches, evaluating candidates
  - Physics: two candidates under consideration
  - Math: one instructor offer out



# Florida Poly Transitioned to Remote Instruction on March 16

- Instruction delivery shifted to Virtual using WEBEX or TEAMS, course materials provided via CANVAS
- Assessment using Proctorio (uses webcam to monitor student during exam)
- Challenges:
  - Internet access and computers for students
  - Faculty moving delivery to online format
  - Maintaining student engagement

		Spring	Fall 2019	Spring
		2019		2020
DFW	Pre-calculus	66%	32%	31%
Fraction	Calculus I	55%	42%	18%
	All Courses	17.86%	17.52	11.13%
SAI	Course	4.01/5	4.04/5	4.12/5
Score	Average			
	Instructor	4.25/5	4.27/5	4.31/5
	Average			

DFW Fraction – the fraction of Grades that are a "D", an "F", or a Withdraw

SAI – Student Assessment of Instruction



- Each year annual salary increments must be formally bargained and codified in a salary article
  - Due to a budget reduction, no salary increases are being provided
  - Board approval is required, Proposed board resolution:
  - The Florida Polytechnic University Board of Trustees approves Article 12: Salaries (Amended May 6, 2020)
- The abrupt change to remote instruction in the spring produced "impact" bargaining
  - Result is a Memorandum of Understanding" and revised guidelines for faculty evaluation
- Proposed Board Resolution
  - The Florida Polytechnic University Board of Trustees approves the Memorandum of Understanding titled:

"MEMORANDUM OF UNDERSTANDING RE: COVID-19 HEALTH EMERGENCY"



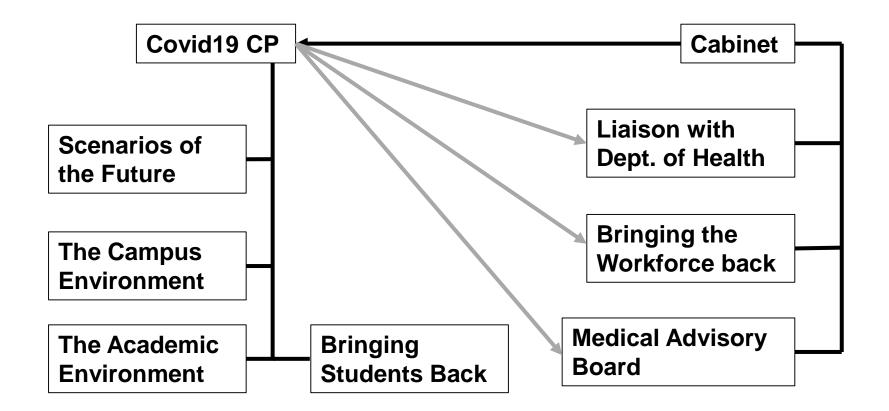
- The COVID-19 pandemic:
  - Produced the largest global recession since the Great Depression
  - Is an enormous challenge for higher education
- Responding to the challenge:
  - Immediate Decisions (Emergency Management)
    - Spring operations: Remote Instruction, Depopulating the campus
  - Very Short Term Planning
    - Summer operations: Remote Instruction, Faculty Training required
  - Fall Planning
    - Campus Planning Effort (CPE) COVID19
    - State University System (SUS) Working Groups and Task Force
    - Obvious Decisions: position the campus for flexibility with remote instruction



# The SUS is planning HOW to open in the fall

- Released May 18, 2020
  - Board of Governors' chair Syd Kitson has directed State University System Chancellor, Marshall Criser III, to develop guidelines to present to the Board of Governors at a public meeting on May 28, 2020.
     Universities will then present their individual plans, based on these guidelines, to the Board of Governors at a board meeting on June 23, 2020
- The guidelines from the Board of governors will likely be organized around:
  - Healthy and Safe Campus
  - Testing
  - Tracing
  - Academic Program Delivery
- University Plans
  - Broad guidelines on how to open but also flexible so that the plan can adjust to operational needs



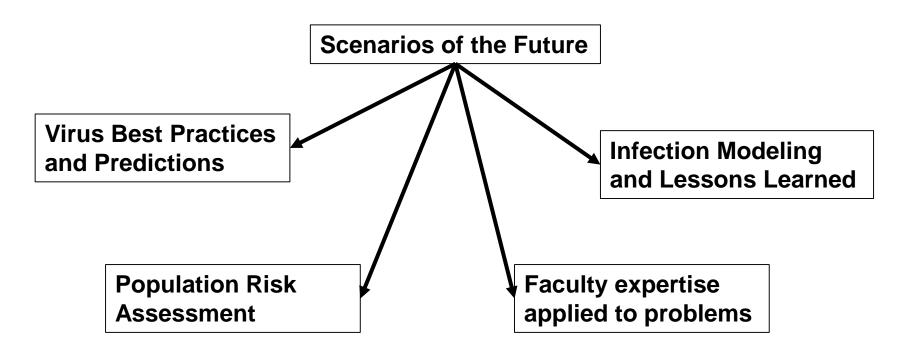


 The problem is highly complex and has multiple elements

May 20, 2020

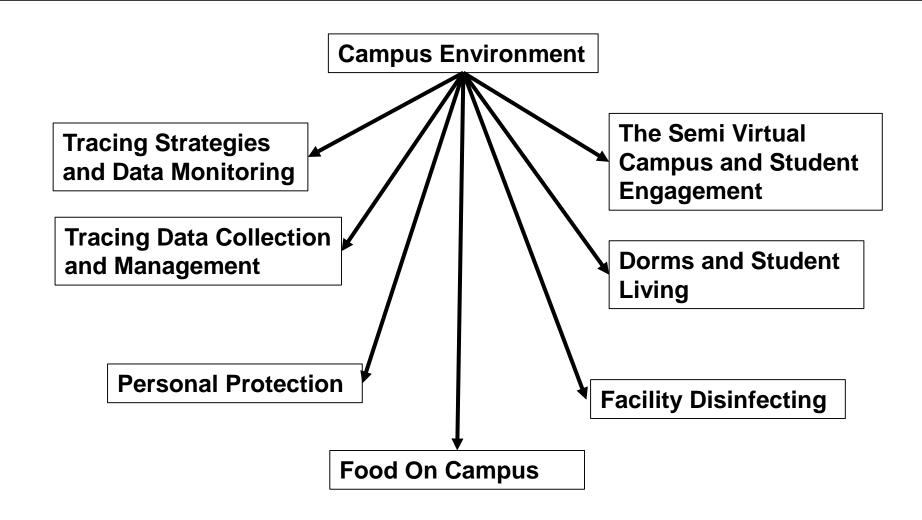


# Each Working Group has a set of subgroups



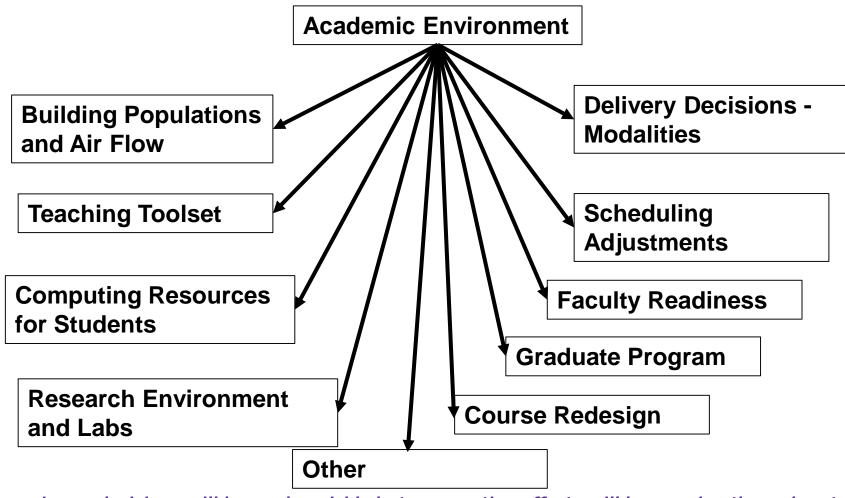
- Scenarios of the Future is more forward looking but has strong ties to the "practical"
- We will leverage our unique characteristics to produce a solution that is practical and innovative

# The operational issues are strongly tied to the campus and academics





# The Academic Environment has potentially long time scales for change



Large decisions will be made quickly but preparation efforts will be ongoing through out the summer

May 20, 2020



- Admissions and Financial Aid
  - Numbers are very good but! Fall uncertainties are significant
- Student Affairs
  - We have transitioned to providing remote student life and services
- Degree Program Additions and Faculty Hiring Status
  - Cyber Security Engineering Degree
  - Moving to Visiting Faculty to meet next years needs
- Technology and Pedagogy
  - We are rapidly putting remote and online capability in place
- Collective bargaining
  - Salary Article for BOT approval and notification of a Memorandum of Understanding
- COVID19 Impacts
  - An aggressive timeline for fall operations

### Florida Polytechnic University Academic & Student Affairs Committee Board of Trustees May 20, 2020

**Subject:** Bachelor of Science in Cyber Security Engineering Degree

#### **Proposed Committee Action**

To support and recommend approval of a Bachelor of Science degree program in Cyber Security Engineering to the Board of Trustees.

#### **Background Information**

The Bachelor of Science in Cybersecurity Engineering prepares engineers to be cybersecurity professionals with the knowledge, skills, and abilities to conceptualize, design, engineer, test, and implement all components of a cyber-physical, network system. This includes hardware, software, networking, and human interfaces of the system. The program encompasses computer engineering, electrical engineering, computer science, engineering, science, and mathematics. The program educates students in the fundamental core of cybersecurity engineering of physical systems and its cutting-edge, high-impact areas focusing on industrial plans, smart-grid and hardware security.

Supporting Documentation: Cyber Security Engineering Degree Proposal

Prepared by: Dr. Terry Parker, EVP & Provost

### Florida Polytechnic University Academic & Student Affairs Committee Board of Trustees May 20, 2020

Subject: Collective Bargaining Agreement, Revised Article 12: Salaries

#### **Proposed Committee Action**

Recommend approval of the Collective Bargaining Agreement, Revised Article 12: Salaries to the Board of Trustees.

#### **Background Information**

In each spring semester, the university and the UFF Florida Poly chapter bargain for salary increases in the upcoming Academic Year. Due to budget constraints, there are no salary increases for the coming year.

Supporting Documentation: Collective Bargaining Agreement, Revised Article 12: Salaries

Prepared by: Dr. Terry Parker, EVP & Provost

### Florida Polytechnic University Academic & Student Affairs Committee Board of Trustees May 20, 2020

**Subject:** Memorandum of Understanding re COVID-19 Health Emergency

#### **Proposed Committee Action**

Recommend approval of the Memorandum of Understanding re COVID-19 Health Emergency to the Board of Trustees.

#### **Background Information**

The abrupt transition to remote instruction in the spring 20-20 semester changed the working conditions which required impact bargaining. The result of this process is the Memorandum of Understanding (MOU) that follows the salary article. The MOU includes revised evaluation guidelines which will be used for annual faculty evaluations.

**Supporting Documentation:** Memorandum of Understanding re COVID-19 Health Emergency

Prepared by: Dr. Terry Parker, EVP & Provost

#### AGENDA ITEM: VI.D.

### Florida Polytechnic University Academic & Student Affairs Committee Board of Trustees May 20, 2020

#### Subject: FPU-3.006 Student Code of Conduct

#### **Proposed Action**

#### Approval of revised regulation FPU-3.006 Student Code of Conduct.

#### **Background Information**

The proposed revisions update the definition of hazing to comply with Board of Governor's regulation 6.021; update position titles, clarify and expand certain types of misconduct, add deferred determination as a method of non-formal resolution, and clarify the conduct of formal hearings and appeals.

Specifically, the following additional types of misconduct are proposed:

- Bullying, when not protected speech,
- Intellectual property as property encompassed by actual or attempted theft,
- Selling controlled substances, possession of paraphernalia used for drugs, and the unprescribed use, inhalation, or ingestion of a substance that could alter a person's mental state,
- Attending class, an organizational meeting or other University event that is specific for an educational purpose while under the influence of the substances listed in the code,
- Violations of any policy or regulation governing University Housing, as well as, the Resident Handbook, and
- Retaliation against a person participating in the student conduct process.

The following revisions to the formal hearing process are proposed:

- Clarifying the process and timing for Responding party and Reporting party to submit questions of the other party to the Hearing Body,
- Removing the requirement that the Hearing Body announce its proposed findings and sanctions following deliberations,
- Allowing the Provost to appoint an appellate officer to review and decide an appeal, and
- Removing "No Substantial Information to Support Recommendation" as a basis for appeal.

The proposed revisions were provided to members of the Student Government Association for their review and comment.

The Notice of Amendment to proposed regulation and the regulation was published on the University's website on April 15, 2020. No comments were received during the review and comment period.

Supporting Documentation: DRAFT FPU-3.006 Student Code of Conduct

Prepared by: Melaine Schmiz, Assistant General Counsel

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# CYBER SECURITY ENGINEERING DEGREE PROPOSAL

### Board of Governors, State University System of Florida

### Request to Offer a New Degree Program

(Please do not revise this proposal format without prior approval from Board staff)

Florida Polytechnic University University Submitting Proposal

Not applicable Name of College(s) or School(s)

Cyber-Security

Academic Specialty or Field

Fall 2021 Proposed Implementation Term

Electrical & Computer Engineering Name of Department(s)/ Division(s)

Cybersecurity Engineering Complete Name of Degree

29.0207

**Proposed CIP Code** 

The submission of this proposal constitutes a commitment by the university that, if the proposal is approved, the necessary financial resources and the criteria for establishing new programs have been met prior to the initiation of the program.

		-
Date Approved by the University Board of	President	Date
Trustees		
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Signature of Chair, Board of	Date	Vice President for Academic	Date
Trustees		Affairs	

Provide headcount (HC) and full-time equivalent (FTE) student estimates of majors for Years 1 through 5. HC and FTE estimates should be identical to those in Table 1 in Appendix A. Indicate the program costs for the first and the fifth years of implementation as shown in the appropriate columns in Table 2 in Appendix A. Calculate an Educational and General (E&G) cost per FTE for Years 1 and 5 (Total E&G divided by FTE).

Implementation Timeframe	Proje Enroll (From T	lment	Projected Program Costs (From Table 2)				
	НС	FTE	E&G Cost per FTE	E&G Funds	Contra ct & Grants Funds	Auxiliary / Philanthr opy Funds	Total Cost
Year 1	20	19	\$38,410	\$729,787			\$729,787
Year 2	45	43					
Year 3	83	76					
Year 4	107	98					
Year 5	120	111	\$11,607	\$1,288,425			\$1,288,425

Note: This outline and the questions pertaining to each section must be reproduced within the body of the proposal

to ensure that all sections have been satisfactorily addressed. Tables 1 through 4 are to be included as Appendix A and not reproduced within the body of the proposals because this often causes errors in the automatic calculations.

#### INTRODUCTION

- I. Program Description and Relationship to System-Level Goals
  - A. Briefly describe within a few paragraphs the degree program under consideration, including (a) level; (b) emphases, including majors, concentrations, tracks, or specializations; (c) total number of credit hours; and (d) overall purpose, including examples of employment or education opportunities that may be available to program graduates.

The Bachelor of Science in Cybersecurity Engineering prepares engineers to be cybersecurity professionals with the knowledge, skills, and abilities to conceptualize, design, engineer, test, and implement all components of a cyber-physical, network system. This includes hardware, software, networking, and human interfaces of the system. The program encompasses computer engineering, electrical engineering, computer science, engineering, science, and mathematics. The program educates students in the fundamental core of cybersecurity engineering of physical systems and its cutting-edge, high-impact areas focusing on industrial plans, smart-grid and hardware security.

The curriculum stems from a strong background in engineering math and science, and engineering topics within the framework of hardware-based computer engineering and electrical engineering blended with software-based computer science. The hardware-based computer engineering includes microcomputer and computer architecture. The curriculum emphasizes on cyber physical security with concentration on Industrial Control Systems Security, Smart-grid Security, Hardware Security and Advanced Topics. The cybersecurity engineering program with an emphasis on the security of cyber physical systems should be distinguishable from other Bachelor of Science programs. It requires seven (7) new courses of 21 credits.

The program is structured to satisfy the ABET general program requirements with 36 credits (minimum 30) of math and science, 65 credits of engineering topics (minimum 45) and 18 credits of general education. The program provides breadth from the required courses and depth through the concentration courses. The curriculum is also structured to meet ABET program requirements for cybersecurity engineering through required courses and these include

- 1. Probability, statistics, and cryptographic topics.
- 2. Discrete mathematics and information theory
- 3. Application of protective technologies and forensic techniques
- 4. Consideration of legal, regulatory, privacy, ethics, and human behavior topics as appropriate to the program.

Students holding this degree are employable in government, military, and private sector, and will have a solid foundation to pursue advanced study in computer science, electrical or computer engineering at the graduate level.

B. Please provide the date when the pre-proposal was presented to CAVP (Council of Academic Vice Presidents) Academic Program Coordination review group. Identify any concerns that the CAVP review group raised with the pre-proposed program and provide a brief narrative explaining how each of these concerns has been or is being addressed.

The pre-proposal was presented to the Council of Academic Vice Presidents Academic Coordinating Group on April 23, 2019. There were no concerns expressed.

#### C. If this is a doctoral level program please include the external consultant's report at the

end of the proposal as Appendix D. Please provide a few highlights from the report and describe ways in which the report affected the approval process at the university.

Not applicable.

D. Describe how the proposed program is consistent with the current State University System (SUS) Strategic Planning Goals. Identify which specific goals the program will directly support and which goals the program will indirectly support (see link to the SUS Strategic Plan on the resource page for new program proposal).

The proposed B.S. in Cybersecurity Engineering directly supports several SUS Strategic Plan goals in several ways. These include not only the program are content itself, but its direct connection with the University's Advanced Mobility Institute with its work in autonomous systems where cyber-security is a critical engineering outcome. The addition of cyber-security engineers to our interdisciplinary, industry-sponsored senior capstone experience will enhance the desirability for industry-partners to want to contribute projects with more dimensions as these students will add an important element of complexity and need to the design. Specifically, the program will directly support the following SUS Strategic Plan Goals:

- Teaching and Learning Strategic Priorities for a Knowledge Economy
  - Goal: increase the number of degrees awarded in STEM and other areas of strategic emphasis.
- Scholarship, Research, and Innovation: Excellence
  - Goal: Strengthen the Quality and Reputation of Scholarship, Research, and Innovation
    - Improve the quality and impact of scholarship, research, and commercialization activities.
    - Increase undergraduate participation in research to strengthen the pipeline of researchers pursuing graduate degrees.
  - Goal: Increase Research Activity and Attract More External Funding
  - Attract more research funding from external (federal and private) sources
- Community and Business Engagement
  - Goal: Increase Community and Business Workforce
    - Increase the percentage of graduates who continue their education or are employed full-time.
  - E. If the program is to be included in a category within the Programs of Strategic Emphasis as described in the SUS Strategic Plan, please indicate the category and the justification for inclusion.

The Programs of Strategic Emphasis Categories:

- 1. Critical Workforce:
  - Education
  - Health
  - Gap Analysis
- 2. Economic Development:
  - Global Competitiveness
- 3. Science, Technology, Engineering, and Math (STEM)

Please see the Programs of Strategic Emphasis (PSE) methodology for additional explanations on program inclusion criteria at <u>the resource page for new program proposal</u>.

The program's CIP code was <u>added to the Programs of Strategic Emphasis</u> area for STEM at the <u>August</u> <u>28-29, 2019 Board of Governors Meeting</u> at Florida Gulf Coast University.

F. Identify any established or planned educational sites at which the program is expected to be offered and indicate whether it will be offered only at sites other than the main campus.

The program is intended to be offered onsite at the J.D. Alexander Campus at 4700 Research Way, Lakeland, Florida 33805.

#### **INSTITUTIONAL AND STATE LEVEL ACCOUNTABILITY**

#### II. Need and Demand

A. Need: Describe national, state, and/or local data that support the need for more people to be prepared in this program at this level. Reference national, state, and/or local plans or reports that support the need for this program and requests for the proposed program which have emanated from a perceived need by agencies or industries in your service area. Cite any specific need for research and service that the program would fulfill.

Cybersecurity is a national security issue and an economic concern for Florida and the United States. As more industrial equipment and processes rely on computer-based, remotely controlled systems such as autonomous vehicles and smart-grids, their secure operation is important. Nationwide, demand is growing for engineering jobs especially in cyber physical security and ABET has responded by developing accreditation standards that articulate industry expectations and requirements associated with the broad field of cyber-security, both software and hardware systems. According to the Occupational Outlook Handbook of US Department of labor, the demand for jobs in security is growing 28% faster ("much faster") than average.

This program should create a hub for highly skilled workforce in cyber physical security to meet the local, state, national and international demands making a center of excellence around Florida Poly. There are a number of companies whose businesses are entirely centered around cyber security.

Seven Florida companies are on the Cybersecurity 500, Cybersecurity Ventures' list of the world's best companies in the industry: Easy Solutions, Veriato, KnowBe4, Appriver, INFOSIGHT, Harris and Citrix. On the other hand, two Florida cities - Miami (6th) and Tampa (8th) - ranked in the top 10 for cyber security job growth from 2010 to 2014.

Within the Departments of Electrical and Computer Engineering and Computer Science, there are at least four (4) faculty members who are actively engaged in research in cyber security with two additional projects funded by Florida agencies. The development of the proposed curriculum would enhance research activities at Florida Poly to reach its research goals. The department of electrical and computer engineering is searching for one new faculty on cyber physical security and another one for autonomous vehicles. Once the proposed curriculum is in place and the program is accredited by ABET Inc, the program plans (a) to seek for designation as a National Center of Academic Excellence in Cyber Defense Education by the National Security Agency and the Department of Homeland Security, and (b) to offer an online certificate on cyber physical security.

#### **Industry Demand**

Worldwide

• 63% of IT professionals surveyed in 2018 noted that their organizations have a shortage of IT staff dedicated to cybersecurity. And nearly 60% say their companies are at moderate or extreme risk of cybersecurity attacks due to this shortage.<sup>[1]</sup>

The United States

- Nationally, there was a 475% increase in national cybercrime reports in March of 2020, demonstrating a high demand for cybersecurity jobs nationwide.<sup>[2]</sup>
- Employment of information security analysts is projected to grow 32% from 2018 to 2028, a much higher rate than most occupations.<sup>[3]</sup> There were 112,300 jobs in 2018, and it is projected to increase to 147,800 jobs by 2028 by the Bureau of Labor statistics.

#### Florida

- More than 27,000 high-tech companies operate in Florida, with more than 5,000 providing ITspecific services, making Florida #4 in the nation for high-tech employment nationally with more than 237,000 IT jobs. Florida's High Tech Corridor alone employs more than 43,000 people, generating a payroll of more than \$3.4 billion annually.<sup>[4]</sup>
- Cybercrime will continue to increase due to Florida's robust economic landscape. At the close of 2017, it was found that there is a national shortage of more than 285,000 skilled workers in this space, with more than 12,600 cybersecurity openings in Florida.
- 68% of organizations surveyed in Florida reported cyber security staff recruitment challenges.<sup>[6]</sup>
- In 2015, more than 46,000 healthcare establishments employed more than 803,000 Floridians. the healthcare industry was the hardest hit by cyberattacks in the first half of 2017, accounting for 25% of all breaches. In Florida alone, organizations reported 28 breaches of HIPAA-related information to the U.S. Department of Health and Human Services in 2016, with 2.8 million records extracted from Florida data centers in 2016.
- Florida ranks among the top 10 states for manufacturing, with more than 19,000 manufacturers producing a variety of goods. Manufacturing was the third-most attacked sector in 2016, and the proportion of serious incidents were 40% higher than the average across all industries.
- The scarcity of trained cybersecurity professionals and increasing wages have resulted in a negative security-specific unemployment rate in Florida. The Florida Department of Economic Opportunity is estimating additional growth of more than 17% by 2024 across all cybersecurity-related positions.<sup>[8]</sup>
- Cyber security data breaches in Florida increased 17.8% between 2015 and 2016. Forty-one percent of Florida entities surveyed by Gartner in 2017 had recently suffered an incident that disrupted normal business. When asked to rank the severity of the disruption, 66% indicated the event was "moderate" in nature, while 16% rated it "high."

<sup>[1]</sup> ISC2 Cybersecurity workforce study (2018). Cybersecurity Professionals focus on Developing New Skills as Workforce Gap Widens.

<sup>[2]</sup> Phillips, J. News Fox 30, April 24, 2020. High demand for cybersecurity professionals in Northeast Florida.

<sup>[3]</sup> US Bureau of Labor Statistics, Occupational Handbook. Information Security Analysts summary.

<sup>[4]</sup> The State of Cybersecurity in Florida. 2017. Florida Center for Cybersecurity at USF. Gartner. <sup>[5]</sup> ibid

<sup>[6]</sup> The State of Cybersecurity in Florida. 2017. Florida Center for Cybersecurity at USF. Gartner. Pg 16 <sup>[7]</sup> Verizon. 2017 Data Breach Investigations Report

18 The State of Cybersecurity in Florida. 2017. Florida Center for Cybersecurity at USF. Gartner.

# B. Demand: Describe data that support the assumption that students will enroll in the proposed program. Include descriptions of surveys or other communications with prospective students.

Computer Science and Computer Engineering, our first and third most popular majors respectively, combine to account for nearly 50% of Florida Poly's majors. Twenty-one percent of our total majors are pursuing the concentration in information assurance and cyber-security, currently available only to computer science students. By creating a focused degree program in cyber-security engineering, we create opportunity for computer engineers to explore the security issues involved in physical systems. Therefore, we have strong reason to believe that students interested in Florida Poly would readily populate this program.

Currently, in the BOG inventory there are two programs under CIP 11.1003 (Computer information systems security/information assurance): a master's at FIU and a bachelor's at UWF. There are no programs in the SUS under CIP 29.0207, Cyber/Electronic Operations and Warfare. As such, the program is not duplicative of any existing program in the SUS, but the SUS does have some competition in Florida from similar programs at private institutions.

At the bachelor's level, fall 2018 census for UWF showed 91 students enrolled in their cyber-security program (source: UWF Institutional Research).

On December 9, 2019, the university surveyed current undergraduates at Florida Poly to determine their level of interest in a potential Cybersecurity Engineering program. Of the four direct questions about the proposed degree program, approximately 49% of those responding, or 36 students, stated that they would be interested in or would consider switching majors into Cybersecurity Engineering out of a total of 74 student respondents, with 84% being current computer science or computer engineering majors.

Nationally, over 134,000 graduating high school seniors were interested in engineering and computer science degrees and had academic results that fit the admissions profile for Florida Poly in terms of their math abilities. By extrapolating the national trends would result in approximately 40% moving into technology security related majors (College Board, EPS data May 11, 2020).

C. If substantially similar programs (generally at the four-digit CIP Code or 60 percent similar in core courses), either private or public exist in the state, identify the institution(s) and geographic location(s). Summarize the outcome(s) of communication with such programs with regard to the potential impact on their enrollment and opportunities for possible collaboration (instruction and research). In Appendix C, provide data that support the need for an additional program.

Related programs in Florida/SUS are identified below. Many institutions, including Florida Poly, have concentrations in cyber-security located in Computer Science or a related field. A presentation by Allen Parrish and Paul Tortora of the US Naval Academy at the 2017 ABET Symposium (April 20-21) includes an analysis of cybersecurity-related programs nationwide, noting that more are needed nationwide to keep up with demand. Moreover, they analyze types of programs, noting that many are designed around specific approaches such as network security, cyber-crime investigation, data-information security, or some other aspect. In ABET terms, a cyber-security engineering program requires students to "analyze, design, implement and evaluate systems as an underlying principle." Further, they note that not all cybersecurity is computing, but that it includes policy and human factors as well.

11.1003     Image: Table: SUS Programs by CIP Code Description       11.1003     Computer Information Systems Security,				
11.1003	1 5 5	UWF-B,M; USF-1 - B,M; FIU-M		
	Information Assurance			
43.0303	Critical Infrastructure Protection	USF-T-M		
43.0406	Cyber/Computer Forensics &	FSU-B,M;		
	Counterterrorism			
43.0406	Forensic Science & Technology	FGCU-B; FIU-M; UCF-B,M		

Table: SUS Programs by CIP Code Description

D. Use Table 1 in Appendix A (1-A for undergraduate and 1-B for graduate) to categorize projected student headcount (HC) and Full Time Equivalents (FTE) according to primary sources. Generally undergraduate FTE will be calculated as 30 credit hours per year and graduate FTE will be calculated as 24 credit hours per year. Describe the rationale underlying enrollment projections. If students within the institution are expected to change majors to enroll in the proposed program at its inception, describe the shifts from disciplines that will likely occur.

It is expected that at the outset some percentage of students will shift from either electrical or computer engineering to cybersecurity engineering. This change will be relatively easy given the similarity in curricula. The University may also explore the possibility of offering double-majors to mitigate reduction in any one degree program should that be feasible without losing out on time to degree. It is also possible students from Computer Science might consider changing major, as some surveyed have expressed interest, but the likelihood is small as those students typically want what they perceive as the appeal of a broader computer science degree. Overall, program enrollment in year one and through the first five years is estimated based on the overall University growth plan, not accounting for Covid-19. We do

anticipate that the program will be attractive as Admissions analysis has positive indicators, and we believe its synergy with our other programs will enable it to grow. Furthermore, as this program, and therefore the ECE Department grows, and launches its newer, better defined concentrations, we feel that any initial pull of graduates will even out and all three ECE programs will, over time, demonstrate growth.

E. Indicate what steps will be taken to achieve a diverse student body in this program. If the proposed program substantially duplicates a program at FAMU or FIU, provide, (in consultation with the affected university), an analysis of how the program might have an impact upon that university's ability to attract students of races different from that which is predominant on their campus in the subject program. <u>The university's Equal</u> <u>Opportunity Officer shall review this section of the proposal and then sign and date</u> <u>Appendix B to indicate that the analysis required by this subsection has been completed</u>.

As noted in I.B., there were no concerns from the CAVP-ACG in April 2019; furthermore, as identified in Section II.C, the proposed program has no similar CIP codes in the system and the only related fields are at FIU at the master's level. Thus, graduates of the B.S. in Cybersecurity Engineering from Florida Poly may be good candidates for graduate work in Forensic Science and Technology at FIU or further study at the master's level in Information Assurance.

#### III. Budget

A. Use Table 2 in Appendix A to display projected costs and associated funding sources for Year 1 and Year 5 of program operation. Use Table 3 in Appendix A to show how existing Education & General funds will be shifted to support the new program in Year 1. In narrative form, summarize the contents of both tables, identifying the source of both current and new resources to be devoted to the proposed program. (Data for Year 1 and Year 5 reflect snapshots in time rather than cumulative costs.)

Table three shows no reallocation of funds because the Department that houses electrical and computer engineering programs that will also house cybersecurity engineering are all under the same account in Academic Affairs. Thus, no reallocation is occurring. In fact, the funds are coming from unallocated recurring dollars from a state appropriation in 2018 to fund additional faculty lines. In general, the additional funds will not be significant as the total person-years in year 1 is 3.08 and in year 5 is 5.4. General institutional growth will make up for the increase in needed faculty along with already allocated funds, growth in student population, and current faculty expertise, which enables us to teach the full curriculum of the proposed program at this time. As noted elsewhere in this document, electrical engineering has been performing below expectations in terms of enrollment so in the short-term, a boost in enrollment in many of the same courses would result in a load-balancing for the faculty as their loads compare across the institution. From this standpoint, the addition of the program is in year one largely cost-neutral.

B. Please explain whether the university intends to operate the program through continuing education, seek approval for market tuition rate, or establish a differentiated graduate-level tuition. Provide a rationale for doing so and a timeline for seeking Board of Governors' approval, if appropriate. Please include the expected rate of tuition that the university plans to charge for this program and use this amount when calculating cost entries in Table 2.

Not Applicable.

C. If other programs will be impacted by a reallocation of resources for the proposed program, identify the impacted programs and provide a justification for reallocating resources. Specifically address the potential negative impacts that implementation of the proposed program will have on related undergraduate programs (i.e., shift in faculty effort, reallocation of instructional resources, reduced enrollment rates, greater use of adjunct

faculty and teaching assistants). Explain what steps will be taken to mitigate any such impacts. Also, discuss the potential positive impacts that the proposed program might have on related undergraduate programs (i.e., increased undergraduate research opportunities, improved quality of instruction associated with cutting-edge research, improved labs and library resources).

By implementing the B.S. in Cybersecurity Engineering in the Electrical and Computer Engineering Department, the first impacts will be felt in the bachelors' programs in Electrical and Computer Engineering. We suspect that, initially, the program in Cybersecurity Engineering may draw students away from one or both of the other programs before a resettling occurs where all three reach a steadystate. Some adjustment in teaching loads on faculty will occur as well; however, the program adds only seven new courses to the department at the upper-level and current departmental loads in terms of SCHs have been declining relative to other programs. The intent is to boost departmental enrollment overall to bring the productivity of department faculty up to a level comparable to their counterparts in computer science and mechanical engineering departments.

In terms of research, the new program leverages expertise across both disciplinary areas within the department and the University's Advanced Mobility Institute as well as other research areas to drive a stronger inter-disciplinary focus on cybersecurity overall. Collaborations with computer science, mathematics, mechanical engineering, and data science will increase with the addition of this program and the need to develop research and curricula in support will help drive the current faculty efforts to higher levels of productivity.

## D. Describe other potential impacts on related programs or departments (e.g., increased need for general education or common prerequisite courses, or increased need for required or elective courses outside of the proposed major).

Increased enrollment that the program will incur would increase demand on general education courses supporting the program and increase demand on courses within the department. These are accounted for in Appendix A in enrollment, cost, and faculty tables.

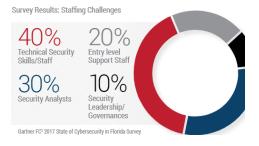
# E. Describe what steps have been taken to obtain information regarding resources (financial and in-kind) available outside the institution (businesses, industrial organizations, governmental entities, etc.). Describe the external resources that appear to be available to support the proposed program.

At this stage, no additional external resources have been pursued to support the program. The state provided Florida Poly with an additional appropriate in 2018 to support faculty hiring and that recurring money continues to be available to grow our programs. As yet unallocated portions of those funds will go toward any new costs associated with the program. The University works regularly with its Industry Partners in funding for senior capstone projects and regularly builds these relationships to facilitate student internships and create pathways for job placement.

#### IV. Projected Benefit of the Program to the University, Local Community, and State

Use information from Tables 1 and 2 in Appendix A, and the supporting narrative for "Need and Demand" to prepare a concise statement that describes the projected benefit to the university, local community, and the state if the program is implemented. The projected benefits can be both quantitative and qualitative in nature, but there needs to be a clear distinction made between the two in the narrative.

The 2017 report out of the Florida Center for Cybersecurity at the University of South Florida makes ample case for the need for a growing workforce in cybersecurity for the state. The "State of Cybersecurity Report" is important to this proposal for several reasons. While it demonstrates the cost of cyber-attacks and the threat they pose to Florida's economy as well as specific sectors within the economy, the most notable aspect of this report with respect to the proposed program is the range of types of threats that the document identifies: among these threats are environment, human threats, and social threats such as unrest. The report details other specific actions and causes of breaches, but the key factor is that the report implicitly identifies the complexity of the cybersecurity problem and show it as one to be challenged from an engineering perspective. The report further examines Florida-based organizations and shows that "the average number of full-time, dedicated security personnel ranges from two to five FTE." Most security teams are backfilled by support positions and 98% of respondents indicated that at least some staff hold security certification. Clearly, the space is wide open for cybersecurity engineers to step in to a wide range of positions throughout Florida and begin making an enormous difference.



#### V. Access and Articulation – Bachelor's Degrees Only

A. If the total number of credit hours to earn a degree exceeds 120, provide a justification for an exception to the policy of a 120 maximum and submit a separate request to the Board of Governors for an exception along with notification of the program's approval. (See criteria in Board of Governors Regulation 6C-8.014)

Not applicable

B. List program prerequisites and provide assurance that they are the same as the approved common prerequisites for other such degree programs within the SUS (see link to the Common Prerequisite Manual on <u>the resource page for new program proposal</u>). The courses in the Common Prerequisite Counseling Manual are intended to be those that are required of both native and transfer students prior to entrance to the major program, not simply lower-level courses that are required prior to graduation. The common prerequisites and substitute courses are mandatory for all institution programs listed, and must be approved by the Articulation Coordinating Committee (ACC). This requirement includes those programs designated as "limited access."

If the proposed prerequisites are not listed in the Manual, provide a rationale for a request for exception to the policy of common prerequisites. NOTE: Typically, all lower-division courses required for admission into the major will be considered prerequisites. The curriculum can require lower-division courses that are not prerequisites for admission into the major, as long as those courses are built into the curriculum for the upper-level 60 credit hours. If there are already common prerequisites for other degree programs with the same proposed CIP, every effort must be made to utilize the previously approved prerequisites instead of recommending an additional "track" of prerequisites for that CIP. Additional tracks may not be approved by the ACC, thereby holding up the full approval of the degree program. Programs will not be entered into the State University System Inventory until any exceptions to the approved common prerequisites are approved by the ACC.

This is in process.

#### LOWER LEVEL COURSES

	Cr. Hrs.	
PSYX012	3	Intro to Psychology
&ECOX013	3	Macroeconomics
&Take one of the two below:		
-or-STAX023	3	Introductory Statistics I
-or-STAX122	3	-
&Select one of the following	two options:	
-or-MACX281	3	
-or-Take both courses		
&MACX140	3	
&MACX114	3	
&PHYXXXX (1)	3	Any Physics Course
&MADX104	3	Discrete Math
&Select from the following in	ntroductory cou	urses for databases for information technology:
-or-CGSX540	3	
-or-CGSX540C	4	
-or-CGSX545	3	
-or-COPX710	3	
&Select from the following co	ourses of progr	camming fundamentals for information technology:
-or-COPX512	3	
-or- COPX210	3	
-or- COPX270	3	
-or- COPX006	3	
-or-COPX272C	4	
-or- COPX500	3	
-or- COPX220	3	
-or- COPX360	3	
-or- COPX800	3	
&Select from the following C	bject-Oriented	l Programming courses for Information Technology
-or- COPX513	3	
-or- COPX551C	4	
-or- COPX000	3	
-or- COPX224	3	
-or- COPX250	3	

(1) PHYX1000 - PHYX2999

C. If the university intends to seek formal Limited Access status for the proposed program, provide a rationale that includes an analysis of diversity issues with respect to such a designation. Explain how the university will ensure that Florida College System transfer students are not disadvantaged by the Limited Access status. NOTE: The policy and criteria for Limited Access are identified in Board of Governors Regulation 6C-8.013. Submit the Limited Access Program Request form along with this document.

Not applicable.

D. If the proposed program is an AS-to-BS capstone, ensure that it adheres to the guidelines

approved by the Articulation Coordinating Committee for such programs, as set forth in Rule 6A-10.024 (see link to the Statewide Articulation Manual on <u>the resource page for new</u> <u>program proposal</u>). List the prerequisites, if any, including the specific AS degrees which may transfer into the program.

Not applicable.

#### **INSTITUTIONAL READINESS**

#### VI. Related Institutional Mission and Strength

A. Describe how the goals of the proposed program relate to the institutional mission statement as contained in the SUS Strategic Plan and the University Strategic Plan (see link to the SUS Strategic Plan on the resource page for new program proposal).

The Program's Educational Objectives (PEOs) at this initial phase are as follows:

- Graduates demonstrate growth in professional development through graduate study or professional training.
- Graduates demonstrate effective team work as members and leaders in professional environments.
- Graduates demonstrate employability in industry, government, and entrepreneurial endeavors.

Florida Polytechnic University's mission is to "serve students and industry through excellence in education, discovery, and application of engineering and applied sciences." The B.S. in Cybersecurity Engineering directly supports these goals through program content in engineering designed to educate students to be successful professionals that serve a range of public, private, and government industries and enhance the research reputation and economy of the state of Florida in keeping with the University System's strategic plan.

## B. Describe how the proposed program specifically relates to existing institutional strengths, such as programs of emphasis, other academic programs, and/or institutes and centers.

The B.S. in Cybersecurity Engineering program follows our rationale for institutional program growth by drawing on existing faculty expertise and curricular constructs already in place. Thus, with relatively minimal investment and effort, we can launch a new degree program that expands our portfolio in a cutting-edge and innovative way, that has strong promise for both career and academic discipline longevity as well as meets immediate and fast-growing local, state, and national (as well as national security) demand.

The program further draws on our existing research base through the Advanced Mobility Institute (AMI) and our partnership with FDOT Suntrax along with potential partnership with the Florida Industrial Phosphate Research Institute (FIPRI) as well as with other institutions in the state that has established cybersecurity programs.

The program also adds a stronger dimension to our programs and ultimately to our senior capstone experience, which is a year-long, industry-sponsored interdisciplinary project that students collaborate on to demonstrate the full breadth of their content and professional knowledge and skills. As cybersecurity engineering is a comprehensive view of the entire system rather than just a component, including this perspective into capstone design project teams provides us with a new selling point to industry and conversely a new opportunity for industry to test out unique projects with our student body. The program's fit into portfolio of offerings strengthens and Florida Poly's total program mix and positions us in yet another way to grow our student body and reputation.

#### C. Provide a narrative of the planning process leading up to submission of this proposal.

Include a chronology in table format of the activities, listing both university personnel directly involved and external individuals who participated in planning. Provide a timetable of events necessary for the implementation of the proposed program.

The program has undergone an extensive departmental and institutional review process in its development.

Date	Participants	Planning Activity
11/28/2018	Dr. Youssif Al-Nashif, Dr. Muhammad	Exploring the steps involved initiating a new
	Rashid, Dr. Tom Dvorske	program
3/12/2019	Dr. Youssif Al-Nashif, Dr. Muhammad	Identifying program limitations and university-
	Rashid, Dr. Tom Dvorske	wide requirements. Prepare draft of New
		Academic Degree Program Authorization Pre-
		Proposal Form
4/24/2019	Dr. Tom Dvorske	Council of Academic Vice Presidents' Academic
		Coordinating Group
8/12/2019	Board of Trustees	Preliminary program approval – inclusion in
		Accountability plan approval in 8/12/2019 re-
		submission to BOG.
8/19/2019	Dr. Arman Sargolzaei, Dr. Muhammad	Identify the steps and timeline to complete the
	Rashid, Dr. Ashiq Sakib, Dr. Mohammad	program curriculum
	Reza Khalghani, Dr. Navid Khoshavi	
	Najafabadi and Dr. Tom Dvorske	
9/5/2019	Dr. Arman Sargolzaei, Dr. Muhammad	Identify the structure and curricular courses of
	Rashid, Dr. Harish Chintakunta, Dr, Onur	the program, concentration areas and specialized
	Toker, Dr, Rawa Adla, Dr. Mohammad Reza	courses
	Khalghani, and Dr. Navid Khoshavi	
	Najafabadi. Dr. Ashiq Sakib.	
10/8/2019	ECE faculty meeting to all ECE (13)	Presented to ECE faculty members for their
	members	comments and input
10/14/2019	Departmental Curriculum Committee	Committee Approval to forward to the
	Dr. Onur Toker, Dr. Ashiq Saqib,	University Curriculum Committee (UCC)
	Dr. Suleiman Alsweiss, Dr. Muhammad	
	Rashid	
11/21/2019	Dr. Arman Sargolzaei, Dr. Muhammad	Assigning tasks and responsibilities to prepare
	Rashid, Dr, Onur Toker, Dr, Rawa Adla, Dr.	equipment list
	Mohammad Reza Khalghani, Dr. Navid	
	Khoshavi Najafabadi and Mahmoud Saleh,	
44 10 ( 10040	Dr. Ashiq Sakib, Dr. Hisham Mahmoud	
11/26/2019	Dr. Arman Sargolzaei, Dr. Muhammad	Review of the draft of equipment list
	Rashid, Dr, Onur Toker, Dr, Rawa Adla, Dr.	
	Mohammad Reza Khalghani, Dr. Navid	
	Khoshavi Najafabadi and Mahmoud Saleh,	
10/2/0010	Dr. Ashiq Sakib, Dr. Hisham Mahmoud	Final list of the againment list
12/3/2019	Dr. Arman Sargolzaei, Dr. Muhammad	Final list of the equipment list
	Rashid, Dr, Onur Toker, Dr, Rawa Adla, Dr.	
	Mohammad Reza Khalghani, Dr. Navid	
12/5/2010	Khoshavi Najafabadi and Mahmoud Saleh	Pariou the BOC meansest form
12/5/2019	Dr. Arman Sargolzaei, Dr. Muhammad	Review the BOG proposal form
	Rashid, Dr, Onur Toker, Dr, Rawa Adla, Dr.	
	Mohammad Reza Khalghani, Dr. Navid Khoshavi Najafabadi and Mahmoud Saleh,	
4/29/2020	Dr. Hisham Mahmoud, Dr. Ashiq Sakib.	Final Course and Program Approval
<del>-1</del> /2020	Dr. Muhammad Rashid	Final Course and Program Approval Recommendation and Concentrations to
		University Curriculum Committee
5/11/2020	Dr. Terry Parker	
5/11/2020		Provost Approval of Program
5/20/2020	Florida Polytechnic University Board of	Approval
	Trustees	

Date	Implementation Activity
5/21/2020	Submit all forms to Board of Governors Staff
Summer 2020	Begin planning integrated course offerings, multi-year schedule in ECE department; validate staffing and enrollment projections.
Upon BOG inclusion in Inventory	Begin recruiting for program and working with State College partners to add to articulation agreements.

#### **Events Leading to Implementation**

#### VII. Program Quality Indicators - Reviews and Accreditation

Identify program reviews, accreditation visits, or internal reviews for any university degree programs related to the proposed program, especially any within the same academic unit. List all recommendations and summarize the institution's progress in implementing the recommendations.

Both programs in the Department of Electrical and Computer Engineering (electrical engineering and computer engineering) were accredited by ABET-EAC in August 2019, back-dated to October 2017, for a period of 6-years. These programs are the "sister-programs" for Cybersecurity Engineering and from the same accrediting agency and commission with the same program learning outcomes. The programs received full-accreditation with no recommendations for the full 6-year period available. This was their first attempt at accreditation by ABET and a strong endorsement of the quality and integrity of the programs and the strong effort put forth by the faculty and the quality processes they have established and continue to nurture and develop.

#### VIII. Curriculum

## A. Describe the specific expected student learning outcomes associated with the proposed program. If a bachelor's degree program, include a web link to the Academic Learning Compact or include the document itself as an appendix.

The Program Learning Outcomes for the B.S. in Cybersecurity Engineering conform to the expectation for learning outcomes for ABET-EAC and are easily aligned to the broad skill areas required for the academic learning compact. In the following table, the learning outcomes are defined in the left column, while their alignment with the ALC skills are noted on the right.

Program (Student) Learning Outco	nes The Outo	comes Involve T	hese Skills:
Upon Completion of the Cybersecurity Engineeri students will possess:	g Degree, Content	Critical Thinking	Communicatio n
1. an ability to identify, formulate, and solv engineering problems by applying princ engineering, science, and mathematics			
<ol> <li>an ability to apply engineering design to solutions that meet specified needs with public health, safety, and welfare, as well cultural, social, environmental, and econ</li> </ol>	consideration of as global,	х	
3. an ability to communicate effectively wir audiences	n a range of		Х
4. an ability to recognize ethical and profes responsibilities in engineering situations informed judgments, which must consid engineering solutions in global, economi and societal contexts	and make er the impact of	x	
<ol> <li>an ability to function effectively on a tea members together provide leadership, cr</li> </ol>			х

	collaborative and inclusive environment, establish goals, plan tasks, and meet objectives			
6.	an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusion	X		
7.	an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.		Х	

#### B. Describe the admission standards and graduation requirements for the program.

Admissions standards and graduation requirements for the program are the same as for all undergraduate programs at Florida Poly. Details for admissions to Florida Poly may be found at <u>https://floridapoly.edu/admissions/</u>.

Requirements for graduation are found in the <u>University's Academic Catalog</u> and in Academic Policy <u>FPU-5.0094AP Baccalaureate Degree Graduation Requirements</u>.

C. Describe the curricular framework for the proposed program, including number of credit hours and composition of required core courses, restricted electives, unrestricted electives, thesis requirements, and dissertation requirements. Identify the total numbers of semester credit hours for the degree.

### B.S. Cybersecurity Engineering

#### 05.20.2020

The following program curriculum template was approved by the UCC and the Provost in spring 2017. This template exists to ensure a certain level of consistency across new and existing programs in terms of general education, foundations, program core, and capstone requirements.

Categor				Note
у	Section	Course	Credits	S
I. Professi	ional Founda	ations Core	8	<u>8</u>
		SLS 1106 - Academic & Professional Skills	1	1
		IDS 4941 - Professional Experience Internship	0	0
		IDS 1380 - Introduction to STEM	3	3
		EGN 1007C - Concepts and Methods for Engineering and Computer Science (req of Engineering and CS programs only).	1	1
		COP 2271C - Introduction to Computation and Programming (required for all programs)	3	3
		All but Professional Foundations may be distributed in categories below to allow for appropriate credit hour allocations.		
II. Genera Educatior		State Required Minimum	<u>36</u>	<u>36</u>
	Rules	<ol> <li>Students must complete at least one ♦ course in each category to satisfy state of Flor regulation.</li> <li>Students must take 9 hours of Humanities and Social Sciences, to be divided 6/3 betw areas.</li> <li>Courses not taught by Florida Poly but listed in the State of Florida "common core" m courses can be accepted as transfer credit.</li> <li>Transfer students who have fulfilled the general education requirements at another in are understood to have fulfilled the requirements at Florida Poly.</li> </ol>	veen the enu of	
	Section A	Communication	6	<u>6</u>

		ENC 1101 - English Composition 1: Exp and Arg Writing (W) ♦	3	3
		ENC 2210 - Technical Writing (W)	3	3
	Section			
	В	Humanities	<u>3 to 6</u>	6
		ARH 2000 - Art Appreciation ♦	3	
		PHI 2010 - Introduction to Philosophy 🔶	3	
		HUM 2022 Explorations in the Humanities (Special Topics)	3	
		IDS 2144 Legal, Ethical, and Management Issues in Technology	3	3R
	Section C	Social Science	<u>3 to 6</u>	<u>6</u>
		AMH 2010 - American History to 1877	3	
		AMH 2020 - American History Since 1877 (W) ♦ Satisfies Florida		
		State Civics Requirement	3	
		AMH 2930 - History: Special Topics	3	
		ECO 2013 - Principles of Macroeconomics (W)	3	3R
		ECO 2023 - Principles of Microeconomics (W)	3	
		PSY 2012 - General Psychology (W) ♦	3	3R
	Section			<u>7</u>
	D	Mathematics	<u>7</u>	
		MAC 2311 - Analytic Geometry and Calculus 1 ♦	4	4
		MAC 2312 - Analytic Geometry and Calculus 2	4	
		MAC 2313 - Analytic Geometry and Calculus 3	4	
		STA 2023 - Statistics 1 ♦	3	
		MAD 2104 - Discrete Mathematics	3	3
		MAP 2302 - Differential Equations	3	
		MAC 1147 - Pre-calculus Algebra and Trigonometry	4	
			-	•
	Section E	Natural Sciences	8	<u>8</u>
		BSC 1010 - Biology 1 ♦	3	
		BSC 1010L - Biology 1 Laboratory	1	2
		CHM 2045 - Chemistry 1 ♦		
			3	3
		CHM 2045L - Chemistry 1 Laboratory	1	1
		CHM 2045L - Chemistry 1 Laboratory PHY 2048 - Physics 1 ♦	1 3	1 3
		CHM 2045L - Chemistry 1 Laboratory PHY 2048 - Physics 1 ♦ PHY 2048L - Physics 1 Laboratory	1 3 1	1
		CHM 2045L - Chemistry 1 Laboratory PHY 2048 - Physics 1 ♦ PHY 2048L - Physics 1 Laboratory PHY 2049 - Physics 2	1 3 1 3	1 3
		CHM 2045L - Chemistry 1 Laboratory PHY 2048 - Physics 1 ♦ PHY 2048L - Physics 1 Laboratory	1 3 1	1 3
	Continu F	CHM 2045L - Chemistry 1 Laboratory PHY 2048 - Physics 1 ◆ PHY 2048L - Physics 1 Laboratory PHY 2049 - Physics 2 PHY 2049L - Physics 2 Laboratory	1 3 1 3 1	1 3 1
	Section F	CHM 2045L - Chemistry 1 Laboratory PHY 2048 - Physics 1 ◆ PHY 2048L - Physics 1 Laboratory PHY 2049 - Physics 2 PHY 2049L - Physics 2 Laboratory Open Inquiry: 3 Additional GE credits taken here	1 3 1 3 1 <u>3</u> <u>3</u>	1 3 1 3 3
	Section F	CHM 2045L - Chemistry 1 Laboratory PHY 2048 - Physics 1 ◆ PHY 2048L - Physics 1 Laboratory PHY 2049 - Physics 2 PHY 2049L - Physics 2 Laboratory	1 3 1 3 1	1 3 1
		CHM 2045L - Chemistry 1 Laboratory PHY 2048 - Physics 1 ◆ PHY 2048L - Physics 1 Laboratory PHY 2049 - Physics 2 PHY 2049L - Physics 2 Laboratory Open Inquiry: 3 Additional GE credits taken here MAP 2302 - Differential Equations	1 3 1 3 1 3 3 3	1 3 1 <u>3</u> 3
II. Progra		CHM 2045L - Chemistry 1 Laboratory PHY 2048 - Physics 1 ◆ PHY 2048L - Physics 1 Laboratory PHY 2049 - Physics 2 PHY 2049L - Physics 2 Laboratory Open Inquiry: 3 Additional GE credits taken here MAP 2302 - Differential Equations ms / Advanced Math & Science	1 3 1 3 1 <u>3</u> <u>3</u>	1 3 1 3 3
II. Progra		CHM 2045L - Chemistry 1 Laboratory PHY 2048 - Physics 1 ◆ PHY 2048L - Physics 1 Laboratory PHY 2049 - Physics 2 PHY 2049L - Physics 2 Laboratory <b>Open Inquiry: 3 Additional GE credits taken here</b> MAP 2302 - Differential Equations <b>ns / Advanced Math &amp; Science</b> 1. This area may consist of additional general education courses or	1 3 1 3 1 3 3 3	1 3 1 <u>3</u> 3
II. Progra		CHM 2045L - Chemistry 1 Laboratory PHY 2048 - Physics 1 ◆ PHY 2048L - Physics 1 Laboratory PHY 2049 - Physics 2 PHY 2049L - Physics 2 Laboratory <b>Open Inquiry: 3 Additional GE credits taken here</b> MAP 2302 - Differential Equations <b>ns / Advanced Math &amp; Science</b> 1. This area may consist of additional general education courses or other foundational courses in a related field.	1 3 1 3 1 3 3 3	1 3 1 <u>3</u> 3
II. Progra		CHM 2045L - Chemistry 1 Laboratory PHY 2048 - Physics 1 ◆ PHY 2048L - Physics 1 Laboratory PHY 2049 - Physics 2 PHY 2049L - Physics 2 Laboratory <b>Open Inquiry: 3 Additional GE credits taken here</b> MAP 2302 - Differential Equations <b>ns / Advanced Math &amp; Science</b> 1. This area may consist of additional general education courses or other foundational courses in a related field. 2. General education courses must be used first to fulfill General	1 3 1 3 1 3 3 3	1 3 1 <u>3</u> 3
II. Progra		CHM 2045L - Chemistry 1 Laboratory PHY 2048 - Physics 1 ◆ PHY 2048L - Physics 1 Laboratory PHY 2049 - Physics 2 PHY 2049L - Physics 2 Laboratory <b>Open Inquiry: 3 Additional GE credits taken here</b> MAP 2302 - Differential Equations <b>ns / Advanced Math &amp; Science</b> 1. This area may consist of additional general education courses or other foundational courses in a related field. 2. General education courses must be used first to fulfill General Education requirements before being applied here.	1 3 1 3 1 3 3 3	1 3 1 <u>3</u> 3
II. Program		CHM 2045L - Chemistry 1 Laboratory PHY 2048 - Physics 1 ◆ PHY 2048L - Physics 1 Laboratory PHY 2049 - Physics 2 PHY 2049L - Physics 2 Laboratory <b>Open Inquiry: 3 Additional GE credits taken here</b> MAP 2302 - Differential Equations <b>ns / Advanced Math &amp; Science</b> 1. This area may consist of additional general education courses or other foundational courses in a related field. 2. General education courses must be used first to fulfill General Education requirements before being applied here. 3. 15 credits here, plus 15 in Sections D and E (above) meet the 30	1 3 1 3 1 3 3 3	1 3 1 <u>3</u> 3
II. Progra		CHM 2045L - Chemistry 1 Laboratory PHY 2048 - Physics 1 ◆ PHY 2048L - Physics 1 Laboratory PHY 2049 - Physics 2 PHY 2049L - Physics 2 Laboratory <b>Open Inquiry: 3 Additional GE credits taken here</b> MAP 2302 - Differential Equations <b>ns / Advanced Math &amp; Science</b> 1. This area may consist of additional general education courses or other foundational courses in a related field. 2. General education courses must be used first to fulfill General Education requirements before being applied here.	1 3 1 3 1 3 3 3	1 3 1 <u>3</u> 3
II. Progra		CHM 2045L - Chemistry 1 Laboratory PHY 2048 - Physics 1 ◆ PHY 2048L - Physics 1 Laboratory PHY 2049 - Physics 2 PHY 2049L - Physics 2 Laboratory <b>Open Inquiry: 3 Additional GE credits taken here</b> MAP 2302 - Differential Equations <b>ns / Advanced Math &amp; Science</b> 1. This area may consist of additional general education courses or other foundational courses in a related field. 2. General education courses must be used first to fulfill General Education requirements before being applied here. 3. 15 credits here, plus 15 in Sections D and E (above) meet the 30	1 3 1 3 1 3 3 3	1 3 1 <u>3</u> 3

	programs) Credits: 3. Doing so ensures the 30 hour ABET		
	requirement for "Basic Math/Science."		
	PHY 2049 - Physics 2		3
	PHY 2049L - Physics 2 Laboratory		1
	MAC 2312 - Analytic Geometry and Calculus 2		4
	MAC 2313 - Analytic Geometry and Calculus 3		4
	STA 3032 Probability and Statistics		3
III. Program Core		40	
	40 credits represents a minimum, depending on how many credits		
	are included in Category II, above.		
	Pre-Capstone design sequences should be included in this category		
	may be listed as a subset in catalog to stand out.		
Add Rows as needed			<u>7</u>
	* IDS 1380 - Introduction to STEM: Credits: 3		3
	* EGN 1007C - Concepts and Methods for Engineering and	Counte	
	Computer Science: Credits: 3 (req of Engineering and CS programs	d above	
	only).		1
	* COP 2271C Introduction to Computation and Programming		3
			<u>43</u>
	COP 3337C Object Oriented Programming		3
	EEL 3311C Circuits 1		4
	EEL 3702C Digital Logic Design		3
	EEL 3135 Systems and Signals		3
	EEL 3312C Circuits 2		3
	EEL 4746C Microcomputers		3
	EEL 4768C Computer Architecture and Organization		3
	CNT 3004C Introduction to Computer Networks		3
	COP 3530 Data Structures & Algorithms		3
	COP 4600 Operating Systems Concepts		3
	MAS 3105 Linear Algebra		3
	CAP 4612 Machine Learning		3
	EEL 4523 Information Theory and Cryptography		3
	EEL 4721 Protective Technologies and Forensic Technologies for Cyber	Socurity	3
		Security	5
V. Concentration		12	
	Concentrations should consist of no more than 12 credits. If other		
	than "Advanced Topics," up to six credits may come from electives		
	or courses in other concentrations.		
Conc 1	Industrial Control Systems Security	12	12
	EEE 4531 Techniques for High Fidelity Acquisition		3
	EEL 4552 Control Theory		3
	EEL 4743 Cyber Physical Security of Industrial Control Systems		3
	Cybersecurity Engineering Concentration or Program Elective	+	3
Conc 2	Smart-Grid Security	12	<u>12</u>
	EEL 4345 Renewable Energy Systems and Power Electronics		3
	EEL 4251 Power System Analysis		3
	EEL 4543 Smart-Grid and Cyber Physical Security		3
	Cybersecurity Engineering Concentration or Program Elective		3

	Conc 3	Hardware Security	12	<u>12</u>
		EEE 3310 Digital Electronics		3
		EEL 4724 Hardware Design with FPGAs and Reconfigurable		
		Computing		3
		EEL 4772 Hardware		
		Security		3
		Cybersecurity Engineering Concentration or Program Elective		3
V. Elective	es		6	
		The number of electives may be reduced to fill out the program core or meet institutional or state required general education requirements.		
Add Rows	as needed	CDA 3631C Embedded Operating Systems		3
		CIS 4367 Computer Security		3
		EEL 4242 Power Electronics Circuits		3
		EEL 4515 Digital Communication Systems		3
		EEL 4664C Kinematics and Control of Robotic System		3
VI. Capsto	one		6	6
		All programs are required to have a 6 credit senior capstone sequence.		
		EEL 4914C Senior Design 1	3	3
		EEL 4915C Senior Design		
		2	3	3
TOTAL HO	DURS		120	120

D. Provide a sequenced course of study for all majors, concentrations, or areas of emphasis within the proposed program.

B.S. Cybersecurity Engineering Plan of Study		
Freshman Year		
Semester 1		
SLS 1106 Academic & Professional Skills	Credits: 1	
BSC 1010 Biology 1	Credits: 3	
or CHM 2045 - Chemistry 1	Credits: 3	
BSC 1010L Biology 1 Laboratory	Credits: 1	
or CHM 2045L - Chemistry 1 Laboratory	Credits: 1	
ENC 1101 English Composition 1	Credits: 3	
IDS 1380 Introduction to STEM		
MAC 2311 Analytic Geometry and Calculus 1		
Total Semester Credit Hours: 15		
Semester 2		
COP 2271C Introduction to Computation and Programming	Credits: 3	
EGN 1007C Concepts & Methods	Credits: 1	
ENC 2210 Technical Writing		
MAC 2312 Analytic Geometry and Calculus 2		
PHY 2048 Physics 1	Credits: 3	
PHY 2048L Physics 1 Laboratory	Credits: 1	

Total Semester Credit Hours: 15	
Sophomore Year	<u> </u>
Semester 1	
COP 3337C Object Oriented Programming	Credits: 3
MAC 2313 Analytic Geometry and Calculus 3	Credits: 4
PHY 2049 Physics 2	Credits: 3
PHY 2049L Physics 2 Laboratory	Credits: 1
Social Science General Education: History	Credits: 3
Total Semester Credit Hours: 14	
Semester 2	
EEL 3311C Circuits 1	Credits: 4
EEL 3702C Digital Logic Design	Credits: 3
MAD 2104 Discrete Mathematics	Credits: 3
MAP 2302 Differential Equations	Credits: 3
Arts and Humanities General Education	Credits: 3
Total Semester Credit Hours: 16	
Junior Year	
Semester 1	
EEL 3135 Systems and Signals	Credits: 3
EEL 3312C Circuits 2	Credits: 3
EEL 4746C Microcomputers	Credits: 3
EEL 4768C Computer Architecture and Organization	Credits: 3
STA 3032 Probability and Statistics	Credits: 3
Total Semester Credit Hours: 15	
Semester 2	
CNT 3004C Introduction to Computer Networks	Credits: 3
COP 3530 Data Structures & Algorithms	Credits: 3
COP 4600 Operating Systems Concepts	Credits: 3
IDS 4941 Professional Experience Internship	Credits: 0
MAS 3105 Linear Algebra	Credits: 3
Arts, Humanities, or Social Science General Education	Credits: 3
Total Semester Credit Hours: 15	creates. 5
Senior Year	
Semester 1	
Cybersecurity Engineering Concentration Course	Credits: 3
Cybersecurity Engineering Concentration Course	Credits: 3
CAP 4612 Machine Learning	Credits: 3
EEL 4914C Senior Design 1	Credits: 3
EEL 4523 Information Theory and Cryptography	Credits: 3
Total Semester Credit Hours: 15	
Semester 2	

Cybersecurity Engineering Concentration Course	Credits: 3
Cybersecurity Engineering Concentration Course	Credits: 3
EEL 4915C Senior Design 2	Credits: 3
EEL 4721 Protective Technologies and Forensic Technologies for Cyber Security	Credits: 3
IDS 2144 Legal, Ethical, and Management Issues in Technology	Credits: 3
Total Semester Credit Hours: 15	
<u>Concentrations</u>	
Industrial Control Systems Security	Credits: 3
EEE 4531 Techniques for High Fidelity Acquisition	Credits: 3
EEL 4652 Control Theory	Credits: 3
EEL 4743 Cyber Physical Security of Industrial Control Systems	Credits: 3
Cybersecurity Engineering Concentration or Program Elective	Credits: 3
Smart-Grid Security	
EEL 4345 Renewable Energy Systems and Power Electronics	Credits: 3
EEL 4251 Power System Analysis	Credits: 3
EEL 4543 Smart-Grid and Cyber Physical Security	Credits: 3
Cybersecurity Engineering Concentration or Program Elective	Credits: 3
Hardware Security	
EEE 3310 Digital Electronics	Credits: 3
EEL 4724 Hardware Design with FPGAs and Reconfigurable Computing	Credits: 3
EEL 4772 Hardware Security	Credits: 3
Cybersecurity Engineering Concentration or Program Elective	Credits: 3
Advanced Topics	
Choose 12 credits from this list of courses	
EEL 4652 Control Theory	Credits: 3
EEL 4251 Power System Analysis	Credits: 3
EEE 3310 Digital Electronics	Credits: 3
EEL 4543 Smart-Grid and Cyber Physical Security	Credits: 3
EEL 4743 Cyber Physical Security of Industrial Control Systems	Credits: 3
EEL 4772 Hardware Security	Credits: 3
Cybersecurity Engineering Electives	
CDA 3631C Embedded Operating Systems	Credits: 3
CIS 4367 Computer Security	Credits: 3
EEL 4242 Power Electronics Circuits	Credits: 3
	Creatites 2
EEL 4515 Digital Communication Systems	Credits: 3

#### E. Provide a one- or two-sentence description of each required or elective course.

The descriptions below include core, elective, and concentration courses for the program.

COP 3337C - Object Oriented Programming

This is an intermediate programming course designed for students with prior programming experience. This course focuses on object-oriented programming concepts and techniques using C++. The covered

topics will include: streams, classes, recursion, template classes, file handling, and exception handling.

#### EEL 3111C - Circuits 1

This lecture-lab combined course covers the basic analysis of linear circuits. Topics include electrical quantities, network laws and theorems, steady state and transient analysis for circuits. Computer-aided analysis is also covered.

#### EEL 3702C - Digital Logic Design

The analysis and design of sequential logic circuits, combinational logic circuits, and feedback circuits are covered in this course. Additional topics include Boolean algebra, Boolean functions, number systems, minimizations, binary arithmetic, k-maps, combinational circuit synthesis, combinational medium scale integrated (MSI) logic circuits, sequential logic, sequential MSI logic circuits and synchronous state machine design.

#### COP 3530 - Data Structures & Algorithms

The course introduces program run-time analysis and algorithm design and analysis. Topics include: data abstraction principals, serial and parallel data structures, linked lists, graphs, trees, divide and conquer algorithms, greedy algorithms, and linear programming.

#### EEL 3112C - Circuits 2

This lecture-lab combined course introduces the fundamentals of transient state analysis; linear circuit analysis in frequency domain, sinusoidal steady-state analysis and power calculations, Laplace transform techniques, frequency response analysis, balanced three-phase circuits and two-port circuit analysis.

#### EEL 3135 - Systems and Signals

Continuous-time and discrete-time systems analysis, focusing on linear time-invariant (LTI) systems and the classification of these systems is presented in this course. Convolution and its application to LTI systems, the Laplace, Fourier, and z transforms, the Fourier series and their application to the analysis of LTI systems will also be presented. Industry applications will be a specific focus.

#### CNT 3004C - Introduction to Computer Networks

This course provides an introduction to fundamental concepts in computer networks, including their design and implementation. Topics covered include all seven layers of OSI Reference Model, network protocols (providing reliability and congestion control), routing, and link access. Special attention is also paid to wireless networks and security.

#### EEL 4768C - Computer Architecture and Organization

This course covers a top-down approach to computer design. Topics include Computer architecture, introduction to assembly language programming and machine language set design. Computer organization, logical modules, CPU, memory and I/O units, instruction cycles, the data path and control unit, hardwiring and microprogramming are also covered.

#### EEL 4746C - Microcomputers

The course will discuss microcomputers and microcontrollers and explore the subjects of memory addressing modes, instruction sets, central processing units / microprocessors, C and assembly language programming in the context of the course, debugging software and hardware, computer buses, interrupts, real-time events, memory, I/O, counters, timers and interfacing techniques.

#### COP 4610 - Operating Systems Concepts

This course covers the concepts of the design and implementation of operating systems. Topics included: memory and storage management, virtual memory, processes/threads, system calls, interfaces, I/O, file system, and introduction to virtualization.

EEL4523 – Information Theory and Cryptography This course covers introduction to information theory, fundamentals of error control coding, error detection and applications; information Theoretic Metrics; basic cryptography and security.

#### CAP 4612 - Machine Learning

An overview of machine learning algorithms and their applications. Topics covered include: supervised and unsupervised learning, clustering and classification, linear and logistic regression, dimensionality reduction, support vector machines, anomaly detection.

EEL 4721 - Protective Technologies and Forensic Techniques for Cyber Security

This course is an introductory course on the selection and design of attack prevention techniques and countermeasures. In addition, it introduces the students to the concepts of digital forensics science and the techniques of preparing the high-tech investigation reports.

#### **Industrial Control Systems Security**

#### EEL 4652 - Control Theory

The analysis of feedback control systems in both continuous- & discrete time domains, methods for improving system response for transient and steady state behavior, system stability concept, methods for examining system stability in both time & frequency domains and determining the system stability margins are discussed.

#### EEL 4743 - Cyber Physical Security of Industrial Control Systems

This course is an introduction to the security of industrial control systems and networked control systems. It covers communication protocols and network security issues related to industrial control systems. The stability of networked control systems will be investigated to examine the robustness of the control systems. It also covers simple model-based detection and compensation techniques for designing secure control system based on linear control theory.

#### EEE 4531 - Techniques for High Fidelity Acquisition

The course covers the concepts, planning, design, tools, and skills related to acquiring high quality signals. Methods include extracting signals from noise, designing measurement systems to minimize noise and disturbance effects, and identifying and ameliorating sources of noise. The course also investigates measurement error using statistical analysis and sensors dynamic models.

#### **Smartgrid Security**

#### EEL 4251 - Power System Analysis

Development of models for power system components: power transformers, transmission lines, transmission lines steady state operation, power flows, symmetrical components, and fault analyses.

#### EEL 4543 - Smart-Grid and Cyber Physical Security

This course covers an overview of smart grid infrastructure, and management policy, including the integration of renewable resources, electricity market, and demand-side management, etc. The smart grid challenges and requirements will be extensively discussed, especially privacy, and cybersecurity. Digital communications, communication standards and Internet-of-Things in smart grids will be presented. Smart grid operation and management will be analyzed and demonstrated by simulation software, e.g. MATLAB-SIMULINK.

#### EEL 4345 - Renewable Energy Systems and Power Electronics

This course covers an overview of renewable energy systems with emphasis of the applications in photovoltaic sources and wind power. Also includes the design considerations of power electronics and control for grid-connected systems. The use of Mathlab-Simulink software tool for evaluating renewable energy and power electronics converters for grid-connected systems.

#### Hardware Security

#### EEE 3310 - Digital Electronics

This course focuses on the implementation of logic devices, MOSFET's, and BJT's. Students will analyze logic families including NMOS, CMOS, and TTL. The fundamentals of digital memory circuits are also covered.

#### EEL 4772 - Hardware Security

This course covers the basic algebra of finite fields, the mathematical theory of selective cryptographic primitives, the different security threats across both circuit and microarchitecture levels in the modern electronic hardware designs, the test and verification of cryptographic hardware, and hardware Trojans. Students will gain in-depth knowledge by applying the theoretical concepts on the practical case studies through completing multiple projects.

#### EEL 4724-Hardware Design with FPGAs and Reconfigurable Computing

Introduction to rapid hardware prototyping and reconfigurable computation. Fundamentals of RTL design, FSM and FSMD based designs, and System on Chip based approaches. Design constraints, timing closure, and power analysis. Realization of various hardware systems on an actual FPGA board.

#### **Cybersecurity Engineering Electives**

#### CIS 4367 - Computer Security

This course covers security issues in different aspect of computing. Topics covered are: access control mechanisms, authentication models, and vulnerability detection. Attacks and mitigation methods at the OS level. Database and operating system security issues, mobile code, security kernels. Malicious code, Trojan horses and computer viruses. Security policy formation and enforcement.

#### CDA 3631C - Embedded Operating Systems

Embedded Operating Systems or Real time operating systems are operating systems are designed to be compact, efficient, and reliable. Topics discussed include embedded architectures, interaction with devices, concurrency, real-time principles, implementation trade-offs, profiling and code optimization, and embedded software.

#### EEL 4664C-Kinematics and Control of Robotic Systems

This course provides a general introduction to spatial descriptions and transformations. The fundamental concepts and methods to analyze, model and control robotic mechanisms will be covered. Main topics include the fundamentals of kinematics, dynamics and control of robotic systems. Additional topics include state estimation and dynamic parameter identification. Also, the course covers the design and implementation of a motion trajectory planning algorithm.

#### EEL 4242 - Power Electronics Circuits

Circuit topologies, analysis, design and simulation of power electronic circuits such as power supplies and motor drives.

#### EEL 4515 - Digital Communication Systems

This course covers various aspects of the physical layer of the communication system. These aspects include information theory (source coding, channel coding, and channel capacity), channel models, and modulation techniques.

#### F. For degree programs in the science and technology disciplines, discuss how industrydriven competencies were identified and incorporated into the <u>curriculum and indicate</u> <u>whether any industry advisory council exists to provide input for curriculum development</u> <u>and student assessment.</u>

The genesis of this degree program idea came from interaction with the Program Area Chair for the ABET-EAC committee that reviewed our programs in Electrical, Computer, and Mechanical Engineering

in October 2018. The program further received input from the curriculum advisory board for the ECE Department at its 2019 meeting in May. This advisory Board provides regular input on the programs as part of the Department's active monitoring of its ABET compliance processes and Cybersecurity Engineering would fall under this umbrella. The specific program objectives at this stage are the same at those reviewed and supported by the industry/curriculum advisory board for electrical and computer engineering and the program's learning outcomes are consistent with outcomes for ABET-EAC accredited programs.

G. For all programs, list the specialized accreditation agencies and learned societies that would be concerned with the proposed program. Will the university seek accreditation for the program if it is available? If not, why? Provide a brief timeline for seeking accreditation, if appropriate.

The program will seek ABET-EAC accreditation upon completion of its first graduate. This should coincide with the reapproval period of its programs in electrical and computer engineering in 2023, so the final decision would likely come in August of 2024, and would be accredited back to the graduation of that first student. The program would also consider certification approvals by NSA and other agencies as appropriate.

H. For doctoral programs, list the accreditation agencies and learned societies that would be concerned with corresponding bachelor's or master's programs associated with the proposed program. Are the programs accredited? If not, why?

Not Applicable.

I. Briefly describe the anticipated delivery system for the proposed program (e.g., traditional delivery on main campus; traditional delivery at branch campuses or centers; or nontraditional delivery such as distance or distributed learning, self-paced instruction, or external degree programs). If the proposed delivery system will require specialized services or greater than normal financial support, include projected costs in Table 2 in Appendix A. Provide a narrative describing the feasibility of delivering the proposed program through collaboration with other universities, both public and private. Cite specific queries made of other institutions with respect to shared courses, distance/distributed learning technologies, and joint-use facilities for research or internships.

The program is intended to be delivered on-site, face-to-face. As the University continues to grow and especially in response to the Covid-19 pandemic, it has increasingly grown in its ability to deliver courses in distance and hybrid delivery methods. We will continue to explore the most effective learning environments and methodologies for our students to be successful professionals in the area of cybersecurity engineering.

#### IX. Faculty Participation

A. Use Table 4 in Appendix A to identify existing and anticipated full-time (not visiting or adjunct) faculty who will participate in the proposed program through Year 5. Include (a) faculty code associated with the source of funding for the position; (b) name; (c) highest degree held; (d) academic discipline or specialization; (e) contract status (tenure, tenure-earning, or multi-year annual [MYA]); (f) contract length in months; and (g) percent of annual effort that will be directed toward the proposed program (instruction, advising, supervising internships and practica, and supervising thesis or dissertation hours).

Existing faculty in the Department of Electrical and Computer Engineering and faculty in the Department of Computer Science collaborated on the development of the program and will continue to collaborate on the delivery of the degree. This is reflected in Appendix A.

B. Use Table 2 in Appendix A to display the costs and associated funding resources for existing and anticipated full-time faculty (as identified in Table 4 in Appendix A). Costs for visiting and adjunct faculty should be included in the category of Other Personnel Services (OPS). Provide a narrative summarizing projected costs and funding sources.

Current faculty positions, as Appendix A, Table 4 shows, are sufficient to deliver the program and maintain delivery in existing programs as well. Funds will come from unallocated E&G provisioned by the legislature in 2018 to support faculty hiring to offset any reallocation of time that may be incurred by increased enrollment and section growth due to student demand.

C. Provide in the appendices the abbreviated curriculum vitae (CV) for each existing faculty member (do not include information for visiting or adjunct faculty).

Curriculum Vitae for faculty are located in Appendix C of this document.

D. Provide evidence that the academic unit(s) associated with this new degree have been productive in teaching, research, and service. Such evidence may include trends over time for average course load, FTE productivity, student HC in major or service courses, degrees granted, external funding attracted, as well as qualitative indicators of excellence.

See Appendix D., Faculty Workload Summary, of this document.

- X. Non-Faculty Resources
  - A. Describe library resources currently available to implement and/or sustain the proposed program through Year 5. Provide the total number of volumes and serials available in this discipline and related fields. List major journals that are available to the university's students. Include a signed statement from the Library Director that this subsection and subsection B have been reviewed and approved.

The Florida Polytechnic University Library is comprised of two distinct collections: the main library collection is a digital library, and the Florida Industrial Phosphate Research (FIPR) Institute collection is primarily a print comprehensive collection of phosphate-related resources and archival materials. There was a conscious effort at the inception of the institution to establish the main library as a virtual library. The Florida Polytechnic University Library provides specialized, STEM-focused resources and learning opportunities for students, faculty, and staff to work successfully with, interpret, and utilize information. Students at Florida Polytechnic University have 24/7/365 access to library resources via the internet.

The Florida Polytechnic University's main library is located on the second floor of the University's Innovation, Science and Technology Building, in an open-space area called the Commons. The main, digital collection contains over 150,000 full text ebook volumes that are a mixture of owned and licensed materials. There is no physical stack area.

The University Library provides support for all the degrees offered at the institution, and currently supports master's and bachelor's programs in Computer, Electrical and Mechanical Engineering. Resources that directly support Florida Poly's current engineering programs will also directly support the proposed Cybersecurity Engineering program. Current library resources include Elsevier's Science Direct, IEEE Electronic Library, and ProQuest's SciTech Premium Collection and ProQuest Ebook Central.

Major journals currently available through the Florida Poly Library that will directly support Cybersecurity Engineering include:

IEEE Security and Privacy (2003-present) IEEE Transactions on Information Forensics and Security (2006-present) IEEE Transactions on Signal and Information Processing Over Networks (2015-present) Elsevier Computers & Security (2012-present) International Journal of Information Security Science (2012-present)

## B. Describe additional library resources that are needed to implement and/or sustain the program through Year 5. Include projected costs of additional library resources in Table 2 in Appendix A. Please include the signature of the Library Director in Appendix B.

To further support the Cybersecurity Engineering program, the Library will seek to acquire access to IOS Press journals that focus on information, intelligence and computer security, specifically: Integrated Computer-Aided Engineering, International Journal of Knowledge-Based Intelligent Engineering Systems and Journal of Computer Security. Approximate cost of IOS Press journal access is \$6,000.00. Also, additional cybersecurity engineering books will need to be identified and added to the Florida Poly collection, with an approximate initial cost of \$5,000.00.

## C. Describe classroom, teaching laboratory, research laboratory, office, and other types of space that are necessary and currently available to implement the proposed program through Year 5.

The following faculties are currently available for electrical and computer engineering programs.

#### C.1. Offices, Classrooms and Laboratories

As a new institution, Florida Polytechnic University currently has one building primarily used for academic and academic support programs. The building is commonly known as the IST, which stands for Innovation, Science, and Technology.

The IST was completed in June 2014 and has an estimated gross square feet of 186,736. It is considered the main building on the main campus, located at the north end. It houses all academic departments and programs. Currently all instruction and research activities conducted by faculty and staff take place at this building. Square footage is separated between classrooms, research labs, teaching labs, library, office space for faculty and staff, study areas, and terrace space.

The second floor, center of the IST houses the University's fully online Library, areas for students to study known as collaboration rooms, and the commons. This space has a total of 22,172 net assignable square footage. Collaborations rooms are used by students, faculty and staff. These sit a maximum of five people, and are equipped with television monitors where personal laptops can be projected.

#### C.2 Offices

All faculty offices are located on the second floor of the campus' main educational building, the IST (Innovation, Science, and Technology). The IST's second floor is divided into four quadrants. The Electrical and Computer Engineering Department shares a quadrant with the Mechanical Engineering Department, and both are adjacent to the Department of Computer Science.

Administrative and faculty offices include a total net assignable space of 10,545. An office has an average of 68 square feet, glass-board, desk and auxiliary table, built-in space for storage and small lock-in key storage cabinet. Each office seats one person.

Across the hall form the ECE faculty offices sits an administrative assistant dedicated to the department and a workroom, complete with copier (scanner, fax, etc.), refrigerator, and other essential office equipment. Each quadrant has a collaboration room for departmental meetings, committee work, student collaborations, and student-faculty conferences.

#### C.3 Classrooms and Associated Equipment

Classrooms and associated equipment that are typically available where the program courses are taught.

Classrooms and teaching labs are primarily located on the 1st floor of the IST building. A typical classroom or teaching lab contains a desk with a computer for the instructor to access teaching materials and seats from 20 to 46 students.

All classrooms have a projector, Claris-boards, and sound-technology so classes can be recorded by instructors. These educational spaces contain different seating options for the comfort of the students and can be easily rearranged depending on the instructional needs. There is 29,620 net assignable square footage in the IST building considered as educational space.

Additionally, there are 16,697 net assignable square footage allocated for research activities conducted by faculty and students. Research labs are located on the 1st floor of the building and depending on the type of research conducted in the lab, they contain specialized equipment, computers, projectors, appropriate safety equipment and security.

#### C.4 ECE Laboratories

Laboratory facilities including those containing computers (describe available hardware and software) and the associated tools and equipment that support instruction. Include those facilities used by students in the program even if they are not dedicated to the program and state the times they are available to students. Complete Appendix C containing a listing of the major pieces of equipment used by the program in support of instruction.

IST, Room 1013 Research Laboratory: This is an approximately 1747 sq. ft. lab that is used as a research project lab for graduate programs and graduate students. This lab has 10 benches with 20 stations. Each station is equipped with 20 Tektronix MD031004-type oscilloscopes, 20 Tektronix AFG 3052C-type Function Generators, 20 Keithley 22300G-3-1-type DC supplies, 20 Keithley 2110-type multimeters and 20 Lenovo computers with access to all of the university software tools. There are additional 4 benches with computers for control system lab and other course based-projects.

The lab also contains bins of resistors, capacitors, parts bins, lab kits, and analog ICs used for the laboratory courses held in the room. Students enrolled in a course utilizing this lab can request access to the lab for hours that the lab is not used. The lab is managed by a lab technician who is available all the time during the lab sessions. There are about 20 labs scheduled in this room during a week. This typically amounts to approximately 60 hours between Monday and Friday.

#### Available ECE Software Tools:

- MARSMIP sumulation
- VHDL/Verilog Model Sim
- Multisim 14.0 circuit sumulator
- Python Language
- Mathlab 2016
- Quarc -software
- Rockwell PLC studio 5000
- Labview
- Cadence 22nm technology
- NeMOS5 Device simulatipons

IST, Room 1056 Circuits Laboratory: This is an approximately 927 sq. ft. lab that is utilized by both electrical and computer engineering students enrolled in circuits, electronics, digital logic and control systems laboratory courses (EEL 3111C, EEL 3112C, EEL 3702C, EEL 3304C, EEL 4351C and 4321C). Each student works individually in each lab station in all labs. It is furnished to accommodate 24 stations for 24 students.

IST, Room 1058 Digital and Cyber Physical Lab: This is an approximately 930 sq. ft. lab is completely equipped and finished appropriately to accommodate 24 stations for 24 students. It is used for labs in

computer architecture and organization, microcomputer, cybersecurity, embedded control, and embedded operating systems, and computer science courses. The program has all the equipment, currently in storage, until facilities finalizes furniture delivery and arrangement.

IST, Room 1025 Robotics Lab: This is an approximately 772 sq. ft. lab that is utilized by both electrical and computer engineering and computer science students for graduate and undergraduate labs and projects.

D. Describe additional classroom, teaching laboratory, research laboratory, office, and other space needed to implement and/or maintain the proposed program through Year 5. Include any projected Instruction and Research (I&R) costs of additional space in Table 2 in Appendix A. Do not include costs for new construction because that information should be provided in response to X (E) below.

The department of electrical and computer engineering plans for implementation of the proposed Cybersecurity Engineering program in collaboration with the department of computer science. The existing faculties will be utilized for most of the courses, except specialized concentration areas. Florida Polytechnic University plans to move to a new building Applied Research Center (ARC) of 95,000 sq. ft in fall 2021, and that facility would prove additional classrooms, laboratories, and two dedicated cyber security labs to be shared with computer science department.

E. If a new capital expenditure for instructional or research space is required, indicate where this item appears on the university's fixed capital outlay priority list. Table 2 in Appendix A includes only Instruction and Research (I&R) costs. If non-I&R costs, such as indirect costs affecting libraries and student services, are expected to increase as a result of the program, describe and estimate those expenses in narrative form below. It is expected that high enrollment programs in particular would necessitate increased costs in non-I&R activities.

Not Applicable

F. Describe specialized equipment that is currently available to implement the proposed program through Year 5. Focus primarily on instructional and research requirements.

With carefully class schedules, the exiting labs IST, Room 1056 Circuits Laboratory, IST, Room 1058 Digital and Cyber Physical Lab, Computer labs and computing facilities should be able to accommodate up to three (3) lab sections of 24 students in each section, totaling 3x24 = 72 students per semester. There would be need to project-based lab facility and dedicated equipment for Industrial Control Systems Security, Smart-grid Security, and Hardware Security.

G. Describe additional specialized equipment that will be needed to implement and/or sustain the proposed program through Year 5. Include projected costs of additional equipment in Table 2 in Appendix A.

1 <sup>st</sup> year: No need for equipment	2021-2022	0
2 <sup>nd</sup> year: software needed \$45k	2022-2023	\$45,000
3 <sup>rd</sup> year: all equipment: \$ 375k	2023-2024	\$375,000
4 <sup>th</sup> year: all equipment: \$200k	2024-2025	\$200,000

H. Describe any additional special categories of resources needed to implement the program through Year 5 (access to proprietary research facilities, specialized services, extended travel, etc.). Include projected costs of special resources in Table 2 in Appendix A.

	Lab Equipment	Specialized Equipment
RTDS: \$150K	0	150000

Opal RT (Real time HIL): \$130k	0	130000
DSPACE: \$25K	0	25000
5 PC: \$15K	15000	0
Power supply: \$10K	10000	0
Hi-Fi Probs: \$10K	10000	0
Hardware security:	0	0
12 PCs: \$25K	25000	0
PLC: \$40K	0	40000
Smart meters: \$30K	30000	0
Server: \$30K	0	30000
Routers: \$10K	0	10000
Software: \$40K	0	40000
Firewalls: \$15K	0	15000
FPGA: \$30K	0	30000
Microcontrollers: \$5K	0	5000
Oscilloscope: \$20K	20000	0
Chip whisperer: \$10K	0	10000
PSSE license: \$5K	0	5000
Hi Com PCs: \$20k	20000	0
	130000	490000
Total: \$620K		

### I. Describe fellowships, scholarships, and graduate assistantships to be allocated to the proposed program through Year 5. Include the projected costs in Table 2 in Appendix A.

Undergraduate students are provided scholarships based on their merit and not by program. As such, there are no specific funds in the form of fellowships, assistantships, or scholarships provided to any program. Graduate assistantships are awarded to students on a competitive basis and some efforts is made by the Graduate Division to apportion these awards based on students' areas of focus within the major. (E.g. M.S. in Engineering of which the Department of ECE supports two specific disciplinary tracks and contributes to one interdisciplinary track.) Faculty with extramural funding also support employment of graduate students.

### J. Describe currently available sites for internship and practicum experiences, if appropriate to the program. Describe plans to seek additional sites in Years 1 through 5.

All Florida Poly degrees require students to take an internship as part of their graduation requirement. The emphasis is on external, professional internships, but may also include internal, research-based internships where students work on funded projects with a faculty member or with a team of collaborators on a faculty-driven or industry-sponsored project.

Florida Poly holds both an annual internship fair and an annual career fair and currently sends interns to over 200 companies in throughout Florida and beyond. Some nearby companies include Accusoft, Publix Supermarkets, the Florida Department of Transportation, and Motorola Solutions. Our Director of Industry Engagement and our Office of Career Services continue to reach out and grow relationships with Florida companies to create pathways for interns, careers, sponsored projects, and a range of other opportunities of mutual benefit.

### Appendix A.

APPENDIX A
TABLE 1-A
PROJECTED HEADCOUNT FROM POTENTIAL SOURCES
(Baccalaureate Degree - Cyber Security Program)

Source of Students	Yea	ar 1	Yea	Year 2		ar 3	Year 4		Year 5	
(Non-duplicated headcount in any given year)*	нс	FTE	НС	FTE	НС	FTE	нс	FTE	нс	FTE
Upper-level students who are transferring from other majors within the university**	7	7	5	5	3	3	2	2	1	1
Students who initially entered the university as FTIC students and who are progressing from the lower to the upper level***	11	10	34	32	60	57	85	80	90	87
Florida College System transfers to the upper level***	2	2	4	4	6	5	6	5	12	10
Transfers to the upper level from other Florida colleges and universities***	0	0	2	2	6	4	6	4	9	7
Transfers from out of state colleges and universities***	0	0	0	0	8	7	8	7	8	6
Other (Explain)***	0	0	0	0	0	0	0	0	0	0
Totals	20	19	45	43	83	76	107	98	120	111

							APPEN	DIX A							
							TABI	.E 2							
					PRO	JECTED CC	STS ANI	) FUNDI	ING SOU	RCES					
					ear 1					Year	5				
Instruction &	Funding Source										Func	ling Source			_
Research Costs (non- cumulative)	Reallocate d Base* (E&G)	Enrollment Growth (E&G)	New Recurrin g (E&G)	New Non- Recurring (E&G)	Contracts & Grants (C&G)	Philanthropy/ Endowments	Enterprise Auxiliary Funds	Subtotal columns 1++7	Continuin g Base** (E&G)	New Enrollmen t Growth (E&G)	Other*** (E&G)	Contracts & Grants (C&G)	Philanthropy/ Endowments	Enterprise Auxiliary Funds	Subtotal columns 9++14
Columns	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Faculty Salaries and Benefits	0	0	0	350,970	0	0	0	\$350,970	609,670	0	0	0	0	0	\$609,670
A & P Salaries and Benefits	0	0	0	114,096	0	0	0	\$114,096	120,942	0	0	0	0	0	\$120,942
USPS Salaries and Benefits	0	0	0	0	0	0	0	\$0	0	0	0	0	0	0	\$0
Other Personal Services	0	0	0	10,200	0	0	0	\$10,200	13,600	0	0	0	0	0	\$13,600
Assistantships & Fellowships	0	0	0	0	0	0	0	\$0	0	0	0	0	0	0	\$0
Library	0	0	0	46,787	0	0	0	\$46,787	49,594	0	0	0	0	0	\$49,594
Expenses	0	0	0	38,984	0	0	0	\$38,984	43,369	0	0	0	0	0	\$43,369
Operating Capital Outlay	0	0	0	168,750	0	0	0	\$168,750	451,250	0	0	0	0	0	\$451,250
Special Categories	0	0	0	0	0	0	0	\$0	0	0	0	0	0	0	\$0
Total Costs	\$0	\$0	\$0	\$729,787	\$0	\$0	\$0	\$729,787	\$1,288,425	\$0	\$0	\$0	\$0	\$0	\$1,288,425
*Identify reall	ocation sourc	es in Table 3	3.												
**Includes recu	urring E&G f	unded costs (	("reallocate	d base," "en	rollment g	rowth," and "ne	w recurring"	) from Year	rs 1-4 that co	ntinue into Y	Year 5.				
***Identify if r	ion-recurring	<u>g</u> .													
Faculty and St	aff Summary	y						Calculate	d Cost per S	Student FT	Е				
Total Position	s	Year 1	Year 5							Yea	r 1		Year	5	·
Faculty (pers	son-years)	3.08	5.41					Total E&	G Funding	\$729,	.787		\$1,288	,425	
A & P (FTE)		2.25	2.25					Annual S	tudent FTE	19			111		
USPS (FTE)		4.25	4.5					E&G Co	st per FTE	\$38,4	410		\$11,6	07	

Table 2 Column	ı Explan	ations
Reallocated		E&G funds that are already available in the university's budget and will be reallocated to support the new program. Please include
Base* (E&G)	1	these funds in the Table 3 - Anticipated reallocation of E&G funds and indicate their source.
Enrollment		
Growth	2	Additional E&G funds allocated from the tuition and fees trust fund contingent on enrollment increases.
(E&G)		
New		
Recurring (E&G)	3	Recurring funds appropriated by the Legislature to support implementation of the program.
New Non-		Non-recurring funds appropriated by the Legislature to support implementation of the program. Please provide an explanation of the
Recurring	4	source of these funds in the budget section (section III. A.) of the proposal. These funds can include initial investments, such as
(E&G)		infrastructure.
Contracts &		
Grants (C&G)	5	Contracts and grants funding available for the program.
Philanthropy		
Endowments	6	Funds provided through the foundation or other Direct Support Organizations (DSO) to support of the program.
Enterprise		
Auxiliary	7	Use this column for continuing education or market rate programs and provide a rationale in section III.B. in support of the selected
Funds		tuition model.
Subtotal		
columns	8	Subtotal of values included in columns 1 through 7.
1++7		
Continuing		
Base** (E&G)	9	Includes the sum of columns 1, 2, and 3 over time.
New		
Enrollment		
Growth	10	See explanation provided for column 2.
(E&G)		
Other***		
(E&G)	11	These are specific funds provided by the Legislature to support implementation of the program.
Contracts &		
Grants (C&G)	12	See explanation provided for column 5.
Philanthropy		
Endowments	13	See explanation provided for column 6.
Enterprise		
Auxiliary	14	Use this column for continuing education or market rate programs and provide a rationale in section III.B. in support of the selected
Funds	14	tuition model.
Subtotal		
	15	Culture I of outputs in all of the advance of the second of the
columns	15	Subtotal of values included in columns 9 through 14.
9++14		

#### APPENDIX A

### TABLE 3 ANTICIPATED REALLOCATION OF EDUCATION & GENERAL FUNDS\*

Program and/or E&G account from which current funds will be reallocated during Year 1	Base before reallocation	Amount to be reallocated	Base after reallocation
Academic Affairs - Faculty Lines	0	0	\$0
	0	0	
	0	0	
	0	0	
	0	0	
	0	0	
			_
	-		_
			_
Totals	\$0	\$0	\$0
If not reallocating funds, please submit a zeroed Ta	able 3		

 TABLE 4

 ANTICIPATED FACULTY PARTICIPATION

Faculty Code	Faculty Name or "New Hire" Highest Degree Held Academic Discipline or Specialty	Rank	Contract Status	Initial Date for Participation in Program	Mos. Contract Year 1	FTE Year 1	% Effort for Prg. Year 1	PY Year 1	Mos. Contract Year 5	FTE Year 5	% Effort for Prg. Year 5	PY Year 5
А	Navid Khoshavi Najafabadi Computer Engineering	Asst. Prof.	МҮА	Fall 2021	9	0.75	0.15	0.11	9	0.75	0.30	0.23
А	Ashiq Sakib Computer Engineering	Asst. Prof.	МҮА	Fall 2021	9	0.75	0.20	0.15	9	0.75	0.33	0.25
А	Onur Toker Electrical Engineering	Assoc. Prof	МҮА	Fall 2021	9	0.75	0.20	0.15	9	0.75	0.30	0.23
А	Muhammad Ullah Elec.& Computer Engineering	Asst. Prof.	MYA	Fall 2021	9	0.75	0.15	0.11	9	0.75	0.33	0.25
А	Bala Chandrasekaran Electrical Engineering	Asst. Prof.	MYA	Fall 2021	9	0.75	0.20	0.15	9	0.75	0.25	0.19
А	Rawa Adla Elec.& Computer Engineering	Asst. Prof.	МҮА	Fall 2021	9	0.75	0.20	0.15	9	0.75	0.40	0.30
А	Youssif Al-Nashif Elec.& Computer Engineering	Assoc. Prof	МҮА	Fall 2021	9	0.75	0.30	0.23	9	0.75	0.40	0.30
А	Jorge Vargas Electrical Engineering	Assoc. Prof	MYA	Fall 2021	9	0.75	0.15	0.11	9	0.75	0.25	0.19
А	Harish Chintakunta Electrical Engineering	Asst. Prof.	MYA	Fall 2021	9	0.75	0.20	0.15	9	0.75	0.33	0.25
А	Suleiman Alsweiss Electrical Engineering	Asst. Prof.	MYA	Fall 2021	9	0.75	0.20	0.15	9	0.75	0.33	0.25
А	Arman Sargolzaei Electrical Engineering	Asst. Prof.	MYA	Fall 2021	9	0.75	0.20	0.15	9	0.75	0.30	0.23
А	Muhammad Rashid Elec. & Electronic Engineering	Professor	МҮА	Fall 2021	9	0.75	0.30	0.23	9	0.75	0.50	0.38
А	Hisham Mahmood	Asst. Prof.	MYA	Fall 2021	9	0.75	0.15	0.11	9	0.75	0.25	0.19

Faculty Code	Faculty Name or "New Hire" Highest Degree Held Academic Discipline or Specialty	Rank	Contract Status	Initial Date for Participation in Program	Mos. Contract Year 1	FTE Year 1	% Effort for Prg. Year 1	PY Year 1	Mos. Contract Year 5	FTE Year 5	% Effort for Prg. Year 5	PY Year 5
	Electrical Engineering											
А	Mahmoud Saleh	Asst. Prof.	MYA	Fall 2021	9	0.75	0.20	0.15	9	0.75	0.25	0.19
	Electrical Engineering											
А	Mohammad Reza Khalghani	Asst. Prof.	MYA	Fall 2021	9	0.75	0.20	0.15	9	0.75	0.25	0.19
	Electrical Engineering											
А	Md Selim Habib	Asst. Prof.	MYA	Fall 2021	9	0.75	0.10	0.08	9	0.75	0.33	0.25
	Photonics Engineering											
А	Luis Jaimes	Asst. Prof.	MYA	Fall 2021	9	0.75	0.20	0.15	9	0.75	0.30	0.23
	Electrical Engineering											
А	Kanwalinderjit Gagneja	Asst. Prof.	MYA	Fall 2021	9	0.75	0.20	0.15	9	0.75	0.30	0.23
	Computer Science											
А	Ashok Patel	Asst. Prof.	MYA	Fall 2021	9	0.75	0.20	0.15	9	0.75	0.30	0.23
	Computer Science											
		Assoc.										
А	Wei Ding	Prof	MYA	Fall 2021	9	0.75	0.10	0.08	9	0.75	0.30	0.23
	Computer Science											
А	Bayazit Karaman	Asst. Prof.	MYA	Fall 2021	9	0.75	0.10	0.08	9	0.75	0.30	0.23
	Computer Science											
	Total Person-Years (PY)							3.08				5.40

Faculty								РҮ	Workload by	Budge	et Classificati	ion
Code			Source of I	Funding				Year 1				Year 5
А	Existing faculty on a regular line	9	Current Education & General Revenue					3.08				5.40
В	New faculty to be hired on a vac	Current Ec		0.00				0.00				
С	New faculty to be hired on a new	w line	New Education & General Revenue				0.00				0.00	
D	Existing faculty hired on contract	cts/grants	Contracts/	Grants				0.00				0.00
Е	New faculty to be hired on contr	racts/grants	Contracts/	Grants				0.00				0.00
					Overall Totals	s for	Year 1	3.08			Year 5	5.40

### APPENDIX B.

Please include the signature of the Equal Opportunity Officer and the Library Director.

Signature of Equal Opportunity Officer

Signature of Library Director

Date

Date

This appendix was created to facilitate the collection of signatures in support of the proposal. Signatures in this section illustrate that the Equal Opportunity Officer has reviewed section II.E of the proposal and the Library Director has reviewed sections X.A and X.B.

### Appendix C. Curriculum Vitae

#### 1. Name: Rawa Adla

#### 2. Degrees

Degrees			
Degree	Discipline	Institution	Year
B.Sc.(Eng.)	Electrical and Computer Engineering	University of Aleppo, Syria	1999
Diploma	Computer Science	University of Aleppo, Syria	2001
M.Sc.	Computer Science	University of Michigan, MI	2008
Ph.D.	Electronic and Electrical Engineering	University of Detroit Mercy, MI	2015

#### 3. Academic Experience

Institution	Rank & Title	Period	FT/PT
Florida Polytechnic University	Assistant Professor	Sep, 2019-	FT
University of Arizona	Assistant Professor of Electrical and	2018 - 2019	FT
	Computer Engineering		
University of Detroit Mercy	Visiting Assistant Professor	2015 - 2016	FT
St. Clair County College	Adjunct Professor	2013-2015	PT
University of Detroit Mercy	Teaching Assistant	2010-2014	РТ
University of Michigan	Teaching Assistant	2008-2009	PT
University of Aleppo	Instructor	2000-2005	FT

#### 4. Non-Academic Experience

Company	Job Title & Position Description	Period	FT/PT
Ford Motor Company, Crash	Senior Research Engineer and	2016-2018	FT
Avoidance Metrics Partnership	Consultant		
(CAMP), Farmington Hills, MI			
University of Detroit Mercy	Graduate Research Assistant	2012-2015	РТ

#### 5. Certifications or Professional Registrations

#### 6. Current Membership in Professional Organizations

- Member, The Institute of Electrical and Electronics Engineers (New York)
- Eta Kapa Nu (HKN) Electrical Engineering Honor Society
- ACM Association for Computing Machinery

#### 7. Honors and Awards

- Best Poster Session Winner Award and to the Success of The IEEE Southeastern Michigan Section Activities, IEEE/SEM Winter 2016 meeting, April 19, 2016.
- Best Poster Presentation Award: "Collision Avoidance Systems in Autonomous Driving," IEEE/SEM
- Fall 2014 meeting, Best Poster Award, November 2014.
- Research Quality Second Place Award: "Bayesian Network Based Vehicle Collision Avoidance System," University of Detroit Mercy, UDM E&S Annual Research Symposium, October 2014.
- Best Poster Presentation Award: "Advanced Sensor Fusion Algorithm for Vehicle Safety System" IEEE/SEM Fall 2013 meeting, Best Poster Award, November 2013.
- Silver Paper Award: "Vehicle Collision Avoidance System Using Multi-Sensor Data Fusion with Dependency Information," The Silver Paper Award, Intelligent Transportation Society-Michigan (ITS-MI) Annual Meeting, 2012.
- 8. Service Activities (within and outside of the institution)
  - Reviewers for many conferences papers and journals such as IEEE, IASTED, and IJCITE

- Member of the Steering/Advisory Committees for EMERGING series. ISSN: 2326-9383, ISBN: 978-1-61208-602-6
- Editorial board member of the International Journal of Computer Science and information technology for education IJCSITE
- Committee member, The 6th international conference on model drive engineering software development (Modelsward 2018), January 22 -24, 2018 Funchal, Madeira, Portugal
- Technical Program Committee member, The 9th IEEE International Conference on Computer Science & Information Technology CSIT 2018, Amman Jordan, 11-12 July
- Technical Program Committee member, The Ninth International Conference on Emerging Networks and Systems Intelligence (EMERGING 2017), November 12 16, 2017 Barcelona, Spain
- Technical Program Committee member, The 8th IEEE International Conference on Computer Science & Information Technology CSIT 2017, Amman Jordan, 12-13 July
- Technical Program Committee member, The Eighth International Conference on Emerging Networks and Systems Intelligence (EMERGING 2016), October 9 13, 2016 Venice, Italy
- Technical Program Committee (TPC) member in the 7th IEEE International Conference on Computer Science and Information Technology CSIT 2016
- Member of the College of Engineering and Science's Computer and Technology Committee, University of Detroit Mercy, 2016
- Member of the Department of Mathematics, Computer Science and Software Engineering's Curriculum Committee, University of Detroit Mercy, 2016

#### 9. List the Most Important Publications and Presentations from the Past Five (5) years

- Mikael Paulik, Sam Youness, Nizar Al-Holou, Syed Misbahuddin, Rawa Adla, "Internet of Things based Undergraduate Curriculum," 5th Annual Conf. on Computational Science & Computational Intelligence (CSCI'18) | Dec 13-15, 2018 | Las Vegas, Nevada, USA
- Meier, J.-N., Kailas, A., Adla., Rawa, et. Al, "On Augmenting Adaptive Cruise Control Systems with Vehicular Communication for Smoother Automated Following," Proc. TRB Annual Meeting, Washington DC, Jan. 2018.
- HRUŠECKÁ, Denisa, Rawa ADLA, Said KRAYEM a Michal PIVNIČKA, "Event-B model for increasing the efficiency of warehouse management," Polish Journal of Management Studies [online]. 2018, vol. 17, iss. 2, s. 63-74. [cit. 2018-08-18]. ISSN 2081-7452.
- Meier, J.-N., Kailas, A., Adla., Rawa, et. Al, "On Augmenting Adaptive Cruise Control Systems with Vehicular Communication for Smoother Automated Following," Journal of the Transportation Research Board, 2018
- Parikh. J, Kailas. A, Rawa Adla, et. Al, "Development of Wireless Message for Vehicle-to Infrastructure Safety Applications," SAE World Congress, 2018.
- Parikh. J, Kailas. A, Rawa Adla, et. Al, "Validating Prototype Connected Vehicle-to-Infrastructure Safety Application in Real-World Settings," SAE World Congress, 2018.
- Jan-Niklas Meier, Aravind Kailas, Rawa Adla, et. Al, "Implementation and Evaluation of Cooperative Adaptive Cruise Control Functionalities", 25th ITS World Congress, Copenhagen, Denmark, 17-21 September 2018
- Meier, J.-N., Abuchaar, O., Adla, Rawa., et. Al, "Cooperative Adaptive Cruise Control Small-Scale Test- Phase 1," submitted to the United States Department of Transportation, FHWA-JPO, 2017
- Parikh, J., Abubakr, M., Adla, Rawa., et. Al, "Vehicle-to-Infrastructure Program Safety Application Project," submitted to the United States Department of Transportation, FHWA-JPO, June, 30, 2017
- Stowe, L., Abubakr, M., Adla, Rawa., et. Al, "Advanced Messaging Concept Development (AMCD) Project Vehicle-to-Infrastructure Program," submitted to the United States Department of Transportation, FHWA-JPO, 2017

- Rawa Adla; Youssef Bazzi; Nizar Al-Holou, "Bayesian network based collision avoidance system," IEEE/ Electro-Information Technology Conference on , pp.605,610, 19-21 May. 2015
- Rawa Adla, Nizar Al-Holou, Youssef Bazzi, "Kalman Filter Based Safety Application," CSC'14, The 2014 World Congress in Computer Science, Computer Engineering, and Applied Computing, The 2014 World Congress Computer Engineering, and Applied Computing, pp. 67-72; 22-25 July 2014.
- Rawa Adla, Youssef Bazzi, Nizar Al-Holou, "Multi Sensor Data Fusion, Methods and Problems," PDPTA'13, The 2013 International Conference on Parallel and Distributed Processing Techniques and Applications, The 2013 World Congress in Computer Science, Computer Engineering, and Applied Computing, pp.1-6, July 2013, <u>http://world-comp.org/p2013/PDP.html</u>
- Adla, Rawa; Al-Holou, Nizar; Murad, Mohannad; Bazzi, Youssef A., "Automotive collision avoidance methodologies Sensor-based and ITS-based," Computer Systems and applications (AICCSA), 2013 ACS International Conference on , vol., no., pp.1,8, 27-30 May 2013, doi: 10.1109/AICCSA.2013.6616458,

http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6616458&isnumber=6616408

• Rawa Adla, Youssef Bazzi, Nizar Al-Holou, "Vehicle Collision Avoidance System Using MultiSensor Data Fusion with Dependency Information", ITS Michigan-Annual Meeting, The Silver Award, 2012.

#### Florida Polytechnic University, 4700 Research Way, Lakeland, FL 33805 yalnashif@floridapoly.edu • +1 (863) 874-8566 Education The University of Arizona, Tucson, AZ, USA ■ Ph.D. in Electrical and Computer Engineering Jan. 2004 - Dec. 2008 Dissertation: Design, Analysis, and Automation of a Multi-Level Network Behavior Analysis Defense System Advisor: Prof. Salim Hariri Jordan University of Science and Technology, Irbid, Jordan ■ M.Sc. in Electronic and Communication Engineering Feb. 1999 - Sep. 2000 ■ Thesis: Topology Transparent Transmission Method in Multi-Hop Packet Radio Network Using Combinatorial Theory • Supervisor: Prof. Ibrahim Ghareeb Jordan University of Science and Technology, Irbid, Jordan ■ B.Sc. in Electrical Engineering, Computer Eng. Major Sep. 1993 - Feb. 1999 Florida Polytechnic University, Lakeland, FL Academic experience ■ Department Chair, Dept. of Computer Science Jan. 2018 - present ■ Associate Professor, Dept. of Computer Science Aug. 2015 - present ■ Associate Professor, Dept. of Computer Engineering Aug. 2015 - present Academic Program Coordinator, Dept. of Computer Science Sep. 2015 - Jan. 2018 Old Dominion University, Norfolk, VA ■ Founding Director for the ODU Center for Cybersecurity Education and Feb. 2015 - Jul. 2015 Research ■ Assistant Professor, Dept. of Electrical and Computer Engineering Jul. 2014 - Jul. 2015 The University of Arizona, Tucson, AZ ■ Assistant Research Professor, Dept. of Electrical and Computer Engi-Feb. 2009 - Jun. 2014 neering Project Manager, Dept. of Electrical and Computer Eng. Apr. 2008 - Feb. 2009 ■ Research Assistant, Dept. of Electrical and Computer Eng. Jan. 2004 - Apr. 2008 ■ Teaching Assistant, Dept. of Electrical and Computer Eng. Jan. 2007 - Jun. 2007 Jordan University of Science and Technology, Irbid, Jordan ■ Lecturer, Dept. of Computer Engineering Sep. 2000 - Dec. 2003 Teaching Assistant, Dept. of Electrical Engineering Feb. 1999 - Aug. 2000 Non-academic AVIRTEK Inc., Tucson, AZ experience Part-time, Computer Research Scientist Oct. 2009 - Jun. 2014 Computer World Establishment, Irbid, Jordan ■ Part-time, Computer hardware/software troubleshooter and maintenance Sep. 1994 - Sep. 1999 man Current ACM Professional Member • A member of the IEEE Society membership A member of the Engineering Society in Amman/Jordan in professional organizations The best poster award from The International Conference on Cloud and Autonomic Computing Honors & awards (CAC 2014), September, 2014 • The solo designer and implementer of Avirteks Inc. Security Solutions. Based on those solutions, Avirtek was chosen with 19 other companies to present Innovative Security Solutions in Washington, D.C. at SINET Showcase 2010. The solutions were labeled as the most innovative Cybersecurity solutions 2010 (http://www.security- innovation.org/showcase2010.htm) .

Youssif Al-Nashif

Activities	<ul> <li>Academic Program Coordinator for the Department of Computer Science and Information Technol-</li> </ul>			
	ogy. (Sept. 2015 - present)			
	<ul> <li>Faculty co-advisor for ACM Florida Polytechnic University ACM Student Chapter. (2017)</li> </ul>			
	<ul> <li>Faculty mentor and judge for Biology Expo 2016.</li> </ul>			
	<ul> <li>Faculty judge for History Expo 2016.</li> </ul>			
	<ul> <li>Search committee chair (Summer 2016).</li> </ul>			
	<ul> <li>Computer Engineering Search Committee member (2017).</li> </ul>			
	■ CSIT program review (2016).			
	<ul> <li>CSIT department representative in the SACS-COC candidacy visit (2017).</li> </ul>			
	<ul> <li>Member in FlPoly Website Steering Committee. (2017).</li> </ul>			
	<ul> <li>Member of Faculty Assembly Constitution Review Committee. (2016).</li> </ul>			
	External			
	<ul> <li>Associate Editor, Cluster Computing: The Journal of Networks, Software Tools and Applications.</li> </ul>			
	<ul> <li>IEEE Cloud and Autonomic Computing Conf. (ICCAC) 2017, Publication Chair</li> </ul>			
	<ul> <li>IEEE Cloud and Autonomic Computing Conf. (ICCAC) 2017, Web Chair</li> </ul>			
	<ul> <li>IEEE AICCSA 2017, Publication Chair</li> </ul>			
	<ul> <li>IEEE Cloud and Autonomic Computing Conf. (ICCAC) 2016, Publicity Chair</li> </ul>			
	<ul> <li>IEEE AICCSA 2016, Publication Chair</li> </ul>			
	<ul> <li>ICICS 2016, Track Co-Chair for Security and Privacy track.</li> </ul>			
	• ANT-2016 (The 7th International Conference on Ambient Systems, Networks and Technologies),			
	Program Committee member			
	<ul> <li>IEEE Cloud and Autonomic Computing Conf. (ICCAC) 2015, Publicity Chair</li> </ul>			
	IEEE AICCSA 2015, Program Chair     The 24th Letter time 10 (CCCCN 2015)			
	• The 24th International Conf. on Computer Communication and Networks (ICCCN 2015), Program			
	Committee member ICICS 2014, Program Committee member			
	<ul> <li>ICCS 2014 (14th International Conference on Computational Science), Program</li> </ul>			
	<ul> <li>ICICS 2013, Program Committee member</li> </ul>			
	<ul> <li>PC member (Autonomic Cybersecurity), ACM Cloud and Autonomic Computing Conference,</li> </ul>			
	CAC2013			
	<ul> <li>PC member (Autonomic Cloud Computing), ACM Cloud and Autonomic Computing Conference,</li> </ul>			
	CAC2013			
	<ul> <li>AICCSA 2013, Publication Chair</li> <li>Judge for the 2016 Congressional App Challenge</li> </ul>			
	■ Judge for the 2016 Congressional App Chanenge			
	• C. Tunc, F. Fargo, Y. B. Al-Nashif, S. Hariri, "Autonomic Cross-Layer Management of Cloud			
Sample of	Systems", In Foundations and Applications of Self* Systems (FAS* W), 2017 IEEE 2nd International			
Recent	Workshops on, pp. 160-165. IEEE, 2017.			
Publications	• E. Blasch, Y. Badr, S. Hariri, Y. Al-Nashif, "Fusion Trust Service Assessment for Crisis Man-			
1 ublications	agement Environments", in Fusion Methodologies in Crisis Management - Higher Level Fusion and			
	Decision Making, Galina Rogova and Peter Scott, Eds., pp. 389-420, Springer, 2016.			
	B. AlBaalbaki, J. Pacheco, C. Tunc, Salim Hariri, Y. Al-Nashif, "Anomaly Behavior Analysis System			
	for ZigBee in Smart Buildings", in IEEE ACS International Conference on Computer Systems and			
	Applications (AICCSA 2015).			
	C. Tunc, S. Hariri, F. D. L. P. Montero, F. Fargo, P. Satam, Y. Al-Nashif, "Teaching and Training Cy-			
	bersecurity as a Cloud Service", Proceedings of the International Conference on Cloud and Autonomic			
	Computing (ICCAC15), 2015			
	• P. Satam, H. Alipour, Y. Al-Nashif, and S. Hariri, "DNS-IDS: Securing DNS in the Cloud Era",			
	Proceedings of the International Conference on Cloud and Autonomic Computing (ICCAC15), 2015			
	• C. Tunc, S. Hariri, Y. Al-Nashif, F. De La Pea Monter, F. Fargo, and P. Satam, "CLaaS: Cybersecurity			
	Lab as a Service Design, Analysis, and Evaluation", Proceedings of the 2nd workshop on Autonomic			
	Cloud Cybersecurity, 2015			
	• Y. Badr, S. Hariri, Y. B. Al-Nashif, E. Blasch, "Resilient and Trustworthy Dynamic Data-driven Ap-			
	plication Systems (DDDAS) Services for Crisis Management Environments," ICCS 2015, pp. 2623-			
	2637			
	• H. Alipour, Y. B. Al-Nashif, P. Satam and S. Hariri, "Wireless Anomaly Detection Based on IEEE			
	802.11 Behavior Analysis," in IEEE Transactions on Information Forensics and Security, vol. 10, no.			
	10, pp. 2158-2170, Oct. 2015.			

Academic Program Coordinator for the Department of Computer Science and Information Technol-

Samples of Professional Development

Service

Internal

• Ongoing research on Trustworthy and Autonomic Computing.

• Ongoing research on Power Management in Cloud Computing.

#### 1. Name: Suleiman Alsweiss

#### 2. Degrees

Degrees			
Degree	Discipline	Institution	Year
B.Sc.(Eng.)	Electrical Engineering	Princess Sumaya University, Jordan	2004
M.Sc.	Electrical Engineering	University of Central Florida, USA	2008
Ph.D.	Electrical Engineering	University of Central Florida, USA	2011

#### 3. Academic Experience

Institution	Rank & Title	Period	FT/PT
Florida Polytechnic University	Assistant professor of Electrical and	August, 2016-	FT
	Computer Engineering	present	

#### 4. Non-Academic Experience

Company	Job Title & Position Description	Period	FT/PT
National Oceanic & Atmospheric	Senior Scientist: Research and	November,	FT
Administration (NOAA)	Development	2011 -	
		August, 2016	

#### 5. Certifications or Professional Registrations

- Professional Engineer, Ontario, Canada (from 1977 2002)
- Chartered Engineer, United Kingdom (from 1977 2005)

#### 6. Current Membership in Professional Organizations

• Senior member, The Institute of Electrical and Electronics Engineers (New York)

#### 7. Honors and Awards

- 8. Service Activities (within and outside of the institution)
  - Editorial board member: The Journal of Atmospheric Science Research
  - Reviewer board member: MDPI Remote Sensing
  - Reviewer: NASA's MUREP Institutional Research Opportunity
  - Reviewer: NASA's Postdoctoral Program (NPP)
  - Reviewer: IEEE Transaction on Geosciences and Remote Sensing, IEEE Geosciences and Remote sensing Letters, IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, IEEE access, MDPI Journal of Remote Sensing, MDPI Journal of Marine Science and Engineering, International Journal of Remote Sensing, International Journal of Geo-Information, IEEE South East Conference, Global Space-based Inter-Calibration System (GSICS)
  - Participated and chaired sessions in several IEEE conferences
  - Participated in NSF grants conference

#### 9. List the Most Important Publications and Presentations from the Past Five (5) years

- S. Alsweiss, R. Hanna, P. Laupattarakasem, W.L. Jones, C.C. Hennon, R. A. Chen, "Non-MLE Approach for Satellite Scatterometer Wind Vector Retrievals in Tropical Cyclones", Remote Sens. Journal, vol. 6, no. 5, pp. 4133-4148, 2014
- 2. S. Alsweiss, Z. Jelenak, P.S. Chang, J. Park, and P. Meyers, "Inter-calibration Results for the Advanced Microwave Scanning Radiometer-2 over Ocean", IEEE Journal of Selected Topics in Applied Earth Observations and Rem. Sens. (JSTARS), vol. 8, no. 9, pp. 4230-4238,2015

- J. Sapp, S. Alsweiss, Z. Jelenak, P.S. Chang, S.J. Frasier, J. Carswell, "Airborne Cross-Polarization Observations of the Ocean Surface NRCS at C-band in Moderate Winds", IEEE Trans. Geosci. Rem. Sens., vol.54, no.10, pp.5975-5992, 2016
- 4. S. Alsweiss, Z. Jelenak, and P.S. Chang, "Remote Sensing of Sea Surface Temperature Using AMSR-2 Measurements", submitted to the IEEE Journal of Selected Topics in Applied Earth Observations and Rem. Sens. (JSTARS), 2017
- J. Sapp, S. Alsweiss, Z. Jelenak, P. S. Chang and J. Carswell, "Stepped Frequency Microwave Radiometer Wind-Speed Retrieval Improvements", Remote Sens. 2019, 11(3), 214; doi:10.3390/rs11030214
- P. S. Chang, Z. Jelenak, S. Alsweiss, J. Park, S. Soisuvarn, P. Meyers, and R. Ferraro, "NOAA GCOM-W1/AMSR2 Product Processing, Validation and Utilization", IEEE IGARSS Conference, Jul. 2014, Canada.
- P. S. Chang, Z. Jelenak, S. Alsweiss, J. Park, S. Soisuvarn, P. Meyers, and R. Ferraro, "An Overview of NOAA's GCOM-W1/AMSR2 Product Processing and Utilization", IEEE IGARSS Conference, Jul. 2015, Italy.
- 8. J. Sapp, S. Alsweiss, Z. Jelenak, and P. S. Chang, "Stepped Frequency Microwave Radiometer Retrieval Error Characterization", IGARSS Conference, Jul. 2017, USA.
- P. S. Chang, Z. Jelenak, S. Alsweiss, S. Soisuvarn, P. Meyers, and R. Ferraro, "An Overview of NOAA's GCOM-W1/AMSR-2 Product Processing and Utilization", IEEE IGARSS Conference, Jul. 2017, USA.
- S. Alsweiss, J. Sapp, Z. Jelenak, and P. S. Chang, "Validation of AMSR2 Oceanic Environmental Data Records Using Tropical Cyclone Composite Fields", IEEE IGARSS Conference, Jul. 2018, USA. (https://ieeexplore.ieee.org/document/8517426)
- L. Nichols, Z. Weingarten, C. Didier, J. Prine, M. Cathcart, S. Alsweiss, and R. Integlia, "Toward an AR Multi-perspective Active Imaging Environment for Application Development", SPIE Defense and Security Conference, May 2018, USA (https://doi.org/10.1117/12.2305105).
- 12. M. Jernigan, S. Alsweiss, J. Cathcart, and R. Razdan, "Conceptual Sensors Testing Framework for Autonomous Vehicles", IEEE VNC conference, Nov. 2018, Taiwan.
- 13. M. Brinkmann, O. Toker, and S. Alsweiss, "Design of an FPGA/SoC Hardware Accelerator for MIT Coffee Can Radar Systems", IEEE South East conference, April. 2019, Alabama, USA.
- 14. J. Vargas, S. Alsweiss, M. Jernigan, A. Amin, M. Brinkmann, and R. Razdan, "Development of Sensors Testbed for Autonomous Vehicles", IEEE South East conference, April. 2019, Alabama, USA.

- Consultant to the Ocean Vector Winds Team at NOAA/NESDIS/STAR
- Plan and participate in field experiment campaigns aboard NOAA's P3 hurricane hunters
- Co-advising graduate students (Msc and PhD) at Florida Polytechnic University and other Universities (e.g. UCF)

#### 1. Name: Balasubramaniyan Chandrasekaran

#### 2. Degrees

Degrees			
Degree	Discipline	Institution	Year
B.E.	Electronics and Communications	Visveswaraiah Technological	2007
	Engineering	University, India	
M.S.	Electrical Engineering	University of North Carolina at	2010
		Charlotte	
Ph.D.	Electrical Engineering	University of North Carolina at	2017
		Charlotte	

#### **3.** Academic Experience

Institution	Rank & Title	Period	FT/PT
Florida Polytechnic University	Assistant Professor, Computer	Aug 2018-	FT
	Engineering		
Teaching Fellow	Fellowship	Aug 2016 –	PT
		Dec 2016	
Teaching Assistant	Student Work	Aug 2014 –	FT
		May 2017	

#### 4. Non-Academic Experience

Company	Job Title & Position Description	Period	FT/PT
Lara Technologies, India	Software Engineer	2010-2014	FT
Tech Mahindra, India	Technical Associate	2007-2008	FT

#### 5. Current Membership in Professional Organizations

• Member, Institute of Electrical and Electronics Engineers (IEEE)

#### 6. Honors and Awards

• 2016 - Provost's Doctoral Teaching Fellowship

#### 7. Service Activities (within and outside of the institution)

• Paper Reviewer: IEEE during 2015 - 2017

#### 8. List the Most Important Publications and Presentations from the Past Five (5) years

- 1. Chandrasekaran, B., & Conrad, J. M. (2017, February). Complete Coverage Planning: Achieving Human Interaction and Maximum Coverage During an Autonomous Robotic Vehicle Navigation of an Unknown Terrain. In Workshops at the Thirty First AAAI Conference on Artificial Intelligence.
- 2. Chandrasekaran, B., Gangadhar, S., & Conrad, J. M. (2017, April). A Survey of Multisensor Fusion Techniques, Architectures and Methodologies. In SoutheastCon, 2017 (pp. 1-8). IEEE.
- 3. Chandrasekaran, B., & Conrad, J. M. (2016, March). Sensor fusion using a selective sensor framework to achieve decision and task execution. In SoutheastCon, 2016 (pp. 1-7). IEEE.
- 4. Chandrasekaran, B., & Conrad, J. M. (2015, April). Human-robot collaboration: A survey. In SoutheastCon 2015 (pp. 1-8). IEEE.

- ABET program evaluation committee member for electrical and computer engineering.
- Faculty Development series organized by Florida Polytechnic University (Fall 2017):
  - Course Assessment
  - Research development/Sponsored Research

## Dr. Harish Chintakunta | Curriculum Vitae

### Education

- Doctor of Philosophy in Electrical Engineering, North Carolina State University, 2013
- Master of Science in Electrical Engineering, North Carolina State University, 2008
- Bachelor of Technology in Electronics and Communications Engineering, Indian Institute of Technology, 2006

## Academic Experience

- Florida Polytechnic University, Assistant Professor of Electrical Engineering, 2016-present, full time
- Coordinated Science Laboratory at University of Illinois, Urbana Champaign, Post-doctoral researcher, 2014-2015, full time.
- Department of Electrical and Computer Engineering at North Carolina State University, Postdoctoral researcher, 2013-2014.

## Current membership in professional organizations

• Institute of Electrical and Electronics Engineers (IEEE)

## Service activities

- Serving on the board for collaboration between Florida Polytechnic University and Lakeland regional hospital.
- Department representative to the faculty assembly.
- Summer student workshops on networking, data acquisition and programming.
- Served in hiring committees for advanced technology and computer engineering departments.
- Served as a reviewer for several peer reviewed journals.

## **Research Grants**

• Real time monitoring and prediction of reduced visibility events on Florida's highways. Granted by Florida Department of Transportation (FDOT). Grant amount: \$1,500,000.

## Selected publications

- Jennifer Gamble, Harish Chintakunta, and Hamid Krim. Node Dominance: Revealing Community and Core-Periphery Structure in Social Networks. IEEE Transactions on Signal and Information Processing over Networks (TSiPN). 2016.
- Hamid Krim, Thanos Gentimis, and Harish Chintakunta. Discovering the Whole by the Coarse: A topological paradigm for data analysis. IEEE Signal Processing Magazine. 2016.
- Harish Chintakunta, and Athanasios Gentimis. Influence of topology in information flow in social networks. Annual Asilomar Conference on Signals, Systems, and Computers (ASILOMAR). 2016.s
- Yang Chen, Harish Chintakunta, Yuliy Baryshnikov and P.R. Kumar. Persistent-Homologybased Detection of Power System Low-frequency Oscillations using PMUs. IEEE Global Conference on Signal and Information Processing (GlobalSIP). 2016.
- Jennifer Gamble, Harish Chintakunta, and Hamid Krim. Coordinate-Free Quantication of Coverage in Dynamic Sensor Networks. Signal Processing. 2015.
- Harish Chintakunta and Hamid Krim. Distributed localization of coverage holes using Topological Persistence. IEEE Transactions on Siganl Processing (TSP). 2014.
- Harish Chintakunta, Thanos Gentimis, Rocio Gonzalez Diaz, Dr., Maria-Jose Jimenez, and Hamid Krim. An entropy based persistent barcode. Special issue on Graph based representation (Gbr2013), Pattern Recognition. 2014.

#### 1. Name: Md Selim Habib

#### 2. Degrees

Degrees			
Degree	Discipline	Institution	Year
B.Sc.(Eng.)	Electrical and Electronic Engineering	Rajshahi University of Engineering	2008
		and Technology, Bangladesh	
M.Sc.	Electrical and Electronic Engineering	Rajshahi University of Engineering	2012
		and Technology, Bangladesh	
Ph.D.	Photonics Engineering	Technical University of Denmark,	2017
		Denmark	

#### 3. Academic Experience

Institution	Rank & Title	Period	FT/PT
Florida Polytechnic University	Assistant Professor of Electrical and	Aug. 12,	FT
	Computer Engineering	2019-	
University of Central Florida	Postdoctoral Research Associate	Sep. 2017 –	FT
		Aug. 2019	
Technical University of Denmark	Postdoctoral Researcher	Apr. 2017 –	FT
		July 2017	
Rajshahi University of	Assistant Professor of Electrical and	2013 - 2014	FT
Engineering and Technology	Electronic Engineering		
Rajshahi University of	Assistant Professor of Electrical and	2010 - 2013	FT
Engineering and Technology	Electronic Engineering		

#### 4. Non-Academic Experience

#### 5. Certifications or Professional Registrations

#### 6. Current Membership in Professional Organizations

- Senior Member, The Institute of Electrical and Electronics Engineers (IEEE), USA
- Early Carrier Professional Member, Optical Society of America (OSA), USA
- Executive officer: Fiber modeling and fabrication group, OSA, USA

#### 7. Honors and Awards

- 2016: Otto Mønsteds Fond, Oticon Fond, and IDA Fond for External research stay in USA
- 2014: University Gold Medal, Rajshahi University of Engineering and Technology, Bangladesh
- 2006-2009: EEE Association Award, Rajshahi University of Engineering and Technology, Bangladesh
- 8. Service Activities (within and outside of the institution)
  - Review papers: Optics Letters, Optics Express, IEEE PTL, IEEE JLT, IEEE Sensors Letters, IEEE Photonics Journal, IEEE J Select Top in Quantum Electronics, IEEE Access, Applied Optics, Optics Communication, Optical Fiber Technology, Chinese Optics Letters, Sensing and Bio-Sensing Research, J Electromagnetic waves & Applications, Optical and Quantum Electronics, Sensors, Applied Sciences.

#### 9. List the Most Important Publications and Presentations from the Past Five (5) years

[1] **M. Selim Habib**, J. E. A. Lopez, C. Markos, A. Schulzgen, R. Amezcua CorreaSingle-mode, "Low loss hollow-core anti-resonant fiber designs," *Optics Express*, vol. 27, pp. 3824-3836, 2019.

- [2] D. Jayasuriya, C. R. Petersen, D. Furniss, C. Markos, Z. Tang, M. Selim Habib et al., "Mid-IR supercontinuum generation in birefringent, low loss, ultra-high numerical aperture Ge-As-Se-Te chalcogenide step-index fiber," *Optical Materials Express*, vol. 9, pp. 2617-2629, 2019.
- [3] Abubakar I. Adamu, **M. Selim Habib** *et al.*, "Deep-UV to Mid-IR Supercontinuum Generation driven by Mid-IR Ultrashort Pulses in a Gas-filled Hollow-core Fiber," *Nature Scientific Reports*, vol. 9, pp. 4446, 2019.
- [4] M. Selim Habib, C. Markos, J. E. A. Lopez, R. Amezcua Correa, "Multi-octave supercontinuum from visible to midIR and Bend Effects on Ultrafast Nonlinear Dynamics in Gas-filled Hollow-core Fiber," *Applied Optics* vol. 58, pp. D7-D11, 2019 [Editor's peak].
- [5] X. Ding, M. Selim Habib, R. Amezcua Correa, J. Moses, "Near-octave intense mid-infrared by adiabatic downconversion in hollow anti-resonant hollow fiber," *Optics Letters*, vol. 44, pp. 1084-1087, 2019.
- [6] M. Saiful Islam, J. Sultana, R. A. Aoni, M. Selim Habib, A. Dinovitser, B. W. H. Ng, D. Abbott, "Localized Surface Plasmon Resonance Biosensor: An Improved Technique for SERS Response Intensification," *Optics Letters*, vol. 44, pp. 1134-1137, 2019.
- [7] M. Selim Habib, C. Markos, J. E. A. Lopez, R. Amezcua Correa, "Extreme UV Light Generation Through Dispersive Wave Trapping in a Tapered Gas-Filled Hollow Fiber," *IEEE Photonics Technology Letters*, vol. 31, pp. 795-798, 2019.
- [8] M. Bache, M. Selim Habib, C. Markos, J Lægsgaard, "Poor-man's model of hollow-core anti-resonant fibers," JOSA B, vol. 36, pp. 69-80, 2019.
- [9] M. Selim Habib, C. Markos, J.E. Antonio-Lopez, R. Amezcua Correa, O. Bang, M. Bache, "Multi-stage generation of extreme ultraviolet dispersive waves by tapering gas-filled hollow-core anti-resonant fibers," *Optics Express*, vol. 26, pp. 24357-24371, 2018.
- [10] M. Selim Habib, O. Bang, M. Bache, "Low-loss single-mode hollow-core fiber with anisotropic anti-resonant elements," *Optics Express*, vol. 24, pp. 8429-8436, 2016.
- [11] M. Selim Habib, O. Bang, M. Bache, "Low-loss hollow-core anti-resonant fibers with semi-circular nested tubes," *IEEE J Selected Top in Quantum Electronics*, vol. 22, pp. 4402106, 2016.
- [12] M. Selim Habib, O. Bang, M. Bache, "Low-loss hollow-core silica fibers with adjacent nested antiresonant tubes," *Optics Express*, vol. 23, pp. 17394-17406, 2015.
- [13] G. K. M. Hasanuzzaman, M. Selim Habib, S. M. Abdur Razzak, M. Anwar Hossain, Y. Namihira, "Low loss single mode porous-core kagome photonic crystal fiber for THz wave guidance," *IEEE Journal of Lightwave Technology*, vol. 33, pp. 4027-4031, 2015.
- [14] Abubakar I. Adamu, **M. Selim Habib** *et al.*, "Multioctave supercontinuum generation from deep-UV to mid-IR in a noble gas-filled fibers," SPIE Photonics West, 2-5 February, 2019, San Francisco, USA [Invited talk].
- [15] Abubakar I. Adamu, **M. Selim Habib** *et al.*, "Deep-UV dispersive wave generation in a gas-filled fiber pumped with mid-IR pulses," SPIE Photonics West, 2-5 February, 2019, San Francisco, USA.
- [16] Abubakar I. Adamu, M. Selim Habib et al., "Supercontinuum generation from deep-UV to mid-IR in a noble gas-filled fiber pumped with ultrashort mid IR pulses," Advances in Photonics Congress, 2-5 July, 2018, Zurich, Switzerland [Post-deadline paper].
- [17] M. Selim Habib, O. Bang, M. Bache, "Anisotropic Anti-resonant Elements gives Broadband Single-mode Low-loss Hollow-core Fibers," CLEO/USA Conference, 05-10 June, 2016, San Jose, USA.

- Associate Editor: IEEE Access
- Feature Editor: Applied Optics
- Topic Editor: Fibers

#### 1. Name: Mohammad Reza Khalghani

#### 2. Degrees

Degrees			
Degree	Discipline	Institution	Year
B.Sc.(Eng.)	Electrical Engineering	Sadjad University of Technology, Iran	2010
M.Sc.	Information and Systems Engineering	University of Birjand, Iran	2012
Ph.D.	Electronic and Electrical Engineering	West Virginia University, US	2019

#### 3. **Academic Experience**

Institution	Rank & Title	Period	FT/PT
Florida Polytechnic University	Assistant Professor	August 2019-	FT
		now	
West Virginia University	Research Assistant	2016 - 2019	FT

#### 4. Non-Academic Experience

Company	Job Title & Position Description	Period	FT/PT
Khorasan Regional Electric	Research Officer: Research and	2013-2014	FT
Company, Iran Ministry of	Development		
Energy			

#### 5. Current Membership in Professional Organizations

- Member, The Institute of Electrical and Electronics Engineers (IEEE), USA
- Member, IEEE- Power & Energy Society (IEEE-PES), USA

#### 6. Honors and Awards

- 2019 IEEE PES General Meeting Conference: Best Paper Award
- 2012, National Elite Foundation, Iran, (Highest Institute for Elite People).

#### 7. Service Activities (within and outside of the institution)

- Technical Program Assistant in North American Power Symposium (NAPS) 2017.
- Technical Reviewer: IEEE Transaction on Vehicular Technology.
- Technical Reviewer: Energies.
- Technical Reviewer: Journal of Applied Energy.
- Technical Reviewer: Journal of Neural Computing and Applications (NCAA).
- Technical Reviewer: Journal Sustainable Cities and Society.
- Technical Reviewer: PES General Meeting Conference 2019.
- Technical Reviewer: Optimal Control, Applications and Methods.
- Technical Reviewer: International Journal of Hydrogen Energy.
- Technical Reviewer: International Journal of Power and Energy Systems.
- Technical Reviewer: Turkish Journal of Electrical Engineering & Computer Sciences.
- Technical Reviewer: Journal of Nonlinear Dynamics, Springer Ltd.
- Technical Reviewer: Journal of Electrical Engineering & Technology.
- Technical Reviewer: IEEE Symposium on Computers & Informatics Conference.
- Technical Reviewer: IEEE International Conference on Computer Applications and Industrial Electronics (ICCAIE).

#### 8. List the Most Important Publications and Presentations from the Past Five (5) years

- 1. M. R. Khalghani, M. H. Khooban, E. Mahboubi-Moghaddam, N. Vafamand and M. Goodarzi, "A self-tuning load frequency control strategy for microgrids: Human brain emotional learning," International Journal of Power and Energy Systems, Vol. 75, pp. 311–319, February 2016.
- M. R. Khalghani, M. Ramezani, and M. Rajabi-Mashhadi, "Demonstrating The Importance Of Applying A New Probabilistic Power Flow Strategy To Evaluate Power Systems With High Penetration Of Wind Farms," Journal of Energy Engineering-ASCE, 10.1061/(ASCE)EY.1943-7897.0000332, 04016002, 2016.
- **3.** H. Heydari-Doostabad, **M. R. Khalghani**, M. H. Khooban, "A Novel Control System Design to Improve LVRT Capability of Fixed Speed Wind Turbines using STATCOM in Presence of Voltage Fault," International Journal of Power and Energy Systems, Vol. 77, pp. 280-286, 2016.
- 4. M. R. Soltanpour, M. H. Khooban, **M. R. Khalghani**, "An Optimal and Intelligent Control Strategy for a Class of Nonlinear Systems: Adaptive Fuzzy Sliding Mode," Journal of Vibration and Control, Vol. 22, Issue 1, pp. 159-175, 2016.
- 5. **M.R. Khalghani**, and M.H. Khooban, "A Novel Self-Tuning Control Method Based on Regulated Biobjective Emotional Learning Controller's Structure with TLBO Algorithm to Control DVR Compensator," Journal of Applied Soft Computing, Vol. 24, pp. 912–922, November 2014.
- M.R. Khalghani, M.A. Shamsi-nejad and M. H. Khooban, "DVR Control Using Bi-objective Optimization to Improve Power Quality's Indices," IET Science, Measurement & Technology, Vol. 8, Issue 4, pp. 203–213, 2014.
- 7. **M.R. Khalghani**, M.A. Shamsi-nejad, M. Farshad and M.H. Khooban, "Modifying power quality's indices of load by Presenting an Adaptive Method Based on Hebb Learning Algorithm for Controlling DVR," AUTOMATIKA–Journal for Control, Measurement, Electronics, Computing and Communications, Vol. 55, No 2, 2014.
- M. R. Khalghani, J. Solanki, S. Khushalani-Solanki and A. Sargolzaei, "Stochastic Load Frequency Control of Microgrids Including Wind Source Based on Identification Method," 2018 IEEE International Conference on Environment and Electrical Engineering and 2018 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe), Palermo, pp. 1-6, 2018.
- 9. M. R. Khalghani, J. Solanki, S. Khushalani-Solanki and A. Sargolzaei, "Resilient and Stochastic Load Frequency Control of Microgrids," Submitted to IEEE PES General Meeting, Atlanta, pp. 1-5, 2019.
- 10. M. R. Khalghani, S. Solanki, and J. Solanki, "A Load Frequency Control for Microgrid including Stochastic Elements Based on Hebb Learning,"2017 North American Power Symposium (NAPS), Morgantown, WV, 2017, pp. 1-6.
- 11. **M. R. Khalghani**, S. Solanki, J. Solanki, A. Sargolzaei, "Cyber Disruption Detection in Linear Power Systems,"2017 North American Power Symposium (NAPS), Morgantown, WV, 2017, pp. 1-6.
- 12. **M. R. Khalghani**, S. Solanki, and J. Solanki, "Optimal Integration and Location of PHEV Aggregators in Power Distribution Systems,"2016 North American Power Symposium (NAPS), Denver, CO, 2016, pp. 1-6.
- 13. M. R. Khalghani, and M.A. Shamsi-nejad, "A novel self-tuning control structure to control DVR compensator using bi-objective human brain Emotional learning," 20th Electric Power Distribution Conference (EPDC), Zahedan, Iran, 2015.
- 14. **M. R. Khalghani**, S. Khushalani-Solanki and J. Solanki, "Load Frequency Control in a Microgrid Including Electric Vehicle Using Neuroscience Based Controllers", Book Title: Microgrids: Design, Applications and Control, Nova Science Inc., 2018.

- Strategic planning Committee, Florida Polytechnic University, 2019.
- Employee Activities Committee, Florida Polytechnic University, 2019.

#### Name: Navid Khoshavi Najafabadi

#### A. Education

Luucution			
Degree	Discipline	Institution	Year
B.Sc.	Computer Engineering Sepahan Science and Technology		2009
		Institute of Higher Education	
M.Sc.	Computer Engineering	Amirkabir University of Technology	2012
M.Sc.	Computer Engineering	University of Central Florida	2016
Ph.D.	Computer Engineering	University of Central Florida	2017

#### **B.** Academic Experience

Institution	Rank & Title	Period	FT/PT
Florida Polytechnic University	Assistant Professor of ECE and CS	May 2018-	FT
Florida Polytechnic University	Instructor	Aug. 2017 –	FT
		May 2018	

#### C. Current Membership in Professional Organization

- Member, Association for Computing Machinery (ACM)
- Member, Institute of Electrical and Electronics Engineers (IEEE)

#### **D.** Honors and Awards

- Feature Paper of Month, *IEEE Transactions on Computers* for the paper titled "Energy-Aware Adaptive Restore Schemes for MLC STT-RAM Cache," May 2017.
- Best Paper Nomination, 18 International Symposium on Quality Electronic Design for the paper titled "Variation-Immune Resistive Non-Volatile Memory using Self-Organized Sub-Bank Circuit Designs," 2017.
- Graduation Presentation and Student Government Association Fellowships to present in ISQED 2017.
- Graduation Presentation and Student Government Association Fellowships to present in ISQED 2016.
- Iranian-American Community Center Scholarship for the 2015-2016 academic year.
- David T. & Jane M. Donaldson Memorial Scholarship for the 2015-2016 academic year.
- SRE Hans Reiche Scholarship, 2015.
- Graduation Presentation Fellowship to present my paper in RAMS 2015.

#### E. Service Activities (within and outside of the institution)

- Member of Enrollment Management and Annual Awards Committees, Florida Polytechnic University,
- Reviewer for papers: IEEE Access, IEEE Transactions on Device and Materials Reliability, Elsevier Microelectronics Journal, Elsevier Microelectronics Reliability Journal, IEEE Transactions on Computers, IEEE Transactions on Circuits and Systems, IEEE Transactions on VLSI, International Journal of Nanoscience and Nanotechnology, IET Micro & Nano Letters, IEEE Computer Society Annual Symposium on VLSI,
- NSF REU Site Project Assessor: Research Experiences on the Internet of Things (IoT) at University of Central Florida, July 28, 2017,
- TPC member of 2nd International Conference on Computer Science and Technology (CST2017).

#### F. Research Activities

#### A. Funded Projects

Arman Sargolzaei (FPU PI), Navid Khoshavi (Co-PI), Kang Yen (Co-PI) "Preventing, Detecting, and Responding to attacks on Safety-Critical Cyber Physical Systems" Florida Cybersecurity Center, *July 2018 – June 2019*, \$58,708.

#### B. List the Most Important Presentations and Seminars from the Past Five (5) years

- N. Khoshavi, "Energy-aware Data Movement in Non-Volatile Memory Hierarchies," Micron, 2017.
- Paper presentation, ISQED, San Francisco, CA, USA, 14 March 15 March 2017.
- Paper presentation, ISQED, San Francisco, CA, USA, 15 March 16 March 2016.
- Invited Presentation, NSF MIST I/UCRC Center Meeting, Orlando, FL, USA, 13 May, 2015.
- Organization member of Multi-functional Integrated System Technology (MIST) Center meeting, May 2015.
- Paper presentation, Reliability and Maintainability Symposium, Palm Harbor, FL, 2015.
- Organization member of Reliability and Maintainability Symposium, January 2015.

- Invited Presentation, NSF MIST I/UCRC Center Meeting, University of Florida, Gainesville, FL, 2014.
- Organization member of International Conference on Evolutionary Computation, December 2014.

#### C. List the Most Important Publications from the Past Five (5) years

- [1] **N. Khoshavi** and R. F. DeMara, "Read-Tuned STT-RAM and eDRAM Cache Hierarchies for Throughput and Energy Optimization," *IEEE Access*, 2018.
- [2] S. Salehi, N. Khoshavi, R. Zand, and R. F. DeMara, "Self-Organized Sub-bank SHE-MRAM-based LLC: an Energy-Efficient and Variation-Immune Read and Write Architecture," *Elsevier Integration, the VLSI Journal*, 2018.
- [3] S. Salehi, N. Khoshavi, and R. F. DeMara, "Leveraging Process Variability for Non-Volatile Cache Resilience and Yield," *IEEE Transactions On Emerging Topics in Computing*, 2018.
- [4] N. Khoshavi, R. A. Ashraf, R. F. DeMara, S. Kiamehr, F. Oboril, M. B. Tahoori, "Contemporary CMOS Aging Mitigation Techniques: Survey, Taxonomy, and Methods," *Elsevier Integration, the VLSI Journal*, inpress, 2017.
- [5] N. Khoshavi, S. Salehi, R. F. DeMara, "Variation-Immune Resistive Non-Volatile Memory using Self-Organized Sub-Bank Circuit Designs" *Proceedings of 18th International Symposium on Quality Electronic Design (ISQED 2017), Best paper candidate, March 14-15, Santa Clara, CA, USA*, 2017.
- [6] X. Chen, N. Khoshavi, R. F. DeMara, J. Wang, D. Huang, W. Wen and Y. Chen, "Energy-Aware Adaptive Restore Schemes for MLC STT-RAM Cache," *IEEE Transactions on Computers, Selected as feature paper* of May 2017, 2016.
- [7] R. Ashraf, N. Khoshavi, A. Alzahrani, R. F. DeMara, S. Kiamehr and M. Tahoori, "Area-Energy Tradeoffs of Logic Wear-Leveling for BTI-induced Aging," ACM International Conference on Computing Frontiers, pp. 37-44, 2016.
- [8] X. Chen, N. Khoshavi, J. Zhou, D. Huang, R. F. DeMara, J. Wang, W. Wen and Y. Chen, "AOS: Adaptive Overwrite Scheme for Energy-Efficient MLC STT-RAM Cache," 53rd Design Automation Conference, pp. 1-6, 2016.
- [9] R. F. DeMara, N. Khoshavi, S. Pyle, J. Edison, R. Hartshorne, B. Chen, M. Georgiopoulos, "Redesigning Computer Engineering Gateway Courses Using a Novel Remediation Hierarchy," in *Proceedings of American Association for Engineering Education National Conference (ASEE-16), June 26-29, New Orleans, LA, USA*, 2016.
- [10] R. F. DeMara, S. Salehi, N. Khoshavi, R. Hartshorne, B. Chen, "Strengthening STEM Laboratory Assessment Using Student-Narrative Portfolios Interwoven with Online Evaluation," in *Proceedings of* ASEE Southeast Section Conference, Alabama, USA, 2016.
- [11] A. Roohi, R. F. DeMara, N. Khoshavi, "Design and Evaluation of an Ultra-Area-Efficient Fault-Tolerant QCA Full Adder," *Elsevier Journal of Microelectronics*, 2015.

#### 1. Name: Hisham Mahmood

#### 2. Degrees

Degrees			
Degree	Discipline	Institution	Year
Ph.D.	Electrical Engineering	University of Western Ontario, Canada	2015
M.Sc.	Control Engineering	Lakehead University, Canada	2008
B.Sc.(Eng.)	Electrical Engineering	University of Basrah, Iraq	1998

#### 3. <u>Academic Experience</u>

Institution	Rank & Title	Period	FT/PT
Florida Polytechnic University	Assistant Professor of Electrical	Aug 13, 2018-	FT
	Engineering	present	
University of Exeter, UK	Research Fellow in the Department	Nov 2017 –	FT
	of Renewable Energy	July 2018	
University of Western Ontario,	Postdoctoral Research Fellow and	Jan 2015 –	FT
Canada	Lecturer of - Department of	Oct 2017	
	Electrical and Computer		
	Engineering		
University of Western Ontario,	Research Assistant - Department of	2008 - 2014	FT
Canada	Electrical and Computer		
	Engineering		
Lakehead University, Canada	Research Assistant - Department of	2006 - 2008	FT
	Electrical and Computer		
	Engineering		
Higher Institute of Technology,	Lecturer and Department Chair –	2001 - 2005	FT
Libya	Department of Electrical		
	Engineering		
Great March University, Libya	Lecturer of Electrical Engineering	2001 - 2003	PT

#### 4. Non-Academic Experience

Company	Job Title & Position Description	Period	FT/PT
HiT Power, UK	Design and Development Engineer	Nov 2017 –	PT
		July 2018	
Cornwall New Energy, UK	Consultant	Nov 2017 –	PT
		July 2018	

#### 5. Certifications or Professional Registrations

#### 6. Current Membership in Professional Organizations

• Member, The Institute of Electrical and Electronics Engineers (New York)

- 8. Service Activities (within and outside of the institution)
  - Review papers for:
    - IEEE Transactions on Power Electronics
    - IEEE Transactions on Industrial Electronics
    - o IEEE Journal of Emerging and Selected Topics in Power Electronics
    - IEEE Transactions on Sustainable Energy
    - $\circ \quad \text{IEEE Transactions on Smart Grid} \\$
    - $\circ \quad \text{IEEE Transactions on Power Systems}$
  - Chaired sessions for IEEE conferences

#### 9. List the Most Important Publications and Presentations from the Past Five (5) years

- 1. Hisham Mahmood, D. Michaelson, J. Jiang, "Decentralized power management of a PV/battery hybrid unit in a droop controlled islanded microgrid," IEEE Transactions on Power Electronics, vol. 30, no. 12, pp. 7215–7229, Dec. 2015.
- 2. Hisham Mahmood, D. Michaelson, J. Jiang, "Reactive power sharing in islanded microgrids using adaptive voltage droop control," IEEE Transactions on Smart Grid, vol. 6, no. 6, pp. 3052–3060, Nov. 2015.
- 3. Hisham Mahmood, D. Michaelson, J. Jiang, "Strategies for independent deployment and autonomous control of PV and battery units in islanded microgrids," IEEE Journal of Emerging and Selected Topics in Power Electronics, vol. 3, no. 3, pp. 742–755, Sept. 2015.
- Hisham Mahmood, D. Michaelson, J. Jiang, "Accurate reactive power sharing in an islanded microgrid using adaptive virtual impedances," IEEE Transactions on Power Electronics, vol. 30, no. 3, pp. 1605–1617, Mar. 2015.
- 5. Hisham Mahmood, D. Michaelson, J. Jiang, "A power management strategy for PV/battery hybrid systems in islanded microgrids," IEEE Journal of Emerging and Selected Topics in Power Electronics, vol. 2, no. 4, pp. 870–882, Dec. 2014.
- 6. Hisham Mahmood, J. Jiang, "Modeling and control system design of a grid connected VSC considering the effect of the interface transformer type," IEEE Transactions on Smart Grid, vol. 3, no. 1, pp. 122–134, Mar. 2012.
- 7. Hisham Mahmood, J. Jiang, "Autonomous Coordination of Multiple PV/Battery Hybrid Units in Islanded Microgrids," IEEE Transactions on Smart Grid, Accepted, May 2017.
- 8. D. Michaelson, Hisham Mahmood, J. Jiang, "A Predictive Energy Management System using Preemptive Load Shedding for Islanded Photovoltaic Microgrids," IEEE Transactions on Industrial Electronics, vol. 64, no. 7, pp. 5440–5448, Jul. 2017.
- 9. Hisham Mahmood, J. Jiang, "Decentralized Power Management of Multiple PV, Battery, and Droop Units in an Islanded Microgrid," IEEE Transactions on Smart Grid, Accepted, Dec. 2017.
- Hisham Mahmood, J. Jiang, "A control strategy of a distributed generation unit for seamless transfer between grid connected and islanded modes," in Proc. IEEE International Symp. Ind. Electron. (ISIE), June 2014, pp. 2518–2523.
- D. Michaelson, Hisham Mahmood, J. Jiang, "A predictive energy management strategy with preemptive load shedding for an islanded PV-battery microgrid," in Proc. IEEE Ind. Electron. Conf., Nov 2013, pp. 1501–1506.
- 12. Hisham Mahmood, D. Michaelson, J. Jiang, "Control strategy for a standalone PV/battery hybrid system," in Proc. IEEE Ind. Electron. Conf., Oct 2012, pp. 3412–3418.
- Hisham Mahmood, K. Natarajan, "Parasitics and voltage collapse of the DC-DC boost converter," in Proc. of IEEE Canadian Conference on Electrical and Computer Engineering, May 2008, pp. 273– 278.

- Served as a consultant with Cornwall New Energy, UK
- Participate in the design of 100 kW grid connected battery charger with HiT Power, UK
- Planning, design and implementation of a laboratory scale microgrid for the Distributed Generation Laboratory, University of Western Ontario, Canada
- Developed a graduate course on Modeling and Control of Power Electronic Converters at the University of Western Ontario, Canada
- Co-supervised PhD and Master's students at the University of Exeter in UK, and University of Western Ontario in Canada

#### 1. Name: Muhammad H. Rashid

#### 2. Degrees

Degrees			
Degree	Discipline	Institution	Year
B.Sc.(Eng.)	Electrical Engineering	Bangladesh University of Eng. and	1967
		Technology, Dhaka	
M.Sc.	Information and Systems Engineering	University of Birmingham, UK	1971
Ph.D.	Electronic and Electrical Engineering	University of Birmingham, UK	1976

#### **3.** Academic Experience

Institution	Rank & Title	Period	FT/PT
Florida Polytechnic University	Professor and Chair of Electrical and	Jan 8, 2018-	FT
	Computer Engineering		
Florida Polytechnic University	Professor of Electrical Engineering	2017 - 2018	FT
University of West Florida	Professor of Electrical and	2007 - 2016	FT
	Computer Engineering		
University of Florida	Professor and Program Director of	1997-2007	FT
	Electrical and Computer		
	Engineering		
Indiana-Purdue University Fort	Professor and Chair of Engineering	1989-2007	FT
Wayne	Department		
Purdue University Calumet	Associate Professor and Professor	1985-1989	FT
Concordia University, Canada	Associate Professor	1981-1985	FT
University of Connecticut	Visiting Assistant Professor	19801981	FT
Higher Institute of Electronics –	Lecturer and Head of Control	1977-1980	FT
Malta and Libya	Engineering		

#### 4. Non-Academic Experience

- · · · · · · · · · · · · · · · · · · ·			
Company	Job Title & Position Description	Period	FT/PT
Lucas Group Research Centre,	Research Officer: Research and	1976-1977	FT
England, UK	Development		
Brush Electrical Machines Ltd.,	Senior Development Engineer:	1974-1976	FT
England, UK	Project Development		
Eastern Refinery Ltd., Bangladesh	Engineer - Instruments & Control	1968-1970	FT
Water & Power Development	Assistant Engineer – Operation	1968-1968	FT
Authority, Bangladesh			

#### 5. Certifications or Professional Registrations

- Professional Engineer, Ontario, Canada (from 1977 2002)
- Chartered Engineer, United Kingdom (from 1977 2005)

#### 6. Current Membership in Professional Organizations

- Life Fellow, The Institute of Electrical and Electronics Engineers (New York)
- Fellow, The Institution of Engineering and Technology, (London, UK)
- Member, American Society of Engineering Education (ASEE)

- 2013 IEEE Industry Applications Society: Outstanding Achievement Award
- 2008 IEEE: Undergraduate Teaching Award
- 2002 IEEE: Educational Activities Board Meritorious Achievement Award in Continuing Education

- 2001-2003: Distinguished Lecturer and Speaker of the IEEE-Industry Applications Society.
- 2010 : Distinguished Lecturer of the IEEE Education Society.
- 1991: IEEE Outstanding Engineer Award
- 8. Service Activities (within and outside of the institution)
  - Review papers: Member, IEEE Education Society, Industry Applications Society, Industrial Electronics Society, Magnetics Society, Circuit & Systems Society, Power Electronics society, and Power Engineering Society.

#### 9. List the Most Important Publications and Presentations from the Past Five (5) years

- 1. M H. Rashid, *Microelectronic Circuits: Analysis and Design*, Cengage Publishing, 2017. ISBN-13: 978-1305635166, ISBN-10: 1305635167
- 2. M. H Rashid, *Power Electronics Devices, Circuits and Applications*. Pearson Publishing, 2014, ISBN-10: 0133125904 ISBN-13: 9780133125900
- 3. M. H. Rashid, *Introduction to PSpice Using OrCAD/LTspice for Circuits and Electronics*, Cengage Publishing on production expected to be published in 2017.
- 4. M. H. Rashid (editor), *Power Electronics Handbook*, Butterworth Heinemann, on production expected to be published in 2017.
- 5. M H. Rashid (editor), *Electric Renewable Energy Systems*, Elsevier Publishing, 2016, ISBN-13: 978-0128044483, ISBN-10: 0128044489
- 6. M. H. Rashid (editor), Alternative Energy in Power Electronics, Elsevier Publishing, 2015, ISBN-13: 978-0124167148, ISBN-10: 0124167144
- 7. M H. Rashid, Electronic *Circuits and Applications*, 1/e. ISBN # 9788131522844, 562 Pages, CL Engineering, 2014.
- 8. M H. Rashid, *Electronic Devices and Circuits*, 1/e. ISBN # 978813152285, 804 Pages, CL Engineering, 2014.
- 9. M H. Rashid, *Linear Integrated Circuits*, 1/e. ISBN # 9788131522837, 534 Pages, CL Engineering, 2014.
- 10. M. H Rashid, *SPICE for Power Electronics and Electric Power*, 3/e, CRC Pres, May 2012, 560 pages.
- 11. M. H Rashid, *The Process of Outcome-Based Education Implementation, Assessment and Evaluations*, .2012 UiTM Press, Malaysia
- Jimmy Kocher, and M. H Rashid, "Engineering Our Food: Possible Risks verses Reward". Original. Research Article Procedia - Social and Behavioral Sciences, Volume 176, 20 February 2015, Pages 927-932.
- 13. M. H. Rashid, Comparison of ABET Outcome Requirements And Washington Accord Attributes, presentation at the 2015 IEE Colloquium, New York City, November 5-6, 2015.

- ABET program evaluator for electrical, computer and general engineering.
- The Academic Accreditor for the Institution of Engineering and Technology (IET, UK)
- Editor-in-Chief of a Series in Electric Energy System with Springer Publishing.
- Editor-in-Chief of a Series in Power Electronics and Applications with CRC Press,
- Editor-in-Chief of a Series in Nanotechnology and Applications with CRC Press,
- Served as an External Examiner for undergraduate program for the faculty of electrical engineering for undergraduate program at the University of Technology Malaysia MARA) from 2004-2016.
- Serves as an International Advisory Board Member of numerous international conferences.
- Gave numerous keynote lectures in international conferences in electrical and electronic engineering in China, India, Malaysia, Bangladesh, Pakistan, Palestine, and Iran.
- Reviewed Ph.D. theses as an external examiner for Nanyang Technological University Singapore.
- Reviewed Ph.D. theses as an external examiner for Universiti Putra Malaysia (UPM)

#### 1. Name: Saleem Sahawneh

#### 2. Degrees

Degrees			
Degree	Discipline	Institution	Year
B.Sc.(Eng.)	Computer Engineering	Yarmouk University, Jordan	1996
M.Sc.	Electrical Engineering	University of Central Florida, USA	2013
Ph.D.	Electrical Engineering	University of Central Florida, USA	2017

#### 3. Academic Experience

Institution	Rank & Title	Period	FT/PT
Florida Polytechnic University	Adjunct professor	Aug 21, 2017-	PT

#### 4. Non-Academic Experience

Company	Job Title & Position Description	Period	FT/PT
University of Central Florida,	Research Assistant	2013-2017	FT
USA			
MyCom North America, USA	Network Switching System Engineer	2009-2012	FT
Walden house Inc., USA	System Administrator	2008-2009	FT

#### 5. Current Membership in Professional Organizations

- Member, The Institute of Electrical and Electronics Engineers, IEEE
- Member, Jordan Engineers Association, (Amman, Jordan)

#### 6. Honors and Awards

• 2013: Member of Delta Epsilon Iota Academic Honor Society

#### 7. List the Most Important Publications and Presentations from the Past Five (5) years

- Saleem Sahawneh, Linwood Jones, Sayak K. Biswas and Daniel Cecil "Hurricane Brightness Temperature Image Geolocation Validation", IEEE Geoscience and remoter sensing letters, volume 14, Issue 11, October 2017
- 2. Saleem Sahawneh, Linwood Jones "Hurricane Imaging Radiometer (HIRAD) Brightness Temperature Validation", presented at IEEE International Geoscience and remote sensing symposium 2017, Fort worth, Texas, July 2017.
- 3. Saleem Sahawneh, Spencer Farrar, James Johnson, Linwood Jones "Hurricane Imaging Radiometer wind speed and rain rate retrievals during the 2010 GRIP flight experiment", Presented at 13th Specialist Meeting on Microwave Radiometry and Remote Sensing of the Environment, Pasadena, California, March 2014.
- Miller, T., M. James, J. Roberts, S. Biswas, D. Cecil, W. L. Jones, J. Johnson, S. Farrar, S. Sahawneh, C. S. Ruf, M. Morris, E. Uhlhorn and P. Black, "The Hurricane Imaging Radiometer: Present and Future," Proc. 2013 International Geoscience and Remote Sensing Symposium, Melbourne, AUSTRALIA, doi: , 22-26 July 2013.
- Saleem Sahawneh, Spencer Farrar, James Johnson, Linwood Jones, Jason Roberts, Sayak Biswas, Daniel Cecil "Hurricane wind speed and rain rate measurements using the airborne Hurricane Imaging Radiometer (HIRAD)", Presented at IEEE SoutheastCon 2013, Jacksonville, Florida, April 2013.

#### 6. List the most recent professional development activities

Attended the 2017 IGARSS conference (microwave radiometry)

#### 1. Name: Ashiq A. Sakib

#### 2. Degrees

Degrees			
Degree	Discipline	Institution	Year
B. Tech.	Electronics and Communication	Institute of Engineering and	2013
	Engineering	Management, West Bengal	
		University of Technology, India	
Ph.D.	Computer Engineering	North Dakota State University, US	2019

#### 3. Academic Experience

Institution	Rank & Title	Period	FT/PT
Florida Polytechnic University	Assistant Professor of Electrical and	Aug. 12,	FT
	Computer Engineering	2019-	
North Dakota State University	Teaching Assistant	Aug. 2014 –	FT
	_	May. 2018	
North Dakota State University	Research Assistant	Jan. 2018 –	FT
		July 2019	

#### 4. Non-Academic Experience

Institution	Rank & Title	Period	FT/PT
Centre for Electronics and Test	Industrial Trainee	June 2013-	PT
Engineers (CETE), Ministry of		August 2013	
Information Technology, Govt.			
of West Bengal, India			

#### 5. Current Membership in Professional Organizations

- Member, The Institute of Electrical and Electronics Engineers (IEEE), USA
- Member, IEEE- Circuits and Systems Society (IEEE-CAS), USA
- Member, IEEE- Eta Kappa Nu (IEEE-HKN), USA
- Member, Phi-Kappa-Phi (PKP), USA

- Love of Learning award offered by the honor society of Phi Kappa Phi, 2018.
- Selected as one of the 10 early PhD students in the Student Activities program to attend the IEEE-VTS'17 conference held in Las Vegas, 2017.
- National Science Foundation (NSF) Travel Grants.
- Outstanding Teaching Assistant (Nominated from the ECE department at NDSU).
- Outstanding Ambassador of the department, Institute of Engineering and Management, 2013.
- Dhaka Board Scholarship for outstanding result, Govt. of Bangladesh, 2007.
- 7. Service Activities (within and outside of the institution)
  - Technical Reviewer: IEEE International Symposium on Circuits and Systems (ISCAS).
  - Technical Reviewer: IEEE Mid-West Symposium on Circuits and Systems (MWSCAS).
  - Technical Reviewer: IEEE International Symposium on VLSI (ISVLSI).
  - Technical Reviewer: IEEE Asia Pacific Conference on Circuits and Systems (APCCAS).
  - Vice-President (2018) and Treasurer (2017), IEEE-Eta Kappa Nu Honor Society, Gamma Tau Chapter.

- University Curriculum Committee, North Dakota State University.
- Graduate Studies Senator, Student Government, North Dakota State University.

#### 8. List the Most Important Publications and Presentations from the Past Five (5) years

- [1] Book Chapter: A. A. Sakib, S. Le, S. C. Smith, and S. K. Srinivasan, "Chapter 15: Asynchronous Circuit Verification," Asynchronous Circuit Applications, Institution of Engineering and Technology (IET), London, UK (In Press).
- [2] Journal: A. A. Sakib, S. C. Smith, S. K. Srinivasan, "Formal Modeling and Verification of PCHB Asynchronous Circuits," IEEE Transactions on VLSI, pp. 1-14, doi: 10.1109/TVLSI.2019.2937087, 2019.
- [3] Peer-reviewed Conference: A. A. Sakib, S. C. Smith, and S. K. Srinivasan, "Formal Modeling and Verification for Pre-Charge Half Buffer Gates and Circuits," IEEE International Midwest Symposium on Circuits and Systems (MWSCAS), pp. 519-522.
- [4] Peer-reviewed Conference: A. A. Sakib, S. C. Smith, and S. K. Srinivasan, "An Equivalence Verification Methodology for Combinational Pre-Charge Half Buffer Asynchronous Circuits." IEEE International Midwest Symposium on Circuits and Systems (MWSCAS), pp. 767-770.
- [5] Peer-reviewed Conference: M. Hossain, A. A. Sakib, S. C. Smith, and S. K. Srinivasan, "An Equivalence Verification Methodology Asynchronous Sleep Convention Logic Circuits." IEEE International Symposium on Circuits and Systems (ISCAS), 2019, pp. 1-5.
- [6] A. A. Sakib and S. C. Smith, "Verification Methodology for QDI Asynchronous Circuits." IEEE VLSI Test Symposium (VTS), 2017.
- [7] Presentation: A. A. Sakib, "Solving real world problems" College of Graduate and Interdisciplinary Studies, North Dakota State University (Presentation).
- [8] Presentation: IEEE Red River Valley Graduate Research Competition, 2018(Poster Presentation).
- [9] Presentation: IEEE Red River Valley Graduate Research Competition, 2017(Poster Presentation).

- ECE Curriculum Committee, Florida Polytechnic University, 2019.
- Program Assessment Committee, Florida Polytechnic University, 2019.
- Faculty Adviser, Sub-Club, Florida Polytechnic University, 2019.
- Working on instating the honor society of IEEE-HKN in the Dept. of ECE at Florida Polytechnic University.

#### 1. Name: Mahmoud Saleh

#### 2. Degrees

Degrees			
Degree	Discipline	Institution	Year
B.Sc.	Electrical Engineering	El Shorouk Academy, Egypt	2010
M.E.	Electrical Engineering	The City College at the City	2013
		University of New York	
Ph.D.	Electrical Engineering	The City College at the City	2019
		University of New York	

#### **3.** Academic Experience

Institution	Rank & Title	Period	FT/PT
Florida Polytechnic University	Assistant Professor of Electrical and	Oct 14, 2019 -	FT
	Computer Engineering	present	
The City College at the City	Researcher – Department of Electrical	Apr 2019-	FT
University of New York	Engineering	June 2019	
Bronx Community College	onx Community College Adjunct lecturer - Department of		PT
	Engineering, Physics, and Technology	Jan 2019	
The City College at the City	Graduate Research Assistant –	Aug 2014 –	FT
University of New York	Department of Electrical Engineering	Apr 2019	
El Shorouk Academy, Egypt	Lecturer of Electrical Power and	Jan 2011 –	FT
	Machines Engineering	May 2012	

#### 4. Non-Academic Experience

<b>_</b>			
Company	Job Title & Position Description	Period	FT/PT
CCNY, ConEdison Electric	Graduate Research Assistant: Lead	Jan 2017 –	FT
Utility, and Metropolitan Transit	and Modeling Engineer	Jan 2018	
Authority (MTA) at New York			
Zahn Innovation Center at New	Cofounder of PluginBlocks, an	Jan 2016 –	PT
York City	Educational Startup	Aug 2016	
LaunchR Accelerator at Rutgers	Cofounder of Ondemand-Microgrid	Jan 2016 –	PT
University	Startup	Apr 2016	

#### 5. Certifications or Professional Registrations

- Professional Engineer (PE), passed at North Carolina (Apr 2017)
- Fundamental Engineering (FE), passed at the American University at Cairo, Egypt (Oct 2011)
- Neural Networks and Deep Learning Certificate (Apr 2018)

#### 6. Current Membership in Professional Organizations

• Member, The Institute of Electrical and Electronics Engineers (IEEE), USA

- 2018 IEEE International Conference on Renewable Energy Research and Applications: *Best Paper*
- 2017 IEEE System Council: James O. Gray Scholarship for research in process control systems engineering and planet automation
- 2017 IEEE Power and Energy Society: *Student Congress Travel Award*
- 2016 9th Annual Graduate Student Research Symposium at The City College of New York: *First place*
- 2016 & 2017 IEEE Industry Applications Society: *Travel award*
- 2010 El Shorouk Engineering Academy: Valedictorian

- 8. Service Activities (within and outside of the institution)
  - Research Committee member, Florida Polytechnic University
  - Reviewer for IEEE Transactions on Smart Grids
  - Reviewer for IEEE Transactions on Industry and Application Society
  - Review papers at: IEEE Power and Energy Conference at Illinois (PECI), IEEE Smart Grid Conference (SGC), IEEE International Conference on Renewable Energy Research, The 8th IEEE India International Conference on Power Electronics, The 3<sup>rd</sup> International Conference on Energy Engineering and Environmental Protection, IEEE Industry Application Society Annual meeting, and IEEE Texas Power and Energy Conference (TPEC)

#### 9. List the Most Important Publications and Presentations from the Past Five (5) years

- 1. M. Saleh, Y. Esa and A. Mohamed, "Impact of information and communication technology limitations on microgrid operation," *Energies Journal*, 2019.
- 2. M El Hariri, E Harmon, T Youssef, **M Saleh**, H Habib, O Mohammed, "The IEC 61850 Sampled Measured Values Protocol: Analysis, Threat Identification, and Feasibility of Using NN Forecasters to Detect Spoofed Packets," *Energies Journal*, 2019.
- 3. M El Hariri, T Youssef, **M Saleh**, S Faddel, H Habib, O Mohammed, "A Framework for Analyzing and Testing Cyber Physical Interactions for Smart Grid Applications," *Electronics Journal, Applications for Smart Cyber Physical Systems issue*, 2019.
- 4. O. Dutta, C. Chan, **M. Saleh**, A.Mohamed, "Active Distribution Management for Prevention of Cascading Failure," submitted to *IEEE Transmission and Distribution*, 2019.
- 5. **M. Saleh**, M El Hariri, "Denial of Service Attacks on Centralized Controlled DC Microgrids: Vulnerability Assessment and Recommendations," submitted to *International Federation of Automatic Control (IFAC)*, 2019.
- 6. M.khodaparastan, O. Dutta, **M. Saleh**, A.Mohamed, "Modeling and design of DC Rail Transit Systems with Various Energy Storage Systems," *IEEE Transactions on Vehicular Technology*, Jan 2019.
- 7. **M. Saleh**, Y. Esa, and A. Moahmed, "Impact of Communication Latency on the Bus Voltage of Centrally Controlled DC Microgrid during Islanding," *IEEE Transactions on Sustainable Energy*, 2019.
- 8. **M. Saleh**, Y. Esa, and A. Moahmed "Communication Based Control for DC Microgrids," *IEEE Smart Grid Transactions*, 2018.
- 9. M. Saleh, Y. Esa and A. Mohamed, "Application of Complex Network Analysis in Electric Power Systems," *Energies Journal, Smart Grids issue*, March 2018.
- 10. M. Saleh, Y. Esa, and A. Moahmed, "Effect of Wireless Communication Delay on Bus Voltage of Centralized Communication Based Control DC Microgrid," *IEEE Energy Conversion Congress and Exposition (ECCE)*, 2018.
- 11. **M. Saleh**, O. Dutta, Y. Esa, and A. Moahmed, "Quantitative Analysis of Regenerative Energy in Electric Rail Traction Systems," *Industry and Application Society (IAS)*, Cincinnati, OH, 1-5 Oct 2017.
- 12. M. Saleh, Y. Esa, and A. Moahmed, "Energy Management Algorithm for Resilient Controlled Delivery Grids," *Industry and Application Society (IAS)*, Cincinnati, OH, 1-5 Octo 2017.
- 13. M. Saleh, Y. Esa, and A. Moahmed, "Centralized Control for DC Microgrid Using Finite State Machine," *IEEE Innovative Smart Grid Technologies (ISGT)*, Washington D.C., USA, 23-26 Apr 2017.
- 14. **M. Saleh**, Y. Esa and A. Mohamed, "Hardware Based Testing of Communication Based Control for DC Microgrid," *International Conference on Renewable Energy Research and Applications (ICRERA)*, San Diego, CA, 2017.
- 15. O. Dutta, **M. Saleh**, A.Mohamed, "HESS in DC Rail Transit System: Optimal Sizing and System Design," *International Conference on Renewable Energy Research and Applications (ICRERA)*, San Diego, CA, 2017.
- 16. **M. Saleh**, Y.esa, A.Mohamed, "Optimal Microgrids Placement in Electric Distribution Systems Using Complex Network Framework," *International Conference on Renewable Energy Research and Applications (ICRERA),* San Diego, CA, 2017.
- 17. M. Saleh, Y. Esa, Y. Mhandi, W. Brandauer and A. Mohamed, "Design and Implementation of CCNY DC Microgrid Testbed," 2016 *IEEE Industry Applications Society Annual Meeting*, Portland, OR, 2016.
- M. Saleh, A. Althaibani, Y. Esa, Y. Mhandi and A. Mohamed, "Impact of Clustering Microgrids on their Stability and Resilience during Blackouts," 2015 International Conference on Smart Grid and Clean Energy Technologies (ICSGCE), Offenburg, 2015, pp. 195-200.

- Editorial board member at American Journal of Electrical Power and Energy Systems
- Editorial board member at SCIREA Journal of Energy, SCIREA Journal of Electrical Engineering, and Donnish Journal of Internet and Information Systems
- Delivered talks at National Renewable Energy Laboratory, Arizona State, Penn State, and New Mexico Universities
- Lead engineer to design, simulate, build and implement a microgrid testbed setup at CCNY
- In the process of forming IEEE Industry and Application Society (IAS) and Power and Energy Society (PES) joint student branch chapter at Florida Polytechnic University

#### 1. Name: Arman Sargolzaei

#### 2. Degrees

Degrees			
Degree	Discipline	Institution	Year
B.Sc.(Eng.)	Electrical Engineering	Sadjad University of Technology	2010
M.Sc.	Electrical Engineering	Florida International University	2012
Ph.D.	Electrical Engineering	Florida International University	2015

#### 3. <u>Academic Experience</u>

Institution	Rank & Title	Period	FT/PT
Florida Polytechnic University	Assistant Professor	2016- Pres	FT
Florida International University	Assistant Scientist/ Scholar	2015 - 2016	FT
Florida International University	Graduate Assistant	2012 - 2013	PT
Florida International University	Research Assistant	2011 - 2012	PT

#### 4. Non-Academic Experience

Company	Job Title & Position Description	Period	FT/PT
PLC International Inc, Miami,	System Development Engineer	2013 - 2015	FT
USA PLC International Inc, Miami,	Hardware and Software Developer	2012 - 2012	FT
USA	1		

#### 5. Certifications or Professional Registrations

- Theoretical and hands-on training on digital power line carrier UCC 2021D.
- Cryptography I, Stanford University.
- Training in Human subject's protection, Virginia Tech

#### 6. Current Membership in Professional Organizations

- 2014-Present Student Member, IEEE Power & Energy Society (PES).
- 2014-Present Student Member, IEEE Communications Society.
- 2014-Present Student Member, International Society of Automation (ISA).
- 2014-Present Student Member, IEEE Computational Intelligence Society.
- 2013-Present Young Professional Member, IEEE.
- 2010-Present Member, IEEE.

- Faculty Research Excellence Award, FPU, 2017
- Best Project Excellence Award, Rockwell Automation, 2017
- Best Graduate Student Among all Graduate Students, FIU, 2015.
- The most Innovative Product, ITEXPO, 2014 and 2015.
- Dean's Scholarship Award, FIU, 2014.
- Travel Grant, IEEE Computational Intelligent Society (CIS), 2014.
- GPSC Award, FIU, 2014.
- GPSC Award, FIU, 2013.
- Best Paper Award, CCCM Conference, 2010.
- 8. Service Activities (within and outside of the institution)
  - Editorial board member for International Journal of Instrumentation and Control Systems, International Journal of Machine Learning and Application
  - Reviewer for IEEE Transaction on Smart Grid, IEEE Transaction on Cybernetics, Journal of Energy and Power Engineering, Asian Journal of Control, Springer-Plus Journal, IEEE Workshop on Machine Learning for Predictive Models in Engineering Applications, International Conference on

Advanced in Communication Technology, ASE journal of Elsevier, IEEE International Conference on Power Electronics, Drivers and Energy Systems,

- Workshop Chairs and organizer for IEEE Workshop on Machine Learning in Security of Cyber-Physical Systems
- Institutional Effectiveness Committee member at Florida Polytechnic University, Introduction in mathematical in Cyber-Security curriculum development at Florida International University.
- 9. List the Most Important Publications and Presentations from the Past Five (5) years
  - 1. Abbaspour, A., Aboutalebi, P., Yen, K., and Sargolzaei, A. "Neural adaptive observer-based sensor and actuator fault detection in nonlinear systems: Application in UAV." ISA Transactions, Volume 67, pp. 317-329, (2017).
  - Sargolzaei, A., Yen, K., Abdelghani, M., Sargolzaei, S., Carbunar, B., "Resilient Design of Networked Control Systems Under Time Delay Switch Attacks, Application in Smart Grid", IEEE ACCESS, V5, pp 15901-15912, (2017).
  - 3. Sargolzaei, A., Yen, K., and Abdelghani, M.N., "Preventing Time-Delay Switch Attack on Load Frequency Control in Distributed Power Grid", IEEE Transaction on Smart Grid, Volume 7, No. 2, pp. 1176-1185, (2016).
  - 4. Sargolzaei, A., Abdelghani, M., Yen, K., and Sargolzaei, S., "Sensorimotor control: computing the immediate future from the delayed present." BMC bioinformatics, Volume 17, no. 7, pp. 501-509, (2016).
  - 5. Sargolzaei, A., Yen, K., and Abdelghani, M.N, M. N., Mehbodniya, Sargolzaei, S., "A Novel Technique for Detection of Time Delay Switch Attack on Load Frequency Control", Intelligent Control and Automation, Volume 6, pp. 205-214, October 2015.
  - Sargolzaei, A., Yen, K., and M. N. Abdelghani. "Delayed inputs attack on load frequency control in smart grid." In Innovative Smart Grid Technologies Conference (ISGT), 2014 IEEE PES, pp. 1-5. IEEE, (2014).
  - S. Noei, A. Sargolzaei, A. Abbaspour, K. Yen, "A Decision Support System for Improving Resiliency of Cooperative Adaptive Cruise Control Systems", Complex Adaptive Systems, Elsevier, (2016).
  - 8. A. Abbaspour, K. Yen, S. Noei, A. Sargolzaei, "Detection of Fault Data Injection Attack on UAV Using Adaptive Neural Network", Complex Adaptive Systems, Elsevier, (2016).
  - S. Sargolzaei, A. Sargolzaei, M. Cabrerizo, G. Chen, M. Goryawala, A. Pinzon-Ardila, S. M. Gonzalez-Arias, M. Adjouadi, "Estimating Intracranial Volume in Brain Research: An Evaluation of Methods", Neuroinformatics journal, Springer, IF: 2.82, (2015).
  - S. Sargolzaei, A. Sargolzaei, M. Cabrerizo, M. Goryawala, Q. Zhou, S. Noei, G. Chen, R. Duara, W. Barker and M. Adjouadi, "Intracranial volume estimation in patients with Alzheimer's disease", BMC Bioinformatics, Springer, IF: 2.57 (2014).
  - 11. S. Sargolzaei, M. Cabrerizo, A. Sargolzaei, S. Noei, H. Rajaei, A. Salah Eddin, A. Pinzon-Ardila, S. M. Gonzalez Arias, P. Jayakar and M. Adjouadi, "A probabilistic approach for pediatric epilepsy diagnosis using brain functional connectivity networks", BMC Bioinformatics, Springer, IF: 2.57, (2014).
  - 12. A. Moghadsi, A. Sargolzaei, A. Sarwat, K. Yen, "Active and Reactive Power Control for Three-Phase PV Module-Integrated Converter Based on a Single-Stage Inverter", IEEE Applied Power Electronics (APEC 2017), Tampa, FL, USA, (2017).
  - 13. A.Moghadasi, A. Sargolzaei, A. Sarwat, K. Yen, "Model Predictive Power Control Approach for Three-Phase Single-Stage Grid-Tied PV Module-Integrated Converter", IEEE Industry Applications Society Annual Meeting, Portland, OR, USA, (2016).
- 10. List the most recent professional development activities
  - Serves as a chair and reviewer of several international conferences.
  - Gave lectures in international conferences and workshops in electrical and electronic engineering.
  - Reviewing Ph.D. theses as an external examiner for Florida International University.

#### 1. Name: Saman Sargolzaei

#### 2. Degrees

Degrees			
Degree	Discipline	Institution	Year
B.Sc.	Electrical and Computer Engineering	Mazandaran University, Babol	2006
M.Sc.	Electrical Engineering	Amirkabir University of	2009
		Technology, Tehran	
M.Sc.	Electrical and Computer Engineering	University of Mimai, FL	2012
Ph.D.	Electrical Engineering	Florida International University, FL	2015

#### 3. <u>Academic Experience</u>

Institution	Rank & Title	Period	FT/PT
Florida Polytechnic University	Visiting assistant professor	2019 -	FT
University of California Los	Postdoctoral scholar	2016 - 19	FT
Angeles (UCLA)			
Wentworth Institute of	Visiting assistant professor	2015 - 16	FT
Technology			
Georgia Institute of Technology	Postdoctoral fellow	2015	FT
(GaTech)			

#### 4. Non-Academic Experience

#### 5. Certifications or Professional Registrations

- "Course Development and Education Leadership", UCLA Bioscience Postdoc Educational Leadership Program, Spring 2018.
- "An Introduction to Evidence-Based STEM Undergraduate Education", The Center for the Integration of Research Teaching and Learning (CIRTL), Spring 2017.

#### 6. Current Membership in Professional Organizations

- Member, The Institute of Electrical and Electronics Engineers (New York)
- Member, Engineering in Medicine and Biology Society (EMBS)

- 2017 National Neurotrauma Society sensor workshop award.
- 2017 National Neurotrauma Society meeting travel award.
- 2015 Worlds' Ahead Graduate Recognition by FIU Office of the President.
- 2015 Outstanding Graduate Student Life Award by FIU Office of the Provost.
- 2014 Recipient of Perry (FIU founding president) graduate scholarship.
- 8. Service Activities (within and outside of the institution)
  - Publication committee member, Department of computer science, Florida Polytechnic University.
  - Grad SLAM semi-final judge, University Graduate School, University of California Los Angeles.
  - Chair of social committee, Postdoctoral association, University of California Los Angeles.
  - Technology fee advisory council member, Florida International University.
  - Faculty senate academic misconduct committee member, Florida International University.
  - Graduate student advisory board member, University Graduate School, Florida International University.
  - Reviewer for IEEE journal of biomedical health and informatics, IEEE Transactions for biomedical circuits and systems, Neural regeneration research, PLOS One, Computers in biology and medicine, Journal of applied statistics.

• Community services for Autism Speaks, Dance Marathon, Race for Hope, Kids Club.

#### 9. List the Most Important Publications and Presentations from the Past Five (5) years

- S. Sargolzaei, A. Sargolzaei, M. Cabrerizo, G. Chen, M. Goryawala, A. Pinzon-Ardila, S. Gonzalez-Arias, M. Adjouadi. "Estimating intracranial volume in brain research: an evaluation of methods." *Neuroinformatics* 13.4 (2015): 427-441.
- S. Sargolzaei, H. Elahi, A. Sokoloff, M. Ghovanloo. "A Dual-Mode Magnetic–Acoustic System for Monitoring Fluid Intake Behavior in Animals." *IEEE Transactions on Biomedical Engineering* 64.9 (2016): 2090-2097.
- S. Sargolzaei, M. Cabrerizo, A. Sargolzaei, S. Noei, A. Eddin, H. Rajaei, A. Pinzon-Ardila, S. Gonzalez-Arias, P. Jayakar, M. Adjouadi. "A probabilistic approach for pediatric epilepsy diagnosis using brain functional connectivity networks." *BMC bioinformatics* 16.7 (2015): S9.
- S. Sargolzaei, A. Sargolzaei, M. Cabrerizo, G. Chen, M. Goryawala, S. Noei, Q. Zhou, R. Duara, W. Barker, M. Adjouadi. "A practical guideline for intracranial volume estimation in patients with Alzheimer's disease." *BMC bioinformatics* 16.7 (2015): S8.
- S. Sargolzaei, M. Cabrerizo, M. Goryawala, A. Eddin, and M. Adjouadi. "Scalp EEG brain functional connectivity networks in pediatric epilepsy." *Computers in biology and medicine* 56 (2015): 158-166.
- N. Maria, S. Sargolzaei, M. Prins, E. Dennis, R. Asarnow, D. Hovda, N. Harris, C. Giza. "Bridging the gap: Mechanisms of plasticity and repair after pediatric TBI." *Experimental neurology* (2019).
- A. Sargolzaei, K. Yen, M Abdelghani, S. Sargolzaei, B. Carbunar. "Resilient design of networked control systems under time delay switch attacks, application in smart grid." *IEEE Access* 5 (2017): 15901-15912.
- A. Sokoloff, Z. Yang, S. Sargolzaei, K. Strait, A. Krasnopeyev, K. Easley, S. Mimche, M. Ghovanloo. "Magnetic implants in the tongue for assistive technologies: Tests of migration; oromotor function; and tissue response in miniature pigs." *Archives of oral biology* 81 (2017): 81-89.
- A. Sargolzaei, K. Yen, M. Abdelghani, A. Abbaspour, S. Sargolzaei. "Generalized attack model for networked control systems, evaluation of control methods." *Intelligent Control and Automation* 8.03 (2017): 164.

- Mentoring an IEEE Computer Science Society undergraduate student club for technical and research paper writing.
- Served for three years as application reviewer for UCLA Undergraduate Research Scholars Program (URSP).
- Certified for Course Development and Education Leadership, UCLA Bioscience Postdoc Educational Leadership Program.
- Completed Spring 2017 CIRTL Network MOOC, An Introduction to Evidence-Based STEM Undergraduate Education.
- Submitted a research grant funding to Department of Defense (DoD) Epilepsy Research program.
- Gave two invited talks at UCLA Synapse to Circuit club (2018) and NIH Neuroimaging Research Core (2016).

#### 1. **Name**: Onur Toker

#### 2. Degrees

Degree	Discipline	Institution	Year
B.S.	Electrical Engineering Mathematics Physics	Bogazici Univ., Istanbul/Turkey	1990 1990 1990
M.S.	Electrical Engineering Mathematics	Ohio State, Columbus OH	1992 1994
Ph.D.	Electrical Engineering	Ohio State, Columbus OH	1995

#### 3. Academic Experience

Institution	Rank & Title	Period	FT/PT
Florida Polytechnic University	Associate Prof. of Computer Engineering	2018 -	FT
Dept. of Electrical and Computer			
Engineering			
TC Fatih Univ., Istanbul/Turkey	Associate Prof., Prof. (2012) of Electrical	2004-2016	FT
Dept. of Electrical and Electronics	and Electronics Engineering		
Engineering			
K.F.U.P.M., Dhahran/K.S.A.	Assistant Prof., Associate Prof. (2004) of	1997-2004	FT
College of Computer Sciences and	Computer Science and Engineering		
Engineering			
Univ. of California, Riverside	Postgraduate Researcher	1996-1997	FT
Dept. of Electrical Engineering			
Eindhoven Univ. of Technology,	Postdoctoral Researcher	1995-1996	FT
The Netherlands			

#### 4. Non-Academic Experience

Company	Job Title & Position Description	Period	FT/PT
Stealth Mode Startup	Embedded Software Engineer	2018-2018	PT
DAQRI	FPGA Design Engineer	2017-2018	FT
Sunnyvale, CA / Pasadena, CA	TTOA Design Elignieer	2017-2018	1,1
Quanergy	Embedded Systems Engineer	2017-2018	FT
Sunnyvale, CA			
Teknobil	SW Developer, Consultant	1998-2004	PT
Istanbul/TURKEY			

#### 5. Certifications or Professional Registrations

#### 6. Current Membership in Professional Organizations

• Member, Institute of Electrical and Electronics Engineers (IEEE)

- Interdisciplinary Research award, College of Computer Sciences and Engineering, KFUPM, 2004
- Interdisciplinary Research award, College of Computer Sciences and Engineering, KFUPM, 2003
- DISC Fellowship award, 1996.
- Best presentation award, ACC 1995 (WA-16 session).
- Ohio State University Presidential Fellowship award, 1994.

- Bogazici University Dean's High Honor List, 1990.
- Ranked first among the graduating seniors in the double major program, and received an award from the Rector of the University, 1990.

#### 8. **Service Activities** (within and outside of the institution)

• Reviewed several papers for various international journals and conferences.

#### 9. List the Most Important Publications and Presentations from the Past Five (5) years

- O. Toker, H. Gumuskaya, C. Ulas, and B. T. Yılmaz, "Lightweight Wireless Protocol Based on IEEE 802.11 for Delay Sensitive Telerobotic Systems, T. Journal of Electrical Engineering & Computer Sciences, Vol. 21, No. 5 (2013), pp. 1394-1410.
- 2. H. S. Efendioglu, T. Yıldırım, O. Toker, and K. Fidanboylu, "New statistical features for the design of fiber optic statistical mode sensors", Optical Fiber Technology, vol. 21 (2013), pp. 279-284.
- 3. F. Camcı, C. Ozkurt, O. Toker, V. Atamuradova, "Sampling based State of Health estimation methodology for Li-ion batteries", Journal of Power Sources, vol. 278 (2015), pp. 668-674.
- 4. B. Enez, E. Gur, B. Okur, O. Toker, A. Sisman, "A Low-cost Biomarker-based SAW-Biosensor Design for Early Detection of Prostate Cancer," Biosensors 2016 (26th Anniversary World Congress on Biosensors), Gothenburg, Sweden (2016).
- M. B. Alver, O. Toker, K. Fidanboylu, "Polar Format Statistical Image Processing Based Fiber Optic Pressure Sensors", Proc. SPIE 9217, Applications of Digital Image Processing XXXVII, San Diego, CA (2014), pp. 9217F-1 - 9217F-7.
- K. Alemdar, S. Likoglu, K. Fidanboylu, O. Toker, "A Novel Periodic Macrobending Hetero-core Fiber Optic Sensor Embedded in Textile for Respiratory Movements Analysis", Proc. SPIE 9062, Smart Sensor Phenomena, Technology, Networks, and Systems Integration, San Diego, CA, (2014), pp. 90620D-1 - 90620D-11.
- S. Likoglu, K. Alemdar, K. Fidanboylu, O. Toker, "A Novel Microbending Hetero-Core Fiber Optic Sensor for Force and Location Sensing with Applications to Home Security", Proc. SPIE 9062, Smart Sensor Phenomena, Technology, Networks, and Systems Integration, San Diego, CA, (2014), pp. 90620C-1 - 90620C-11.
- 8. C. Ozkurt, F. Camcı, B. Esat, O. Toker, "Cost Benefit Analysis of Individual Cell Control in Batteries for Electric Vehicles", 23rd IEEE International Symposium on Industrial Electronics (ISIE), Istanbul, Turkey, (2014), pp. 1800-1804.
- 9. H. Efendioglu, T. Yıldırım, O. Toker, K. Fidanboylu, "Intelligent fiber-optic statistical mode sensors using novel features and artificial neural networks", Proc. SPIE 8693, Smart Sensor Phenomena, Technology, Networks, and Systems Integration, San Diego, CA, (2013).

#### 10. List the most recent professional development activities

• Reviewed Ph.D. theses as an external examiner for Istanbul Technical University (ITU)

#### 1. Name: Muhammad S. Ullah

#### 2. Degrees

Degrees			
Degree	Discipline	Institution	Year
B.Sc.(Eng.)	Electrical and Electronic Engineering	Chittagong University of Engineering	2008
		and Technology, Bangladesh	
M.SE.	Electrical and Computer Engineering	Purdue University Northwest, USA	2013
Ph.D.	Electrical and Computer Engineering	University of Missouri-Kansas City,	2016
		USA	

#### 3. **Academic Experience**

Institution	Rank & Title	Period	FT/PT
Florida Polytechnic University	Assistant Professor	August 15, 2016-	FT
University of Missouri-Kanas	Instructor and Graduate Research	August 2013-	PT
City	Assistant	May 2016	
Purdue University Northwest	Graduate Teaching and Research	August 2011-	PT
	Assistant	May 2013	
Chittagong University of	Lecturer	September 2008-	FT
Engineering and Technology		August 2011	

#### 4. Non-Academic Experience

Company	Job Title & Position	Period	FT/PT
Microwave Packaging Technology, Inc	R&D Engineer	May 2015-August 2015	PT

#### 5. Certifications or Professional Registrations

- Training Certificate in Industrial Control with PLC, Institute of Energy Technology at Chittagong University of Engineering and Technology, June 2008
- Training Certificate in Industrial Technology on Electrical and Instrumentation, Training Institute for Chemical Industries, Bangladesh, May 2007

#### 6. **Current Membership in Professional Organizations**

- Professional Member, Association for Computing Machinery (ACM)
- Professional Member, Institute of Electrical and Electronic Engineering (IEEE)

- December 2017
   Teen Driver Education Task Force Choice Award, Office of the Tax Collector, 5<sup>th</sup> Annual Polytechnic BIO Expo, Florida Polytechnic University.
- April 2017 Florida Polytechnic University's President Choice Award, 4<sup>th</sup> BIO EXPO Award Ceremony, Florida Polytechnic University.
- April 2016 **Best Poster Presentation Award**, University of Missouri-Kansas City Community Scholar Symposium
- January 2016 Interdisciplinary Applied Mathematics Fellowship (IAMP) Award, Department of Mathematics and Statistics, University of Missouri-Kansas City
- April 2015 **Preparing Future Faculty Scholar Award**, The School of Graduate Studies, University of Missouri-Kansas City
- May 2015 **Outstanding PhD Student Award**, The School of Computing and Engineering, University of Missouri-Kansas City
- August 2013-May 2016
   Graduate Teaching and Research Assistantships, Department of Computer Science Electrical Engineering, University of Missouri-Kansas City
- May 2013 **Purdue University Calumet Chapter of Sigma Xi Student Research Award**, Sigma Xi-The Scientific Research Society, USA
- April 2013 **Student Research Day Presentation Award**, The Graduate School, Purdue University Calumet

- 8. Service Activities (within and outside of the institution)
  - Member, Academic Standard Committee, Florida Polytechnic University (2016~)
  - **Member**, Computer Engineering Search Committee (2017-2018), Computer Science and Information Technology (2016-2017), Computer Engineering Search Committee (2017~2018)
  - Judge, Middle School Physical, Florida Junior Academy of Science, Florida Polytechnic University, March 11, 2017.
- 9. List the Most Important Publications and Presentations from the Past Five (5) years
  - M. S. Ullah, Abdullah G. Alharbi and Masud H. Chowdhury, "BPSK Modulation Based Exact BER Computation for Network Intra-Chip RF Interconnect," *The 29<sup>th</sup> IEEE International Conference on Microelectronics*, Beirut, Lebanon, pp. 91-94, 10- 13 December 2017.
  - 2. **M. S. Ullah** and Masud H. Chowdhury, "Analytical Models of High Speed RLC Interconnect Delay for Complex and Real Poles," *IEEE Transactions on Very Large Scale Integration Systems*, vol. 25, no. 6, pp. 1831-1841, February 2017.
  - 3. **M. S. Ullah** and Masud H. Chowdhury, "Subthreshold Swing Characteristics of Multilayer MoS2 Tunnel FET," *IEEE 58th International Midwest Symposium on Circuits and Systems*, Fort Collins, Colorado, pp. 1-4, 2-5 August 2015.
  - 4. **M. S. Ullah** and Masud H. Chowdhury, "Multilayer Molybdenum disulphide based Tunnel Transistor" *IEEE International Symposium on Circuits and Systems*, Lisbon, Portugal, pp. 1929-1932, 24-27 May 2015.
  - 5. **M. S. Ullah** and Masud H. Chowdhury, "A new real pole delay model for RLC interconnect using second order approximation," *IEEE 57<sup>th</sup> International Midwest Symposium on Circuits and Systems*, College Station, TX, USA, pp. 238-241, 3-6 August 2014.
  - 6. **M. S. Ullah** and Masud H. Chowdhury, "Analysis of RLC interconnect delay model using second order approximation," *IEEE International Symposium on Circuits and Systems*, Melbourne, Australia, pp. 2756-2759, 1-5 May 2014.
  - 7. **M. S. Ullah** and K. Gopalan, "Deception detection in speech using Bark band and perceptually significant energy features," *IEEE 56th International Midwest Symposium on Circuits and Systems*, Columbus, OH, USA, pp.1212-1215, 3-7 August, 2013.
  - 8. **M. S. Ullah**, "A review of higher order statistics and spectra in communication systems," *The Global Journal of Science Frontier Research*, vol. 13, no. 4, pp. 31-50, May 2013.

- Journal Paper Review
  - Reviewer, IEEE Transactions on Very Large Scale Integration Systems, Microelectronics Journal, Elsevier, Journal of Circuit, Systems and Signal Processing, Springer
- Seminars Attend
  - "The Future of STEM Education and Research", The 81st Annual Meeting of the Florida Academy of Sciences at Florida Polytechnic University, Lakeland, FL, March 10, 2017.
  - The Division of Diversity and Inclusion's Eighth Annual Martin Luther King Jr. Lecture on "Building Community in an Hour of Chaos: Progress in the Age of Obama", UMKC Pierson Auditorium, January 27, 2016
  - Effective Teaching Practice Session class that organized by Association of College and University Educators (ACUE), UMKC Hospital Hill Campus, September 22, 2015
  - Workshops, Technical Presentations and Seminars
    - "TFET-An Energy Efficient Electronic Device for Future Nanoscale Technology," Faculty Research on Renewable Energy and Sustainability Showcase Hour, Lakeland, FL, 9<sup>th</sup> -10<sup>th</sup> October 2017
    - "Accuracy Characterization of High Speed VLSI Interconnect Network," The 81<sup>st</sup> Annual Meeting of the Florida Academy of Sciences, Lakeland, FL, March 10-11, 2017.

#### 1. Name

Jorge M. Vargas

#### 2. Degrees

Degree	Discipline	Institution	Year
B.Sc.	Electrical Engineering	Florida International	1999
		University (FIU)	
M.Sc.	Electrical Engineering	Florida International	2001
		University (FIU)	
Ph.D.	Electrical Engineering	Florida International	2005
		University (FIU)	

#### 3. Academic Experience

Institution	Rank & Title	Period	FT/PT
Florida Polytechnic	Associate Professor, APC	2013-	FT
University (FPU)		present	
Turabo University	Associate Professor	2009-2013	FT
Turabo University	Assistant Professor	2006-2009	FT

#### 4. Non-Academic Experience

Company	Job Title & Position	Period	FT/PT
	Description		
FIU, FAST Center- Future	RA and Electrical Engineer:	2002-2005	FT
Aerospace Science and	R&D		
Technology			
IBM Microelectronics	Product Development	2001-2002	FT
Division	Engineer: Product Dev.		
FIU, FAST Center- Future	Graduate Research	1999-2001	FT
Aerospace Science and	Assistant: RF/ Microwave		
Technology	Eng.		

## 5. Certifications or Professional Registrations $N\!/\!A$

#### 6. Current Membership in Professional Organizations

- IEEE- Senior member
- ASEE
- Eta Kappa Nu
- SHPE

- 5-year service recognition at Florida Poly, 2019
- Nominated for the Exemplary Service to Others award, FPU, 2018
- Institutional Excellence Award (runner-up), FPU, 2017
- Distinguished Graduate of the Graduate School, FIU, 2005

- Outstanding PhD award (runner-up), Florida International University, 2005
- Distinctive Student Award, FIU, 2001 and 2004

#### 8. Service Activities

- Reviewer for IEEE Transactions on Applied Superconductivity
- Reviewer for IEEE Microwave and Wireless Components Letters

#### 9. List the Most Important Publications and Presentations

- Akbas M., Sargolzaei A., Alnaser A., Sahawneh S., Alsweiss S., Vargas J., Razdan R. "Unsettled Technology Areas in Autonomous Vehicle Test and Validation," SAE EDGE, SAE International, June 2019
- Vargas J., Alsweiss S., Jernigan M., Amin A., Brinkmann M., and Razdan R., "Development of Sensors Testbed for Autonomous Vehicles", IEEE South East conference, April. 2019, Alabama, USA.
- Carpenter M., Yakymyshyn C., Micher L., Drake C. and Vargas J. "Proposal-Based Learning for Freshman Introduction to Engineering," ASEE, 2016. DOI:10.18260/p.26009; and permanent URL: https://peer.asee.org/26009
- Vargas J. M., Hijazi Y., Vlasov Y.A. and Larkins G.L., Jr. "Effectiveness of BaTiO<sub>3</sub> dielectric patches on YBCO thin films for MEM switches." *Journal of Physics: Conf. Series Institute of Physics*, 2014, 507(4):042045.
- Vargas J. M., Bogozi A., Noel J., Hijazi Y., Vlasov Y.A. and Larkins G.L., Jr. "Reliability of suspended bridges on superconducting microstrip filters using MEMS switches." *IEEE Trans. On Appl. Supercond.*, 2011, v. 21, no. 3, p. 567-570.
- Vargas J.M., Noel J., Brzhezinskaya M., Vlasov Yu.A., Larkins G.L., Jr. "Design and fabrication of two switched superconducting microstrip hairpin filters using series MEM switches." *IEEE Trans. On Appl. Supercond.*, 2007, v. 17, no. 2, p. 898-901.
- Martinez J.A., Brzhezinskaya M., Bogozi A., Vargas J.M., Vlasov Y.A., Larkins G.L. Jr. "Optimization of a MEMS Switched Superconducting Microstrip Hairpin Filter." *Advances in Cryogenic Engineering*, 2006.
- Bogozi A., Brzhezinskaya M., Martinez J., Vargas J.M., Vlasov Y.A., Larkins, G.L. Jr., Datye A.V., Wu K.H. "Advances in Elastic Modulus Study of Gold Thin Film for Use as an Actuated Membrane in a Superconducting RF MEM Switch." *Advances in Cryogenic Engineering*, 2006.

- Work with local industries such as Green Road Energy to establish senior design projects at Florida Poly
- Co-advise graduate students at Florida Poly
- Served as an Academic Program Coordinator (APC) at Florida Poly
- Made efforts relating course development, EE program development, graduate program development, equipment selection, and lab space development in the EE department at Florida Poly

# Appendix D. Faculty Workload Summary

#### Faculty Workload Summary for Cybersecurity Engineering Academic Year 2019 – 2020

Faculty Member	PT or FT	Classes Taught (Course No./Credit Hrs.) Term and Year	Teaching	Research or Scholarship	Service / Other	% Time Devoted to the Program
		Fall 2019				
		Computer Engineering	g			
Youssif Al- Nashif	FT	CAP 5830-Modeling and Simulation CIS 4367-Computer Security COP 2034-Intro to Programming Using Python COP 4935C-Senior Design 2 EEL 5741-Microcomputers	71%	7%	22%	100.0%
Balasubraman iyan Chandrasekar an	FT	EEL 4664C-Kinematics and Control of Robotic Systems EEL 4768C-Computer Architecture and Organization (2 sections) EGS 5930-Adv. Kinematics and Control of Robotic Systems	58%	33%	8%	100.0%
Navid Khoshavi Najafabadi	FT	CIS 4362-Applied Cryptography EEL 4768-Computer Architecture and Organization (2 sections)	60%	13%	27%	100.0%
Ashiq Sakib	FT	EEL 3702C-Digital Logic Design CDA 3631C-Embedded Operating Systems	75%	15%	10%	100.0%
Muhammad Ullah	FT	CDA 4210-VLSI Design EEE 4510-Digital Signal Processing EEL 3702C-Digital Logic Design (2 sections)	92%	0%	8%	100.0%
Onur Toker	FT	EEL 4746-Microcomputers EEL 4914C-Senior Design 1 EEL 4915C-Senior Design 2	80%	15%	5%	100%
Rawa Adla FT EEL 4746-S1 Microcomputers EEL 4746-S2 Microcomputers			75%	15%	5%	100%
		Electrical Engineering	5			
Jorge Vargas	FT	EEL 3111C-Circuits 1 EEL 3470-Electromagnetic Fields and Applications	75%	15%	10%	100%
Harish Chintakunta FT		EEL 3111C-Circuits1 (2 sections) EEL 4515-Digital Communication Systems (Independent Study) EGN 4930-Software Defined Radio Communications EEL 3804C-Analog Electronics	75%	17%	8%	100%
Suleiman Alsweiss	nan EEL 3112C-Circuits2		75%	15%	10%	100%
Arman Sargolzaei	FT	EEE 4531C-Techniques for High Fidelity Signal Acquisition EEL 4652-Control Theory	65%	25%	10%	100%
Muhammad Rashid	FT	EEL 4242-Power Electronics (3 credits) EEL 5245-Power Electronics (3 credits)	50%	10%	50%	100%
Mahmoud Saleh	FT	None	0%	90%	10%	100%

Faculty Member	PT or FT	Classes Taught (Course No./Credit Hrs.) Term and Year	Teaching	Research or Scholarship	Service / Other	% Time Devoted to the Program
Mohammad Reza Khalghani	FT	EEL 3287- Renewable Energy and Sustainability IDS 1380- Introduction to STEM EEL 4251- Power Systems Analysis	75%	15%	10%	100%
Md Selim Habib	FT	EEE 3310-Digital Electronics EEE 4351-Electronic Devices EEL 4448-Optoelectronics	75%	17%	8%	100%
Hisham Mahmoud	FT	EEL 3135 Systems and Signals EEL 4220 Electronic Motor Control EEL 5235 Electronic Motor Control	70%	20%	10%	100%
		Computer Science				
Luis Jaimes	FT	COP 4610-Operating Systems Concepts (3 sections)	69.3%	15.3%	15.3%	100%
Kanwalinderjit Gagneja	FT	CIS 4203-Digital Forensics (2 sections) COP 2271C-Intro to Computation & Programming	69.3%	15.3%	15.3%	100%
Ashok Patel	FT	CIS 4204-Ethical Hacking (2 sections) CIS 4369 Web Applications Security	69.3%	15.3%	15.3%	100%
Wei Ding	FT	COP 2272C-Computer Programming 1 (2 sections) COP 3834C-Web Application Development	69.3%	15.3%	15.3%	100%
Bayazit Karaman	FT	CDA 2108-Intro to Computer Systems COP 4415-Data Structures (2 sections)	69%	23%	8%	100%
		Spring 2020				
		Computer Engineering	g			
Youssif Al- Nashif	FT	COP 2271C – Intro to Computation & Programming IDS 5975 – Thesis 2 (2 students)	25%	42%	33%	100%
Balasubraman iyan Chandrasekar an	FT	EEL 4660C & EEL 5669C-Autonomous Robotic Systems EEL 4768C-Computer Architecture &		8.3%	8.3%	100%
Navid Khoshavi Najafabadi	PT	CIS 4362-Applied Cryptography COP 3530-Data Structures & Algorithms EEL 4768C-Computer Architecture & Organization	75%	16%	9%	100%
Ashiq Sakib	FT	EEL 3702C- Digital Logic Design CDA 4685C- Embedded Control CDA 5685C- Embedded Control	75%	15%	10%	100%
Muhammad Ullah	Muhammad ET EEL 3702C Digital Logic Design (2 sections)		63%	29%	8%	100%
Onur Toker	FT	EGN 1007C – Concepts and Methods EEL 4914C Senior Design 1 EEL 4915C Senior Design 2		15%	5%	100%
Rawa Adla	FT	EEL 4746 C – Microcomputers- 2 sections	50%	42%	8%	100%
		Electrical Engineering	5			
Jorge Vargas	FT	EEL 3111C-Circuits 1 EEL 4421-RF and Microwave Systems	75%	15%	10%	100%
Harish Chintakunta	FT	EEL 3111C-Circuits 1 (2 sections) EEL 4515-Digital Communication Systems	67%	25%	8%	100%

Faculty Member	PT or FT	Classes Taught (Course No./Credit Hrs.) Term and Year	Teaching	Research or Scholarship	Service / Other	% Time Devoted to the Program
Suleiman Alsweiss	FT EEL 4759-Digital Image Processing EEL 5820-Advanced Digital Image Processing EEE 4510-Digital Signal Processing EEE 5507-Advanced Digital Signal Processing		75%	15%	10%	100%
Arman Sargolzaei	FT	EEL 4321C-Hardware or System in the Loop Simulation and Characterization- EEL 4612-Control System Design EEL 5613-Modern Controls	85%	5%	10%	100%
Muhammad Rashid	FT	EEE 5311-Analog IC Design	25%	10%	65%	100%
Mahmoud Saleh	FT	EEL 3112C-Circuits 2 (2 sections)	33%	58%	8%	100%
Mohammad Reza Khalghani	FT	EEL 4283- Renewable Energy Systems EEL 4290- Sustainability for Engineering Technology and Entrepreneurs EEL 5283- Advanced Renewable Energy Systems	75%	15%	10%	100%
Md Selim Habib	FT	EEE 3304C-Analog Electronics EEE 3310-Digital Electronics EEE 4376-Analog Integrated Circuits EGN 1007C-Concepts & Methods	67%	25%	8%	100%
Hisham Mahmoud	FT	EEL 3135 Systems and Signals EEL 3211C Basic Electric Energy Engineering	70%	20%	10%	100%
		Computer Science				
Luis Jaimes	FT	CAP 4612-Machine Learning CAP 4610-Operating Systems Concepts (2 sections) IDS 5975-Thesis (1 student)	77%	15%	8%	100%
Kanwalinderjit Gagneja	FT	CIS 4203-Digital Forensics CNT 4409-Network Security COP 2271C-Intro to Computation & Programming	75%	17%	8%	100%
Ashok Patel FT		CIS 4204-Ethical Hacking CIS 4369-Web Application Security COP 2271C-Intro to Computation & Programming COP 3337C-Object Oriented Programming	77%	15%	8%	100%
Wei Ding	FT	CNT 3004C-Intro to Computer Networks (2 sections) COP 5272-Computation Theory	75%	17%	8%	100%
Bayazit Karaman	FT	CDA 2108-Intro to Computer Systems COP 3337C-Object Oriented Programming (2 sections)	75%	15%	8%	100%

# Article 12: Salary for the Collective Bargaining Agreement with the United Faculty of Florida

1

2 3

#### ARTICLE 12 SALARIES [Amended May 6, 2020]

4 The parties of this Agreement recognize the importance of providing appropriate compensation as an 5 essential component in the delivery of quality higher education programs and quality scholarship that

6 is recognized nationally and internationally.

Annual Salary Increases. The following table describes the implementation of merit increases
 throughout the life of this Agreement with the qualifications described below.

		PERIOD OF PERFORMANCE REVIEWED FOR MERIT	INCREASE TAKES EFFECT FIRST PAY PERIOD:		RIT INCREASE TO SALARY AMOUNT <sup>1</sup> :
June 30, 20	18	AY 2017 – 2018	January 17, 2019	ME: EE: EX:	2% 2.75% 3.5%
June 30, 20	19	AY 2018 – 2019	July 1, 2019	0%	
June 30, 20	20	AY 2019 – 2020	July 1, 2020	0%	

<sup>1</sup>ME: Meets Expectations; EE: Exceeds Expectations; EX: Exemplary.

9 <u>Eligibility</u>: The salary increases described in the above table in Section 12.1 shall be distributed 10 to each bargaining unit member if the bargaining unit member received an annual evaluation 11 and received a rating of "Meets Expectations" or above; individuals that received below a 12 "Meets Expectations" are not eligible for any increase.

- 13 12.2 <u>Other Increases (OI)</u>. The University BOT may provide annual OIs up to one percent (1.0%)
   14 of the total salary rate of the bargaining-unit.
- 15 (a) OIs may be granted at any time at any time in the following circumstances:
  - 1. In response to verified written offers of outside employment;
- 172.As recognition for special achievements and/or exceptional merit, including,18but not limited to, awards from national or international19academic/professional community or funding agencies;
- 20

16

3. To address compression and inversion;

For the University	For the UFF M MS
Alexander Landback Chief Negotiator	Myles Kim Chief Negotiator
May 6, 2020	May 6, 2020
Date	Date

1			4. For equity and market equity considerations;
2		(b)	No other OIs shall be provided unless negotiated with UFF and ratified by both parties.
3		(c)	The University shall notify the UFF annually on OI.
4	12.3	<u>Unive</u>	ersity Awards.
5 6 7 8		(a)	The University may provide a competitive annual Employee awards program to acknowledge and celebrate the efforts of Employees for their contribution in making the University a world-class leader in science, technology, engineering and math (STEM) education.
9 10 11		(b)	Awards that have a monetary component must be awarded as the result of a competitive process open to all Employees covered by this contract. The process and criteria for the award must be clearly defined and shared with all eligible Employees.
12 13		(c)	The total pool for competitive awards for bargaining unit members will not exceed \$5,000.
14		(d)	This section shall retroactively apply to recipient(s) of the 2018 Ablaze Awards.
15 16 17 18	12.4	prom increa	otion Increases. A bargaining-unit member who receives a promotion utilizing the otion procedures in this collective bargaining agreement shall receive the base-salary use shown below, effective August 15 following the academic year in which the successful v takes place.

CURRENT RANK	PROMOTION RANK	PROMOTION INCREASE TO BASE SALARY AMOUNT
Assistant Professor	Associate Professor	9% or increase to minimum of 90% of median target salary, whichever is greater
Associate Professor	Professor	9% or increase to minimum of 90% of median target salary, whichever is greater

Median target salary noted in the above table is the median salary provided by College and
University Professional Association (CUPA) for the rank and field for the individual using the
following target universities, when they participate in the salary survey, as comparators: Alfred
University, Kettering University, Rose-Hulman Institute of Technology, South Dakota School
of Mines, University of Alaska Southeast, University of Central Florida, University of South
Florida, Clarkson University, Colorado School of Mines, Franklin W. Olin College of

For the University

Alexander Landback Chief Negotiator

May 6, 2020

Myles Kim

For the UFF

Chief Negotiator

m

May 6, 2020

Date

- Engineering, Illinois Institute of Technology, Oregon Institute of Technology, Rochester
   Institute of Technology.
- 12.5 <u>Legislatively Mandated Increases</u>. Any additional legislatively mandated increases shall be
   implemented following the corresponding law and do not conflict with this agreement.
- 5 12.6 <u>Salary floors</u>. The salary floors for all bargaining-unit members with meets-expectations ratings
   6 or above shall follow 85% of the median salary (parity level) for comparable roles and
   7 comparable ranks in the target salary for peer institutions.
- 8 12.7 <u>Starting Salary</u>. All bargaining-unit positions will be hired at a starting salary commensurate 9 with their experience. It is expected that those salaries will typically be within 20% of 10 employees within that unit at a similar rank and/or experience level. In exceptional cases, 11 bargaining-unit positions may be hired at a salary above that range contingent on extraordinary 12 experience and extramural funding.
- 13 12.8 <u>Grievability</u>. The only issues to be addressed in a grievance filed pursuant to this Agreement
   (Article 11) alleging violation of this Article are whether there is unlawful discrimination
   pursuant to state or federal law, or whether there is an arbitrary and capricious application of
   the provisions of one or more sections of this Article.
- 17 12.9 <u>Increases Contingent on Receipt of New Recurring/Non-Recurring Funds</u>. Unless the
   University chooses to fund the increases, and in the event the University does not receive
   sufficient new legislative or performance funding to fund the salary increases, they shall
   become void and re-opened for negotiations by the parties.
- 21 12.10 Labor Management Committee. The University and the UFF agree to form a Labor 22 Management Committee ("Committee") for the purpose of examining opportunities for 23 advancement (i.e. promotions, longevity increases, etc.) for employees holding the title of 24 Instructor, Assistant Librarian, or Wellness Counselor. The Committee shall meet and confer, 25 with the intention that the Committee will make a recommendation to the collective bargaining 26 teams for possible inclusion in the next collective bargaining agreement. The Committee shall 27 consist of a minimum of two representatives each from the University and UFF. At least one 28 representative from the University should hold the title of Vice Provost or higher. The 29 Committee shall be formed and have its first meeting within six (6) months from the 30 ratification of this Agreement. The Committee shall meet at least three times each semester 31 (fall and spring) unless otherwise agreed, or they have agreed to a recommendation for the 32 University and UFF's collective bargaining teams. This provision shall expire at the end of this 33 Agreement's term.

For the University

Alexander Landback Chief Negotiator

May 6, 2020

For the UFF M

Myles Kim Chief Negotiator

May 6, 2020

Date

Date

# MOU with the UFF regarding the change to remote instruction in spring 2020

#### MEMORANDUM OF UNDERSTANDING RE: COVID-19 HEALTH EMERGENCY

During the current health emergency brought on by the coronavirus pandemic, UFF-FPU and the Florida Polytechnic University Board of Trustees are committed to maintaining the productive and efficient operation of the University in a safe and healthy environment. UFF-FPU and Florida Poly Board of Trustees are committed to working together to promote the appropriate solutions to meeting our mission, which is strongly focused on providing education to our students, despite the difficulties that COVID19 has presented to the university and its faculty. To this end, we agree to the following terms and conditions:

- Faculty shall be provided the option of excluding Spring 2020 Student Assessment of Instruction and any other subjective evaluation regarding remote instructional effectiveness in Spring 2020 of their course delivery from their 2020-2021 annual performance evaluation. Discussion of DFW rate and Course GPA may be considered, but a direct comparison of remote and non-remote, with the expectation that they are equivalent, is not appropriate.
  - a. If a faculty member chooses to exclude Spring 2020 Student Assessment of Instruction and any other subjective evaluation of teaching regarding remote instructional effectiveness in Spring 2020 from the 2020-2021 annual performance evaluation, Spring 2020 Student Assessment of Instruction and any other subjective evaluation of teaching regarding remote instructional effectiveness in Spring 2020 will likewise be excluded from consideration for reappointment or promotion. In reappointment and/or promotion consideration, discussion of DFW rate and Course GPA may be considered BUT direct comparison of remote and non-remote delivery, with the expectation that they are equivalent, is not appropriate.
  - b. If a faculty member chooses not to exclude the items listed in 1a from their performance in Spring 2020 from the 2020-2021 annual performance evaluation, the evaluation will be based on the Amended Evaluation Guidelines which account for the challenges of remote instruction, assessment, and examination.
  - c. Faculty members must declare their choice regarding the evaluator's use of Student Assessment of Instruction and any other subjective evaluation of teaching regarding remote instructional effectiveness in Spring 2020 when they submit the Faculty activity report for the 2020-2021 evaluation period.
  - d. When a faculty member submits their Faculty Activity Report for the 2020-2021 period, they may also, as an addendum to the research section of the FAR, include a statement detailing specific impacts of the COVID19 pandemic on their teaching, research activity, and service. Such a statement will be carefully considered by the evaluator.
  - e. Faculty members that were prevented from conducting research due to circumstances related to the COVID19 pandemic (Ex. Access to labs, travel restrictions, business closures, etc.) shall not be negatively evaluated as a result of those impacts. However, if possible, faculty members must make reasonable attempts to fulfill their obligations as much as possible, using remote tools that are available to them, during this time. A failure to make reasonable attempts to fulfill those obligations may be considered by the evaluator.
- Faculty who have a teaching assignment during Summer shall receive Amended Evaluation Guidelines which account for the challenges of remote instruction, assessment, and examination. These guidelines are attached to this MOU as an appendix.

- 3. Florida Polytechnic University policy 1.0061P (Adopted June 3, 2015), and federal and state intellectual property law, shall apply to all course content and course delivery materials created as a result of the mandated transition to online instruction.
  - a. As to Recordings of Remote Instruction ("Recordings") produced for remote instruction during paid time of the faculty member, which are <u>not</u> produced using significant University *facilities or equipment*:
    - i. Such Recordings are considered to have been developed using significant University Resources under FPU policy 1.0061P(G).
      - However, if the faculty member wishes to own their individual intellectual property rights as to such Recordings, the faculty member must make a disclosure in writing to the Provost's Office, consistent with the disclosure requirements described FPU policy 1.0061P(M).
      - Upon receipt of the disclosure, the University will waive its rights in the disclosed Recordings, pursuant to FPU Policy 1.0061P(T), contingent upon a perpetual nonexclusive, royalty-free grant to the University to use the Recordings for educational and research purposes.
    - ii. University provided computers or tablet devices are not considered as significant facilities nor as significant equipment.
  - b. The University will not waive its rights for Recordings of Remote Instruction or intellectual property which are:
    - i. Developed during paid time of the faculty member <u>and</u> are <u>also</u> produced using significant University facilities or equipment, or
    - ii. Developed in the course of, or pursuant to, other agreement with the University.
    - iii. Developed specifically as a work-for-hire.
- 4. The impacts of COVID-19 on the Florida Polytechnic University community are changing constantly. Nothing in this memorandum shall be construed as a waiver of the Florida Polytechnic University's right to implement measures pursuant to directives from appropriate state and/or federal authorities or that the Florida Polytechnic University otherwise deems essential to protecting the health and safety of students, faculty, and staff. Nothing in this memorandum shall be construed as a waiver of the Florida Polytechnic University's obligation to engage in bargaining over the impacts of such decisions upon request by UFF Florida Poly.

Appendix A – Amended Annual Evaluation Guidelines for Faculty 2020-2021 (SPRING 2020)
 Appendix B – Amended Annual Evaluation Guidelines for Faculty 2020-2021 (SUMMER/FALL 2020)
 Appendix C – Online Starter Kit Overview

Alexander Landback FPU-BOT Chief Negotiator

Myles Kim

Myles Kim **UFF-FPU** Chief Negotiator

# Amended Annual Evaluation Guidelines for Faculty 2020-2021 (For the Remote Instruction period that started on March 16 through the end of the Spring 2020 semester, not to be used for a face-to-face instruction period)

(adopted based on Department Suggestions and Discussion/Recommended by Evaluation Panel)

Evaluators must consider the rank when evaluating teaching, research, and service; said consideration is tied to the expectations based on rank in the faculty handbook

Faculty must comply with and follow instructions of department chair regarding teaching scheduling and standards, research procedures and compliance, and service requirements.

Overall scores consider the fare form credit given.

#### **Evaluation Key:**

Unsatisfactory (U)	Performance that is clearly substandard. Performance improvement plan is mandated, and termination may be appropriate.
Needs Improvement (NI)	Performance that is below a reasonable expectation for the faculty rank that an individual holds
Meets Expectations (ME)	Performance is sound for the faculty rank held and within reasonable expectations for the person's job description.
Exceeds Expectations (EE)	Performance is sound for the faculty rank held and within reasonable expectations for the person's job description. The individual has distinguished themselves in some way by performing at a level that is above a normal expectation for their faculty rank.
Exemplary (E)	Performance is sound for the faculty rank held and within reasonable expectations for the person's job description. The individual has truly done something that is outstanding and that is not present in the majority of the faculty.

#### **Teaching:**

University teaching and student learning encompass much more than the hours faculty members spend in the classroom. Teaching also involves keeping up with the field (both technical and changes in pedagogy), planning lectures, creating instructional materials, appropriately utilizing the CANVAS LMS, constructing tests, grading papers, mentoring/interacting with students, participating in tutorials, recitations, and formal teaching committees, working with graduate students, supervising student educational assistants (SEAs), conducting office hours, and participating in professional development programs. Because many aspects of teaching remain invisible to students, their evaluations alone are inadequate to provide comprehensive and convergent evidence of teaching effectiveness. In addition to student assessments, some departments may have obtained evaluations from individuals who both understand the subject matter and recognize the intellectual effort and pedagogical merit involved in various instructional activities.

**Evaluation Philosophy:** Evaluations are earned by faculty and supported by the evidence (both quality and quantity) that a faculty member is performing his or her duties at a certain level. To achieve a "Meets Expectations" rating, a faculty typically *must* perform the appropriate core duties in the teaching that were assigned. An evaluator may consider elements such as number of students and student credit hours supported, number of different courses delivered, and also should consider how effective the communication with students is based on a range of elements including the course syllabus, SAI results and comments, and use of CANVAS.

#### Elements to consider:

#### Evidence:

- Courses taught
- Student Credit hours produced
- DFW rate
- Course GPA
- SAI used carefully noting the transition to the online environment
- Thesis or projects directed, where applicable
- Thesis or projects committee, where applicable
- Instructional materials sufficient to demonstrate performance ratings below

### Elements that are core duties and typically, where appropriate, are present to achieve MEETS EXPECTATIONS performance (based on evidence supplied in the dossier):

- Syllabus timeliness, construction, and compliance with required standards
- Presence to deliver course AND be appropriately available to students (e.g. office hours) for the remote period, evidence of an ongoing effort during the remote period that connects with students on a weekly, or more frequently, basis.
- Participates and cooperates appropriately in multi section courses
- Curricular Rigor; evidence based upon items such as alignment between outcomes and assessments, syllabus, course materials, examinations, and examination practice
- Grading aligns as a fair assessment of mastery of material and is fair to students, noting the challenges of remote instruction and assessment .
- Grading and examination policies and execution lead to proper and fair assessment, noting the challenges of remote instruction and assessment .
- Grades assignments and exams in a timely manner, noting the challenges of remote instruction and assessment, faculty must make a good faith effort to make remote examination and proctoring work property but are not accountability for system bugs and difficulties.
- Adheres to appropriate student learning outcomes to ensure we provide a quality education: evidenced by examinations and completion of planned course material
- Submits midterm and final grades consistently and on-time, maintains approved syllabus and updated accurate gradebook in Canvas, submits assessment reports and other documentation consistently and on time noting that there might be some careful changes in syllabi that are appropriately coordinated with other sections.

Amended Annual Evaluation Guidelines for Faculty – 2020-2021

- Submits attendance reports as required, tracks student attendance in Canvas or appropriate verifiable method
- Appropriate use of SEAs as per department and academic affairs guidelines and demonstrating appropriate responsibility in the delivery of the course
- Appropriate interactions, consistent with university policy and guidelines, with students and appropriate professional behavior in communication with students
- Demonstration of ongoing and reasonable improvements in courses, and a plan for further improvements, that have been delivered multiple times by the faculty member
- Executes teaching duties with honesty and integrity

**Elements that may be used by an evaluator to justify an Exceeds Expectations or Exemplary rating** This must be very carefully considered in the context of the institution and is specifically not a list-based, check-box exercise. If a faculty member is clearly demonstrating effectiveness in all of the areas for consideration under meets expectations, with respect to their workload, consideration of exceeds expectation may be appropriate. Evidence presented must support teaching and pedagogical excellence that is distinct from the Meets Expectations requirements. The evaluator must judge the effectiveness of the individual's contribution, and determine if it warrants a higher than Meets Expectation rating.

Examples might be:

- Successful course delivery innovation has attracted students' interests, increasing retention and curricular progression. Demonstration of effective results in the remote environment, indications of strong foundations for remote delivery.
- Curricular Innovation: New course development, innovation in pedagogy that is significant
- Active Participation in curriculum development for new concentration, or a new degree program
- For Exemplary the faculty has truly done something that is outstanding and that is not present in the majority of the faculty such as:
  - o Successful Curricular innovation has attracted interests from other universities, increasing enrollment
  - o Demonstrable impact on student retention and facilitating progression to timely graduation
  - Extraordinary leadership of execution in remote instruction period as evidenced by documented contribution to departmental or institutional efforts that support multiple sections or faculty.

#### **Research:**

Research at Florida Poly is evolving as a core duty for the faculty that do not hold the title instructor. While research can be hard to measure, as a core duty, faculty need to demonstrate activity and success in this realm. If faculty do not have time to do research, this will be indicated on their FARE form in terms of the credit granted; where there is no time, the rating should be N/A. Where there is time, the rating expectation must be adjusted to reflect the amount of time available. For instance, if a person has only a small amount of credit available for research, achieving Meets Expectations performance requires demonstrated progress commensurate with the time allocated. If there is more time, the progress must be more significant. Regardless of time available, an above Meets Expectations score requires the presence of items from the evidence list identified below. Research must advance the mission of the university and support the program and concentration(s) in which the faculty member teaches.

The remote instruction period likely produced time availability constraints so that the time available for research may have been impacted. In addition, those with laboratory efforts likely will exhibit slower progress due to lower availability of laboratory time and the personnel to serve laboratory projects. Evaluators will use their judgement as they assess how the broader COVID-19 pandemic might lead to unforeseen consequences that may negatively affect research productivity (e.g. canceled conferences, inability to travel or access necessary resources, etc.).

#### **Elements to consider:**

#### Evidence:

- Refereed Publications
- Non-refereed publications
- Books, book contributions
- Presentations or invited talks
- Funded projects
- Works in Progress where there is work product as evidence
- Proposals submitted
- Editorial position in a national level journal
- Students supported/advised and/or student effort in research programs
- Research activity with students that has an outcome
- Other activity pre-approved by Department Chair and/or Division Director.

Elements that are core duties and typically must be present, as demonstrated by evidence, to achieve MEET EXPECTATIONS performance: Examples are not exhaustive, but all activity must demonstrate impact and relevance to university and field.

#### Core element that must be present:

- Adequate progress on clearly defined, multi-year research plan (ideally explicitly laid out, but may be evident in other ways)
- Executes research duties with honesty and integrity

#### Other core elements that are appropriate to consider

- Appropriate pursuit/success in developing a funded research program,
- Works/Proposals in progress reflect substantial progress toward completion and promise of likely success.

- Recognizable major publication (s) or significant grant funding with progress on grant commensurate with grant size
- Substantial industry project with significant impact on research, development, application (where the faculty member secured prior approval, followed appropriate procedures, and advances the research and/or educational mission of the University, department, and/or program.)
- Publication in high impact factor journals
- Research awards such as grants
- Honorific research societies
- Compliance with all rules, regulations, disclosures, and requirements associated with research, including following institutional protocols for engagement with external partners or potential partners.
- Research presentation or publication that receives public recognition and/or publicity, or impacts public policy or enhances the University's economic impact
- Successful publication or presentation at a national conference or significant contribution to a state or regional conference.
- Any of the items in the "Facts" column that hold demonstrable national or international impact or advance the program, department, and university's reputation.

#### Elements that may be used by an evaluator to justify an Exceeds Expectations or Exemplary rating

This must be very carefully considered in the context of the institution and is specifically not a list based, check box exercise. Evidence presented must support research excellence that is distinct from the Meets Expectations requirements.

. Examples might be:

- Significant research award from a competitive proposal process
- Publication activity that is of high quality and above the norm for the department

#### Service

Service comes in a variety of capacities. The basic levels are departmental, division-level (where applicable), and institutional. Institutional service includes University committees but also leadership and advising of student organizations, clubs, or professional societies. Service also includes externally-focused service in the form of community relationships or formal efforts to solicit industry engagement in either curricular or research capacities, or unfunded consulting relationship with local, state, or federal government, private entities, or industry. A third broad category is professional service, which may include affiliations with state or national organizations as an organizer, peer reviewer, society fellow, or other activity that advances the discipline or profession and demonstrates recognition of the faculty-member's expertise and authority.

#### **Elements to consider:**

#### Evidence:

- Nature of service assignments
- Student organizations supervised
- Community-related service
- Industry or other agency service
- Professional service
- Demonstrated contribution and impact of contribution to service roles.

#### Elements that are core duties and typically must be present to achieve and provide evidence to MEET EXPECTATIONS performance:

- Service remains a core duty that during remote instruction is fulfilled with remote work.
- Executes service duties with honesty and integrity and demonstrates collegiality in performing service roles
- Regular, documented active participation in assigned service duties
- Participation in department meetings
- Demonstrable results or progress made on external service activity
- Significant, demonstrated contribution to internally assigned service roles that enable the unit or organization to fill a gap, solve a problem, or advance in some important way (e.g. contribution to curriculum advisory board relationship).
- Successfully develop or lead co-curricular project such as speaker-series or other events or competitions.
- Initiate meaningful service contribution to program, department, or University.
- Sponsor a new student organization or grow an existing one.
- Enable the organization to achieve positive impact on campus community or a professional society that advances the culture of learning among students in the discipline. All rules must be followed when leading student clubs or organizations.
- Foster significant one-time relationship or potential for extended relationship with external entity that benefits the program, department, or University through research, curriculum, in new or existing areas.
- Provide professional service that raises the profile of the program, department, and university.
- Member of grant review committee for governmental agency or foundation, editorial board, journal reviewer or co-editor

#### Elements that may be used by an evaluator to justify an Exceeds Expectations or Exemplary rating

• This must be very carefully considered in the context of the institution and is specifically not a list based, check box exercise. Evidence presented must support service excellence that is distinct from the Meets Expectations requirements.

An example might be:

• Significant, demonstrated contribution to internally assigned service roles that enable the unit or organization to fill a gap, solve a problem, or improve productivity

### Amended Annual Evaluation Guidelines for Faculty 2020-2021 (Summer and Fall 2020)

(adopted based on Department Suggestions and Discussion/Recommended by Evaluation Panel)

Evaluators must consider the rank when evaluating teaching, research, and service; said consideration is tied to the expectations based on rank in the faculty handbook

Faculty must comply with and follow instructions of department chair regarding teaching scheduling and standards, research procedures and compliance, and service requirements.

Overall scores consider the fare form credit given. DO NOT FORGET to rate summer activity for teaching and or research (presuming that it was compensated by the University).

#### **Evaluation Key:**

Unsatisfactory (U)	Performance that is clearly substandard. Performance improvement plan is mandated, and termination may be appropriate.
Needs Improvement (NI)	Performance that is below a reasonable expectation for the faculty rank that an individual holds
Meets Expectations (ME)	Performance is sound for the faculty rank held and within reasonable expectations for the person's job description.
Exceeds Expectations (EE)	Performance is sound for the faculty rank held and within reasonable expectations for the person's job description. The individual has distinguished themselves in some way by performing at a level that is above a normal expectation for their faculty rank.
Exemplary (E)	Performance is sound for the faculty rank held and within reasonable expectations for the person's job description. The individual has truly done something that is outstanding and that is not present in the majority of the faculty.

#### **Teaching:**

University teaching and student learning encompass much more than the hours faculty members spend in the classroom. Teaching also involves keeping up with the field (both technical and changes in pedagogy), planning lectures, creating instructional materials, appropriately utilizing the CANVAS LMS, constructing tests, grading papers, mentoring/interacting with students, participating in tutorials, recitations, and formal teaching committees, working with graduate students, supervising student educational assistants (SEAs), conducting office hours, and participating in professional development programs. Because many aspects of teaching remain invisible to students, their evaluations alone are inadequate to provide comprehensive and convergent evidence of teaching effectiveness. In addition to student assessments, some departments may have obtained evaluations from individuals who both understand the subject matter and recognize the intellectual effort and pedagogical merit involved in various instructional activities.

**Evaluation Philosophy:** Evaluations are earned by faculty and supported by the evidence (both quality and quantity) that a faculty member is performing his or her duties at a certain level. To achieve a "Meets Expectations" rating, a faculty typically *must* perform the appropriate core duties in the teaching that were assigned. An evaluator may consider elements such as number of students and student credit hours supported, number of different courses delivered, and also should consider how effective the communication with students is based on a range of elements including the course syllabus, SAI results and comments, and use of CANVAS.

#### **Elements to consider:**

#### Evidence:

- Courses taught
- Student Credit hours produced
- DFW rate
- Course GPA
- SAI used carefully noting the transition to the online environment
- Thesis or projects directed, where applicable
- Thesis or projects committee, where applicable
- Instructional materials sufficient to demonstrate performance ratings below

### Elements that are core duties and typically, where appropriate, are present to achieve MEETS EXPECTATIONS performance (based on evidence supplied in the dossier):

- Syllabus timeliness, construction, and compliance with required standards
- Presence to deliver course AND be appropriately available to students (e.g. office hours) If the class, or a portion of the class is delivered remotely, evidence of an ongoing effort during the remote period that connects with students on a weekly, or more frequently, basis.
- Participates and cooperates appropriately in multi section courses
- Curricular Rigor; evidence based upon items such as alignment between outcomes and assessments, syllabus, course materials, examinations, and examination practice
- Grading aligns as a fair assessment of mastery of material and is fair to students
- Grading and examination policies and execution lead to proper and fair assessment
- Grades assignments and exams in a timely manner, faculty must make a good faith effort to make remote examination and proctoring work properly but are not accountable for system bugs and difficulties. For remote instruction, Faculty must maintain strong engagement by publishing expectations for and adhering to grading timeliness. Only in rare instances should assignments or exams not be returned within ten days.
- Adheres to appropriate student learning outcomes to ensure we provide a quality education: evidenced by examinations and completion of planned course material
- Submits midterm and final grades consistently and on-time, maintains approved syllabus and updated accurate gradebook in Canvas, submits assessment reports and other

documentation consistently and on time - noting that there might be some careful changes in syllabi that are appropriately coordinated with other sections.

- Submits attendance reports as required, tracks student attendance in Canvas or appropriate verifiable method
- Appropriate use of SEAs as per department and academic affairs guidelines and demonstrating appropriate responsibility in the delivery of the course
- Appropriate interactions, consistent with university policy and guidelines, with students and appropriate professional behavior in communication with students
- Demonstration of ongoing and reasonable improvements in courses, and a plan for further improvements, that have been delivered multiple times by the faculty member
- Executes teaching duties with honesty and integrity
- For remote delivery, provides course organization with Canvas that adheres to the Florida Poly Canvas starter kit model. The course organization must clearly provide instructions for how material will be delivered, how interactions will be managed (asynchronous, synchronous, tools, and expectations for interactions, including instructor response-time to student inquiries), and how assessment will be handled. In addition, expectations and clear instructions for students must be present in syllabus and in the course materials especially in terms of expectations for student participation in synchronous activities.
- If during Fall 2020 instruction transitions from remote to live or vice-versa, evaluators must consider the disruption such a transition will cause. In particular, evaluators must treat SAIs, DFWs, and course GPAs with a great deal of care as students will likely find such a transition challenging.

**Elements that may be used by an evaluator to justify an Exceeds Expectations or Exemplary rating** This must be very carefully considered in the context of the institution and is specifically not a list-based, check-box exercise. If a faculty member is clearly demonstrating effectiveness in all of the areas for consideration under meets expectations, consideration of exceeds expectation may be appropriate, but is not required. Evidence presented must support teaching and pedagogical excellence that is distinct from the Meets Expectations requirements. The evaluator must judge the effectiveness of the individual's contribution, and determine if it warrants a higher than Meets Expectation rating.

Examples might be:

- Successful course delivery innovation has attracted students' interests, increasing retention and curricular progression. Demonstration of effective results in the remote environment, indications of strong foundation for remote delivery.
- Curricular Innovation: New course development, innovation in pedagogy that is significant
- Active Participation in curriculum development for new concentration, or a new degree program
- For Exemplary the faculty has truly done something that is outstanding and that is not present in the majority of the faculty such as:
  - o Successful Curricular innovation has attracted interests from other universities, increasing enrollment
  - o Demonstrable impact on student retention and facilitating progression to timely graduation
  - Extraordinary leadership of execution in remote instruction period as evidenced by documented contribution to departmental or institutional efforts that support multiple sections or faculty.

#### **Research:**

Research at Florida Poly is evolving as a core duty for the faculty that do not hold the title instructor. While research can be hard to measure, as a core duty, faculty need to demonstrate activity and success in this realm. If faculty do not have time to do research, this will be indicated on their FARE form in terms of the credit granted; where there is no time, the rating should be N/A. Where there is time, the rating expectation must be adjusted to reflect the amount of time available. For instance, if a person has only a small amount of credit available for research, achieving Meets Expectations performance requires demonstrated progress commensurate with the time allocated. If there is more time, the progress must be more significant. Regardless of time available, an above Meets Expectations score requires the presence of items from the evidence list identified below. Research must advance the mission of the university and support the program and concentration(s) in which the faculty member teaches.

The remote instruction period likely produced time availability constraints so that the time available for research may have been impacted. In addition, those with laboratory efforts likely will exhibit slower progress due to lower availability of laboratory time and the personnel to serve laboratory projects. Evaluators will use their judgement as they assess how the broader COVID-19 pandemic might lead to unforeseen consequences that may negatively affect research productivity (e.g. canceled conferences, inability to travel or access necessary resources, etc.).

#### **Elements to consider:**

#### Evidence:

- Refereed Publications
- Non-refereed publications
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- Funded projects
- Works in Progress where there is work product as evidence
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- Publication in high impact factor journals
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- Honorific research societies
- Compliance with all rules, regulations, disclosures, and requirements associated with research, including following institutional protocols for engagement with external partners or potential partners.
- Research presentation or publication that receives public recognition and/or publicity, or impacts public policy or enhances the University's economic impact

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Amended Annual Evaluation Guidelines for Faculty - 2020-2021
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#### Appendix B

- Successful publication or presentation at a national conference or significant contribution to a state or regional conference.
- Any of the items in the "Facts" column that hold demonstrable national or international impact or advance the program, department, and university's reputation.

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- Enable the organization to achieve positive impact on campus community or a professional society that advances the culture of learning among students in the discipline. All rules must be followed when leading student clubs or organizations.
- Foster significant one-time relationship or potential for extended relationship with external entity that benefits the program, department, or University through research, curriculum, in new or existing areas.
- Provide professional service that raises the profile of the program, department, and university.
- Member of grant review committee for governmental agency or foundation, editorial board, journal reviewer or co-editor

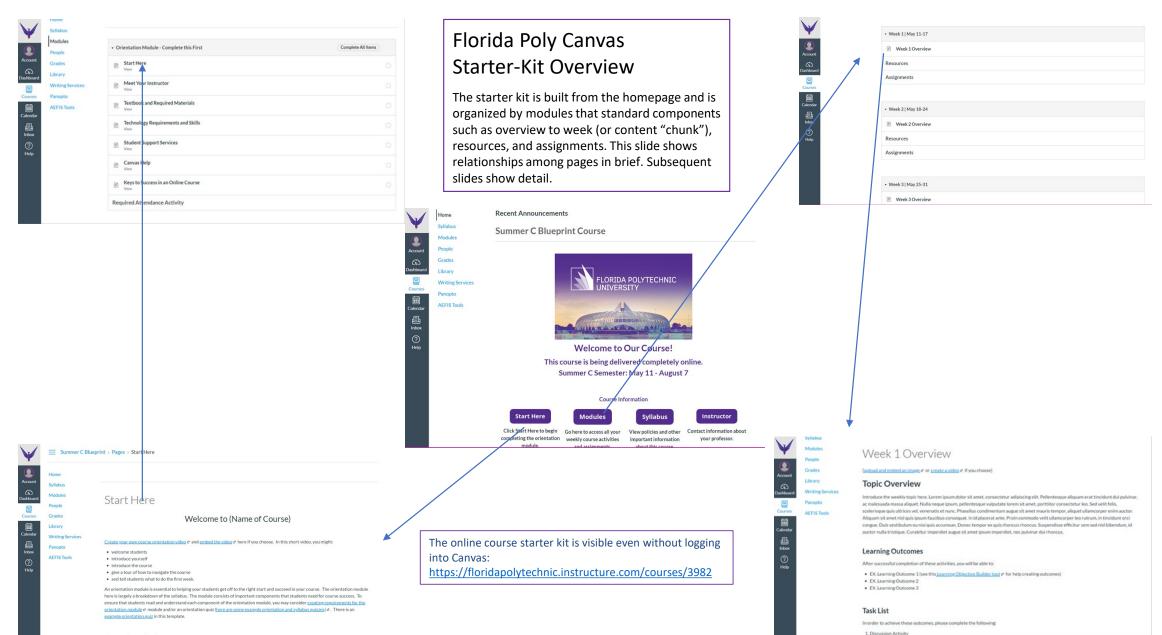
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An example might be:

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Appendix C



Appendix C

# Main Page



#### **Recent Announcements**

Summer C Blueprint Course

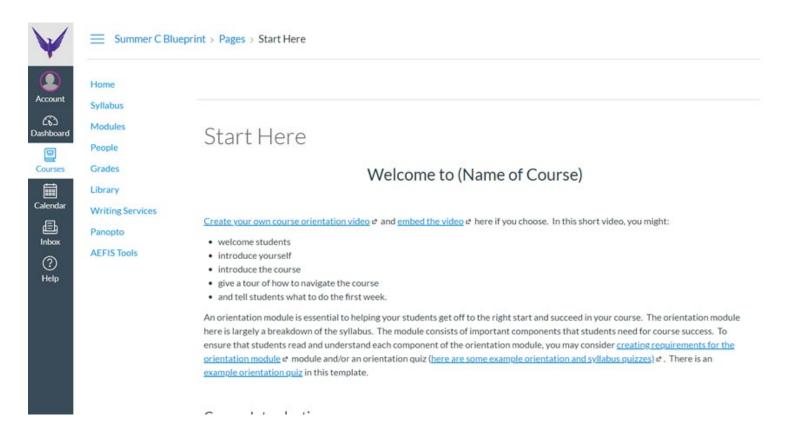


# **Orientation Module**



	ientation Module - Complete this First	
P	Start Here View	
P	Meet Your Instructor View	
P	Textbook and Required Materials View	
P	Technology Requirements and Skills View	
P	Student Support Services View	
P	Canvas Help View	
P	Keys to Success in an Online Course View	

# Inside Orientation Module



# Weekly (or Topic-driven) Modules



• Week 1   May 11-17	
Week 1 Overview	
Resources	
Assignments	

• Week 2   May 18-24		
🖹 Week 2 Overview		
Resources		
Assignments		

· Week 3 | May 25-31

Week 3 Overview

# Inside Weekly Module



#### Week 1 Overview

[upload and embed an image & or create a video & if you choose]

#### **Topic Overview**

Introduce the weekly topic here. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Pellentesque aliquam erat tincidunt dui pulvinar, ac malesuada massa aliquet. Nulla neque ipsum, pellentesque vulputate lorem sit amet, portitor consectetur leo. Sed velit felis, scelerisque quis ultrices vel, venenatis et nunc. Phasellus condimentum augue sit amet mauris tempor, aliquet ullamcorper enim auctor. Aliquam sit amet nisl quis ipsum faucibus consequat. In id placerat ante. Proin commodo velit ullamcorper leo rutrum, in tincidunt orci congue. Duis vestibulum eu nisi quis accumsan. Donec tempor ex quis rhoncus rhoncus. Suspendisse efficitur sem sed nisl bibendum, id auctor nulla tristique. Curabitur imperdiet augue sit amet ipsum imperdiet, nec pulvinar dui rhoncus.

#### Learning Outcomes

After successful completion of these activities, you will be able to:

- EX. Learning Outcome 1 (see this Learning Objective Builder tool & for help creating outcomes)
- EX. Learning Outcome 2
- EX. Learning Outcome 3

#### Task List

In order to achieve these outcomes, please complete the following:

1. Discussion Activity

### **Student Code of Conduct: Revised May 2020**

#### THE FLORIDA POLYTECHNIC UNIVERSITY BOARD OF TRUSTEES

#### FPU-3.006 Student Code of Conduct

#### (1) Introduction

- (a) Community Values. The Student Code of Conduct is designed to promote responsible behavior for all students consistent with the values and welfare of the Florida Polytechnic University ("University") community. It exists to define the behavioral rights and responsibilities of University students and student organizations. The Student Code of Conduct fosters and enhances the academic mission of the University as well as protects the rights of all University students, faculty, and staff.
- (b) Applicability. The Student Code of Conduct applies to the conduct of any student or student organization that occurs: on University property; at University or studentsponsored activities; and at locations where a University course or program is being conducted, including foreign locations such as study abroad and exchange programs. It also applies to off-campus conduct and online conduct that adversely affects the University community and/or the pursuit of its objectives.

#### (2) Authority

- (a) The Florida Polytechnic University Board of Trustees is charged with the responsibility and authority for creating a Student Conduct Review Process. Authority for the Student Conduct Review Process rests with the University President or designee ("President").
- (b) Student organizations are also regulated under this authority.

#### (3) **Definitions**

- (a) **Responding Party.** Any student or student organization that has been charged with violating the Student Code of Conduct.
- (b) Advisor. The person chosen by the Responding party who may assist and/or accompany the Responding party throughout the Student Conduct Review Process.
- (c) **Business Day**. Monday through Friday from 8 am to 5 pm, excluding University holidays.
- (d) **Reporting Party**. A person that believes that he or she has been a victim of a student's misconduct or any person who submits an allegation that a student violated the Student Code of Conduct.
- (e) **Sanction.** Outcome(s) imposed on the Responsible.
- (f) **Faculty Member.** Any person hired by the University to conduct classroom or teaching activities or who is otherwise considered by the University to be a member of its faculty.
- (g) **Good Standing**. A conduct status describing a student who does not have pending charges under the Student Code of Conduct or incomplete misconduct Sanctions.
- (h) **Hearing Body.** Any person or persons appointed by the Vice Provost of Student Affairs or designee to conduct hearings to determine whether the Responding party has violated the Student Code of Conduct and impose Sanctions. This includes a Hearing Officer or Hearing Panel.
- (i) May. The term "may" is used in the permissive sense.
- (j) **Policy.** Any written policies, regulations, or rules of the University as found in, but not limited to, the Student Code of Conduct; University Policies, Regulation and

Rules webpage; the Student Handbook; Housing Policies and Rules, and the Undergraduate and the Graduate Catalogs.

- (k) **Preponderance of the Evidence.** Information considered as a whole that indicates the facts sought to be proved are more likely than not. This is the burden of proof that must be met in a determination of responsible or not responsible.
- (1) **Representative**. An Office of Student Development employee designated by the Vice Provost of Student Affairs to fulfill specified duties under the Student Conduct Review Process.
- (m) **Responsible**. A student or student organization that has been found to have violated the Student Code of Conduct by a preponderance of the evidence.
- (n) Student.
  - (i) Persons taking courses at the University (full-time or part-time) in undergraduate, graduate, or professional studies;
  - (ii) Persons who withdraw from the University after allegedly violating the Student Code of Conduct;
  - (iii) Persons who were previously enrolled but are not officially enrolled for a particular term and have a continuing relationship with the University; or
  - (iv) Persons who have been notified of their acceptance for admission to the University.
- (o) **Student Organization.** A registered student organization as described in FPU- 3.002 Student Government and Student Organizations.
- (p) **University Community.** Includes any University officer, employee, student, applicant, visitor, agent, vendor, or contractor.
- (q) **University Official.** Includes any person employed by the University that is performing assigned administrative or professional responsibilities.
- (r) **University Property.** Property owned or controlled by the University.
- (s) **Witness**. A person who has relevant information to help a decision maker determine whether or not an alleged violation of the Student Code of Conduct has taken place.
- (4) Student Rights In the Student Conduct Review Process. The student has the right to:
  - (a) Be free from self-incrimination. However, the rights and rules of evidence or procedure in a civil or criminal proceeding do not apply to the Student Conduct Review Process.
  - (b) Be informed of and receive just and unbiased treatment under the Policies of the University, in its courses, in its residential life, and in its extracurricular activities;
  - (c) Be informed of decisions impacting their status, advancement, or exercise of University benefits, and have the opportunity to appeal, through a defined process and framework, those decisions in accordance with the procedures prescribed in this Student Code of Conduct;
  - (d) Have past behavior considered only when related to the charge(s);
  - (e) Privacy, including the confidentiality of education records according to the Federal Family Educational Rights and Privacy Act of 1974 (FERPA);
  - (f) Adequate notice of charges and a fair and impartial hearing under the Student Code of Conduct;
  - (g) Be secure in their persons, living quarters, papers, and effects against unreasonable searches and seizures by the University; and
  - (h) Ready access to established UniversityPolicies.

- (5) Student Responsibilities. The student has the responsibility to:
  - (a) Observe and comply with all University Policies and local, state, and federal laws;
  - (b) Respect the rights and privacy of others;
  - (c) Accept the Sanctions imposed due to one's actions;
  - (d) Maintain high standards of academic integrity and honor in all work submitted; and
  - (e) Conduct oneself in a manner that does not infringe upon the rights of other members of the University community.
- (6) Misconduct. Any student or student organization found to have committed or to have attempted to commit the following misconduct is subject to Sanctions in accordance with this Student Code of Conduct.
  - (a) Acts of Dishonesty, including but not limited to the following:
    - (i) **Cheating**, **plagiarism**, or other forms of academic dishonesty as defined in University Regulation FPU-5.005 Academic Integrity.
    - (ii) **Furnishing false information** to any University official, faculty member, or office.
    - (iii) **Forgery, alteration, or misuse** of any University document, record, or instrument of identification.
  - (b) **Disruption or obstruction** of teaching, research, administration, disciplinary proceedings, other University activities, including its public service functions, on or off campus, or of other authorized non-University activities when the conduct occurs on University property.
  - (c) **Physical abuse, verbal abuse, threats, intimidation, harassment, stalking, coercion**, and/or other conduct that threatens or endangers the health or safety of any person, group, or animal that is not of a sexual nature, including bullying. Bullying is repeated and/or severe aggressive behaviors that intimidate or intentionally harm or control another person physically or emotionally, and such conduct is not protected by freedom of expression.
  - (d) Sexual misconduct as defined in University Policies.
  - (e) Attempted or actual theft of and/or damage to property, including intellectual property, of the University or property of a member of the University community or other personal or public property, on or off campus.
  - (f) Hazing, means any action or situation, which occurs on or off University property, that recklessly or intentionally endangers the mental or physical health or safety of a student for purposes including, but not limited to, initiation, admission into, affiliation with, or the perpetuation or furtherance of a tradition or ritual of any University student organization or group whether or not officially recognized by the University. Hazing includes, but is not limited to, pressuring or coercing the student into violating state or federal law; any brutality of a physical nature, such as whipping, beating, branding, exposure to the elements, forced consumption of any food, liquor, drug, or other substance; or other forced physical activity that could adversely affect the physical health or safety of the student; or any activity that would subject the student to extreme mental stress, such as sleep deprivation, forced exclusion from social contact, forced conduct that could result in extreme embarrassment, or other forced activity that could adversely affect the mental health or dignity of the student. Hazing does not include customary athletic events or other similar contests or competitions or any activity or conduct that furthers a legal and legitimate objective.
  - (g) **Failure to comply with directions** of University officials or law enforcement officers acting in performance of their duties and/or failure to identify oneself to such persons

when requested to do so.

- (h) **Unauthorized possession, duplication or use of keys** to any University property or unauthorized entry into or use of University property.
- (i) Violation of any University Policy.
- (j) Violation of any federal state, or local law.
- (k) Use, possession, manufacturing, selling or distribution of marijuana, heroin, narcotics, or other controlled substances, except as expressly permitted by law. This includes the misuse of prescription drugs, paraphernalia used for drugs (e.g. bongs, glass pipes, etc.) and the un-prescribed use, inhalation, or ingestion of a substance (e.g. nitrous oxide, glue, paint, etc.) that could alter a person's mental state.
- Use, consumption, possession, manufacturing, selling or distribution of alcoholic beverages (except as expressly permitted by University Policies), paraphernalia used for consumption of alcohol (e.g. kegs, bongs, etc.) or public intoxication. Alcoholic beverages may not, in any circumstance, be used by, possessed by or distributed to any person under twenty-one (21) years of age.
- (m) Attending class, an Organizational meeting or other University event that is specific for an educational purpose while under the influence of the substances listed in sections (k) and (l)
- (n) **Control or operation of any vehicle**, including non-motorized vehicles, **while impaired** by alcohol or another substance.
- (o) **Illegal or unauthorized possession of firearms, explosives, weapons, or dangerous chemicals** on University property or use of any such item, even if legally possessed, in a manner that harms or threatens others.
- (p) Soliciting, facilitating, or participating in any **illegal gambling**, bookmaking or illegal betting whether through a bookmaker, a parlay card, a pool or any other method of organized gambling.
- (q) Causing or attempting to cause a fire or explosion; falsely reporting a fire, explosion, or an explosive device; tampering with fire safety equipment; or failure to evacuate University buildings during a fire alarm.
- (r) **Unauthorized posting of commercial advertising** or engaging in **commercial activity** as described in University Policies.
- (s) **Participation in an on-campus or off-campus demonstration, riot or activity that disrupts the normal operations** of the University and/or infringes on the rights of other members of the University community; or leading or inciting others to disrupt scheduled and/or normal activities within any campus building or area.
- (t) **Obstruction of the free flow of pedestrian or vehicular traffic** on University property or at University sponsored or supervised functions.
- (u) **Conduct that is disorderly, lewd, or indecent**; **breach of peace**; or aiding, abetting, or procuring another person to breach the peace on University property or at functions the University or members of the University community have sponsored or participated in.
  - (i) **Disorderly Conduct** includes, but is not limited to: any unauthorized use of electronic or other devices to make an audio or video record of any person while on University property without his or her prior knowledge, or without his or her effective consent when such a recording is likely to cause injury or distress. This includes, but is not limited to, surreptitiously taking pictures of another person in a gym, locker room, or restroom.
- (v) Theft or other abuse of computer facilities and resources, including but not limited

to:

- (i) Unauthorized entry into a file to use, read, or change the contents, or for any other purpose.
- (i) Unauthorized transfer of a file.
- (ii) Use of another individual's identification and/or password.
- (iii) Use of computing facilities and resources to interfere with the work of another student, faculty member or UniversityOfficial.
- (iv) Use of computing facilities and resources to send obscene or abusive messages.
- (v) Use of computing facilities and resources to interfere with normal operation of the University computing system.
- (vii)Use of computing facilities and resources in violation of copyright laws.
- (w) **Residence Hall Policy Violation,** includes violations of any policy or regulation governing University Housing, as well as, the Resident Handbook.
- (x) Abuse of the Student Conduct Review Process, including but not limited to:
  - (i) Failing to obey the notice from the Office of Student Development or a University official to appear for a meeting or hearing as part of the Student Conduct Review Process.
  - (ii) Falsifying, distorting, or misrepresenting of information before a Hearing.
  - (ii) Disrupting or interfering with the orderly conduct of a Student Conduct Review Process.
  - (iii) Reporting a violation of the Student Code of Conduct in bad faith.
  - (iv) Attempting to discourage an individual's proper participation in, or use of, the Student Conduct Review Process.
  - (v) Attempting to improperly influence the impartiality of a Hearing Body prior to, and/or during the course of, the Student Conduct Review Process.
  - (vi) Harassing (verbal or physical) and/or intimidation of a Hearing Body prior to, during, and/or after a Student Conduct Review Proceeding.
  - (vii) Failing to comply with the Sanction(s) imposed under the Student Code of Conduct.
  - (viii) Influencing or attempting to influence another person to commit an abuse of the Student Conduct Review Process.
  - (ix) **Retaliation** against a person(s) alleging misconduct or participating in the student conduct review process.
- (7) Sanctions. The Responsible is subject to Sanctions commensurate with the offense with consideration given to any aggravating and mitigating circumstances, including but not limited to the Responsible's conduct record at the University. The Responsible's efforts to get help or assist others may be taken into account in determining Sanctions. The Responsible's failure to complete Sanctions may result in a registration, transcript, final grades, and/or diploma hold. Sanctions that may be imposed upon the Responsible include, but are not limited to:
  - (a) **Deactivation**. The loss of all privileges, including University recognition, for a specified period of time when the Responsible is an organization.
  - (b) **Discretionary Educational Sanctions**. Work assignments, essays, service to the University, or other related discretionary Sanctions.
  - (c) Fines. Previously established and published financial fines may be imposed.
  - (d) Loss of Privileges. Denial of specified privileges for a designated period of time.

- (e) **Probation**. A designated period of time where more severe disciplinary Sanctions will be imposed if the Responsible is found to violate the Student Code of Conduct during the probation period.
- (f) **Residence Hall Expulsion**. Permanent separation of the Responsible from the residence halls.
- (g) **Residence Hall Suspension**. Separation of the Responsible from the residence halls for a definite period of time, after which the Responsible is eligible to return. Conditions for returning to the residence halls may be specified.
- (h) **Restitution**. Requiring compensation for loss, damage, or injury. This may take the form of appropriate service and/or monetary or material replacement.
- (i) **Revocation of Admission and/or Degree**. Admission to the University or a degree awarded from the University may be revoked for fraud, misrepresentation, or other violation of University standards in obtaining the degree, or for other violations that were committed by the student prior to graduation.

(j) University Expulsion. Permanent separation of the Responsible from the University.

(k) **Deferred Suspension**. Suspension that will be imposed at a defined future date or time unless sanctions are completed as described by the hearing officer and there are no further policy violations.

(k) University Suspension. Separation of the Responsible from the University for a definite period of time. Conditions for readmission to the University will be specified. The Vice Provost of Student Enrollment or designee will instruct the

Registrar to place an overlay on the Responsible's transcript during the period of suspension indicating the period of suspension. Further, while on University Suspension, a hold will be placed on the Responsible's record to prevent registration. All assigned educational Sanctions must be completed prior to the restoration of student privileges; otherwise the suspension will remain in effect. A suspended student is not permitted on University property during the length of his/her suspension. A suspension may be deferred so that the Responsible can attend classes for the remainder of the semester.

- (1) **Warning**. A notice in writing to the Responsible that the Responsible is violating or has violated the Student Code of Conduct.
- (m) **Withholding Degree.** The University may withhold awarding a degree otherwise earned until the completion of the process set forth in this Student Code of Conduct, including the completion of any Sanctions imposed.
- (n) One or more of the Sanctions listed above may be imposed for any single violation.
- (8) Interim Suspension. In certain situations, the Provost or designee may impose a University or residence hall interim suspension prior to the completion of the Student Conduct Review Process.
  - (a) An interim suspension may be imposed:
    - (i) To ensure the safety and well-being of members of the University community or preservation of University property; or
    - (ii) If the student poses an ongoing threat of disruption of, or interference with, the normal operations of the University.
  - (b) If requested in writing by the student, an interim suspension is subject to a review at a hearing within three (3) business days by the Provost or designee to determine the status of the interim suspension. The outcome of an interim suspension hearing

remains in effect until the final disposition of the charges unless the Provost or designee decides otherwise.

- (c) During the interim suspension, the student may be denied access to the residence halls and/or to the campus (including classes) and/or all other University activities or privileges for which the student might otherwise be eligible, as the Provost or designee determines to be appropriate.
- (d) The interim suspension does not replace the regular Student Conduct Review Process, which proceeds on the normal schedule, up to and through a formal hearing, if required.
- (e) If the student is subsequently found not responsible for the violation, the University will:
  - i) Correct any record of the change in enrollment status in the student's permanent records and reports in a manner compliant with state and federal laws; and
  - ii) Refund to the student a pro rata portion of any charges for tuition and out-ofstate fees, as appropriate, if the temporary suspension of the student's ability to attend classes lasts for more than ten (10) business days.

#### (9) Student Conduct Review Process

#### (a) General Provisions.

(i) <u>Requests for reasonable accommodations</u>. The Responding party, Reporting party, or other person participating in the Student Conduct Review Process may submit a request for reasonable accommodations for a documented disability for any part of the Student Conduct Review Process to the Office of Student Development representative (the "Representative"). The Representative must receive such requests at least three (3) business days prior to the part of the Student Conduct Review Process for which the person is requesting accommodations.

- The Representative has the discretion to grant such requests. The Representative also has the discretion to waive the three (3) business day requirement.
- (ii) <u>Requests for Postponement</u>. The Responding party or Reporting party may request to postpone any part of the Student Conduct Review Process.
  - (1) Requests to postpone any part of the Student Conduct Review Process must:
    - (i) Be submitted in writing to the Representative at least three (3) business days prior to the part of the Student Conduct Review Process for which the person is requesting postponement, and
    - (ii) State the reason(s) for the request.
  - (2) The Representative has the discretion to grant such requests. The Representative also has the discretion to waive the three (3) business day requirement.
  - (3) The University is not required to postpone a Student Conduct Review proceeding pending the outcome of a criminal prosecution.
- (iii) <u>Notices</u>. All notices to a student are sent to the student's official University email account. Notices to a student organization are sent to the student organization's highest-ranking officer's official University email account.
- (iv) <u>Remote Participation</u>. The Representative has the discretion to allow the Responding party, Reporting party, and/or Witness to participate in the Student Conduct Review Process remotely via telephone or other electronic means.
  - (1) Requests to participate remotely must be received by the

Representative at least three (3) business days prior to the part of Student Conduct Review Process for which the request is being made.

- (2) The Representative has the discretion to waive the three (3) business day requirement.
- (v) Failure to Attend Scheduled Meeting or Hearing.
  - (1) After receiving notice, if the Responding party, Reporting party, or Witness does not timely request a postponement and does not attend a scheduled meeting or hearing, the meeting or hearing will take place as scheduled.
  - (2) Sanctions may be imposed against the Responding party even if the Responding party does not attend scheduled meetings and hearings. The Responding party will be sent written notice of any imposed Sanctions.
  - (3) The Representative may have a hold placed on the Responding party's registration, transcript, final grades and/or diploma if the Responding party does not attend a scheduled meeting or hearing. This hold is removed once the Responding party attends the re-scheduled meeting or hearing, or the Student Conduct Review Process is concluded.
- (vi) <u>Advisor</u>. The Responding party and the Reporting party may have, at their own expense and initiative, an Advisor present for any part of the Student Conduct Review Process.
  - (1) If the Responding party or Reporting party chooses to have an Advisor, it is his or her responsibility to make appropriate arrangements for the Advisor to attend the Student Conduct Review Process. No part of the Student Conduct Review Process will be delayed due to scheduling conflicts with an Advisor.
  - (2) The Advisor may be present to advise the Responding party or Reporting party but cannot speak for or present the case or otherwise participate directly in the Student Conduct Review Process.
  - (3) If the Responding party or Reporting party chooses an attorney as the Advisor, the Responding party or Reporting party must inform the Representative of such at least three (3) business days prior to the Initial Meeting.
- (vii) <u>University's Right to Attorney</u>. The University may be advised by an attorney at any time prior to, during, or after the Student Conduct Review Process.
- (viii) <u>Burden of Proof</u>. The burden of proof for any portion of the Student Conduct Review Process is not on the Responding party.
- (ix) Student's Eligibility to Attend Classes and University Activities.
  - (1) A student remains eligible to attend classes and University activities pending the outcome of the Student Conduct Review Process and until any appeal is concluded except for in the following situations:
    - (i) The student is currently subject to an Interim Suspension; or
    - (ii) Where there is an appeal and the Sanction(s) imposed included University or Residence Hall Suspension or Expulsion.
  - (2) If the student is subsequently found not responsible, the University will:
    - (i) Correct any record of the change in enrollment status in the student's permanent records and reports in a manner compliant with state and federal laws; and
    - (ii) Refund to the student a pro rata portion of any charges for tuition and out-of-state fees, as appropriate, if the suspension of the student's ability to attend classes lasted for more than ten (10)

school days.

- (x) Alleged Violations of University policy FPU-1.005P Sexual Harassment may require additional procedural rights. In the event of a conflict between this regulation and University policy FPU-1.005P Sexual Harassment, University policy FPU-1.005P Sexual Harassment controls. Additionally, in the event of a conflict between this regulation and University Regulation FPU-1.005 Discrimination and Harassment Complaint and Investigation Procedures, University Regulation FPU-1.005 Discrimination and Harassment Complaint and Investigation Procedures controls.
- (b) **Student Conduct Report**. Any person or entity may report an alleged violation of the Student Code of Conduct to the Office of Student Development. The University may conduct an investigation regarding the circumstances of the report. An investigation is a neutral fact-finding process that determines whether there is sufficient information to move forward with formal student conduct charges or other action as appropriate. An investigation may include interviews with the Reporting Party, the Responding party, and any Witnesses.
- (c) No Charges Filed. The Representative may choose to not file charges if:
  - (i) It is found that there are not sufficient facts or information to substantiate a violation of the Student Code of Conduct;
  - (ii) The person being accused of violating the Student Code of Conduct is not a student;
  - (iii) The action claimed as misconduct is not a violation of the Student Code of Conduct.
  - (iv) Or in other appropriate circumstances such as Medical Amnesty as referenced in University policy FPU-1.0003P Alcohol Policy.
- (d) **Filing Charges and Timeline.** The Representative will review the relevant information to determine if a student or student organization will be charged with violating the

Student Code of Conduct. Upon receipt of a report, the Representative has six (6) months to file a charge. The Representative may exercise discretion when applying the time provision to account for circumstances that warrant a waiver of the six (6) month time limit.

(e) **Notice of Charges**. The Representative will give the Responding party written notice of the charge(s) at least five (5) business days prior to the Initial Meeting, unless student has waived the five (5) business day requirement in writing. The Notice of Charges must include:

(i) Specific charges including specific code sections alleged to have been violated;(ii) A description of the behavior that led to the charges; and

(iii) An opportunity for the Responding party to attend an Initial Meeting.

- (f) Notice of Reporting Party's Rights. The Representative will give the Reporting party written notice of their rights. The Reporting party has the same rights as the Responding party, including the right to appeal and the rights described in Section (9)(j)(v) Reporting party's Rights. The Reporting party also has the same responsibilities as the Responding party.
- (g) **Initial Meeting**. The Responding party has the opportunity to attend an Initial Meeting with the Representative. The Responding party may choose an Advisor to accompany the Responding party to the Initial Meeting.

(i) At the Initial Meeting, the Responding party will be given an overview of the

Student Conduct Review Process, information known at the time the charge(s) were filed, and an opportunity for the Responding party to accept or deny responsibility for the charge(s).

- (ii) At the conclusion of the Initial Meeting, the Representative will select an option for resolution. The options are: 1) Dismissal of Charges; 2) Non-Formal Resolution; or 3) Formal Hearing.
  - (1) Responding Party Accepts Responsibility. If the Responding party accepts responsibility, the Representative may choose to resolve the violation through non-formal resolutions.
  - (2) Responding Party Denies Responsibility. If the Responding party denies responsibility or wishes to have a Formal Hearing, the charge(s) will be resolved by a Formal Hearing.
  - (3) Non-Formal Resolution Requirements. Non-formal resolutions may be used when the student accepts responsibility and possible Sanctions do not include suspension or expulsion. Non-formal resolutions may not be used for violations that the Representative deems to be serious, such as sexual misconduct, violence, or violations involving weapons.
- (h) Non-Formal Resolution. Non-formal resolutions include:
  - (i) <u>Mediation Agreement</u>: Depending on the nature and severity of the charge, the Representative may recommend mediation. The Responding party and the Reporting party must both agree to mediation for mediation to be an option. Mediation is confidential.
    - (1) In mediation, the Responding party and the Reporting party voluntarily meet with an impartial mediator to communicate their concerns and needs to each other and to reach their own agreement on the resolution of the case ("Mediation Agreement"). The Responding party and Reporting party are responsible for honoring their Mediation Agreement or renegotiating it, if necessary.
    - (2) Breach of a Mediation Agreement may result in a follow up mediation session, or the Representative may refer the matter back through the Student Code Review Process.
    - (3) If the Responding party and Reporting party do not agree to mediate or mediate but do not reach a full and final resolution, the matter will be referred back through the Student Conduct Review Process for an Administrative Agreement or a Formal Hearing.
  - (ii) <u>Administrative Agreement</u>: An Administrative Agreement is negotiated by the Representative and the Responding party. The Administrative Agreement is between the Responding party and the Office of Student Development.
    - (1) The Administrative Agreement may include punitive Sanctions (disciplinary warning or disciplinary probation) as well as educational Sanctions (papers, seminars, community service, etc.).
    - (2) Breach of an Administrative Agreement may result in a new Administrative Agreement, or Representative may refer the matter to be resolved by a Formal Hearing or Mediation.
  - (iii) <u>Deferred Determination</u>: Deferred Determination is when the determination is delayed so the Responding Party can complete certain requirements in an allotted timeframe. The Representative determines the requirements and timeframe in which the requirements must be met. At the completion of all

requirements, the Responsible Party will be found "not responsible." Deferred Determination only be used for specific non-violent first-time offenses.

- (i) **Failure to Resolve Through Non-Formal Resolution.** If the charge is not resolved by a non-formal resolution, the matter will be resolved through a Formal Hearing.
- (j) **Formal Hearing:** The Formal Hearing is not a criminal or judicial proceeding and is designed to address student or student organization behavior; therefore, alleged violations of the Student Code of Conduct will be addressed independently of any penalty imposed by the courts for a criminal offense. All Formal Hearings are recorded and confidential.
  - (i) <u>Notice of Formal Hearing</u>. The written Notice of Formal Hearing is sent to the Responding party and the Reporting party at least five (5) business days prior to the Formal Hearing. The notice mustinclude:
    - (1) The date, time, and location of the Formal Hearing;
    - (2) The names of witnesses to be called and information to be used in the Responding party's matter;
    - (3) Whether the Hearing Body received any additional information after the Initial Meeting that will be used in the Formal Hearing, and, if so, will indicate when and where the additional information may be viewed; and(4) The names of the members of the Hearing Body.
  - (ii) <u>Responding Party's Right to Hearing Panel and Waiver</u>. The Responding party has the right to a Formal Hearing conducted by a Hearing Panel. If the Responding party chooses to waive this right, a Hearing Officer conducts the Formal Hearing. The Responding party may waive their right to a Hearing Panel if:
    - The Responding party requests such a waiver in writing on forms provided by the University that include an explanation of the effect of the waiver; and
    - (2) The Vice Provost of Student Affairs or designee approves the Responding party's request.
  - (iii) <u>Responding Party's and Reporting Party's Right to Inspect Information</u>. The Responding party and the Reporting party each have the right to inspect all of the information, including witnesses, that will be presented against the Responding party at least three (3) business days before the Formal Hearing.
  - (iv) <u>University's Right to Inspect Information</u>. The University also has the right to review any information, including witnesses, the Responding party and Reporting party intend to use at least three (3) business days before the Formal Hearing.
  - (v) <u>Reporting Party's Rights</u>. Reporting Party has the right:
    - (1) To have unrelated past behavior excluded from the hearing.
    - (2) To participate in and be present throughout the entire Formal Hearing or any portions thereof. If the Reporting party does not want to be present in the same room as the Responding party, the Hearing Body will make alternative arrangements, if possible.
    - (3) To testify in limited privacy. In lieu of testifying in person or via telephone, the Reporting party may submit a written or recorded statement. The determination of whether the testimony will be given in limited privacy is made at the discretion of the Vice Provost of Student Affairs or designee.

- (4) To submit a "student impact statement" and offer to the Hearing Body a suggestion of what the Reporting party believes to be an appropriate Sanction for the Responding party. This information may be used only to determine Sanctions.
- (5) To be excluded from direct examination in cases where sexual misconduct or abuse is alleged. The Responding party will not be permitted to directly question the Reporting party where the alleged violations are sexual misconduct or abuse. In such cases, the Responding party and the Reporting party must submit questions to the Hearing Body; however, the Hearing Body is not required to ask all of the questions submitted.
- (vi) <u>Hearing Body</u>. The Hearing Body reviews all information presented during the Formal Hearing and determines whether the Responding party is responsible. The Representative that conducts the Initial Meeting cannot serve as a Hearing Body.
  - (1) Formal Hearing Conducted by Hearing Panel. The Representative facilitates a Formal Hearing conducted by a panel. The Representative does not participate in deliberations. The Representative selects a member of the Hearing Panel to chair the hearing and report the recommended finding(s) and sanctions, if any. The Hearing Panel must consist of at least 50% students. The Provost or designee appoints faculty, staff, and student representatives to the Hearing Panel.
  - (2) Formal Hearing Conducted by Hearing Officer. The Hearing Officer conducts the hearing and determines the findings and Sanctions.
  - (3) Hearing Body for Charges Involving Sexual Misconduct. The Hearing Body is comprised of staff and/or faculty for charges involving sexual misconduct. However, upon request by the Responding party, and provided there is no objection from the Reporting party, Representative may approve that the Hearing Body will be a Hearing Panel with at least one-half of the members being students.
  - (4) Hearing Body Member Unable to Serve. If a Hearing Body member is unable to serve due to an emergency or unforeseeable occurrence, the Provost may appoint a new Hearing Body member prior to the scheduled hearing.
  - (5) Challenging a Hearing Body Member's Impartiality. The Responding party and/or Reporting party has the right to challenge any Hearing Body member's impartiality at least three (3) business days prior to the scheduled hearing. The Responding party may challenge the substitution of a substituted Hearing Body member at the time of the Formal Hearing. The challenge must be in writing, and must show actual bias (such as a conflict of interest, animosity, pressure, or influence) that would preclude a fair and impartial hearing. The Vice Provost of Student Affairs or designee determines whether to grant such a challenge and such decision is final.
- (vii) <u>Witnesses and Information</u>. The Responding party and/or Reporting party may present or arrange for witnesses to voluntarily present relevant information during the Formal Hearing. Character witnesses cannot participate in the Formal Hearing. The Hearing Body may accept pertinent records, reports, exhibits, and written statements as information for

consideration.

- (1) The Hearing Body facilitates the questioning of witnesses.
- (2) The Responding party and/or Reporting party may submit a request in writing to the Representative to provide relevant information during the Formal Hearing in a manner that avoids direct contact with the Responding party and/or Reporting party.
- (3) The Representative has the discretion to approve or deny the request.
- (viii) Questions for Parties and Witnesses. Both parties are required to submit questions they would like the Hearing Body to ask of the other party or witnesses in writing and at least three (3) business days prior to the Formal Hearing. The Hearing Body will then review the questions to ensure they are relevant and appropriate. Both parties also have the opportunity to submit additional questions to the Hearing Body during the Formal Hearing.
- (ix) <u>Determination of Responsibility</u>. The determination of "responsible" or "not responsible" will be based upon a preponderance of the information. The determination must be based solely upon the information presented at the Formal Hearing.

# (k) Conduct of Formal Hearings.

- (1) Reading of charge(s) by Hearing Body.
- (2) Responding party's response of "responsible" or "not responsible."
- (3) Hearing Body presents information regarding the charges.
- (4) Responding party's opening statement and presentation of information.
- (5) Reporting party's opening statement and presentation of information.
- (6) Hearing Body's questioning of the Responding party, Reporting Party and/or witnesses.
- (7) Hearing Body's asking of questions that were submitted by the parties in advance of the Formal Hearing.
- (8) Hearing Body's final questions of the Responding party.
- (9) Parties may submit additional questions, if any, to the Hearing Body for consideration.
- (10) Hearing Body's asking of additional question, if any.
- (11) Responding party's closing remarks.
- (12) Reporting party's closing remarks.
- (13) Hearing is brought to a close.
- (l) **Deliberations**. Deliberations by the Hearing Body are not part of the hearing and are confidential. Deliberations occur after the close of the hearing and are not recorded.
- (m) Findings, Recommendation, and Determination.
  - (i) <u>Presentment of Proposed Findings and Sanctions to Vice Provos</u>t. The Hearing Body's proposed findings and Sanctions must be presented to the Vice Provost of Student Affairs or designee within a reasonable period of time after the conclusion of the Formal Hearing.
  - (ii) <u>Vice Provost's Determination</u>. The Vice Provost of Student Affairs or designee may accept the proposed findings of responsible or not responsible or remand the matter for a rehearing.
    - (1) If the Vice Provost of Student Affairs or designee accepts the proposed finding of responsible, then they may approve, mitigate, or increase the Sanctions proposed by the Hearing Body.

- (2) If the Vice Provost of Student Affairs or designee alters the proposed Sanctions or remands the matter for a rehearing, the Responding party must be given a concise and explicit written statement that explains the basis for the decision to alter the Sanctions or remand the matter for a rehearing.
- (n) **Notice of Determination and Sanctions**. Following the Student Conduct Review Process, the Vice Provost of Student Affairs or designee notifies the Representative of the determination. The Representative notifies the Responding party and the Reporting party in writing of the determination and, to the extent permitted by law, of any Sanctions imposed.
- (o) **Official Record**. The recording of the Formal Hearing will serve as the official record of the Formal Hearing and is the property of the University. Retention of the record is subject to the General Records Schedule GS5 for Universities and Community Colleges.
- (p) Appeal Process.
  - (i) <u>Responsibility</u>. The Provost is responsible for overseeing the appeal process. The Provost may designate a University employee as an appellate officer to review the appeal and render a determination.
  - (ii) <u>Appeal deadline</u>. The Responsible or the Reporting party may appeal a determination reached or an imposed Sanction to the Representative. Such appeals must be in writing and must be received by the Representative no later than five (5) business days after the date the determination was sent.
  - (iii) <u>Persons who may not hear or decide an appeal</u>. No person may hear or decide an appeal if he or she conducted or participated in the Student Conduct Review Process being reviewed on appeal.
  - (iv) <u>Basis of Appeal</u>. When submitting an appeal, the student must state the reason(s) for appeal, the supporting facts, and the recommended solution. This is not a re-hearing of the conduct case. An appeal cannot be filed simply because the student is dissatisfied with the decision. Failure to describe the nature of the information in full detail in the appeal letter will result in the denial of an appeal.
    - (1) Formal Hearing was not Properly Conducted. The purpose of the appeal will be to determine whether the Formal Hearing was conducted fairly in light of the charges and information presented, and in conformity with prescribed procedures. This includes evident bias in the decision of the Hearing Body. However, deviations from designated procedures will not be a basis for sustaining an appeal unless significant prejudice results.
    - (2) Sanctions Imposed were Improper. The purpose of the appeal will be to determine whether the Sanction(s) imposed were inconsistent or overly severe for the charge(s) for which Responsible was found responsible.
    - (3) New Information not known at time of Formal Hearing. The purpose of the appeal will be to consider new information, sufficient to alter a recommendation that was not known to the Responsible at the time of the Formal Hearing.
  - (v) <u>Information to be Reviewed on Appeal</u>. An appeal is limited to a review of the verbatim record of the Formal Hearing and supporting documents unless the basis of appeal is to consider new information.

- (vi) <u>Appeals Decision</u>. The Provost or appellate officer determines whether to uphold the determination and sends written notification of such decision to the Representative within five (5) business days of receiving the appeal.
  - (1) If the result of the appeal is to uphold the determination, the matter is final and binding on all involved.
  - (2) If the earlier determination is not upheld on appeal, a new Formal Hearing will occur.
- (vii) <u>Notice of Appeal Outcome</u>. The Representative provides written notice of the outcome of the appeal within three (3) business days of receiving the decision from the Provost or appellate officer.
- (viii) <u>Final Decisions Resulting in University Suspension or Expulsion.</u> Final appellate decisions that result in a University Suspension or Expulsion of the Responsible must include notice of the right to appeal to an external judicial forum.
- (10) Disciplinary and Academic Records. The Vice Provost of Student Affairs determines whether disciplinary Sanctions are noted on the Responsible student's permanent academic record and disciplinary record. Upon graduation, the Responsible student may submit a request to the Office of Student Development to have his/her disciplinary record expunged of disciplinary actions other than Residence Hall Expulsion, University Suspension, University Expulsion, or revocation or withholding of a degree.
- (11) Student's Education Record. The records of the Student Conduct Review Process and of the Sanctions imposed, if any, are considered "education records" of both the Responsible and the Reporting party (if Reporting party is a student) pursuant to The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99).

# (12) Interpretation and Revision.

- (a) Any questions of interpretation or application of the Student Code of Conduct are referred to the Provost or designee for final determination.
- (b) The Student Code of Conduct is reviewed periodically by a committee that includes student representation under the direction of the Provost or designee.

Authority: FBOG regulations 1.001(4)(a)(10), 6.010, 6.0105 History: New 1.14.14, Amended 7.29.14, Amended 12.6.2017 Amended \_\_\_\_\_

# Student Code of Conduct: Mark-up to produced revision, May 2020

# THE FLORIDA POLYTECHNIC UNIVERSITY BOARD OF TRUSTEES

### FPU-3.006 Student Code of Conduct

### (1) Introduction

- (a) Community Values. The Student Code of Conduct is designed to promote responsible behavior for all students consistent with the values and welfare of the Florida Polytechnic University ("University") community. It exists to define the behavioral rights and responsibilities of University students and student organizations. The Student Code of Conduct fosters and enhances the academic mission of the University as well as protects the rights of all University students, faculty, and staff.
- (b) Applicability. The Student Code of Conduct applies to the conduct of any student or student organization that occurs: on University property; at University or studentsponsored activities; and at locations where a University course or program is being conducted, including foreign locations such as study abroad and exchange programs. It also applies to off-campus conduct and online conduct that adversely affects the University community and/or the pursuit of its objectives.

### (2) Authority

- (a) The Florida Polytechnic University Board of Trustees is charged with the responsibility and authority for creating a Student Conduct Review Process. Authority for the Student Conduct Review Process rests with the University President or designee ("President").
- (b) Student organizations are also regulated under this authority.

# (3) **Definitions**

- (a) **Responding Party.** Any student or student organization that has been charged with violating the Student Code of Conduct.
- (b) Advisor. The person chosen by the Responding party who may assist and/or accompany the Responding party throughout the Student Conduct Review Process.
- (c) **Business Day**. Monday through Friday from 8 am to 5 pm, excluding University holidays.
- (d) **Reporting Party**. A person that believes that he or she has been a victim of a student's misconduct or any person who submits an allegation that a student violated the Student Code of Conduct.
- (e) **Sanction.** Outcome(s) imposed on the Responsible.
- (f) **Faculty Member.** Any person hired by the University to conduct classroom or teaching activities or who is otherwise considered by the University to be a member of its faculty.
- (g) **Good Standing**. A conduct status describing a student who does not have pending charges under the Student Code of Conduct or incomplete misconduct Sanctions.
- (h) Hearing Body. Any person or persons appointed by the Vice Provost of EnrollmentVice Provost of Student Affairs-Student Affairs or designee to conduct hearings to determine whether the Responding party has violated the Student Code of Conduct and impose Sanctions. This includes a Hearing Officer or Hearing Panel.
- (i) May. The term "may" is used in the permissive sense.
- (j) **Policy.** Any written policies, regulations, or rules of the University as found in, but not limited to, the Student Code of Conduct; University Policies, Regulation and

Rules webpage; the Student Handbook; <u>Housing Policies and Rules</u>, and the Undergraduate and the Graduate Catalogs.

- (k) **Preponderance of the Evidence.** Information, considered as a whole that indicates the facts sought to be proved are more likely than not. This is the burden of proof that must be met in a determination of responsible or not responsible.
- Representative. An Office of Student Development employee designated by the Vice- <u>Provost of EnrollmentVice Provost of Student Affairs</u> to fulfill specified duties under the Student Conduct Review Process.
- (m) **Responsible**. A student or student organization that has been found to have violated the Student Code of Conduct by a preponderance of the evidence.
- (n) Student.
  - (i) Persons taking courses at the University (full-time or part-time) in undergraduate, graduate, or professional studies;
  - (ii) Persons who withdraw from the University after allegedly violating the Student Code of Conduct;
  - (ii)(iii) <u>Persons</u> -who were previously enrolled but are not officially enrolled for a particular term and have a continuing relationship with the University; or
  - (iii)(iv) Persons who have been notified of their acceptance for admission to the University.
- (o) **Student Organization.** A registered student organization as described in FPU- 3.002 Student Government and Student Organizations.
- (p) **University Community.** Includes any University officer, employee, student, applicant, visitor, agent, vendor, or contractor.
- (q) **University Official.** Includes any person employed by the University that is performing assigned administrative or professional responsibilities.
- (r) **University Property.** Property owned or controlled by the University.
- (s) **Witness**. A person who has relevant information to help a decision maker determine whether or not an alleged violation of the Student Code of Conduct has taken place.
- (4) Student Rights In the Student Conduct Review Process. The student has the right to:
  - (a) Be free from self-incrimination. However, the rights and rules of evidence or procedure in a civil or criminal proceeding do not apply to the Student Conduct Review Process.
  - (b) Be informed of and receive just and unbiased treatment under the Policies of the University, in its courses, in its residential life, and in its extracurricular activities;
  - (c) Be informed of decisions impacting his or hertheir status, advancement, or exercise of University benefits, and have the opportunity to appeal, through a defined process and framework, those decisions in accordance with the procedures prescribed in this Student Code of Conduct;
  - (d) Have past behavior considered only when related to the charge(s);
  - (e) Privacy, including the confidentiality of education records according to the Federal Family Educational Rights and Privacy Act of 1974 (FERPA);
  - (f) Adequate notice of charges and a fair and impartial hearing under the Student Code of Conduct;
  - (g) Be secure in their persons, living quarters, papers, and effects against unreasonable searches and seizures by the University; and
  - (h) Ready access to established UniversityPolicies.

- (5) Student Responsibilities. The student has the responsibility to:
  - (a) Observe and comply with all University Policies and local, state, and federal laws;
  - (b) Respect the rights and privacy of others;
  - (c) Accept the Sanctions imposed due to one's actions;
  - (d) Maintain high standards of academic integrity and honor in all work submitted; and
  - (e) Conduct oneself in a manner that does not infringe upon the rights of other members of the University community.
- (6) **Misconduct.** Any student or student organization found to have committed or to have attempted to commit the following misconduct is subject to Sanctions in accordance with this Student Code of Conduct.
  - (a) Acts of Dishonesty, including but not limited to the following:
    - (i) **Cheating**, **plagiarism**, or other forms of academic dishonesty as defined in University Regulation FPU-5.005 Academic Integrity.
    - (ii) **Furnishing false information** to any University official, faculty member, or office.
    - (iii) **Forgery, alteration, or misuse** of any University document, record, or instrument of identification.
  - (b) Disruption or obstruction of teaching, research, administration, disciplinary proceedings, other University activities, including its public service functions, on or off campus, or of other authorized non-University activities when the conduct occurs on University property.
  - (c) Physical abuse, verbal abuse, threats, intimidation, harassment, stalking, coercion, and/or other conduct that threatens or endangers the health or safety of any person, group, or animal that is not of a sexual nature, including bullying. Bullying is included in this violation and refers to repeated and/or severe aggressive behaviors that intimidate or intentionally harm or control another person physically or emotionally, and such conduct is are not protected by freedom of expression.
  - (d) Sexual misconduct as defined in University Policies.
  - (e) Attempted or actual theft of and/or damage to property, including intellectual property, or services provided of the University or property of a member of the University community or other personal or public property, on or off campus.
  - (f) Hazing, means any action or situation, which occurs on or off Uuniversity property, that recklessly or intentionally endangers the mental or physical health or safety of a student for purposes including, but not limited to, initiation, admission into, affiliation with, or the perpetuation or furtherance of a tradition or ritual of any Uuniversity student organization or group whether or not officially recognized by the Uuniversity. Hazing includes, but is not limited to, pressuring or coercing the student into violating state or federal law; any brutality of a physical nature, such as whipping, beating, branding, exposure to the elements, forced consumption of any food, liquor, drug, or other substance; or other forced physical activity that could adversely affect the physical health or safety of the student; or any activity that would subject the student to extreme mental stress, such as sleep deprivation, forced exclusion from social contact, forced conduct that could result in extreme embarrassment, or other forced activity that could adversely affect the mental health or dignity of the student. Hazing does not include customary athletic events or other similar contests or competitions or any activity or conduct that furthers a legal and legitimate objective. defined as an act which endangers the mental or physical health or safety of a student, or which destroys orremoves public or private property, for the purpose of initiation, admission into,

affiliation with, or as a condition for continued membership in, a group or organization. The express or implied consent of the victim will not be a defense. Apathy or acquiescence in the presence of hazing are not neutral acts; they are violations of this regulation.

- (g) **Failure to comply with directions** of University officials or law enforcement officers acting in performance of their duties and/or failure to identify oneself to such persons when requested to do so.
- (h) **Unauthorized possession, duplication or use of keys** to any University property or unauthorized entry into or use of University property.
- (i) Violation of any University Policy.
- (j) Violation of any federal state, or local law.
- (k) Use, possession, manufacturing, <u>selling</u> or distribution of marijuana, heroin, narcotics, or other controlled substances, except as expressly permitted by law. This includes the misuse of prescription drugs, <u>paraphernalia used for drugs (e.g. bongs</u>, glass pipes, etc.) and the un-prescribed use, inhalation, or ingestion of a substance (e.g. nitrous oxide, glue, paint, etc.) that could alter a person's<u>Student's</u> mental state is alsoprohibited.

<del>(k) .</del>

- (1) Use, <u>consumption</u>, possession, manufacturing, <u>selling</u> or distribution of alcoholic beverages (except as expressly permitted by University Policies), <u>paraphernalia used</u> for consumption of alcohol (e.g. kegs, bongs, etc.) or public intoxication. Alcoholic beverages may not, in any circumstance, be used by, possessed by or distributed to any person under twenty-one (21) years of age.
- (1)(m) Attending class, an Organizational meeting or other University event that is specific for an educational purpose while under the influence of the substances listed in sections (k) and (l<sup>1</sup>/<sub>1</sub>)
- (m)(n) Control or operation of any vehicle, including non-motorized vehicles, while impaired by alcohol or another substance.
- (n)(o) Illegal or unauthorized possession of firearms, explosives, weapons, or dangerous chemicals on University property or use of any such item, even if legally possessed, in a manner that harms or threatens others.
- (o)(p)\_Soliciting, facilitating, or participating in any **illegal gambling**, bookmaking or illegal betting whether through a bookmaker, a parlay card, a pool or any other method of organized gambling.
- (p)(q) Causing or attempting to cause a **fire or explosion**; **falsely reporting a fire**, **explosion**, or an **explosive device**; **tampering with fire safety equipment**; or **failure to evacuate** University buildings during a fire alarm.
- (q)(r) Unauthorized posting of commercial advertising or engaging in commercial activity as described in University Policies.
- (r)(s) Participation in an on-campus or off-campus demonstration, riot or activity that disrupts the normal operations of the University and/or infringes on the rights of other members of the University community; or leading or inciting others to disrupt scheduled and/or normal activities within any campus building or area.
- (s)(t) **Obstruction of the free flow of pedestrian or vehicular traffic** on University property or at University sponsored or supervised functions.
- (t)(u) Conduct that is disorderly, lewd, or indecent; breach of peace; or aiding, abetting, or procuring another person to breach the peace on University property or at functions the University or members of the University community have sponsored or participated

in.

- (i) **Disorderly Conduct** includes, but is not limited to: any unauthorized use of electronic or other devices to make an audio or video record of any person while on University property without his or her prior knowledge, or without his or her effective consent when such a recording is likely to cause injury or distress. This includes, but is not limited to, surreptitiously taking pictures of another person in a gym, locker room, or restroom.
- (u)(v) Theft or other abuse of computer facilities and resources, including but not limited to:
  - (i) Unauthorized entry into a file to use, read, or change the contents, or for any other purpose.
  - (i) Unauthorized transfer of a file.
  - (ii) Use of another individual's identification and/or password.
  - (iii) Use of computing facilities and resources to interfere with the work of another student, faculty member or UniversityOfficial.
  - (iv) Use of computing facilities and resources to send obscene or abusive messages.
  - (v) Use of computing facilities and resources to interfere with normal operation of the University computing system.
  - (vii)Use of computing facilities and resources in violation of copyright laws.
- (w) **Residence Hall Policy Violation**, includes violations of any policy or regulation governing University Housing, as well as, the Resident Handbook.

(v)(x) Abuse of the Student Conduct Review Process, including but not limited to:

- (i) Failing to obey the notice from the Office of Student Development or a University official to appear for a meeting or hearing as part of the Student Conduct Review Process.
- (ii) Falsifying, distorting, or misrepresenting of information before a Hearing.
- (ii) Disrupting or interfering with the orderly conduct of a Student Conduct Review Process.
- (iii) Reporting a violation of the Student Code of Conduct in bad faith.
- (iv) Attempting to discourage an individual's proper participation in, or use of, the Student Conduct Review Process.
- (v) Attempting to improperly influence the impartiality of a Hearing Body prior to, and/or during the course of, the Student Conduct Review Process.
- (vi) Harassing (verbal or physical) and/or intimidation of a Hearing Body prior to, during, and/or after a Student Conduct Review Proceeding.
- (vii) Failing to comply with the Sanction(s) imposed under the Student Code of Conduct.
- (viii) Influencing or attempting to influence another person to commit an abuse of the Student Conduct Review Process.
- (ix) **Retaliation** against a person(s) alleging misconduct <u>or participating<del>on</del> in the</u> <u>student conduct review process</u>.
- (7) Sanctions. The Responsible is subject to Sanctions commensurate with the offense with consideration given to any aggravating and mitigating circumstances, including but not limited to the Responsible's conduct record at the University. The Responsible's efforts to get help or assist others may be taken into account in determining Sanctions. The Responsible's failure to complete Sanctions may result in a registration, transcript, final

grades, and/or diploma hold. Sanctions that may be imposed upon the Responsible include, but are not limited to:

- (a) **Deactivation**. The loss of all privileges, including University recognition, for a specified period of time when the Responsible is an organization.
- (b) **Discretionary Educational Sanctions**. Work assignments, essays, service to the University, or other related discretionary Sanctions.
- (c) **Fines**. Previously established and published financial fines may be imposed.
- (d) Loss of Privileges. Denial of specified privileges for a designated period of time.
- (e) **Probation**. A designated period of time where more severe disciplinary Sanctions will be imposed if the Responsible is found to violate the Student Code of Conduct during the probation period.
- (f) **Residence Hall Expulsion**. Permanent separation of the Responsible from the residence halls.
- (g) **Residence Hall Suspension**. Separation of the Responsible from the residence halls for a definite period of time, after which the Responsible is eligible to return. Conditions for returning to the residence halls may be specified.
- (h) **Restitution**. Requiring compensation for loss, damage, or injury. This may take the form of appropriate service and/or monetary or material replacement.
- (i) Revocation of Admission and/or Degree. Admission to the University or a degree awarded from the University may be revoked for fraud, misrepresentation, or other violation of University standards in obtaining the degree, or for other violations that were committed by the student prior to graduation.

(j) University Expulsion. Permanent separation of the Responsible from the University.

(k) **Deferred Suspension**. Suspension that will be imposed at a defined future date or time unless sanctions are completed as described by the hearing officer and there are no further policy violations.

(j)(k) University Suspension. Separation of the Responsible from the University for a definite period of time. Conditions for readmission to the University will be specified. The Vice Provost of Student Enrollment or designee will instruct the

Registrar to place an overlay on the Responsible's transcript during the period of suspension indicating the period of suspension. Further, while on University Suspension, a hold will be placed on the Responsible's record to prevent registration. All assigned educational Sanctions must be completed prior to the restoration of student privileges; otherwise the suspension will remain in effect. A suspended student is not permitted on University property during the length of his/her suspension. A suspension may be deferred so that the Responsible can attend classes for the remainder of the semester.

- (1) **Warning**. A notice in writing to the Responsible that the Responsible is violating or has violated the Student Code of Conduct.
- (m) **Withholding Degree.** The University may withhold awarding a degree otherwise earned until the completion of the process set forth in this Student Code of Conduct, including the completion of any Sanctions imposed.
- (n) More than one<u>One or more</u> of the Sanctions listed above may be imposed for any single violation.
- (8) Interim Suspension. In certain situations, the Provost or designee may impose a University or residence hall interim suspension prior to the completion of the Student Conduct Review Process.

- (a) An interim suspension may be imposed:
  - (i) To ensure the safety and well-being of members of the University community or preservation of University property; <u>or</u>
  - (ii) To ensure the student's own physical or emotional safety and well being; or If
  - the student poses an ongoing threat of disruption of, or interference with, the normal operations of the University.
- (b) If requested in writing by the student, an interim suspension is subject to a review at a hearing within three (3) business days by the Provost or designee to determine the status of the interim suspension. The outcome of an interim suspension hearing remains in effect until the final disposition of the charges unless the Provost or designee decides otherwise.
- (c) During the interim suspension, the student may be denied access to the residence halls and/or to the campus (including classes) and/or all other University activities or privileges for which the student might otherwise be eligible, as the Provost or designee determines to be appropriate.
- (d) The interim suspension does not replace the regular Student Conduct Review Process, which proceeds on the normal schedule, up to and through a formal hearing, if required.
- (e) If the student is subsequently found not responsible for the violation, the University will:
  - i) Correct any record of the change in enrollment status in the student's permanent records and reports in a manner compliant with state and federal laws; and
  - ii) Refund to the student a pro rata portion of any charges for tuition and out-ofstate fees, as appropriate, if the temporary suspension of the student's ability to attend classes lasts for more than ten (10) business days.

# (9) Student Conduct Review Process

# (a) General Provisions.

(i) <u>Requests for reasonable accommodations</u>. The Responding party, Reporting party, or other person participating in the Student Conduct Review Process may submit a request for reasonable accommodations for a documented disability for any part of the Student Conduct Review Process to the Office of Student Development representative (the "Representative"). The Representative must receive such requests at least three (3) business days prior to the part of the Student Conduct Review Process for which the person is requesting accommodations.

- The Representative has the discretion to grant such requests. The Representative also has the discretion to waive the three (3) business day requirement.
- (ii) <u>Requests for Postponement</u>. The Responding party or Reporting party may request to postpone any part of the Student Conduct Review Process.
  - (1) Requests to postpone any part of the Student Conduct Review Process must:
    - (i) Be submitted in writing to the Representative at least three (3) business days prior to the part of the Student Conduct Review Process for which the person is requesting postponement, and
    - (ii) State the reason(s) for the request.
  - (2) The Representative has the discretion to grant such requests. The Representative also has the discretion to waive the three (3) business day requirement.

- (3) The University is not required to postpone a Student Conduct
  - Review proceeding pending the outcome of a criminal prosecution.
- (iii) <u>Notices</u>. All notices to a student are sent to the student's official University email account. Notices to a student organization are sent to the student organization's highest-ranking officer's official University email account.
- (iv) <u>Remote Participation</u>. The Representative has the discretion to allow the Responding party, Reporting party, and/or Witness to participate in the Student Conduct Review Process remotely via telephone or other electronic means.
  - Requests to participate remotely must be received by the Representative at least three (3) business days prior to the part of Student Conduct Review Process for which the request is being made.
  - (2) The Representative has the discretion to waive the three (3) business day requirement.
- (v) Failure to Attend Scheduled Meeting or Hearing.
  - (1) After receiving notice, if the Responding party, Reporting party, or Witness does not <u>timely</u> request a postponement and does not attend a scheduled meeting or hearing, the meeting or hearing will take place as scheduled.
  - (2) Sanctions may be imposed against the Responding party even if the Responding party does not attend scheduled meetings and hearings. The Responding party will be sent written notice of any imposed Sanctions.
  - (3) The Representative may have a hold placed on the Responding party's registration, transcript, final grades and/or diploma if the Responding party does not attend a scheduled meeting or hearing. This hold is removed once the Responding party attends the re-scheduled meeting or hearing, or the Student Conduct Review Process is concluded.
- (vi) <u>Advisor</u>. <u>The</u> Responding party and the Reporting party may have, at their own expense and initiative, an Advisor present for any part of the Student Conduct Review Process.
  - (1) If the Responding party or Reporting party chooses to have an Advisor, it is his or her responsibility to make appropriate arrangements for the Advisor to attend the Student Conduct Review Process. No part of the Student Conduct Review Process will be delayed due to scheduling conflicts with an Advisor.
  - (2) The Advisor may be present to advise the Responding party or Reporting party but cannot speak for or present the case or otherwise participate directly in the Student Conduct Review Process.
  - (3) If the Responding party or Reporting party chooses an attorney as the Advisor, the Responding party or Reporting party must inform the Representative of such at least three (3) business days prior to the Initial Meeting.
- (vii) <u>University's Right to Attorney</u>. The University may be advised by an attorney at any time prior to, during, or after the Student Conduct Review Process.
- (viii) <u>Burden of Proof</u>. The burden of proof for any portion of the Student Conduct Review Process is not on the Responding party.
- (ix) Student's Eligibility to Attend Classes and University Activities.
  - (1) A student remains eligible to attend classes and University activities pending the outcome of the Student Conduct Review Process and until any appeal is concluded except for in the following situations:
    - (i) The student is currently subject to an Interim Suspension; or
    - (ii) Where there is an appeal and the Sanction(s) imposed

included University or Residence Hall Suspension or Expulsion.

- (2) If the student is subsequently found not responsible, the University will:
  - (i) Correct any record of the change in enrollment status in the student's permanent records and reports in a manner compliant with state and federal laws; and
  - (ii) Refund to the student a pro rata portion of any charges for tuition and out-of-state fees, as appropriate, if the suspension of the student's ability to attend classes lasted for more than ten (10) school days.
- (x) Alleged Violations of University policy FPU-1.005P-Sexual Harassment on Sexual Harassment may require additional procedural rights. In the event of a conflict between this regulation and University policy FPU-1.005P Sexual Harassment, University policy FPU-1.005P Sexual Harassment controls. Additionally, in the event of a conflict between this regulation and University Regulation FPU-1.005 Discrimination and Harassment Complaint and Investigation Procedures, University Regulation FPU-1.005 Discrimination and Harassment Complaint and Investigation Procedures controls.
- (b) Student Conduct Report. Any person or entity may report an alleged violation of the Student Code of Conduct to the Office of Student Development. The University may conduct an investigation regarding the circumstances of the report. An investigation is a neutral fact finding process that determines whether there is sufficient information to move forward with formal student conduct charges or other action as appropriate. An investigation may include interviews with the Reporting Party, the Reporting party, the Responding party, and any Witnesses.
- (c) No Charges Filed. The Representative may choose to not file charges if:
  - (i) It is found that there are not sufficient facts or information to substantiate a violation of the Student Code of Conduct;
  - (ii) The person being accused of violating the Student Code of Conduct is not a student;
  - (iii) The action claimed as misconduct is not a violation of the Student Code of Conduct.
  - (iv) Or in other appropriate circumstances such as Medical Amnesty as reference<u>d</u> in University policy FPU-1.0003P Alcohol Policy.
- (d) **Filing Charges and Timeline.** The Representative will review the relevant information to determine if a student or student organization will be charged with violating the

Student Code of Conduct. Upon receipt of a report, the Representative has six (6) months to file a charge. The Representative may exercise discretion when applying the time provision to account for circumstances that warrant a waiver of the six (6) month time limit.

- (e) Notice of Charges. The Representative will give the Responding party written notice of the charge(s) at least five (5) business days prior to the Initial Meeting, <u>unless student</u> <u>has waived the five (5) business day requirement in writing</u>. The Notice of Charges must include:
  - (i) Specific charges including specific code sections alleged to have been violated;
  - (ii) A description of the behavior that led to the charges; and

(iii) An opportunity for the Responding party to attend an Initial Meeting.

- (f) Notice of Reporting Party's Rights. The Representative will give the Reporting party written notice of <u>theirhis or her</u> rights at least five (5) business days prior to the Initial Meeting. The Reporting party has the same rights as the Responding party, including the right to appeal and the rights described in Section (9)(j)(v) Reporting party's Rights. The Reporting party also has the same responsibilities as the Responding party.
- (g) **Initial Meeting**. The Responding party has the opportunity to attend an Initial Meeting with the Representative. The Responding party may choose an Advisor to accompany the Responding party to the Initial\_Meeting.
  - (i) At the Initial Meeting, the Responding party will be given an overview of the Student Conduct Review Process, information known at the time the charge(s) were filed, and an opportunity for the Responding party to accept or deny responsibility for the charge(s).
  - (ii) At the conclusion of the Initial Meeting, the Representative will select an option for resolution. The options are: 1) Dismissal of Charges; 2) Non-Formal Resolution; or 3) Formal Hearing.
    - (1) Responding Party Accepts Responsibility. If the Responding party accepts responsibility, the Representative may choose to resolve the violation through non-formal resolutions.
    - (2) Responding Party Denies Responsibility. If the Responding party denies responsibility or wishes to have a Formal Hearing, the charge(s) will be resolved by a Formal Hearing.
    - (3) Non-Formal Resolution Requirements. Non-formal resolutions may be used when the student accepts responsibility and possible Sanctions do not include suspension or expulsion. Non-formal resolutions may not be used for violations that the Representative deems to be serious, such as sexual misconduct, violence, or violations involving weapons.
- (h) Non-Formal Resolution. Non-formal resolutions include:
  - (i) <u>Mediation Agreement</u>: Depending on the nature and severity of the charge, the Representative may recommend mediation. The Responding party and the Reporting party must both agree to mediation for mediation to be an option. Mediation is confidential.
    - (1) In mediation, the Responding party and the Reporting party voluntarily meet with an impartial mediator to communicate their concerns and needs to each other and to reach their own agreement on the resolution of the case ("Mediation Agreement"). The Responding party and Reporting party are responsible for honoring their Mediation Agreement or renegotiating it, if necessary.
    - (2) Breach of a Mediation Agreement may result in a follow up mediation session, or the Representative may refer the matter back through the Student Code Review Process.
    - (3) In the event that If the Responding party and Reporting party do not agree to mediate or mediate but do not reach a full and final resolution, the matter will be referred back through the Student Conduct Review Process for an Administrative Agreement or a Formal Hearing.
  - (ii) <u>Administrative Agreement</u>: An Administrative Agreement is negotiated by the Representative and the Responding party. The Administrative Agreement is

between the Responding party and the Office of Student Development.

- (1) The Administrative Agreement may include punitive Sanctions (disciplinary warning or disciplinary probation) as well as educational Sanctions (papers, seminars, community service, etc.).
- (2) Breach of an Administrative Agreement may result in a new Administrative Agreement, or Representative may refer the matter to be resolved by a Formal Hearing or Mediation.
- (iii) Deferred Determination: Deferred Determination is when a Student is responsible for a violation but when the determination finding is delayedheld so the Responding PartyStudent can complete certain requirements in an allotted timeframe. The Representative determines the requirements and timeframe in which the requirements must be met. In order to receive Deferred Determination, the Student must begin by accepting responsibility. At the completion of all requirements, the Responsible Party Student will be foundadjudicated "not responsible." Deferred Determination This may only be used for specific non-violent first timefirst-time offenses.
- (i) **Failure to Resolve Through Non-Formal Resolution.** If the charge is not resolved by a non-formal resolution, the matter will be resolved through a Formal Hearing.
- (j) **Formal Hearing:** The Formal Hearing is not a criminal or judicial proceeding and is designed to address student or student organization behavior; therefore, alleged violations of the Student Code of Conduct will be addressed independently of any penalty imposed by the courts for a criminal offense. All Formal Hearings are recorded and confidential.
  - (i) <u>Notice of Formal Hearing</u>. The written Notice of Formal Hearing is sent to the Responding party and the Reporting party at least five (5) business days prior to the Formal Hearing. The notice mustinclude:
    - (1) The date, time, and location of the Formal Hearing;
    - (2) The names of witnesses to be called and information to be used in the Responding party's matter;
    - (3) Whether the Hearing Body received any additional information after the Initial Meeting that will be used in the Formal Hearing, and, if so, will indicate when and where the additional information may be viewed; and(4) The names of the members of the Hearing Body.
  - (ii) <u>Responding Party's Right to Hearing Panel and Waiver</u>. The Responding party has the right to a Formal Hearing conducted by a Hearing Panel. If the Responding party chooses to waive this right, a Hearing Officer conducts the Formal Hearing. The Responding party may waive <u>their his or her</u> right to a Hearing Panel if:
    - The Responding party requests such a waiver in writing on forms provided by the University that include an explanation of the effect of the waiver; and
    - (2) The Vice Provost of Enrollment Vice Provost of Student Affairs or designee approves the Responding party's request.
  - (iii) <u>Responding Party's and Reporting Party's Right to Inspect Information</u>. The Responding party and the Reporting party each have the right to inspect all of the information, including witnesses, that will be presented against the Responding party at least three (3) business days before the Formal Hearing.
  - (iv) University's Right to Inspect Information. The University also has the right to

review any information, including witnesses, the Responding party and <u>Reporting partyComplaint</u> intend to use at least three (3) business days before the Formal Hearing.

- (v) <u>Reporting Party's Rights</u>. Reporting Party has the right:
  - (1) To have unrelated past behavior excluded from the hearing.
  - (2) To participate in and be present throughout the entire Formal Hearing or any portions thereof. If the Reporting party does not want to be present in the same room as the Responding party-Student, the Hearing Body will make alternative arrangements, if possible.
  - (3) To testify in limited privacy. In lieu of testifying in person or via telephone, the Reporting party may submit a written or recorded statement. The determination of whether the testimony will be given in limited privacy is made at the discretion of the <u>Vice Provost of</u> <u>EnrollmentVice Provost of Student Affairs</u> or designee.
  - (4) To submit a "student impact statement" and offer to the Hearing Body a suggestion of what the Reporting party believes to be an appropriate Sanction for the Responding party. This information may be used only to determine Sanctions.
  - (5) To be excluded from direct examination in cases where sexual misconduct or abuse is alleged. The Responding party will not be permitted to directly question the Reporting party where the alleged violations are sexual misconduct or abuse. In such cases, the Responding party and the Reporting party must submit questions to the Hearing Body; however, the Hearing Body is not required to ask all of the questions submitted.
- (vi) <u>Hearing Body</u>. The Hearing Body reviews all information presented during the Formal Hearing and determines whether the Responding party is responsible. The Representative that conducts the Initial Meeting cannot serve as a Hearing Body.
  - (1) Formal Hearing Conducted by Hearing Panel. The Representative facilitates a Formal Hearing conducted by a panel. The Representative does not participate in deliberations. <u>The Representative selects a member</u> of the Hearing Panel to chair the hearing and report the recommended <u>finding(s) and sanctions, if any.</u> The Hearing Panel must consist of at least 50% students. The Provost or designee appoints faculty, staff, and student representatives to the Hearing Panel.
  - (2) Formal Hearing Conducted by Hearing Officer. The Hearing Officer conducts the hearing and determines the findings and Sanctions.
  - (3) Hearing Body for Charges Involving Sexual Misconduct. The Hearing Body is comprised of staff and/or faculty for charges involving sexual misconduct. However, upon request by the Responding party, and provided there is no objection from the Reporting party, Representative may approve that the Hearing Body will be a Hearing Panel with at least one-half of the members being students.
  - (4) Hearing Body Member Unable to Serve. If a Hearing Body member is unable to serve due to an emergency or unforeseeable occurrence, the Provost may appoint a new Hearing Body member prior to the scheduled hearing.
  - (5) Challenging a Hearing Body Member's Impartiality. The Responding

party and/or Reporting party has the right to challenge any Hearing Body member's impartiality at least three (3) business days prior to the scheduled hearing. The Responding party may challenge the substitution of a substituted Hearing Body member at the time of the Formal Hearing. The challenge must be in writing, and must show actual bias (such as a conflict of interest, animosity, pressure, or influence) that would preclude a fair and impartial hearing. The Vice Provost of EnrollmentVice Provost of Student Affairs or designee determines whether to grant such a challenge and such decision is final.

- (vii) <u>Witnesses and Information</u>. The Responding party and/or Reporting party may present or arrange for witnesses to voluntarily present relevant information during the Formal Hearing. Character witnesses cannot participate in the Formal Hearing. The Hearing Body may accept pertinent records, reports, exhibits, and written statements as information for consideration. <u>Questions for the parties are requested in advance to be</u> <u>providing to the Hearing Body prior to the start of the Formal Hearing for</u> <u>review, this does not take away from additional opportunities to ask questions</u> <u>during the Formal Hearing.</u>
  - (1) The Hearing Body facilitates the questioning of witnesses.
  - (2) The Responding party and/or Reporting party may submit a request in writing to the Representative to provide relevant information during the Formal Hearing in a manner that avoids direct contact with the Responding party and/or Reporting party.
  - (3) The Representative has the discretion to approve or deny the request.
- (viii) Questions for Parties and Witnesses. Both parties are required to submit questions they would like the Hearing Body to ask of the other party or witnesses in writing and at least three (3) business days prior to the Formal Hearing. The Hearing Body will then review the questions to ensure they are relevant and appropriate. Both parties also have the opportunity to submit additional questions to the Hearing Body during the Formal Hearing.
- (viii)(ix) Determination of Responsibility. The determination of "responsible" or "not responsible" will be based upon a preponderance of the information. The determination must be based solely upon the information presented at the Formal Hearing.

### (k) Conduct of Formal Hearings.

- (1) Reading of charge(s) by HearingBody.
- (2) Responding party's response of "responsible" or "not responsible."
- (3) Hearing Body presents information regarding the charges.
- (4) Responding party's opening statement and presentation of information.
- (5) Reporting party's opening statement and presentation of information.
- (6) Hearing Body's questioning of the Responding party, <u>Reporting Party and/or</u> <u>witnesses</u>.
- (7) Hearing Body's <u>asking of questions that were submitted by ing-the parties in</u> <u>advance of the Formal Hearingto the Hearing Body.</u> of Reporting party, witnesses, and/or Reporting Party. (This may include questions submitted to the Hearing-Body for charges of sexual misconduct and abuse. See Section (j)(v)(5).
- (8) Hearing Body's final questions of the Responding party.
- (9) Parties may submit additional questions, if any, to the Hearing Body for

consideration.

- (8)(10) Hearing Body's asking of additional question, if any.
- (9)(11) Responding party's closing remarks.
- (10)(12) Reporting party's closing remarks.
- (11)(13) Hearing is brought to a close.
- (1) **Deliberations**. Deliberations by the Hearing Body are not part of the hearing and are confidential. Deliberations occur after the close of the hearing and are not recorded.
- (m) Findings, Recommendation, and Determination.
  - (ix) <u>Announcement of Proposed Findings and Sanctions.</u> Following deliberations, the Hearing Officer or the Representative will announce to the Responding party the proposed findings and any Sanctions. The announcement of the proposed findings and any Sanctions are recorded as part of the official hearing record.
    - (i) <u>Presentment of Proposed Findings and Sanctions to Vice Provos</u>t. The Hearing Body's proposed findings and Sanctions must be presented to the <u>Vice Provost of EnrollmentVice Provost of Student Affairs</u> or designee within a reasonable period of time after the conclusion of the Formal Hearing.
    - (ii) <u>Vice Provost's Determination</u>. The <u>Vice Provost of EnrollmentVice Provost</u> of <u>Student Affairs</u> or designee may accept the proposed findings of responsible or not responsible or remand the matter for a rehearing.
      - If the Vice Provost of EnrollmentVice Provost of Student Affairs or designee accepts the proposed finding of responsible, then theyhe/she may approve, mitigate, or increase the Sanctions proposed by the Hearing Body.
      - (2) If the Vice Provost of EnrollmentVice Provost of Student Affairs or designee alters the proposed Sanctions or remands the matter for a rehearing, the Responding party must be given a concise and explicit written statement that explains the basis for the decision to alter the Sanctions or remand the matter for a rehearing.
- (n) Notice of Determination and Sanctions. Following the Student Conduct Review Process, the Vice Provost of EnrollmentVice Provost of Student Affairs or designee notifies the Representative of the determination. The Representative notifies the Responding party and the Reporting party in writing of the determination and, to the extent permitted by law, of any Sanctions imposed.
- (o) **Official Record**. The recording of the Formal Hearing will serve as the official record of the Formal Hearing and is the property of the University. Retention of the record is subject to the General Records Schedule GS5 for Universities and Community Colleges.
- (p) Appeal Process.
  - (i) <u>Responsibility</u>. The <u>President Provost</u> is responsible for overseeing the appeal process. The <u>President Provost</u> may designate the Provost to oversee the appeal processa University employee as an appellate officer to review the appeal and render a determination.
  - (ii) <u>Appeal deadline</u>. The Responsible or the Reporting party may appeal a determination reached or an imposed Sanction to the <u>PresidentRepresentative</u>. Such appeals must be in writing and must be received by the <u>President Representative</u> no later than five (5) business

days after the date the determination was sent.

(iii) Persons who may not hear or decide an appeal. No person may hear or decide an appeal if he or she conducted or participated in the Student Conduct Review Process being reviewed on appeal.

(ix) When submitting an appeal, the student must state the reason(s) for appeal, the supporting facts, and the recommended solution. This is not a re-hearing of the conduct case. An appeal cannot be filed simply because the student is dissatisfied with the decision. Failure to describe the nature of the information in full detail in the appeal letter will result in the denial of an appeal.

(iii)(iv) Basis of Appeal. When submitting an appeal, the student must state the reason(s) for appeal, the supporting facts, and the recommended solution. This is not a re-hearing of the conduct case. An appeal cannot be filed simply because the student is dissatisfied with the decision. Failure to describe the nature of the information in full detail in the appeal letter will result in the denial of an appeal.

- (1) Formal Hearing was not Properly Conducted. The purpose of the appeal will be to determine whether the Formal Hearing was conducted fairly in light of the charges and information presented, and in conformity with prescribed procedures. This includes evident bias in the decision of the Hearing Body. However, deviations from designated procedures will not be a basis for sustaining an appeal unless significant prejudice results.
- (2) No Substantial Information to Support Recommendation. The purpose of the appeal will be to determine whether the Hearing Body'srecommendation regarding the Responsible was based on substantial information. A recommendation is based on substantial informationwhen the Hearing Body adequately considered all relevant factspresented during the Formal Hearing.
- (3)(2) Sanctions Imposed were Improper. The purpose of the appeal will be to determine whether the Sanction(s) imposed were inconsistent or overly severe for the charge(s) for which Responsible was found responsible.

(4)(3) New Information not known at time of Formal Hearing. The purpose of the appeal will be to consider new information, sufficient to alter a recommendation that was not known to the Responsible at the time of the Formal Hearing.

- (iv)(v) Information to be Reviewed on Appeal. An appeal is limited to a review of the verbatim record of the Formal Hearing and supporting documents unless the basis of appeal is to consider new information.
- (v)(vi) <u>President's Appeals Decision</u>. The <u>President Provost or appellate officer-designee</u> determines whether to uphold the determination and sends written notification of such decision to the Representative within five (5) business days of receiving the appeal.
  - (1) If the result of the appeal is to uphold the determination, the matter is final and binding on all involved.
  - (2) If the earlier determination is not upheld on appeal, a new Formal Hearing will occur.
- (vi)(vii) Notice of Appeal Outcome. The Representative provides written notice of the outcome of the appeal within three (3) business days of receiving the Provost's decision from the Provost or appellate officer.

(vii)(viii) Final Decisions Resulting in University Suspension or Expulsion. Final appellate decisions that result in a University Suspension or Expulsion of the Responsible must include notice of the right to appeal to an external judicial forum.

### (10) Disciplinary and Academic Records. The Vice Provost of Enrollment Vice

<u>Provost of Student Affairs</u> determines whether disciplinary Sanctions are noted on the Responsible student's permanent academic record and disciplinary record. Upon graduation, the Responsible student may submit a request to the Office of Student Development to have his/her disciplinary record expunged of disciplinary actions other than Residence Hall Expulsion, University Suspension, University Expulsion, or revocation or withholding of a degree.

(11) Student's Education Record. The records of the Student Conduct Review Process and of the Sanctions imposed, if any, are considered "education records" of both the Responsible and the Reporting party (if Reporting party is a student) pursuant to The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99).

### (12) Interpretation and Revision.

- (a) Any questions of interpretation or application of the Student Code of Conduct are referred to the Provost or designee for final determination.
- (b) The Student Code of Conduct is reviewed periodically by a committee that includes student representation under the direction of the Provost or designee.

Authority: FBOG regulations 1.001(4)(a)(10), 6.010, 6.0105 History: New 1.14.14, Amended 7.29.14, Amended 12.6.2017