UNIVERSITY OF GEORGIA

Franklin College of Arts & Sciences
Department of Computer Science

Department of Computer Science
415 Boyd Graduate Studies Research Center
200 D.W. Brooks Drive
University of Georgia
Athens, Georgia 30602-7404
TEL 706-542-2911 | FAX 706-542-2966
www.cs.uga.edu

February 05, 2019

Dr. Thomas L. Mote/Associate Dean
Franklin College of Art and Sciences
University of Georgia
CAMPUS

Dear Dr. Mote,

Enclosed please find a proposal requesting to establish a new Master degree program in Cybersecurity and Privacy which will be administered by the Department of Computer Science. Our Faculty has approved this request and I submit this proposal for your review and consideration.

Thank you for your attention. Please let me know if you have any question.

Sincerely,

Dr. Thiab Taha
Professor & Department Head

USG ACADEMIC PROGRAM PROPOSAL
(Effective 1/29/2019)

Institution: University of Georgia

Date Completed at the Institution: 12/01/2018

Name of Proposed Program/Inscription: Cybersecurity and Privacy (M.S.)

Degree: Master of Science (M.S.)

Major: Cybersecurity and Privacy

CIP Code: 11100301

School/Division/College: Franklin College of Arts and Sciences

Department: Computer Science

Anticipated Implementation Date: Fall 2019

Requesting Differential Tuition Rate _____ Yes[1] _X____ No

Delivery Mode (Check all that apply):

On-campus, face-to-face only	X
Off-campus location, face-to-face only (specify the location):	
Online Only *If this program will be offered online, within two weeks after Board approval, the USG institution must upload requisite information into Georgia ONmyLINE using the institutional PDA account.* *See Appendix II for the specific questions involved for Georgia ONmyLINE.*	
Combination of on-campus and online (specify whether 50% or more is offered online for SACSCOC)	
Combination of off-campus and online (specify whether 50% or more is offered online for SACSCOC)	
Hybrid, combination delivery, but less than 50% of the total program is online based on SACSCOC	
Contractual Location (specify the location and timeframe/start and end dates):	

[1] All documents and forms requesting a differential tuition rate must be submitted to the Office of Fiscal Affairs prior to Academic Affairs Review of the Degree Proposal.

USG ACADEMIC PROGRAM PROPOSAL
(Effective 1/29/2019)

SIGNATURE PAGE

Approval by the President (“*I certify that the institution has adequate funds to cover the costs of the new program. Furthermore, the new program will not reduce the effectiveness or quality of existing programs at the institution”***):**

_____

Approval by Vice President for Academic Affairs or Provost:

_____

Approval by Vice President for Finance/Business (or designee) and contact information:

_____

Approval by Vice President for Facilities (if different from VP- Finance or designee) and contact information:

_____

Acknowledged by Vice President for Enrollment Management (or designee) for Recruitment:

_____

1) **Forecast:** If this program was not listed on your one of the past two-year academic forecasts provide an explanation concerning why it was not forecasted, but is submitted at this time.

   This program was not included in the University of Georgia's Academic Forecast because it had not been submitted through the faculty governance process.

2) **Academic Framework:** Within the context of strategic planning of all resources and divisions within short-term and long-term perspectives, provide a narrative that explains campus leadership review and attention to newly institutionally approved programs within the last four years, low-producing programs, and post-approval enrollment analyses prior to approving the proposed program for submission to the system office.

   The Office of Instruction reviews newly institutionally approved programs, low-producing programs, and post-approval enrollment to monitor and assess future viability of all programs.

3) **Rationale:** Provide the rationale for proposing the new academic program. *(In other words, does the state need the program; should your institution offer the program; and can your institution develop and implement the program.)*

   Security and privacy vulnerabilities affect every technology we use, from wearable and portable devices such as smartwatches and smartphones to national critical infrastructure, such as the power grid and air traffic control systems. The proposed program in Cybersecurity and Privacy (M.S.) is committed to helping meet the nation's cybersecurity research and educational needs, and to working with colleagues in academia, industry, and government to further satisfy this critical need.

   On October 31, 2017, "the National Science Foundation (NSF) announced $74.5 million in funding for foundational research and education that aims to address the growing cybersecurity challenge. This investment, through the NSF Secure and Trustworthy Cyberspace (SaTC) program, is critical to achieving a safe, secure, resilient and trustworthy cyberspace, including associated critical infrastructure such as the energy grid and transportation systems". "The Secure and Trustworthy Cyberspace program is poised to strengthen our nation's competitive edge through safer and more secure cyber systems, and to develop the knowledge base that will lead to a well-trained cyber workforce," said Jim Kurose, NSF assistant director for Computer and Information Science and Engineering (CISE)". Safeguarding cyberspace requires a wealth of expertise from many disciplines, and we are especially excited about the interdisciplinary, highly collaborative nature of this portfolio across a wide range of research areas"
   (https://www.nsf.gov/news/news_summ.jsp?cntn_id=243566&WT.mc_id=USNSF_51&WT.mc_ev=click).

   The need for expertise in the broad field of cybersecurity has grown tremendously in recent years. The Forbes Magazine reports "Some estimate that between $9 and $21 trillion of global economic value creation could be at risk if companies and governments are unable to successfully combat cyber threats" (http://www.forbes.com/sites/frontline/2015/07/13/why-cybersecurity-leadership-must-start-at-the-top/).

The Computer Science Department at UGA has 5 faculty whose research areas are in cybersecurity and privacy and is authorized to hire a new tenure-track faculty in cybersecurity to start in August 2019. The Computer Science Department at UGA has established an Institute for Cybersecurity and Privacy (ICSP). The National Security Agency and Department of Homeland Security named the UGA Institute for Cybersecurity and Privacy a National Center of Academic Excellence in Cybersecurity Research.
In addition, the Computer Science Department has established a Graduate Certificate in Cybersecurity. All of the above makes the Computer Science Department very well qualified to offer an M.S. in Cybersecurity and Privacy. Currently, Georgia Tech offers a Cybersecurity (M.S.) that will be effective Spring 2019 and will be offered online. https://www.bizjournals.com/atlanta/news/2018/08/09/georgia-tech-introduces-online-cyber-security.html . They have also offered a face-to-face version since 2002 according to the article above. http://www.iisp.gatech.edu/masters-degree. But, the state does not have an M.S. program in Cybersecurity and Privacy.
The proposed M.S. program will have a big impact by having graduates who have the expertise and the skills in cybersecurity and privacy.

4) **Mission Fit and Disciplinary Trends:** Description of the program's fit with the institutional mission and nationally accepted trends in the discipline (explain in narrative form). If the program is outside the scope of the institutional mission and sector, provide the compelling rationale for submission.

The Master of Science in Cybersecurity and Privacy will fit the mission of the University of Georgia as it provides the necessary expertise of graduates in the high demand area of cybersecurity and privacy. One of the missions of UGA is its commitment to excellence in public service, economic development, and technical assistance activities designed to address the strategic needs of the state of Georgia. This program will support this mission of UGA by providing a well-trained workforce in cybersecurity and privacy.

This program will also support the mission of the newly created UGA Institute for Cybersecurity and Privacy, which is housed in the Department of Computer Science, part of the Franklin College of Arts and Sciences that will advance research with implications for economic vitality and national security. It also enhances the mission of the Georgia Informatics Institute for Research and Education (GII) that was established in fall 2016 at UGA (http://gii.uga.edu).

This major also fits in with the trends in the nation. In order to meet the immediate demand for cybersecurity and privacy, many universities across the U.S. have recently introduced cybersecurity programs (M.S.) at the graduate level. More information on the top 25 master's degrees in cybersecurity can be found at the website: https://www.cyberdegrees.org/listings/top-online-masters-in-cyber-security-programs/. A few universities have cybersecurity and privacy (M. S.) degrees at the graduate level such as the New Jersey Institute of Technology (http://catalog.njit.edu/graduate/computing-sciences/computer-science/cyber-security-privacy-ms/). We expect the number of new graduate cybersecurity and privacy programs to

increase substantially in the near future because of the high demand in the expertise in this area.

5) **Description and Objectives:** Program description and objectives (explain in narrative form).

The Computer Science Department is proposing a new master's program in Cybersecurity and Privacy. This program would be useful for all students, particularly in the fields of computer science, mathematics, and engineering. The program aims to develop expertise in various aspects of computer security and privacy such as networking, operating systems, network and systems security, and data and communications privacy. The need for expertise in the broad field of cybersecurity has grown tremendously in recent years. The Forbes Magazine reports that "some estimate that between $9 and $21 trillion of global economic value creation could be at risk if companies and governments are unable to successfully combat cyber threats" (http://www.forbes.com/sites/frontline/2015/07/13/why-cybersecurity-leadership-must-start-at-the-top/). In addition, the U.S. government has initiatives to expand cybersecurity education and the professional workforce, such as part of the Comprehensive National Security Initiative (https://www.coursehero.com/file/11441186/cybersecurity/), the executive branch /will "begin a campaign to promote cybersecurity awareness and digital literacy from our boardrooms to our classrooms and begin to build the digital workforce of the 21st century." The proposed program is intended to help provide a well-trained workforce to meet the increasing demand for cybersecurity and privacy experts in the modern economy.

6) **Need:** Description of the justification of need for the program. (Explain in narrative form why the program is required to expand academic offerings at the institution, the data to provide graduates for the workforce, and/or the data in response to specific agency and/or corporation requests in the local or regional area, and/or needs of regional employers.) (A list of resources, not exhaustive, is available on the public web link along with the proposal form at: http://www.usg.edu/academic_programs/new_programs)

Students majoring in Computer Science, as well as related mathematical and engineering disciplines, would benefit from the proposed program as new courses will be designed and existing courses will be restructured to include material that will support the program. This program will attract new graduate students whose main interest are in cybersecurity and privacy to the institution. This is very consistent with the "USG Cybersecurity Initiative" that will focus all of the cyber education and training resources across USG in order to meet the needs of the U.S. Army Cyber Command, the National Security Agency, the financial transaction processing industry, and the health informatics/electronic medical records industry. The initiative aims to create a cybersecurity workforce of sufficient scale, quality, and capability to meet the needs of Georgia companies, military installations, government agencies and other institutions." For more information please refer to: http://gov.georgia.gov/press-releases/2014-12-10/deal-state-acts-high-demand-career-initiative-report. Also note the report from Information Systems Audit and Control Association, Inc. (ISACA): "Cybersecurity skills are in high demand, as threats continue to plague enterprises around the world. An overwhelming majority of students surveyed by ISACA recognizes this and plan to work in a position that requires cybersecurity knowledge. However, one in five report that their universities do not offer cybersecurity courses and less

than half feel they will have the adequate skills and knowledge when they graduate*"* (http://www.isaca.org/cyber/pages/cybersecurity-fundamentals-certificate/aspx).This proposed M.S. program is in line with the UGA strategic plan (https://provost.uga.edu/_resources/documents/UGA_Strategic_Plan_2020_-_October_30_2012.pdf) on pages 11, 14, and 19.

7) **Demand:** Please describe the demand for the proposed program. Include in this description the supporting data from 1) existing and potential students and 2) requests from regional industries. How does the program of study meet student needs and employer requirements in terms of career readiness and employability, requirements to enter the profession, post-graduate study, and disciplinary rigor at the level required for professional success and advanced educational pursuits? *(In other words, how does the program of study prepare students for the next step?)*

In the Department of Computer Science, which has over 1,100 undergraduate students, current courses related to the proposed M.S. program have experienced increasing enrollments. Nationally, a large number of universities have started programs in cybersecurity. At a national level, cybersecurity programs are experiencing an undiminished and sustained upward trend. A formal survey of undergraduate Computer Science majors was conducted in upper-level computer science courses to determine interest in a master's program. The students were asked "If an M.S. degree in Cybersecurity and Privacy was available in the Computer Science Department at UGA next year, please indicate your level of interest in pursuing such degree: 0: No Interest, 1: Not sure, 2: Would consider, 3. Probably Yes, 4: Definitely Yes. Please circle only one choice."
Of the 266 students responding, 175 indicated interest in pursuing a master's degree in Cybersecurity and Privacy. Therefore, we expect a strong demand for such a degree.

8) **Duplication:** Description of how the program does not present duplication of existing academic offerings in the geographic area, within the system as a whole, and within the proposing institution regardless of academic unit. If similar programs exist, indicate why these existing programs are not sufficient to address need and demand in the state/institution's service region and how the proposed program is demonstrably different or complementary to other USG degrees and majors.

There is not currently a major in Cybersecurity and Privacy at the University of Georgia. In Georgia, these are the programs that are currently offered at the different public schools within the University System of Georgia:

Institution Name	Title of Existing Program	Link to Existing Program Information	Notes
Georgia Southern University	Graduate Certificate in Cyber Crime Cyber Defense Certificate	https://cogs.georgiasouthern.edu/admission/certificate-in-cybercrime-online/	
Augusta University	Information Security Management (M.S.)	http://catalog.augusta.edu/preview_program.php?catoid=28&poid=4230	
Clark Atlanta University	Computer Science (M.S.) with a concentration in Computer Networks and Security	http://www.cau.edu/department-of-computer-and-information-science/computer-and-information-science-graduate-programs.html	Fifteen (15) hours of concentration electives, including a graduate thesis (if applicable). Concentration electives are available in Computer Network and Security, Computer Architecture, and Information Systems.
Columbus State University	Applied Computer Science (M.S.) with a concentration in Cyber Defense	https://cs.columbusstate.edu/cae-ia/	
Georgia Institute of Technology	Cybersecurity (M.S.)	https://pe.gatech.edu/degrees/cybersecurity	Online Master of Science in Cybersecurity
Kennesaw State University	Master of Science in Information Technology	http://ccse.kennesaw.edu/it/programs/msit.php	

Middle Georgia State University	Information Technology (M.S.I.T.)	https://mga.edu/information-technology/programs.php	
University of North Georgia	Graduate Certificate in Cybersecurity	https://ung.edu/mike-cottrell-college-of-business/academic-programs/masters/cybersecurity-graduate-certificate.php	
University of West Georgia	Master of Business Administration, Business Intelligence and Cyber Security	https://www.westga.edu/academics/program_page.php?program_id=295	

Our proposed degree program concentrates on both cybersecurity and privacy issues. Our program contains both conventional computer security topics such as authentication and authorizations, and emerging topics such as data privacy protection and network intrusion preventions. None of the above related M.S. degree programs offered in the state of Georgia explicitly are addressing the emerging privacy protection aspect in their degree programs. We consider privacy protection an essential component of the degree, and our program aims to train students with both hands-on skills on cybersecurity attacks and defenses, as well as privacy awareness and common defense techniques, such as differential privacies. The emphasis on both cybersecurity and privacy aspects makes our program unique among the programs offered in the state of Georgia.

Two-step option directions: Institutions that prefer to submit a new academic program proposal in two stages are required to answer questions #1 through #8 for system office preliminary review. This half-step will be shared with all system institutions and an affiliated system academic committee similar to practices that occur with a full, one-step proposal.

9.) **Collaboration:** Is the program in collaboration with another USG Institution, TCSG institution, private college or university, or other entity?
Yes ___ or No _X___ (place an X beside one)

If yes, list the institution below and include a letter of support from the collaborating institution's leadership (i.e., President or Provost and Vice President for Academic Affairs) for the proposed academic program in Appendix I.

N/A

10.) **Admission Criteria:** List the admission criteria for the academic program, including standardized test and grade point average requirements for admission into the program. Also, at what point (e.g., credit hours completed) are students admitted to the program.

Admissions requirements will align with the current admissions standards set by the Graduate School and the Franklin College of Arts and Sciences. Completed applications will include the UGA graduate application, Bachelor's degree from a regionally accredited institution in Computer Science or a related discipline, three letters of recommendation, statement of purpose, a minimum 3.0 GPA, GRE test score. Applicants will need to meet all Graduate School requirements.

Students with insufficient background in Computer Science must first take undergraduate Computer Science courses to remedy any deficiencies in addition to their graduate program requirements. A sufficient background in Computer Science must include at least the following courses (or equivalents):

- CSCI 1301-1301L, Introduction to Computing and Programming (alternative option CSCI 7010, Computer Programming)
- CSCI 1302, Software Development
- CSCI 1730, Systems Programming
- CSCI 2610, Discrete Mathematics for Computer Science
- CSCI 2670, Introduction to Theory of Computing
- CSCI 2720, Data Structures
- MATH 2200, Analytic Geometry and Calculus
- MATH 2250, Calculus I for Science and Engineering

11.) **Curriculum**

a. Specify whether the proposed program requires full-time study only, part-time study only, or can be completed either full time or part time.

Full-Time only

b. If the proposed program will be offered online, describe measures taken by the academic unit to sufficiently deliver the program via distance education technologies and provide instructional and learning supports for both faculty and students in a virtual environment. Will the program be offered in an asynchronous or synchronous format?

The program will not be offered online.

c. List the entire course of study required to complete the academic program. Include the course prefixes, course numbers, course titles, and credit hour requirement for each course. Indicate the word "new" beside new courses. Include a program of study.

Required Courses (22-23 hours):
CSCI 6250, Cyber Security (4 hours)
CSCI 6260, Data Security and Privacy (4 hours)
CSCI 6720, Computer Systems Architecture (4 hours)
CSCI 6730, Operating Systems (4 hours)
CSCI 6760, Computer Networks (4 hours)
CSCI 7200, Master's Project (2-3 hours)

Elective Courses (7-8 hours):
Choose two courses from:
CSCI 8240, Software Security and Cyber Forensics (4 hours)
CSCI 8250, Advanced Cyber Security (4 hours)
CSCI 8260, Computer Network Attacks and Defenses (4 hours)
CSCI 8960, Privacy-Preserving Data Analysis (4 hours)
MATH 6450, Cryptology and Computational Number Theory (3 hours)
CSCI 6270, Introduction to Computer Forensics (4 hours)

Cybersecurity spans all aspects of computer systems and networks, from hardware to software, to systems' architecture and design. To complete the program in Cybersecurity and Privacy (M.S.), students must complete 22-23 hours of mainstream cybersecurity courses in Computer Science, including CSCI 7200, Master's Project, with at least 12 hours of graduate coursework. Students must additionally complete 7-8 hours of elective coursework related to Cybersecurity and Privacy. In addition, the student is required to pass a written exam administered by a Computer Science Graduate faculty whose research area is in the mainstream courses of cybersecurity and privacy.

The proposed program requires students to first acquire the foundations of computer and network security and privacy, which will be achieved via five required core courses. As security threats focus on computer architecture, computer operating systems and computer networks, the first three classes are foundational computer science. The mainstream cybersecurity classes for beginning graduate students are:

- CSCI 6250, Cyber Security

- CSCI 6260, Data Security and Privacy
- CSCI 6720, Computer Systems Architecture
- CSCI 6730, Operating Systems
- CSCI 6760, Computer Networks

While the Operating Systems and Computer Networks courses do not embed "security" in the course title, they do include important security concepts. For instance, the Operating System course teaches concepts such as process isolation and access control. The Computer Networks course includes material related to the confidentiality, integrity, and authenticity of network communications. In addition, it teaches basic concepts related to Web security.

d. State the total number of credit hours required to complete the program, but do not include orientation, freshman year experience, physical education, or health and wellness courses that are institutional requirements as defined in the Academic and Student Affairs Handbook, Section 2.3.1 and the Board Policy Manual, 3.8.1.

This program requires 30 credit hours.

e. Within the appendix, append the course catalog descriptions for new courses and their prerequisite courses. Include the course prefixes, course numbers, course titles, and credit hour requirements.

See Appendix I

f. If this is an undergraduate program, how does or would the department/institution use eCore, eMajor, or dual enrollment?

N/A

g. If this is a doctoral program, provide the names of four external reviewers of aspirational or comparative peer programs complete with name, title, institution, e-mail address, telephone number, and full mailing address. External reviewers must hold the rank of associate professor or higher in addition to other administrative titles.

N/A

12) PROGRAM OF STUDY-UNDERGRADUATE ONLY

Courses *(list acronym, number, and title)*	**Hours**
Area A 1: Communication Skills *(indicate the semester hour range)*	
Area A 2: Quantitative Skills *(indicate the semester hour range)*	
Given the mathematics pathways that are available to students, what specific mathematics course is recommended of those listed below MATH 1001 – Quantitative Reasoning or MATH 1101 – Mathematical Modeling MATH 1111 – College Algebra (for non-STEM degrees) MATH 1113 – Pre-calculus (for STEM degrees) Please note the Mathematics recommendations for programs of study in terms of USG math pathways at the following url : (http://www.completegeorgia.org/math-recommendations). Indicate the institutional mathematics requirement in this space:	
Area B: Institutional Options *(indicate the semester hour range)*	
Area C: Humanities, Fine Arts, and Ethics *(indicate the semester hour range)*	
Area D: Natural Sciences, Mathematics, and Technology *(indicate the semester hour range)*	
Area E: Social Sciences *(indicate the semester hour range)*	
Area F: *(indicate the semester hour range)*	
Major Area Courses – Common Curriculum *(indicate the semester hour range; and, annotate whether courses involve an internship or field experience)*	
Concentration *(indicate the semester hour range)*	
Electives *(indicate the semester hour range)*	
Total Semester Credit Hours	

12a) **PROGRAM OF STUDY- GRADUATE ONLY (provide the program of study).**

Courses *(list acronym, number, and title)*	**Semester**	**Hours**
Required Courses		
CSCI 6250, Cyber Security	Spring	4
CSCI 6260, Data Security and Privacy	Fall	4
CSCI 6720, Computer Systems Architecture	Fall	4
CSCI 6730, Operating Systems	Spring	4
CSCI 6760, Computer Networks	Fall	4
CSCI 7200, Master's Project	Summer	2-3
Elective Courses (Choose two courses)		
CSCI 8240, Software Security and Cyber Forensics	Spring	4
CSCI 8250, Advanced Cyber Security	Spring	4
CSCI 8260, Computer Network Attacks and Defenses	Spring	4
CSCI 8960, Privacy-Preserving Data Analysis	Spring	4
CSCI 6270 Introduction to Computer Forensics	Spring	4
MATH 6450 Cryptology and Computational Number Theory	Spring	3

14) **Alternative Curricular Pathway:** What alternative curricular pathways exist (for example for students who were not admitted to the major but are still in satisfactory standing at the institutional level)? Please describe them below and describe how these students are advised about the alternative(s).

Those students might apply for the graduate certificate in Cybersecurity and Privacy that the department is currently offering or take the prerequisite courses for this degree and then apply.

15) **Prior Learning Assessment:** Does the program include credit for prior learning assessment? How will credit be assessed and for what specific courses in the curriculum inclusive of prerequisites? If this is not applicable, indicate "NA" in this section.

N/A

16) **Open Educational Resources:** Does the program include open educational resources that have been assessed for quality and permissions, can be connected with related curricular resources, and are mapped to learning outcomes? If this is not applicable, indicate "NA" in this section.

N/A

17) **Waiver to Degree-Credit Hour** (if applicable):

- All bachelor's degree programs require 120-semester credit hours.

- Master's level programs have a maximum of 36-semester hours. Semester credit-hours for the program of study that are above these requirements require a waiver to degree-credit hour request with this proposal.
- State whether semester credit-hours exceed maximum limits for the academic program and provide a rationale.
- This is not applicable for specialist in education and doctoral programs.

This program does not exceed the maximum master's level program limit.

18) **Student Learning Outcomes:** Student Learning outcomes and other associated outcomes of the proposed program (provide a narrative explanation).

a. Students in this program should be able to defend against common cybersecurity and privacy attacks by having knowledge of information security, including secure programming and known practices.

b. Students will be able to use their enhanced and improved hands-on experiences and skills to address various security and privacy issues.
c. Students should be able to make risk assessment to IT design decisions.

19) **Assessment:** Describe institutional programmatic assessments that will be completed to ensure academic quality, viability, and productivity.

For every related course offered, the learning outcome is evaluated based on both student performance in projects and exams as well as feedback collected from students through anonymous surveys.

All graduate students are advised by the Graduate Coordinator of the Computer Science Department. The administrator, in conjunction with the Department Head, will be responsible for coordinating course offerings, maintaining student records, promoting activities, securing additional funding, and consulting with the department's graduate program and curriculum committees regarding courses in the certificate program.
All academic programs are reviewed annually to assess the program outcomes and student learning outcomes. Students completing the Cybersecurity and Privacy (M.S.) are required to take all the major courses that will encompass the student learning outcomes for the program.

In addition, the new major will be assessed as part of the UGA comprehensive program review carried out every seven years.

20) **Accreditation:** Describe disciplinary accreditation requirements associated with the program (if applicable, otherwise indicate NA).

N/A

21) **SACSCOC Institutional Accreditation**: Is program implementation contingent upon SACSCOC action (e.g., substantive change, programmatic level change, etc.)? Please indicate Yes or No. _____No_____

ENROLLMENT SECTION *(Consult with Enrollment Management)*

22) **Recruitment and Marketing Plan**: What is the institution's recruitment and marketing plan? What is the proposed program's start-up timeline

The department will utilize a number of venues for recruitment and marketing its proposed program by including it on the department's website, mailing and emailing a department newsletter to Computer Science Departments nationwide, and attending nationwide recruitment events for graduate students. This proposed program will begin in fall 2019 or as soon as USG approval is secured.

23) **Enrollment Projections:** Provide projected enrollments for the program specifically during the initial years of implementation.

a) Will enrollments be cohort-based? Yes____ or No__X___ (place an X beside one)
b) Explain the rationale used to determine enrollment projections.

The number of undergraduate students in the Computer Science Department at UGA is more than 1,100, the number of students enrolled in the Computer Science (M.S.) program is more than 120, and the number of the students in the Computer Science (Ph.D.) program is more than 70.
Our conservative enrollment projection assumes that in year 1, 5 of the existing M.S. students will shift into the new program and 15 new students will enter the new program. We conservatively estimate new enrollments to increase in year 2 and beyond.

If projections are not met, the Graduate Program Committee in the Computer Science Department, chaired by the Graduate Coordinator, will develop a recruitment strategy to increase enrollment.

	First FY	Second FY	Third FY	Fourth FY
I. ENROLLMENT PROJECTIONS				
Student Majors				
Shifted from other programs	5	5	2	2
New to the institution	15	20	23	23
Total Majors	20	25	25	25

This is based on the survey that we have conducted. Of the 266 students responding, 175 indicated interest in pursuing a master's degree in Cybersecurity and Privacy. And according to the survey, 14 are not sure and 37 are not interested because some of them will be graduating. Therefore, from the survey above, we expect a strong demand for such a degree.

22) Faculty

a) Provide the total number of faculty members that will support this program: _9___

b) Submit your SACSCOC roster for the proposed degree. Annotate in parentheses the person who will have administrative responsibility for the program. Indicate whether any positions listed are projected new hires and currently vacant.

Faculty Name	**Rank**	**Courses Taught (including term, course number & title, credit hours (D, UN, UT, G)**	**Academic Degrees & Coursework (relevant to courses taught, including institution & major; list specific graduate coursework, if needed)**	**Current Workload**	**Other Qualifications & Comments (related to courses taught)**
Suchendra Bhandarkar	Professor	**Fall** CSCI 6720, Computer Systems Architecture, 4.0 (UT/G)	Ph.D. Computer Engineering, Syracuse University M.S. Computer Engineering, Syracuse University B. Tech. Electrical Engineering Indian Institute of Technology, India	5 credit hours/sem.	Ph.D. dissertation: "3-D Object Recognition from Qualitative Surface Descriptions"
Michael Cotterell	Lecturer	**Spring**		12 credit hours/sem.	Ph.D. dissertation:

		CSCI6730, Operating System, 4.0 (UT/G)	Ph.D. Computer Science, University of Georgia B.S. Computer Science, University of Georgia		"Supporting Open Science in Big Data Frameworks and Data Science Education"
Le Guan	Assistant Professor	**Spring CSCI 8965 Internet of Things Security(G)**	Ph.D. Computer Science, Institute of Information Engineering, Chinese academy of Sciences, China B. Eng. University of Science and Technology of China, China	5 credit hours/sem.	Ph.D. dissertation: "Research on the Protection of Cryptographic Keys in Commodity Platforms"
Maria Hybinette	Associate Professor	**Fall** CSCI 4730/6730 Operating Systems, 4.0 (UT/G)	Ph.D. Computer Science, Georgia Institute of Technology M.S., Computer Science, Georgia Institute of Technology B.S. Mathematics and Computer Science, Emory University	5 credit hours/sem.	Ph.D. dissertation: "Interactive Parallel Simulation Environments"

Manijeh Keshtgari	Lecturer	**Fall** CSCI 4760/6760, Computer Networks, 4.0 (UT	Ph.D. Computer Engineering, Sharif University of Technology M.S. Electrical & Computer Engineering, Colorado State University B.S. Computer Engineering, Shiraz University	12 credit hours/sem.	Ph.D. dissertation: 'Survivability of Networks M.S. thesis: "Performance Evaluation of FDDI-II Networks"
Kyu Hyung Lee	Assistant Professor	**Fall** CSCI 4730/6730, Operating Systems, 4.0 (UT/G) **Spring** CSCI 8240, Software Security and Cyber Forensics, 4.0 (UT)	Ph.D. Computer Science, Purdue University M.S. Computer Engineering, Hong-Ik University, South Korea B.S. Computer Engineering, Hong-Ik University, South Korea	5 credit hours/sem.	Ph.D. dissertation: "Selective Logging for Accurate, Space Efficient Forensic Analysis and Reducible Execution Replay" M.S. thesis: "PFC: Transparent Optimization of Existing Prefetching Strategies for Multi-level Storage Systems"
Jaewoo Lee	Assistant Professor	**Fall** CSCI 3360, Data Science I, 4.0 (UT) **Spring** CSCI 8960, Privacy	Ph.D. Computer Science, Purdue University M.S. Computer Science,	5 credit hours/sem.	Ph.D. dissertation: "Achieving Practical Differential Privacy" M.S. thesis: "Efficiently Tracing Clusters over High-

		Preserving Data Analysis, 4.0 (G)	Yonsei University, South Korea		dimensional Data Streams"
Kang Li	Professor	**Spring** CSCI 8250, Advanced Network Security, 4.0 (G) **Spring** CSCI 8260, Computer Network Attacks and Defenses, 4.0(G)	Ph.D. Computer Science and Engineering, Oregon Health and Science University B.S. Computer Science and Engineering, Tsinghua University, China	5 credit hours/sem.	Ph.D. dissertation: "Modeling the Bandwidth Sharing Behavior of Congestion Controlled Flows"
Roberto Perdisci	Associate Professor	**Spring** CSCI 4760/6760, Computer Networks, 4.0 (UT/G)	Ph.D. Computer Engineering, University of Cagliari, Italy M.S. Electronic Engineering, University of Cagliari, Italy	5 credit hours/sem.	Ph.D. thesis: "Statistical Pattern Recognition Techniques for Intrusion Detection in Computer Networks, Challenges and Solutions" M.S. thesis: "Alarm Clustering for Intrusion Detection Systems in Computer Networks"

c) Does the institution require additional faculty to establish and implement the program? Yes or No. _____No__. Please indicate your answer in the space provided.

Describe the institutional plan for recruiting additional faculty members in terms of required qualifications, financial preparations, timetable for adding faculty, and whether resources were shifted from other academic units, programs, or derived from other sources. Explain clearly whether additional faculty hires can be supported with institutional funds.

The Computer Science Department has 5 faculty in the area of cybersecurity and privacy and it is authorized to hire a new tenure-track Assistant Professor in the area of cybersecurity to start in August 2019.

23) Fiscal, Tuition, and Estimated Budget

a) Describe the resources that will be used specifically for the program.

All resources needed for the program are pre-existing. We will utilize the current resources (personnel, library, equipment, laboratory, and computing) available at the departmental and university level.

b) Does the program require a tuition cost structure different from or above a regular tuition designation for the degree level? Yes _____ or No _X_____ (place an X beside one)

c) Does the program require a special fee for the proposed program? Yes ____ or No__X___ (place an X beside one)

d) If the program requires a different tuition cost structure or special fee, such requests require approval through both the Committee on Academic Affairs (for the academic program) and the Committee on Fiscal Affairs (for the tuition increase or special fee designation). The resultant tuition and/or fee request for a new degree is to be submitted to both the academic affairs and fiscal affairs offices. Complete Appendix III that includes information for a differential tuition cost structure involving a proposal for a new academic program.

N/A

e) Note: The web link for approved tuition and fees for USG institutions is located at the following url: http://www.usg.edu/fiscal_affairs/tuition_and_fees

f) Budget Instructions: Complete the form further below and **provide a narrative to address each of the following**:

g) For Expenditures (*ensure that the narrative matches the table*):

i. Provide a description of institutional resources that will be required for the program (e.g., personnel, library, equipment, laboratories, supplies, and capital expenditures at program start-up and recurring).

- All faculty resources needed for the program are pre-existing. We currently have 5 faculty in cybersecurity and privacy and we are authorized to hire a new tenure-track assistant professor in the area of cybersecurity to start in fall 2019. Those faculty will be teaching the core courses. Other listed faculty in Section 16 above will teach the elective courses as well as the pre-requisite ones. No new administrative staff are needed. The administrative staff in the

Computer Science Department will be able to handle the new load and the new duties are already built in their job description.

- Personnel expenditures for each fiscal year are calculated using average per course instructional cost associated with offering graduate level required courses offered that year. In our calculations, the average instructional cost for each course is taken to be $21,000, whereas for courses that are common to the M.S. and Ph.D. programs in Computer Science, we take the average instructional cost to be $6,000. The average instructional cost is calculated using the average faculty salary multiplied by the average instructional EFT and divided by the average course load.

- For the first year, the expenditure is determined based on offering three required courses (CSCI 6720, CSCI 6260, CSCI 6760). In the second year, the expenditure is based on offering three required courses (CSCI 6250, CSCI 6730, and an 8000-level elective course).

ii. If the program involves reassigning existing faculty and/or staff, include the specific costs/expenses associated with reassigning faculty and staff to support the program (e.g., cost of part-time faculty to cover courses currently being taught by faculty being reassigned to the new program, or portion of full-time faculty workload and salary allocated to the program).

Neither faculty nor staff hiring or reassignments are necessary.

h) For Revenue (*ensure that the narrative matches the table*):

i. If using existing funds, provide a specific and detailed plan indicating the following three items: source of existing funds being reallocated; how the existing resources will be reallocated to specific costs for the new program; and the impact the redirection will have on units that lose funding.

Existing and authorized faculty lines budgeted for instruction will be utilized to cover the program instructional costs. Since the required courses are already offered, and only the class sizes are expected to expand, then no reallocation of existing resources is required.

ii. Explain how the new tuition amounts are calculated.

Tuition is calculated based on the 2018-2019 University of Georgia rate for Master's students of $363/credit hour or a flat-rate of $4,352 for 12 or more credit hours.

iii. Explain the nature of any student fees listed (course fees, lab fees, program fees, etc.). Exclude student mandatory fees (i.e., activity, health, athletic, etc.).

No additional fees are to be charged.

iv. If revenues from Other Grants are included, please identify each grant and indicate if it has been awarded.

N/A

v. If Other Revenue is included, identify the source(s) of this revenue and the amount of each source.

N/A

i) Revenue Calculation: Provide the revenue calculation, in other words, the actual calculation used to determine the projected tuition revenue amounts for each fiscal year involving start-up and implementation of the proposed program.

	Fall	Spring	Summer	Total
Year One: 20 students	20 students x $4,352 = $87,040	20 students x $4,352 = $87,040	20 students x $363 x 2 credits = $14,520 Or 20 students x $363 x 3 credits = $21,780	$188,600 Or $195,860
Year Two: 25 students	25 students x $4352 = $108,800	25 students x $4352 = $108,800	25 students x $363 x 2 credits = $18,150 Or 25 students x $363 x 3 credits = $27, 225	$235,750 Or $244,825
Year Three: 25 students	25 students x $4352 = $108,800	25 students x $4352 = $108,800	25 students x $363 x 2 credits = $18,150 Or 25 students x $363 x 3 credits = $27, 225	$235,750 Or $244,825
Year Four: 25 students	25 students x $4352 = $108,800	25 students x $4352 = $108,800	25 students x $363 x 2 credits = $18,150 Or 25 students x $363 x 3 credits = $27, 225	$235,750 Or $244,825

j) When Grand Total Revenue is not equal to Grand Total Costs:

i. Explain how the institution will make up the shortfall. If reallocated funds are the primary tools being used to cover deficits, what is the plan to reduce the need for the program to rely on these funds to sustain the program?

N/A. There is no shortfall because there is no new cost as a result of offering this new program.

ii. If the projected enrollment is not realized, provide an explanation for how the institution will cover the shortfall.

There will be no budget shortfall and there will be no additional cost to the University, as these courses will continue to be taught by the existing faculty members.

iii. If the projected enrollment is not realized, what are your next action steps in terms of bolstering the program, potentially altering the program, teach-outs, a planned phase-out, etc.?

The department will invest more in recruitment by going to more graduate recruitment events, recruiting from neighboring universities, and increasing the advertisement for the program.

I. EXPENDITURES	First FY Dollars	Second FY Dollars	Third FY Dollars	Fourth FY Dollars
Personnel – reassigned or existing positions				
Faculty **(see 23.g.ii)**	$86,000	$86,000	$86,000	$86,000
Part-time Faculty **(see 23.g.ii)**				
Graduate Assistants **(see 23.g.ii)**				
Administrators **(see 23.g.ii)**				
Support Staff **(see 23.g.ii)**				
Fringe Benefits				
Other Personnel Costs				
Total Existing Personnel Costs	$86,000	$86,000	$86,000	$86,000

EXPENDITURES (Continued)				
Personnel – new positions (see 23.g.i)				
Faculty				
Part-time Faculty				
Graduate Assistants				
Administrators				
Support Staff				
Fringe Benefits				
Other personnel costs				
Total New Personnel Costs	$0	$0	$0	$0
Start-up Costs (one-time expenses) (see 23.g.i)				
Library/learning resources				
Equipment				
Other				
Physical Facilities: construction or renovation (see section on Facilities)				
Total One-time Costs	$0	$0	$0	$0
Operating Costs (recurring costs – base budget) (see 23.g.i)				
Supplies/Expenses				
Travel				
Equipment				
Library/learning resources				
Other				
Total Recurring Costs				
GRAND TOTAL COSTS				

III. REVENUE SOURCES				
Source of Funds				
Reallocation of existing funds **(see 23.h.i)**	$86,000	$86,000	$86,000	$86,000
New student workload				
New Tuition **(see 23.h.ii)**	$188,600 or $195,860	$235,750 or $244,825	$235,750 or $244,825	$235,750 or $244,825
Federal funds				
Other grants **(see 23.h.iv)**				
Student fees **(see 23.h.iii)** Exclude mandatory fees (i.e., activity, health, athletic, etc.).				
Other **(see 23.h.v)**				
New state allocation requested for budget hearing				
GRAND TOTAL REVENUES	$233,600 or $240,860	$280,750 or $289,825	$280,750 or $289,825	$280,750 or $289,825
Nature of Revenues				
Recurring/Permanent Funds				
One-time funds				
Projected Surplus/Deficit (Grand Total Revenue – Grand Total Costs) (see 20.h.i. & 20.h.ii).	$147,600 or $154,860	$194,750 or $203,825	$194,750 or $203,825	$194,750 or $203,825

24) Facilities/Space Utilization for New Academic Program Information

Facilities Information — Please Complete the table below.

			Total GSF
a.	**Indicate the floor area required for the program in gross square feet (gsf). When addressing space needs, please take into account the projected enrollment growth in the program over the next 10 years.**		8,000
b.	**Indicate if the new program will require new space or use existing space. (Place an "x" beside the appropriate selection.)**		
	Type of Space		**Comments**
i.	Construction of new space is required (x).-→	N/A	
ii.	Existing space will require modification (x). →	N/A	
iii.	If new construction or renovation of existing space is anticipated, provide the justification for the need.		N/A
iv.	Are there any accreditation standards or guidelines that will impact facilities/space needs in the future? If so, please describe the projected impact.		No
v.	Will this program cause any impact on the campus infrastructure, such as parking, power, HVAC, other? If yes, indicate the nature of the impact, estimated cost, and source of funding.		No
vi.	Indicate whether existing space will be used.	X	Existing facilities will be sufficient
c.	**If new space is anticipated, provide information in the spaces below for each category listed:**		
i.	Provide the estimated construction cost.		
ii.	Provide the estimated total project budget cost.		
iii.	Specify the proposed funding source.		
iv.	What is the availability of funds?		
v.	When will the construction be completed and ready for occupancy? (Indicate semester and year).		
vi.	How will the construction be funded for the new space/facility?		
vii.	Indicate the status of the Project Concept Proposal submitted for consideration of project authorization to the Office of Facilities at the BOR. Has the project been authorized by the BOR or appropriate approving authority?		
d.	**If existing space will be used, provide information in the space below.**		
	Provide the building name(s) and floor(s) that will house or support the program. Indicate the campus, if this is part of a multi-campus institution and not physically located on the main		

	campus. Please do not simply list all possible space that could be used for the program. We are interested in the actual space that will be used for the program and its availability for use.			
	Boyd Graduate Studies building (home of Computer Science) will house and support the program. Classroom spaces on south campus will be used for classes.			
e.	**List the specific type(s) and number of spaces that will be utilized (e.g. classrooms, labs, offices, etc.)**			
i.	**No. of Spaces**	**Type of Space**	**Number of Seats**	**Assignable Square Feet (ASF)**
	5	Classrooms	40	12,500
		Labs (dry)		
		Labs (wet)		
		Meeting/Seminar Rooms		
		Offices		
		Other (specify)	5 offices with each one has 8 seats	3,000
Total Assignable Square Feet (ASF)				
ii.	If the program will be housed at a temporary location, please provide the information above for both the temporary space and the permanent space. Include a time frame for having the program in its permanent location.			

Chief Business Officer or Chief Facilities Officer Name & Title	**Phone No.**	**Email Address**
	Signature	
Note: A Program Manager from the Office of Facilities at the System Office may contact you with further questions separate from the review of the new academic program.		

FINAL NOTE:

Appendices that do not apply to the proposed program should not be attached.

APPENDIX I

Use this section to include letters of support, curriculum course descriptions, and recent rulings by accrediting bodies attesting to degree level changes for specific disciplines, and other information.

Course Description

Course prefix/number	Credit hours	Course title	Course description
CSCI 6720	**4**	**Computer Systems Architecture**	Functional components and structure of computing systems. Topics include principles of combinational and sequential logic, number systems and computer arithmetic, hardware subsystem design and test, I/O and memory subsystem principles and techniques, instruction set architecture and implementation, pipelining and system-level parallelism, interconnection networks, trends.
CSCI 6250	**4**	**Cyber Security**	Basic concepts of computer security and the theory and current practices of authentication, authorization, and privacy mechanisms in modern operating systems and networks.
CSCI 6260	**4**	**Data Security and Privacy**	This course will examine security and privacy issues related to protecting personal data in various environments (for example: cloud computing, smart grid, and internet of things), cover the fundamentals and principles of data security and privacy, and explore computational and statistical techniques for constructing secure and private systems.
CSCI 6270	**4**	**Introduction to Computer Forensics**	The course covers both the principles and practice of computer forensics. Topics include computer crime, software vulnerabilities, intellectual property, privacy issues, countermeasures, methods and standards for extraction, preservation, and deposition of legal evidence in a court of law.
CSCI 6760	**4**	**Computer Networks**	In-depth coverage of computer networks, including: digital data transmission and encoding, layered protocol models, Internet protocol, Internet client-server software, and network design methodology.

CSCI 6730	**4**	**Operating Systems**	Coverage of the key concepts in modern operating systems. Specific topics include process management, synchronization mechanisms, scheduling strategies, deadlock detection/avoidance, memory management, file systems, protection and security, and distributed systems. Concepts will be reinforced through programming projects using a realistic operating system.
CSCI 7200	**2-3**	**Master's Project**	Applied research project under the direction of the major professor for the Computer Science Non-thesis MS degree. As part of the requirements, a comprehensive report must be prepared detailing the student's procedures and findings regarding the completed project work.
CSCI 8240	**4**	**Software Security and Cyber Forensics**	Exploration of both the foundation and recent advances in software security and cyber forensics. Topics will include software vulnerability analysis, advanced attack and defense techniques, cybercrime investigation and forensics, and security and forensics in different platforms (e.g., mobile, cloud computing, web application).
CSCI 8250	**4**	**Advanced Cyber Security**	Recent advances in computer networks and system security. Fast and secure network systems, secure storage systems, high performance intrusion detection systems, and efficient anti-abuse systems.
CSCI 8260	**4**	**Computer Network Attacks and Defenses**	This is an advanced course on computer and network security. The course will mainly focus on reading and analyzing recent top- tier research publications in the field of computer security and privacy and on the research and development of systems that can enforce security and privacy in the real world.
CSCI 8960	**4**	**Privacy-Preserving Data Analysis**	An introduction to the privacy preservation problems, as well as algorithmic and statistical techniques for data privacy, in modern data analysis, such as machine learning and data mining. Approaches include randomized algorithms, synthetic data generation, stability analysis, and so on.

CSCI 8965	**4**	**Internet of Things Security(G)**	Introduction to security problems associated with the emerging Internet of Things (IoT) technologies, including privacy disclosure and data manipulation. Topics studied include architectural differences leading to such issues, how adversaries launch attacks by either exploiting software vulnerabilities or physically hacking into the hardware, and mitigation techniques, such as trusted booting.
MATH 6450	**3**	**Cryptology and Computational Number Theory**	Recognizing prime numbers, factoring composite numbers, finite fields, elliptic curves, discrete logarithms, private key cryptology, key exchange systems, signature authentication, and public key cryptology.

Sample Program of Study

	Corse Number	**Course Title**	**Hours**
First Year Fall	CSCI 6760 CSCI 6720 CSCI 6260	Computer Networks Computer Systems Architecture Data Security and Privacy Total Credit Hours	4 4 4 12
First Year Spring	CSCI 6730 CSCI 6250 CSCI 8260 CSCI 8960	Operating Systems Computer Security Computer Network Attacks and Defenses Privacy-Preserving Data Analysis Total Credit Hours	4 4 4 4 16
Summer	CSCI 7200	Master's Project Total Credit Hours	2-3 2-3
Total			**30**

APPENDIX II

For the online delivery of programs, those for which the curriculum meets SACSCOC specifications for programs at a distance whereby fifty percent or more of the curriculum is offered via distance education technologies, within two weeks after Board approval, the university system institution must upload the following requisite information into the institutional PDA account for Georgia ONmyLINE and to assist with marketing the program. Specific questions required for completion of Georgia ONmyLINE are provided below. Please complete these questions as part of this proposal submission.

Georgia ONmyLINE PDA Upload Information

Copied from https://www.usg.edu/apps/goml/programs/frm_general

General Information * indicates required fields

Institution *

Institution Web Site (URL) *

Program Title *

Program Web Site

- SOC Status * (select all that apply) [About SOC - Service members Opportunity Colleges]
- SOC
- SOCAD
- SOCMAR
- SOCNAV
- SOCCOAST
- SOCGuard
- ConAP

None - Institution does not participate in SOC.

Is BOR Approval Required For This Program? * YES NO

* If "Yes", Enter BOR Approval Date (4 digits):

Program Discipline / Subject *

Degree Type *

Program Level *

Program Description *

[Max 4000 characters. NOTE: Descriptions over 4000 characters will be truncated.]

Primary Delivery Format *

Supplemental Delivery Format(s)

Program Accreditation

Special program requirements (1000 characters max.) Characters remaining: 1,000

Special program prerequisites (1000 characters max.) Characters remaining: 1,000

Enrollment Capacity

Technical Requirements *(select at least one)

- Computer with current operating system (Windows or Mac).
- Additional peripherals; Headphones, printer may be required.
- High Speed Internet Access
- Satellite Receiver
- DVD Player
- CD Player
- Television
- Cable Television / Satellite
- Other

Pre-Enrollment Advising *

Advisor Name

Advisor Email

Advisor Phone

Contact Information for Program

For verification purposes, please enter your name and contact information. This information will NOT appear on the public web site.

First Name
Last Name
Email Address
Telephone

APPENDIX III

Tuition Differential Application

Complete the information below only if the institution is simultaneously requesting a tuition differential for the proposed, new academic program. If the institution has determined that the proposal is an executive level or professional program that requires a higher tuition than established standard tuition rates, then details below require completion.

Before considering submitting any tuition increase request, institutions are **cautioned** and **strongly encouraged** to thoroughly examine and explore other options for addressing fiscal issues regarding graduate and professional programs before requesting a tuition increase for any graduate or professional program. Among measures institutions should engage in before opting to request any tuition increase include:

Review all program costs and processes to identify where potential efficiencies exist and expenses can be reduced; evaluate and prioritize program areas to identify areas or activities no longer needed/obsolete or classified as low priority where funds can be redirected to address higher priority needs; and explore the use of other fund sources if additional revenue is needed to sustain the program despite actions taken from above measures.

If an institution elects to submit a graduate or professional program tuition increase request, detailed documentation of actions the institution has taken and/or plans to take, including at a minimum the steps listed above, must accompany any request to substantiate the institution's efforts to minimize as much as possible, if not eliminate, the need for a tuition increase. Accompanying documentation must be program specific. Generic responses will not be accepted. An institution requesting any tuition increase must clearly demonstrate that other avenues or alternatives have been or are being pursued, ***and the decision to request a tuition increase is a last resort rather than a first option.*** Any request for a tuition increase will be fully scrutinized. FY 2019 graduate and professional program tuition requests are due to the System Office on ***January 12, 2018.*** The required forms are attached and also located online at https://www.usg.edu/budgets/ under **BRS Documents**.

Professional Program Tuition:

Board Policy 7.3.1.3 allows institutions to request separate graduate tuition rates for specialized programs. The forms include the following items which must be completed and submitted as part of your request package:

Tuition Request Narrative – A narrative description of each request, providing a justification for the increase. The narrative **should not** be a generic narrative used interchangeably for all increases, but instead it must be specific to the degree program for which the increase is being requested and address items unique to that degree program. Also, as explained above, include detailed documentation of measures and actions taken to absolutely minimize, if not mitigate, any tuition increase being requested.

Trend Data: A summary table showing enrollment, graduation and job placement trends.

Table 1: Summary Table of Current and Proposed Rates – A summary table showing your current semester tuition rate and requested semester tuition rates by program and listing in-state and out-of-state rates individually. Do not include a general tuition increase in your projections.

Table 2: Revenue/Expenditure Estimates – A table showing current budget and projected Budgets both with and without the requested increase. This will allow us to analyze changes due to the increased revenue from enrollments and the program differential separately.

Table 2a: Explanation/Detail of How Incremental Revenue From Requested Increase is To Be Used – A table outlining the incremental revenue projected to be received from a requested tuition differential increase, how this incremental revenue will be spent and why.

Table 2b: Detail of Tuition Breakdown & Expenditures For New Programs Requesting To Charge Tuition Under An All-Inclusive Model – A table presenting a breakdown of the various elements comprising the requested all-inclusive program rate with explanations required for each element involved.

Table 3 - Current and Requested Tuition Rate Comparison to Peer Institutions – A table showing current semester tuition rates, proposed semester tuition rates and mandatory fees for in-state and out-of-state students. The table asks you to compare tuition rates with those of peer institutions. In some cases, data from peer institutions do not separate tuition and fees. If so, please note that fact and make sure you have included your current mandatory fees for students in these programs.

Board of Regents of the University System of Georgia
FY 2018 Graduate/Professional Program

Tuition Increase Request

Institution:

Graduate/Professional Program Name:

CIP Code:

Requested Graduate/Professional Program Tuition Increase: $ amount per student

If you are currently charging a differential, what is the current amount? What is the amount of this request?

Current and Projected Program Revenue/Expenditures:
Describe the current and proposed budget. What changes are you proposing without the differential and what will the additional revenue be used for?

(See attached Tables 2 and 2a. Please include current and projected enrollments for Table 2)

Justification for Increase:

1) Describe what the programmatic need is for this request. Is this a request for a new differential, or an increase to a current one? (For example, your institution may be trying to reduce the faculty/student ratio, or address accreditation concerns.)
2) If this request is to convert from a credit hour tuition model to an all-inclusive cost tuition model, a full and detailed explanation for this proposed conversion is required for this request to be considered, particularly the issue of student affordability regarding the potentially significantly higher tuition under the all-inclusive cost tuition model. Also, complete tables 2 and 2b.

What impact will the additional fees collected have on the affected program? What enhancements will be made?
Describe what impact the additional revenue will have on addressing the needs described in the question above. This is a narrative description of Tables 2 and 2a.

Peer Institution Comparison:

Compare your current and proposed fees with peer programs. Explain how the peer group was determined, especially if the peer group is not one approved by BOR Academic Affairs. Also include information as to whether the enhancement you are requesting is part of your chosen peers' program. For example, if you are adding faculty to reduce the faculty/student ratio, what is the ratio at the institutions you have compared yourself to? See attached Table 3.

Has this increase to the current differential, establishing a new differential or changing the tuition structure (i.e. from credit hour based to all-inclusive cost) been discussed with affected students? If so, describe how students were informed of the proposed increase or tuition change, and their reaction to the proposed increase or tuition change.

What contingency plans are in place if the requested increase exceeds that which is permitted by the Board of Regents?

NEED FORM VERIFICATION OF FY2019 Professional Program Tuition
TREND DATA
Enrollment, Graduation & Job Placement Trend & Other Data
Institution:
Degree Program:
CIP Code:

Program Enrollment (Headcount)	**FY2013**	**FY2014**	**FY2015**	**FY2016**	**FY2017 (Actual/Est.)**	**FY2018 (Projected)**
In-State:						
Fall						
Spring						
Summer						
Out-of-State:						
Fall						
Spring						
Summer						
Total Semester Enrollment:						
Fall						
Spring						
Summer						
Unduplicated Enrollment:						
Total In-State						
Total Out-of-State						
Grand Total Unduplicated Enrollment						
Program Acceptance Rate:						
No. of Applicants						
No. of Applicants Accepted						
Acceptance Rate (%)						
Program Capacity (maximum number of students accommodated):						
On-Campus						
Online						
Total Program Capacity						
Graduates						
No. of Graduates						
Job Placement						
No. of Job Placements for Above Graduates						

Student Program Loan Indebtedness (connected with program enrollment/studies):						
Lowest amount of student program loan indebtedness for an individual program student						
Highest amount of student program loan indebtedness for an individual program student						
Average amount of student program loan indebtedness for an individual program student						

NEED FORM VERIFICATION OF FY2019 Professional Program Tuition
TABLE 1

FY 2018 Professional Program Tuition
Summary of Current and Proposed Rates
Table 1

Insert Program Name Here	Current Semester Tuition Rate with Differential		Requested Semester Professional Program Tuition Change*	Total Proposed Tuition
Insert Institution Name	$		$	$
In-State				
Out-of-State				

*Do not include general tuition increase.

NEED FORM VERIFICATION OF FY2019 Professional Program Tuition
TABLE 2

FY 2018 Professional Program Tuition
Annual Revenue/Expenditure Estimates
Table 2

Insert Program Name here	Current Budget		Projected Budget	
			Without Change	With Change
Expenditures				
Personnel Services:				
Faculty				
Support Staff				
Fringes				
Other				
Subtotal Personnel Services	$		$	$
Operating Expenses				
Regular Operating Expenses				
Travel				
Computer Equipment				
Other				
Subtotal Operating Expenses	$		$	$
TOTAL EXPENDITURES	$		$	$
Revenue				
Fund Sources:				
State Appropriation				
Sponsored				
Tuition Revenue				
Other				
TOTAL REVENUE	$		$	$
Enrollment Projection	Current		Projected	Projected
In-State				
Out-of-State				

NEED FORM VERIFICATION OF FY2019 Professional Program Tuition
TABLE 2a

FY 2018 Professional Program Tuition
Detail of How Incremental Revenue from Requested Differential Increase To Be Used
Table 2a

Insert Program Name Here	**Budget for Incremental Revenue from Requested Increase**			
Expenditures				
Personnel Services:		**Number of Positions**	**Position Titles**	**Purpose of Positions Added**
Faculty				
Support Staff				
Fringes				
Other				
Subtotal Personnel Services	**$**			
Operating Expenses:		**Explanation/Purpose of Expense**		
Regular Operating Expenses				
Travel				
Computer Equipment				
Other				
Subtotal Operating Expenses	**$**			
TOTAL EXPENDITURES	**$**			
DIFFERENCE (Incremental Revenue – Total Expenditures)				

NEED FORM VERIFICATION OF FY2019 Professional Program Tuition
TABLE 2b

FY 2018 Professional Program Tuition
Detail of Tuition Breakdown & Expenditures for New Programs Requesting to Change Tuition Under an All-Inclusive Cost Tuition Model
Table 2b

Insert Program Name Here	**Current Credit Hour Tuition Model**	**Proposed All-inclusive Tuition Model**	**Comments**
Total program tuition per student to complete program			
# of semesters tuition above is based			
# of credit hours included in tuition above			
Indicate all items to be covered per student and the amount per student allocated for each item.			
DIRECT COSTS:	NOT APPLICABLE		Explanation required for each item.
Tuition			
Mandatory Student Fees (technology, athletic, activity, special institutional fee, etc.)			
Books & Materials			
Supplies			
Parking			
Meals			
Other Fees (itemize these fees below)			
(Other Fee)			
(Other Fee)			
(Other Fee)			
Other Items Covered			
(Other Item)			
(Other Item)			
(Other Item)			
TOAL DIRECT COSTS:		$	
INSTRUCTIONAL COSTS:			Explanation required for each item.
Faculty Extra Compensation (handling course overload if applicable)			
Fringe Benefits			
Graduate Assistants			
Other Instructional Costs (itemize below)			
(Other Instructional Costs)			
(Other Instructional Costs)			
(Other Instructional Costs)			
TOTAL INSTRUCTIONAL COSTS		$	

Insert Program Name Here	**Current Credit Hour Tuition Model**	**Proposed All-inclusive Tuition Model**	**Comments**
OVERHEAD COSTS:	NOT APPLICABLE		Explanation required for each item.
Staff Salary			
Fringe Benefits			
Travel			
Instruction Space Rental			
Other Overhead Costs (itemize below)			
(Other Overhead Costs)			
(Other Overhead Costs)			
(Other Overhead Costs)			
TOTAL OVERHEAD COSTS		$	
OTHER ALLOCATED COSTS			Explanation required for each item.
Program Recruiting			
(Other Allocated Costs)			
(Other Allocated Costs)			
(Other Allocated Costs)			
TOTAL OTHER ALLOCATED COSTS		$	
GRAND TOTAL ALLOCATED COSTS/STUDENT		$	
PROPOSED PROGRAM TUITION		$	
			Explanation if difference does not equal zero.
DIFFERENCE (GRAND TOTAL ALLOCATED COSTS SHOULD EQUAL PROPOSED ALL-INCLUSIVE PROGRAM TUITION)			

NEED FORM VERIFICATION OF FY2019 Professional Program Tuition
TABLE 3

FY 2018 Professional Program Tuition
Current and Requested Tuition Rate Comparison to Peer Institutions
Table 3

Insert Program Name Here	Current Semester Tuition Rate	Current Semester Mandatory Fees	Current Total Tuition and Fees	Requested Semester Tuition Change	Requested Total Tuition and Fees
Your Institution In-State	$	$	$		
Your institution Out-of-State	$	$	$		
Other Peer Institutions					
Insert Institution Name In-State Out-of-State				Include Internet link to information	
Insert Institution Name In-State Out-of-State				Include Internet link to information	
Insert Institution Name In-State Out-of-State				Include Internet link to information	
Other Peer Institution Tuition & Fee Explanations/Comments	Tuition Comments	Mandatory Fee Comments	Other Comments		
Insert Institution Name In-State Out-of-State					
Insert Institution Name In-State Out-of-State					
Insert Institution Name In-State Out-of-State					