



**AGENDA ITEM**

A-2. UNC Degree Program Establishment.....Courtney Thornton

**Situation:** North Carolina Central University requests authorization to establish the following program:  
- B.A. in Interdisciplinary Studies (CIP 24.0101)

UNC Charlotte requests authorization to establish the following program:  
- M.S. in Cybersecurity (CIP 11.1003)

**Background:** Per UNC 400.1, UNC General Administration, in consultation with the campuses, brings recommendations to the UNC Board of Governors for new degree programs that meet identified academic program needs.

**Assessment:** Establishment of the above-listed programs are recommended.

**Action:** This item requires a vote by the Committee, with full Board vote through the consent agenda.

**Request for Authorization to Establish a  
Bachelor of Arts in Interdisciplinary Studies  
(B.A., CIP 24.0101) at  
North Carolina Central University**

**I. Program Highlights**

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- Offers a flexible program of study that can achieve an interdisciplinary selection of courses and be designed to suit individual personal or career needs
- Target audience is part-way home students who have some course credit but no earned baccalaureate degree
- Plans for online delivery to further serve the target audience
- Features an interdisciplinary studies core curriculum (30 hours) plus a 15-hour concentration in either communication arts; humanities; race, gender and class; or a student-generated concentration upon advisor approval
- 124 credit hours
- Required capstone
- 40 full-time and 10 part-time students projected at steady state
- All coursework and faculty are already in place; therefore, minimal resources are needed to launch the program. These include a program director stipend and minimal supplies. Internal reallocations have been identified to meet these resource needs.

**II. BOG Academic Program Planning Criteria (UNC Policy 400.1)**

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- 1. Existing Programs (Number, Location, Mode of Delivery).** Several UNC institutions offer similar degree programs that provide flexible pathways to a baccalaureate degree, particularly for part-way home students. They include: ASU B.A. in Interdisciplinary Studies; East Carolina University B.S. in University Studies and B.A./B.S. in Multidisciplinary Studies; NC A&T State B.A. in Liberal Studies; NC State B.A./B.S. in Interdisciplinary Studies; UNC Asheville B.A. in Interdisciplinary Studies; UNC Greensboro B.A./B.S. in Liberal Studies; UNC Pembroke B.I.S. in Interdisciplinary Studies; UNC-Chapel Hill B.A. in Interdisciplinary Studies; WCU B.A./B.S. in Interdisciplinary Studies; WSSU Bachelor's in Interdisciplinary Studies. Several are approved for online delivery, including ECU's University Studies program and programs at UNCG, UNCP, and WSSU. UNCP and NC A&T State are approved for off-site delivery locations as well.
- 2. Relation to Campus Distinctiveness and Mission.** The proposed program aligns with NC Central University's strong liberal arts tradition and mission to prepare leaders to advance social responsibility in a diverse global society.
- 3. Demand (Local, regional, state).** The primary target audience is the estimated 1.5 million North Carolinians who have left higher education with some earned hours but no degree. While many similar UNC programs enroll 30-60 students, some enrollments are as high as two to three hundred students. Indeed, one UNC system faculty reviewer noted that NCCU's enrollment projections may be conservative.
- 4. Potential for Unnecessary Duplication.** Although there are a number of existing similar programs in the UNC system, the scope of opportunity with part-way home student populations is significant. Additionally, some in NCCU's native student population may elect to pursue this

degree for an interdisciplinary experience that suits their needs and interests and that they cannot access through other degree programs on the campus.

5. **Employment Opportunities for Graduates.** According to NCWorks, more than 40% of all jobs in North Carolina require a bachelor's degree, with top desired skills being problem-solving, decision-making, flexibility, and interpersonal skills. The proposed degree would prepare graduates with a strong liberal arts foundation that, according to the U.S. Bureau of Labor Statistics, are well suited for application in a wide range of fields, such as market research analysis, communications and media, and urban and regional planning.
6. **Faculty Quality and Number.** Twenty-two full-time faculty across ten departments have been initially identified for direct involvement in delivering the proposed program. Departments include Language and Literature, Mass Communication, History, Political Science, Music, Art, Theatre and Dance, Psychology, Human Sciences, and Geography.
7. **Availability of Campus Resources (library, space, etc.).** All facilities, library, and information technology resources required to launch the proposed program are in place and adequate.
8. **Relevant Lower-level and Cognate Programs.** As noted above, the proposed program draws upon existing faculty and coursework from a large number of departments at NCCU. The program will be housed in the College of Arts and Sciences' Department of Language and Literature.
9. **Impact on Access and Affordability.** The proposed program provides another access point and opportunity for degree completion for partway home students.
10. **Expected Quality.** The proposed program builds off of existing courses and faculty expertise in place at NCCU.
11. **Feasibility of Collaborative Program.** As noted above, the interdisciplinary nature of the degree program requires significant cross-campus collaboration at NCCU. Flexible degree programs such as this one require significant attention to student advising that does not readily lend such programs to inter-institutional collaborations.
12. **Other Considerations.** None.

### III. Summary of Review Processes

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**Campus Review Process and Feedback.** The program was reviewed and unanimously approved at each of the following levels at NCCU: Department of Language and Literature; College of Arts and Sciences Curriculum Review Committee; Dean of the College of Arts and Sciences; University Undergraduate Curriculum Review Committee; and University Academic Planning Council.

**UNC General Administration Review Process and Feedback.** Throughout the review process, NCCU responded to questions from UNC General Administration regarding the relationship to other degree programs and the curriculum.

Faculty from four UNC institutions reviewed the request to establish the proposed program. Some reviewers questioned the intentionality and rigor of the interdisciplinary curriculum and requirements, specifically noting they saw too few requirements for upper-division coursework. NCCU faculty carefully considered the feedback and decided to revise the curriculum requirements such that, within the 30 hours of concentration coursework, students can take no more than 6 hours at the 1000 or 2000 level. Some reviewers cautioned that the well-defined liberal studies core curriculum may prove challenging for serving both partway home students and intentionally interdisciplinary native students through the proposed program. Based on their review of the records of many NCCU “stopped out” students, the institution believes the proposed program can provide the needed flexibility while still limiting attempted credit hours. NCCU acknowledged the key roles of advising and program coordination to ensure student success.

Benefits of program approval include high leverage of existing faculty, resources, and curriculum capacity to meet an identified need. For these reasons, we do not recommend any alternatives to implementing the degree program.

#### **IV. Recommendation**

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It is recommended that the Board of Governors approve North Carolina Central University’s request to establish a Bachelor of Arts (B.A.) in Interdisciplinary Studies degree program (CIP 24.0101) to enroll students starting Fall 2016.

**Request for Authorization to Establish a  
Master of Science in Cybersecurity  
(M.S., CIP 11.1003) at  
UNC Charlotte**

**I. Program Highlights**

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- Designed to prepare professionals with the advanced knowledge and skills essential to safeguard the nation's information and computing assets
- 30 credit hours
- Core coursework in computer security and forensics, and concentration options in network security, secure software development, and security for emerging technology
- Thesis, internship, and capstone options available
- 80 full-time and 20 part-time students projected at steady state
- Resources needed to launch the program include two faculty FTE and a program coordinator, graduate research assistant stipends, capital outlay for classroom equipment, and minimal supplies and materials, travel, communication, printing and binding, and advertising. While the program can launch through internal reallocation of resources in Year 1, the steady state budget requires a differential tuition of \$4,000 per FTE per year, to be included with the next tuition and fee request.

**II. BOG Academic Program Planning Criteria (UNC Policy 400.1)**

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1. **Existing Programs (Number, Location, Mode of Delivery).** UNC Charlotte would be the first UNC institution to offer a Master's degree program specifically in cybersecurity and privacy.
2. **Relation to Campus Distinctiveness and Mission.** The proposed program aligns with UNC Charlotte's mission as an urban-serving research university. It supports the university's focus on community engagement, graduate education, and the economic and social needs of the greater Charlotte region, including those of the region's power, financial, retail and healthcare services industries.
3. **Demand (Local, regional, state).** UNC Charlotte currently offers a graduate certificate in information security and a related concentration within their M.S. in Information Technology program. Enrollment in the M.S. in Information Technology program exceeds 220 and has increased by more than 300% since 2013; about 10% of those students pursue the Information Security and Privacy concentration. The proposal included a table of 2013 enrollments in various cybersecurity graduate programs on the east coast; enrollments ranged from 29 (George Washington University) to over 1,000 (University of Maryland). Time Warner Cable, Oracle, Wells Fargo, and several others supplied support letters that noted the need for these graduates and, in several cases, a willingness to provide enriching experiences for students in the program.
4. **Potential for Unnecessary Duplication.** No other UNC institution offers a master's degree in cybersecurity.
5. **Employment Opportunities for Graduates.** Education Advisory Board (EAB) and U.S. Bureau of Labor Statistics (BLS) reports and analyses indicate the demand for cybersecurity professionals far outpaces the number of skilled professionals available. EAB's 2014 report found 73% growth

in cybersecurity positions from 2007 to 2012. According to BLS in 2014, demand for information security analysis is expected to grow 37% from 2012-2022, fastest among all major STEM occupations. The support letters from regional industry corroborated the need for such graduates.

6. **Faculty Quality and Number.** Seven current faculty will be directly involved in delivering the proposed program. In addition, industry practitioners with appropriate credentials, including from Bank of America, Wells Fargo, IBM, TIAA-CREF, Vanguard and others, will be invited to serve as adjunct faculty on an as-needed basis.
7. **Availability of Campus Resources (library, space, etc.).** Library resources are adequate to launch the program. The College of Computing and Informatics has three large computer labs for teaching plus an additional lab for hands-on learning in computer networking. That same lab can be isolated for the purpose of carrying out cybersecurity exercises and experiments. A one-time investment is needed to establish two additional cybersecurity labs, one in network security and one in malware analysis. With exception of the two labs needed, information technology resources are robust and can support the program for launch and into the future.
8. **Relevant Lower-level and Cognate Programs.** The College of Computing and Informatics department serves over 300 students in its baccalaureate programs in computer science.
9. **Impact on Access and Affordability.** The proposed program would provide North Carolina residents with access to a public, in-state graduate program option in cybersecurity.
10. **Expected Quality.** As evidenced by support letters, the program would enjoy robust relationships with local industry.
11. **Feasibility of Collaborative Program.** The proposed program complements the existing M.S. in Information Technology and, as such, leverages considerable faculty, curricular, and other resources.
12. **Other Considerations.** None.

### III. Summary of Review Processes

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**Campus Review Process and Feedback.** The proposal was reviewed and approved unanimously by the graduate curriculum committee of the Department of Software and Information Systems; the full Department; the graduate committee of the College of Computing and Informatics; and the graduate Council of UNC Charlotte. No substantive issues, concerns or opposition were raised during the consultation process.

**UNC General Administration Review Process and Feedback.** Throughout the review process, UNC Charlotte responded to questions from UNC General Administration regarding curriculum, student demand, societal demand, and budget.

Four UNC institutions submitted feedback on the request to establish the proposed program. Reviewers affirmed the need for the program and the considerable leverage of existing strengths and capacities at UNC Charlotte. Reviewers offered relatively few suggestions

regarding the curriculum, program requirements, and program identity. UNC Charlotte responded to questions regarding the rationale and specifics of the laboratory upgrades required to launch the program.

Benefits of program approval include high leverage of existing resources and curriculum capacity, expansion of access for in-state students, and meeting an identified industry need. For these reasons, we do not recommend any alternatives to implementing the degree program.

#### **IV. Recommendation**

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It is recommended that the Board of Governors approve UNC Charlotte's request to establish a Master of Science (M.S.) in Cybersecurity degree program (CIP 11.1003) to enroll students starting Spring 2017.



**AGENDA ITEM**

A-3. UNC Degree Program Discontinuation .....Courtney Thornton

**Situation:** Elizabeth City State University requests discontinuation of:  
- B.S. in Industrial Technology (CIP 15.0612)

UNC Pembroke requests discontinuation of:  
- B.A. in Art Education (CIP 13.1302)

**Background:** Per UNC 400.1, the campuses and UNC General Administration review degree program offerings and bring periodic discontinuation recommendations to the UNC Board of Governors.

**Assessment:** Discontinuation of the above-listed programs is recommended.

**Action:** This item requires a vote by the Committee, with full Board vote through the consent agenda.



**Requests for Authorization to Discontinue  
Academic Degree Programs**

Elizabeth City State University

B.S. in Industrial Technology (CIP 15.0612)

The program is recommended for discontinuation because of insufficient student enrollment. Upon discontinuation, components of this program will remain available through the B.S. in Engineering Technology, which shares the same faculty and many of the same courses.

This discontinuation does not result in the reassignment or discontinuation of faculty or staff. Upon teach-out of current students, course offerings will be reevaluated for further efficiencies.

UNC Pembroke

B.A. in Art Education (CIP 13.1302)

The program is recommended for discontinuation because of insufficient student enrollment. Upon discontinuation, an Art Education track within the B.A. in Art degree program will allow current students to complete the program and future students to seek teacher education licensure in Art.

This discontinuation does not result in the reassignment or discontinuation of faculty or staff.