Request for Authorization to Establish a Bachelor of Science in Information Technology (BS, CIP 11.0103) at North Carolina Central University

I. Program Highlights

- North Carolina Central University's proposed Bachelor of Science in Information Technology (IT) degree program would prepare students to help businesses and corporations protect, manage, and analyze data to improve efficiency and productivity. Many of our business practices, online shopping activities, or social profiles generate huge data streams. However, big data has no value if it is not properly analyzed and secured. To extract and protect information relevant to decision-making processes, IT professionals will need the right tools and methodologies to provide data analysis and security solutions to businesses.
- The proposed degree program would require 120 total credit hours, offering two concentrations: Cybersecurity and Data Analytics. The program would include general education courses (36 credit hours), business core courses (27 credit hours), information technology core courses (27 credit hours), two concentrations in Cybersecurity (18 credit hours) and Data Analytics (21 credit hours), and unrestricted electives (from four-seven credit hours, depending on the concentration).
- The proposed degree program would be administered on campus and online.
- Fifteen full-time students on campus are projected in the first year. Ninety full-time students on campus are projected by the fourth year.
- The School of Business will request one new tenure track faculty member for cybersecurity.
 Depending upon enrollment growth, one new tenure track faculty member may be requested for data analytics. In addition, a technology support technician will be requested to maintain the cybersecurity lab and the data analytics hardware and software.
- NCCU would use enrollment increase funds to support the program. The NCCU Administration, including the Dean of the School of Business are committed to supporting this new program.
- No tuition differential will be sought to support the proposed degree program.
- The library's resources are adequate to support the proposed degree program.
- The facilities are adequate to support the proposed degree program.

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

1. Existing Programs (Number, Location, Mode of Delivery). Six institutions in the UNC System offer a BS in information technology, including East Carolina University, North Carolina Agricultural and Technical State University, the University of North Carolina at Charlotte, The University of North Carolina at Pembroke, the University of North Carolina Wilmington, and Winston-Salem State University.

Between 2015 and 2018, enrollment in each institution's information technology program increased, demonstrating growing interest in the discipline. In 2018, ECU had 280 students enrolled in the program and conferred 47 degrees. North Carolina A&T had 279 students enrolled and conferred 17 degrees. UNC Charlotte had 135 students enrolled and conferred 63 degrees. UNC Pembroke had 117 students enrolled and conferred 16 degrees. UNC Wilmington had 107

students enrolled and conferred 43 degrees. Winston-Salem State had 48 students enrolled and conferred three degrees.

The existing programs provide instruction in information technology, but the proposed program would be differentiated by concentrations in both cybersecurity and data analytics offered through the School of Business.

- 2. Relation to Campus Distinctiveness and Mission. The proposed degree program would support NCCU's mission by offering students and faculty opportunities to engage in innovative thinking, teaching and research activities with opportunities to generate new ideas and research opportunities. Through the partnerships established with the local IT organizations in the Research Triangle Park (RTP) area (IBM, SAS, CISCO, etc.), students enrolled in the proposed degree program concentrations in Cybersecurity or Data Analytics would have access to industry insights—through internships and site visits—allowing them to incorporate their respective perspectives and problem-solving capabilities.
- **3. Demand (local, regional, state).** According to Cyberseek, an organization providing labor market information related to cybersecurity, there are more than 4,000 cybersecurity job openings in the RTP area in NC, with a 1.4 cybersecurity workforce supply/demand ratio. The high demand is leading to higher job placements and better salaries for cybersecurity graduates with a premium of about \$12,000 over the average for all computer jobs.

The faculty discussed the proposed program and job placement opportunities with members of the Computer Information Systems (CIS) Advisory Council, consisting of industry partners representing the City of Durham, Lincoln Financial, IBM, Cisco Systems, MCNC, Information Technology Senior Management Forum (ITSMF), BDPA Associates, alumni who graduated from the CIS degree program, and current students in the Computer Science and Business (CSB) program. Industry partners were asked what cybersecurity skills they would want their employees to have for job placement and to help develop the curriculum. The CIS advisory subcommittee cybersecurity curriculum conference call was held in March 4, 2019 to review proposed cybersecurity classes and curricular topics.

4. Potential for Unnecessary Duplication. No other institutions in the UNC System offer standalone cybersecurity programs at the bachelor's level. One cybersecurity degree program at the master's level is offered at UNC Charlotte. There are several post-baccalaureate certificates related to Data Analytics offered at UNC System institutions, and two master's programs, offered at Appalachian State University and UNC Charlotte. Most of the cybersecurity related programs are offered as certificates. Although there are schools offering a bachelor's degree in information technology, there is no UNC System institution offering a bachelor's degree in information technology with concentrations in cybersecurity and data analytics within the School of Business.

Given the high demand in the job market for cybersecurity (4,000 open positions in RTP) and data analytics, the combined programs in the state may not be producing enough graduates to meet industry needs.

5. Employment Opportunities for Graduates. The US Bureau of Labor Statistics' (BLS) 2018 report projects that employment of cybersecurity personnel will grow 28 percent from 2016 to 2026,

faster than the seven percent average for all occupations. The report indicates that median pay was \$95,000 in 2018 (with a bachelor's degree). According to The Cisco 2018 Security Annual Cybersecurity Report, *Capabilities Benchmark Study*, the lack of trained personnel and lack of skilled talent tops the list of obstacles in all industries and across all regions. These two issues are the main challenges to adopting advanced security processes and technology. The US BLS also reported that demand associated with data science will generate approximately 11.5 million job openings by 2026.

As noted above, Cyberseek, an organization providing labor market information related to cybersecurity, there are more than 4,000 cybersecurity job openings in the RTP area in NC, with a 1.4 cybersecurity workforce supply/demand ratio. The high demand is leading to higher job placements and better salaries for cybersecurity graduates with a premium of about \$12,000 over the average for all computer jobs.

- 6. Faculty Quality and Number. The School of Business will request one new tenure track faculty member for cybersecurity. Depending upon enrollment growth, one new tenure track faculty member may be requested for data analytics. In addition, a technology support technician will be requested to maintain the cybersecurity lab and the data analytics hardware and software.
- 7. Availability of Campus Resources (library, space, etc.) The James E. Shepard Memorial Library (Shepard Library) contains a Business Collection that could support the proposed degree program. The collection supports teaching and research of undergraduate and master's level courses within the School of Business, including the Computer Information Systems core courses. There are currently nine full-time librarians who are members of the University faculty/staff. Each school or college has a librarian liaison assigned to it. The library liaison provides library instruction sessions at the request of faculty. Additionally, students and faculty can access over 400 online electronic academic databases and over 200,000 e-books.

The facilities are adequate for support of the proposed degree program. The core information technology courses and the cybersecurity and data analytics concentration courses would be delivered in NCCU's School of Business. The School of Business, built in 1956, has three computer labs and ten classrooms to support instruction. Additionally, the School of Business received a grant to build a new cybersecurity lab, which will be housed in one of the three existing computer labs.

- **8. Relevant Lower-level and Cognate Programs.** Currently, the Decision Sciences Department has a data analytics certificate for undergraduate and graduate students. There are no cognate programs in cybersecurity offered at this time.
- **9. Impact on Access and Affordability.** No tuition differential will be sought to support the proposed degree program.

Tuition and fees are as follows:

Full-Time Undergraduate Tuition and Fees Per Annum (In Dollars)

Category	Resident	Non-Resident
Tuition	3,728	16,435
Mandatory Fees (Activities,	2,690	2,690
Athletics, Health, Debt		
Service, Campus Safety,		
Association of Student Govt)		
Special Fees (Program	N/A	N/A
Specific)		
Application Fee (Program	N/A	N/A
Specific)		
Total Tuition and Fees	6,418	19,125

- **10. Expected Quality.** The success of the program will be judged by evaluating enrollment, student proficiency in learning outcomes, retention and graduation rates, job placement, and the satisfaction of graduates and employers.
- 11. Feasibility of Collaborative Program. North Carolina State University has a master's program in Data Analytics and UNC Charlotte has a Master of Science in Cyber Security degree program. Both programs offer potential opportunities for collaboration, which will be explored with the program coordinators. In addition, NCCU will contact representatives for other programs within the UNC System with Cybersecurity certificates/tracks to evaluate and pursue opportunities to collaborate.
- 12. Other Considerations. None.

III. Summary of Review Processes

Campus Review Process and Feedback. The proposal was reviewed by the NCCU faculty, department and university curriculum committees, the provost, and chancellor. Approval was obtained at all levels.

UNC System Office Review Process and Feedback. Throughout the review process, NCCU provided relevant information pertaining to program requirements and resources. The institution submitted appropriate documentation and research to support its statements. Reviewers evaluated the proposal and requests for information were provided by the institution.

IV. Recommendation

It is recommended that the Board of Governors approve NCCU's request to establish a Bachelor of Science in Information Technology degree program (CIP 11.0103) to enroll students starting fall 2020.

Request for Authorization to Establish a Bachelor of Science in Sports Medicine (BS, CIP 26.0908) at North Carolina Central University

I. Program Highlights

- North Carolina Central University's proposed Bachelor of Science in Sports Medicine degree program would prepare students for careers in the areas of sports injury or illness management and/or performance enhancement. Potential job placements include cardiac rehab, clinical exercise specialist, exercise physiology, fitness instructor, physical therapy assistant, occupational therapy assistant, or health care assistant. In addition, due to new guidelines from the Commission on Accreditation of Athletic Training Education, (CAATE), after the fall of 2022, undergraduate athletic training programs cannot accept new students to qualify for the Board of Certification (BOC) exam. All accredited athletic training programs must offer a post-baccalaureate degree. This change in degree level will increase the need nationwide for majors aimed at preparing students for a master's degree in athletic training. The proposed sports medicine degree program would fulfill this need and serve as an additional option for students who would otherwise major in Pre-Med, Pre-Physical Therapy, or Pre-Occupational Training.
- The proposed degree program would require 120 total credit hours. The curriculum would consist of 38 credit hours in general education courses, 30 credit hours in kinesiology core courses, 18 credit hours in sports medicine, and 34 credit hours in non-departmental courses.
- The proposed degree program would be administered on campus.
- Twenty-five full-time students are projected in the first year. One hundred full-time students are projected by the fourth year.
- Existing faculty would be adequate to support the proposed degree program.
- No tuition differential will be sought to support the proposed degree program.
- The library's resources are adequate to support the proposed degree program.
- The facilities are adequate to support the proposed degree program.

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

- 1. Existing Programs (Number, Location, Mode of Delivery). Two institutions in the UNC System offer a baccalaureate degree in athletic training: the University of North Carolina Wilmington and Western Carolina University. Only Western Carolina has a program that specializes in sports medicine. Both programs are administered on campus.
- 2. Relation to Campus Distinctiveness and Mission. The proposed degree program would support NCCU's mission by preparing students to become global leaders and practitioners who transform communities. It would further serve the mission by producing graduates who are engaged problem solvers that advance research in the health sciences.

The proposed degree program would align with the Chancellor's Strategic Priorities, Goal Seven: Critical Workforces of the UNC Strategic Plan, Higher Expectations. Goal Seven prioritizes the increase in the number of "quality credentials awarded in health sciences."

- **3. Demand (local, regional, state).** According to the U.S. Department of Labor's CareerOneStop search tool, the projected rate growth for athletic trainers in the State of North Carolina predicts an increase of 23 percent for athletic trainers, 28 percent for physical therapists, 26 percent for occupational therapists, and 37 percent for physician assistants. These projections are commensurate with national predictions of job growth in these areas. In North Carolina, this would result in an increase in 4,020 jobs and a total of 17, 560 jobs in these fields by 2024.
- 4. Potential for Unnecessary Duplication. Currently, there are no other undergraduate degree programs in the UNC System in sports medicine under the Classification of Instructional Programs (CIP) code of 26.0908. Western Carolina offers the BS in athletic training, with a specialization in sports medicine. However, given recent changes in athletic training accreditation standards, the program may not accept undergraduate students after the fall of 2022. The proposed degree program would be differentiated by preparing students for graduate study in athletic training as well as other health care professions.
- 5. Employment Opportunities for Graduates. The proposed degree program would prepare students for admissions to graduate programs in physical therapy, occupational therapy, physician assistant, athletic training, and medical schools. According to the U.S Bureau of Labor Statistics, these professions are predicted to have above-average growth. The National average growth rate (percent change in employment) from 2016 to 2026 is projected to be 23 percent for athletic trainers, 28 percent for physical therapists, 24 percent for occupational therapists, and 37 percent for physician assistants. Nationwide, this will result in an increase of 144,000 jobs and a total of 648,200 jobs in these fields by 2024.
- **6. Faculty Quality and Number.** Existing faculty would be adequate to support the proposed degree program.
- 7. Availability of Campus Resources (library, space, etc.) The James E. Shepard Memorial Library (Shepard Library) maintains a collection of over 300,000 print volumes. The facility holds over 1200 journals, magazines and newspapers and more than 120,000 government documents. Beyond its print collection, the library subscribes to over 220 electronic databases which provide students with 24/7 access to over 25,000 electronic full text journals and books. The library staff consists of professionals and support personnel, including a librarian who serves as liaison to the Department of Kinesiology and Recreation Administration.

The existing facilities are adequate for support of the proposed degree program.

- **8.** Relevant Lower-level and Cognate Programs. There are no other cognate programs at NCCU for the proposed degree program. No other subject-matter fields will be necessary to support the curriculum.
- **9. Impact on Access and Affordability.** No tuition differential will be sought to support the proposed degree program.

Tuition and fees are as follows:

Full-Time Undergraduate Tuition and Fees Per Annum (In Dollars)

Category	Resident	Non-Resident
Tuition	3,728	16,435
Mandatory Fees (Activities,	2,690	2,690
Athletics, Health, Debt		
Service, Campus Safety,		
Association of Student Govt)		
Special Fees (Program	N/A	N/A
Specific)		
Application Fee (Program	N/A	N/A
Specific)		
Total Tuition and Fees	6,418	19,125

- **10. Expected Quality.** The success of the program will be judged by evaluating enrollment, student proficiency in learning outcomes, retention and graduation rates, job placement, and the satisfaction of graduates and employers.
- 11. Feasibility of Collaborative Program. NCCU has existing collaborations with academic, clinical teaching and research institutions. These are formal affiliate agreements with University of North Carolina at Chapel Hill and Duke University Hospital Systems. The agreements offer clinical learning experience for student majors pursuing sports medicine, orthopedics, physician assistant, athletic training and physical and occupational therapy professions.
- 12. Other Considerations. None.

III. Summary of Review Processes

Campus Review Process and Feedback. The proposal was reviewed by the NCCU faculty, department and university curriculum committees, the provost, and chancellor. Approval was obtained at all levels.

UNC System Office Review Process and Feedback. Throughout the review process, NCCU provided relevant information pertaining to program requirements and resources. The institution submitted appropriate documentation and research to support its statements. Reviewers evaluated the proposal and requests for information were provided by the institution.

IV. Recommendation

It is recommended that the Board of Governors approve NCCU's request to establish a Bachelor of Science in Sports Medicine degree program (CIP 26.0908) to enroll students starting fall 2020.

Request for Authorization to Establish a Bachelor of Arts in Human and Organizational Leadership and Development (BA, CIP 52.0213) at University of North Carolina at Chapel Hill

I. Program Highlights

- The University of North Carolina at Chapel Hill's proposed Bachelor of Arts in Human and Organizational Leadership and Development degree program would prepare students for careers in management analytics, human resources, training and development, social and community services management, and training and development management. Human and organizational leadership and development is a field of applied science focused on understanding and managing change and improvement in people and organizations. The proposed degree program would be offered by the School of Education.
- The proposed degree program would require 120 total credit hours. The curriculum would include general education courses, with credit hours dependent upon the requirements at students' date of enrollment. Students who enrolled prior to or during the 2020-2021 academic year would be subject to UNC-Chapel Hill's current set of General Education Curriculum. Students who enroll in the 2021-2022 academic year or later would fulfill requirements of the IDEAs in Action General Education Curriculum. Forty-five hours of coursework would be required for the major, including 18 hours in required coursework, 15 hours of electives, and a 12-hour internship/capstone sequence.
- The proposed degree program would be administered on campus.
- Fifty full-time students are projected in the first year. One hundred full-time students are projected by the fourth year.
- Existing faculty are adequate to support much of the proposed degree program. It is estimated
 that one additional clinical faculty member with recent field experience and extensive contacts
 among organizational leaders in the region would be an essential complement to existing faculty.
- No tuition differential will be sought to support the proposed degree program.
- The library's resources are adequate to support the proposed degree program.
- The facilities are adequate to support the proposed degree program.

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

- **1. Existing Programs (Number, Location, Mode of Delivery).** There are no other undergraduate degree programs in human and organizational leadership in the UNC System.
- 2. Relation to Campus Distinctiveness and Mission. The proposed degree program would support UNC-Chapel Hill's mission to prepare the "next generation of leaders" for North Carolina and beyond and thus serve the UNC System's mission to contribute "to the solution of societal problems" and enrich "the quality of life in the State."
- 3. Demand (local, regional, state). Analysis by Hanover Research concluded that employment growth in occupations related to human and organizational leadership development is "expected to be faster than average in North Carolina, the Southeast, and nationwide through 2024, and student and employer demand for HOLD's analytics and organizational dynamics enable it to meet this demand." According to the U.S. Department of Labor's CareerOneStop

search tool, the projected growth in careers related to human and organizational leadership development in North Carolina predicts an increase of 19 percent for management analysts, 13 percent for human resources managers, and 15 percent for training and development managers.

4. Potential for Unnecessary Duplication. Currently, there are no other undergraduate degree programs in human and organizational leadership in the UNC System. The closest analogue in the UNC System to the proposed degree program is North Carolina State University's BA in Leadership in the Public Sector. However, it functions as a degree completion program, designed for students who have an associate degree or who are changing majors after completing a substantial amount of coursework in another program at the bachelor's level. The proposed degree program would target a more traditional undergraduate population.

An independent market analysis by Hanover Research concluded: "There is no evidence of other North Carolina bachelor's degree programs offering HOLD's unique mix of education, social science, policy, analytics, and leadership education." It would be the only undergraduate program in the UNC System associated with CIPS code 52.0213.

- 5. Employment Opportunities for Graduates. The proposed degree program would prepare graduates for careers in management analytics, human resources, training and development, social and community services management, and training and development management. Projections Central predicts that openings in these fields will grow by 17 percent annually in North Carolina, 16 percent annually in the Southeast, and 12 percent annually across the United States over the next decade. In addition to being in high demand, these fields are highly remunerated, with annual salaries ranging from approximately \$65,000 (for Human Resources specialists and Social and Community Service Managers) to more than \$120,000 (for Human Resources Managers and Training and Development Managers.)
- **6. Faculty Quality and Number.** Existing faculty are adequate to support much of the proposed degree program. It is estimated that one additional clinical faculty member who has recent field experience as well as extensive contacts among organizational leaders in the region would be an essential complement to existing faculty.
- **7. Availability of Campus Resources (library, space, etc.)** The library's resources, including substantial e-journals and e-research by discipline, are adequate to support the proposed degree program.

The existing facilities are adequate to meet student and faculty needs for the proposed degree program. Course sections will be taught in general use classrooms managed by the university as well as classrooms managed specifically by the School of Education.

8. Relevant Lower-level and Cognate Programs. The proposed BA in Human and Organizational Leadership Development degree program would build on the School of Education's undergraduate minor in education and will complement the School of Education's undergraduate minor in human development and family studies. The proposed curriculum would not require improvement or expansion in any complementary subject matter fields. The proposed course of study includes several elective courses offered via other programs, including the School of Business, the Department of Public Policy, the Department of Communication, and the Department of Sociology.

9. Impact on Access and Affordability. No tuition differential will be sought to support the proposed degree program.

Tuition and fees are as follows:

Full-Time Undergraduate Tuition and Fees Per Annum (In Dollars)

Category	Resident	Non-Resident
Tuition	7,019	34,198
Mandatory Fees (Activities, Athletics, Health, Debt Service, Campus Safety, Association of Student Govt)	1,732	1,732
Special Fees (Program Specific)	N/A	N/A
Application Fee (Program Specific)	N/A	N/A
Total Tuition and Fees	8,751	35,930

- **10. Expected Quality.** The success of the program will be judged by evaluating enrollment, student proficiency in learning outcomes, retention and graduation rates, job placement, and the satisfaction of graduates and employers.
- 11. Feasibility of Collaborative Program. There are no other undergraduate degree programs in human and organizational leadership in the UNC System. However, the proposed course of study would include several cross-listed electives in UNC-Chapel Hill's School of Business, Education, and Departments of Communication, Public Policy, and Sociology. Faculty are working on a partnership with the UNC-Chapel Hill School of Education's Human Development and Family Studies major around shared research methods and capstone coursework.
- 12. Other Considerations. None.

III. Summary of Review Processes

Campus Review Process and Feedback. The proposal was reviewed by the UNC-Chapel Hill faculty, department and university curriculum committees, the provost, and chancellor. Approval was obtained at all levels.

UNC System Office Review Process and Feedback. Throughout the review process, UNC-Chapel Hill provided relevant information pertaining to program requirements and resources. The institution submitted appropriate documentation and research to support its statements. Reviewers evaluated the proposal and requests for information were provided by the institution.

IV. Recommendation

It is recommended that the Board of Governors approve UNC-Chapel Hill's request to establish a Bachelor of Arts in Human and Organizational Leadership and Development degree program (CIP 52.0213) to enroll students starting fall 2020.

Request for Authorization to Establish a Bachelor of Arts in Medical Anthropology (BA, CIP 45.0203) at University of North Carolina at Chapel Hill

I. Program Highlights

- The University of North Carolina at Chapel Hill's proposed Bachelor of Arts in Medical Anthropology degree program would prepare students for careers related to research in natural and social sciences, clinical health care, and social service arenas. The field of medical anthropology introduces students to the biocultural character of disease and engages them in direct work with communities.
- The proposed degree program would require 120 total credit hours. The curriculum would include general education courses, with credit hours dependent upon the requirements at students' date of enrollment. Students who enrolled prior to or during the 2020-2021 academic year would be subject to UNC-Chapel Hill's current set of General Education Curriculum. Students who enroll in the 2021-2022 academic year or later would fulfill requirements of the IDEAs in Action General Education Curriculum. The curriculum would require 27 credit hours of core courses in medical anthropology and a minor of 15 credit hours.
- The proposed degree program would be administered on campus.
- Twenty full-time students are projected in the first year. Eighty full-time students are projected by the fourth year.
- The proposed degree program has been granted a tenure-track line to hire a cultural medical anthropologist. In addition, a second hire may be needed in the biological subfield to provide appropriate course opportunities.
- No tuition differential will be sought to support the proposed degree program.
- The library's resources are adequate to support the proposed degree program.
- The facilities are adequate to support the proposed degree program.

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

- **1. Existing Programs (Number, Location, Mode of Delivery).** There are no other medical anthropology degree programs within the UNC System or private institutions in North Carolina.
- 2. Relation to Campus Distinctiveness and Mission. The proposed degree program would support UNC-Chapel Hill's mission and key objectives of the UNC System, the institution's College of Arts and Science's strategic plan, and their Blueprint for Next through the development of a contemporary, innovative, inclusive, and global curriculum. It would provide students with multidisciplinary, evidence-based knowledge, skills, and experiences that draw on and integrate the humanities and sciences; and will prepare students to be productive citizens in a 21st century global society that requires creativity, flexibility, and knowledge-based capabilities.
- **3. Demand (local, regional, state).** According to the U.S. Department of Labor's CareerOneStop search tool, the projected rate growth for jobs related to medical anthropology in the state of North Carolina predicts an increase of 14 percent for epidemiologists, 23 percent for physical therapists, 15 percent for nutritionists, and 14 percent for health educators. These projections are commensurate with national predictions of job growth in these areas.

- 4. Potential for Unnecessary Duplication. There are no other universities in the UNC System or the state of North Carolina that offer a degree in medical anthropology. On the UNC-Chapel Hill campus, the only existing major in the College of Arts and Sciences related to health is the BA in Global Studies, Concentration in Global Health and the Environment. Students pursuing this degree may include medical anthropology courses towards their major. The proposed degree program would differ by offering a broad-based, multidisciplinary education that incorporates studies of biology and culture, history and the present, through the framework of anthropology.
- 5. Employment Opportunities for Graduates. Career paths in dentistry, osteopathic, chiropractic, and integrative medicine, which all enjoy high societal demand, are common among medical anthropology minors and would be pursued by graduates of the proposed degree program. Options may include careers in global health (e.g., field consultants, organization development specialists, and program implementation and evaluation), public health (e.g., education and prevention specialists, epidemiologists, study coordinators, nutritionists, disease ecologists, and public health information officers), allied health care, and health and human services positions.

According to the U.S. Bureau of Labor Statistics, "employment in healthcare occupations is projected to grow 14 percent from 2018 to 2028, much faster than the average for all occupations, adding about 1.9 million new jobs. Healthcare occupations are projected to add more jobs than any of the other occupational groups."

- **6. Faculty Quality and Number**. The department has been granted a tenure-track line to hire a cultural medical anthropologist to support course offerings, student mentoring, and supervision of honors' theses. In addition, the proposed degree program may require a second hire in the biological subfield to provide appropriate course opportunities.
- 7. Availability of Campus Resources (library, space, etc.) The present library holdings are adequate for the instructional and research needs of the proposed degree program. Since the curriculum would involve the expansion of an existing minor degree with faculty already actively involved in research in this field, the existing library resources should be sufficient.

The existing facilities are adequate for support of the proposed degree program. The Department of Anthropology's space comprises 9,214 square feet on the second, third, and fourth floors of Alumni Building, as well as two small temporary offices in Caldwell Hall. The facilities include the Human Biology Laboratory, a 400-sqare foot newly renovated laboratory space. The lab provides an integrative, comparative approach to studies of human biology and health.

- **8. Relevant Lower-level and Cognate Programs.** There are no lower-level or cognate programs that support the proposed degree program. The BA in Medical Anthropology would be a self-sufficient, inter-disciplinary course of study that provides students with course work that begins with introductory level foundations and builds in sophistication and complexity through courses that are also suitable for graduate level study.
- **9. Impact on Access and Affordability.** No tuition differential will be sought to support the proposed degree program.

Tuition and fees are as follows:

Full-Time Undergraduate Tuition and Fees Per Annum (In Dollars	rs)
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Category	Resident	Non-Resident
Tuition	7,019	34,198
Mandatory Fees (Activities,	1,732	1,732
Athletics, Health, Debt		
Service, Campus Safety,		
Association of Student Govt)		
Special Fees (Program	N/A	N/A
Specific)		
Application Fee (Program	N/A	N/A
Specific)		
Total Tuition and Fees	8,751	35,930

- **10. Expected Quality.** The success of the program will be judged by evaluating enrollment, student proficiency in learning outcomes, retention and graduation rates, job placement, and the satisfaction of graduates and employers.
- 11. Feasibility of Collaborative Program. Medical Anthropology faculty have extensive ties with colleagues in the School of Global Public Health, Carolina Population Center, School of Nursing, School of Allied Sciences, and at research institutions at Research Triangle Park. These relationships provide opportunities for collaboration for undergraduate students through guest lectures given in medical anthropology classes, through the enrollment of graduate students from these various schools in combined upper-level undergraduate/ graduate courses, and through the collaborative research projects that medical anthropology faculty undertake with these colleagues and share with their undergraduates. It is possible that these connections may foster internship opportunities for students.
- 12. Other Considerations. None.

III. Summary of Review Processes

Campus Review Process and Feedback. The proposal was reviewed by the UNC-Chapel Hill faculty, department and university curriculum committees, the provost, and chancellor. Approval was obtained at all levels.

UNC System Office Review Process and Feedback. Throughout the review process, UNC-Chapel Hill provided relevant information pertaining to program requirements and resources. The institution submitted appropriate documentation and research to support its statements. Reviewers evaluated the proposal and requests for information were provided by the institution.

IV. Recommendation

It is recommended that the Board of Governors approve UNC-Chapel Hill's request to establish a Bachelor of Arts in Medical Anthropology degree program (CIP 45.0203) to enroll students starting fall 2020.

Request for Authorization to Establish a Bachelor of Fine Arts in Graphic Design (BFA, CIP 50.0409) at University of North Carolina at Charlotte

I. Program Highlights

- The University of North Carolina at Charlotte's proposed Bachelor of Fine Arts in Graphic Design degree program would prepare students for careers in visual communications, including, but not limited to: graphic designer/developer, art director, web designer, user experience/user interface designer, animator, and creative director. The target audience would be regional college applicants interested in a professional creative career in visual communication.
- The proposed degree program would require 120 total credit hours. The proposed curriculum would require general education courses (37 credit hours), College of Arts and Architecture courses (5 credit hours), and major core courses (78 credit hours).
- The proposed degree program would be administered on campus.
- Seventy-five full-time students and five part-time students are projected in the first year. Ninety full-time students and 10 part-time students are projected by the fourth year.
- No tuition differential will be sought to support the proposed degree program.
- Existing faculty are adequate to support the proposed program. Given that the proposed degree program would transform an existing concentration-based program into a degree program, the current faculty would be sufficient to serve student needs.
- The library's resources are adequate to support the proposed degree program.
- Existing facilities are adequate to support the proposed degree program.

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

- Existing Programs (Number, Location, Mode of Delivery). UNC System institutions offering
 programs similar to the proposed BFA in graphic design include Appalachian State University, East
 Carolina University, Elizabeth City State University, North Carolina State University, University of
 North Carolina at Asheville, and Western Carolina University. Each program is offered on campus.
- 2. Relation to Campus Distinctiveness and Mission. The proposed degree program would support UNC Charlotte's mission by providing a competitive program of creative activity that responds to both corporate and civic needs in the local community. It is also consistent with the UNC System's mission to "discover, create, transmit, and apply knowledge to address the needs of individuals and society. This mission is accomplished through instruction, which communicates the knowledge and values and imparts the skills necessary for individuals to lead responsible, productive, and personally satisfying lives; through research, scholarship, and creative activities."
- 3. Demand (local, regional, state). According to NCworks.gov, the 2016 median wage for a graphic designer employed in Mecklenburg County was \$45,219, while the median wage for a web developer was \$75,961. On April 6, 2018, there were 28 job openings for graphic designers advertised online in Mecklenburg County, for which there were 102 potential candidates in the workforce, or 3.64 candidates per job. While they consider this to be a competitive statewide market, they also forecast graphic design to be a 'National High Growth' industry that has a 'Bright Outlook Nationally.' The local forecast for web developers is even healthier, as there were

57 job openings advertised with 48 potential candidates, or 0.84 candidates per job. NCWorks considers Web development to be a 'Regional High Growth' industry that has a 'Bright Outlook Statewide.'

Graduates of UNC Charlotte's existing concentration-based program have been successful in gaining employment in the field. In the fall of 2017, UNC Charlotte sent a Google Survey to graphic design concentration alumni and received a total of 180 responses. The survey included questions about location, employer and job title, and perceptions of trends in the field of graphic design. Notably, 89% of the respondents are currently employed in a design, marketing, or advertising position.

- 4. Potential for Unnecessary Duplication. Consultations with Appalachian and ECSU regarding their enrollment growth, including waitlists at Appalachian, suggest that the proposed degree program would not have a negative impact on existing programs. Graduation trends data from the Institutional Research Analytics group at UNC Charlotte reveal that a significant portion of degrees awarded by UNC Charlotte are completed by students who come from Mecklenburg and surrounding counties. The establishment of a BFA in Graphic Design at UNC Charlotte would provide the only in-person, on-campus professional degree in the discipline for the Charlotte metro region.
- **5. Employment Opportunities for Graduates.** According to the Bureau of Labor Statistics (BLS), there were 266,300 graphic design positions nationally in 2016 with a median pay of \$47,640 per year. From 2016 to 2026, the employment outlook for graphic designers is projected to grow 4% nationally, below the average of 7% for all occupations. However, there were 162,900 Web developer positions nationally, with a significantly higher median pay of \$66,130 per year. The occupation is projected to grow 15%, more than twice the average for all occupations.
- **6. Faculty Quality and Number.** Existing faculty are adequate to support the proposed program. Given that the proposed degree program would transform an existing concentration-based program into a degree program, the current faculty would be sufficient to serve student needs.
- 7. Availability of Campus Resources (library, space, etc.) UNC Charlotte's Atkins Library has adequate resources to support the proposed degree program. The university has relevant print holdings in both Atkins Library and supporting materials in the Charles C. Hight Architecture Library. The library also has relevant electronic holdings in the categories of monographs and periodicals. In addition, the library offers audio-visual equipment for students and faculty in both locations.

The Atkins Library has several relevant electronic databases, including Art and Architecture Complete, and Arts and Humanities Database from ProQuest, and ProQuest Arts Premium Collection. The library also provides access to the image database Artstor, which includes over two million images. Approximately 31,000 of those images are related to graphic design and illustration. In addition, there are several relevant interdisciplinary databases such as JSTOR and Academic Search Complete.

Existing facilities are adequate to support the proposed degree program. The current concentration-based program has two dedicated computer labs, with 48 available digital

workstations that serve as the primary classrooms for delivery. An additional computer lab, with 24 available digital workstations, as well as flexible studio-based classrooms within the Department of Art and Art History would also be available to deliver classes, as needed.

8. Relevant Lower-level and Cognate Programs. Studio art and art history courses are necessary and valuable to support the proposed degree program. The courses currently offered meet specialized accreditation standards of the National Association of Schools of Art and Design (NASAD) and do not require improvement or expansion.

Students engaged in the proposed curriculum would benefit from proficiency in concepts related to business, marketing, sociology, anthropology, psychology, and others that examine human motivation. Existing general education courses in those fields are adequate to support the proposed degree program. There would be no needed improvement or expansion of those fields.

9. Impact on Access and Affordability. No tuition differential will be sought to support the proposed degree program.

Tuition and fees are as follows:

Full-Time Undergraduate Tuition and Fees Per Annum (In Dollars)

Category	Resident	Non-Resident
Tuition	3,812	17,246
Mandatory Fees (Activities,	3,094	3,094
Athletics, Health, Debt		
Service, Campus Safety,		
Association of Student Govt)		
Special Fees (Program	N/A	N/A
Specific)		
Application Fee (Program	N/A	N/A
Specific)		
Total Tuition and Fees	6,906	20,340

- **10. Expected Quality.** The success of the program will be judged by evaluating enrollment, student proficiency in learning outcomes, retention and graduation rates, job placement, and the satisfaction of graduates and employers.
- 11. Feasibility of Collaborative Program. UNC Charlotte identified collaborative opportunities that target North Carolina community colleges. A high proportion of students served at UNC Charlotte are transfer students. Many of those students transferred from community colleges in the region, such as Central Piedmont Community College or Rowan Cabarrus Community College. The proposed degree program would include 15 credits of studio art and art history coursework that could transfer from 31 NC community colleges to UNC Charlotte in accordance with the Comprehensive Articulation Agreement (CAA) of August 2016. Since the CAA transfer course list was expanded in 2018 and 2019, UNC Charlotte is considering adding another nine-12 credits worth of pre-major courses that would transfer.

Given the demand within similar programs in the UNC System, UNC Charlotte would entertain collaborative opportunities through distance education courses and summer session opportunities as appropriate.

12. Other Considerations. None.

III. Summary of Review Processes

Campus Review Process and Feedback. The proposal was reviewed by the UNC Charlotte faculty, department and university curriculum committees, the provost, and chancellor. Approval was obtained at all levels.

UNC System Office Review Process and Feedback. Throughout the review process, UNC Charlotte provided relevant information pertaining to program requirements and resources. The institution submitted appropriate documentation and research to support its statements. Reviewers evaluated the proposal and requests for information were provided by the institution.

IV. Recommendation

It is recommended that the Board of Governors approve UNC Charlotte's request to establish a Bachelor of Fine Arts in Graphic Design degree program (CIP 50.0409) to enroll students starting fall 2020.