THE UNIVERSITY OF NORTH CAROLINA SYSTEM

MEETING OF THE BOARD OF GOVERNORS
Committee on Educational Planning, Policies, and Programs
November 19, 2025

AGENDA ITEM

A-6. UNC System Academic Degree Program Actions ..... David English

Situation: Section 400.1.1[R] of the UNC Policy Manual, *Regulation for Academic Program Planning and Evaluation*, defines the academic program actions that require approval from the University of North Carolina Board of Governors and those actions that are delegated to staff at the University of North Carolina System Office. This report presents those program actions that require Board approval.

Program Establishments

NC State University
Master of Science (MS) in Wide Bandgap Semiconductors CIP 14.1001
Master (MR) in Agricultural Business Management CIP 01.0102

University of North Carolina at Chapel Hill
Master of Science (MS) in Data Science CIP 11.0701
Doctor of Philosophy (Ph.D.) in Data Science CIP 11.0701

University of North Carolina at Charlotte
Master of Science (MS) in Entrepreneurship CIP 52.0701

University of North Carolina Pembroke
Bachelor of Science (BS) in Agriculture CIP 01.0000

Western Carolina University
Bachelor of Fine Arts (BFA) in Design and Visual Communications CIP 50.0401

Program Discontinuations and Consolidations

North Carolina Central University
Master of Science (MS) in Chemistry CIP 40.0501

Background: Per Section 400.1 of the UNC Policy Manual, the constituent institutions and the UNC System Office review academic degree program offerings and bring periodic requests for program establishment, discontinuation, and consolidation recommendations to the Board. Items such as change of delivery mode, change of program title or Classification

of Instructional Program (CIP) codes, change of off-site locations, and change of specialty codes are delegated to UNC System Office staff.

Assessment: Approval of the requested program actions are recommended.

Action: This item requires a vote by the committee, with a vote by the full Board of Governors through the consent agenda.

THE UNIVERSITY OF NORTH CAROLINA SYSTEM

Request for Authorization to Establish
Master of Science (MS) in Wide Bandgap Semiconductors
CIP 14.1001
NC State University

I. Program Highlights

- NC State University proposes the establishment of a Master of Science in Wide Bandgap Semiconductors (MSWBGS) that will be delivered both on campus and online (asynchronously).
- Designed to leverage NC State's significant research successes in the cutting-edge field of semiconductor technology, the MSWBGS will provide students with an educational experience that is rooted in both theoretical knowledge and practical application. The MSWBGS will focus on process, materials, and devices with both in-class and practical training.
- Full-time students can expect to finish the MSWBGS in 1.5 years, including the required summer practicum experience. Twenty-six full-time students are projected to be enrolled in year five.
- The MSWBGS supports each component of NC State's mission through its interdisciplinary design, focus on science and technology, inclusion of public and private industries, and focus on real-world problems. It also directly contributes to the workforce development goals of initiatives such as Creating Helpful Incentives to Produce Semiconductors (CHIPS) and Commercial Leap Ahead Technologies for Wide Bandgap Semiconductors (CLAWS), addressing the critical need for skilled professionals in this rapidly growing sector.
- Graduates of the MSWBGS will be well-versed in ultra-wideband gap semiconductors and ready to lead and innovate in this dynamic field.

II. Academic Program Planning Criteria (UNC Policy 400.1)

1. **Relation to Campus Distinctiveness and Mission.** Included in the mission of NC State is the university's dedication to teaching, the creation and application of knowledge, and engagement with public and private partners; its commitment to excellence in a comprehensive range of disciplines; its strengths in science and technology; and its promotion of an integrated approach to problem solving that transforms lives and provides leadership for social, economic, and technological development across North Carolina and around the world. The MSWBGS supports each component of the university's mission through its interdisciplinary design, focus on science and technology, inclusion of public and private sectors, and focus on real-world problems. More broadly, MSWBGS is in line with the UNC System's mission to address the needs of individuals and society.

2. **Student Demand.** Student demand for the MSWBGS is demonstrated by enrollment increases in related degree programs and courses at NC State at both the undergraduate and graduate levels as well as by an increase in student research interest in wide bandgap

semiconductors at NC State. It is important to note that although North Carolina Agricultural and Technical State University and the University of North Carolina at Charlotte offer master's degrees in electrical engineering using CIP code 14.1001, the program proposed by NC State is uniquely focused on wide bandgap semiconductors with a specialized curriculum. Despite 10 of NC State's 12 peer institutions offering master's degree programs that share CIP code 14.1001, only the MS in Microelectronics and Semiconductors offered by Purdue University most closely resembles the MSWBGS in terms of curriculum and focus. Over the four-year period listed in Table 3, Purdue's program grew by more than 150 percent. It is important to note that their program is offered 100 percent online.

Table 1. Other UNC System Enrolled for CIP 14.1001 — [Electrical and Electronics Engineering], [Master's]

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23	AY2023-24	AY2024-25
North Carolina A&T	23	21	22	34	37	41
UNC Charlotte	84	58	50	53	47	35

Table 2. Other UNC System Completions for CIP 14.1001 — [Electrical and Electronics Engineering], [Master's]

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23	AY2023-24	AY2024-25
North Carolina A&T	6	4	8	13	12	N/A
UNC Charlotte	44	40	18	29	24	N/A

Table 3. IPEDS Peer Institutions Completions for CIP 14.1001 — [Electrical and Electronics Engineering], [Master's]

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23
Georgia Institute of Technology	395	334	267	357
Michigan State University	41	25	30	31
Purdue University-Main Campus	82	96	99	211
Rutgers University-New Brunswick	64	69	52	45
Texas A&M University-College Station	106	87	65	79
University of California-Davis	56	53	50	50
University of Illinois Urbana-Champaign	186	176	126	162
University of Maryland-College Park	40	34	39	30
University of Minnesota-Twin Cities	73	65	42	62

Virginia Polytechnic Institute and State University	57	54	47	50

3. **Employment Opportunities for Graduates.** The wide bandgap semiconductor industry continues to emerge and, at present, there is insufficient data from the National Center for Education Statistics and the NC Department of Commerce to make a precise assessment of wages or future employment trends in this field. That said, NC State has used available data to provide a meaningful estimate. Four SOC codes were identified for the MSWBGS and include 17-2061 (Computer Hardware Engineers), 17-2071 (Electrical Engineers), 17-2072 (Electronics Engineers, Except Computer), and 17-2131 (Materials Engineers). Employment data for these SOC codes were only available for the bachelor's level and are reported in the tables below for completeness.

Table 4. Median Wage for SOC Codes Cross-walked to CIP Code: 14.1001 [Electrical and Electronics Engineering]

Educational Level Requirement	SOC Count	Median Wage
Some College or Associate Degree	0	N/A
Bachelor's Degree	4	$110,245
Doctoral or Professional Degree	0	N/A

Table 5. Estimated Employment in North Carolina for SOC Codes Cross-walked to CIP Code: 14.1001 with a Matching Education Level Requirement

Education Level Requirement	Count of SOC Codes	2022	2032 Estimate	Net Change	Percent Change
Bachelor's	4	9,079	10,193	1,114	12.27%

4. **Impact on Access and Affordability.** To enhance accessibility, the MSWBGS will be delivered through a hybrid model, offering theoretical courses both online and on campus while practicum courses will be conducted in person to ensure hands-on training. The proposed program will require the completion of 31 credit hours at a cost of $30,913 for a full-time, in-state student. This makes the MSWBGS more cost-effective than the MS in Microelectronics and Semiconductors offered by peer institution Purdue University. It is important to highlight that a student can complete the MSWBGS at an accelerated pace over 12 months at a cost of $24,799.

5. **Program Specific Fees or Tuition**. NC State is requesting tuition differential for the proposed MSWBGS.

Table 6. Full-Time 2025-2026 Master's Tuition and Fees per Year (In Dollars)

Category	Resident	Nonresident
Tuition	10,230.00	31,528.00
Tuition Differential	4,800.00	4,800.00
Mandatory Fees (Athletics, Student Activities, Health Services, Educational & Technology, Campus Security,	2,280.00	2,280.00

Debt Service, ASG)		
Special Fees	--	--

6. **Expected Quality.** As part of the MSWBGS, students will complete 13 credit hours of core courses, six credit hours of practicum, and 12 credit hours of either materials electives or device electives. Full-time students can expect to complete the program in 1.5 years, though a maximum of six years will be allowed for completion. Among the admissions requirements are an undergraduate GPA of 3.0 or better and a BS in computer science, computer engineering, electrical engineering, materials science, or a similar degree program from an accredited college or university. Once admitted to the program, students will be required to maintain an average GPA of 3.0.

7. **Faculty Quality and Number.** The MSWBGS will have a core group of 15 graduate faculty who will be directly responsible for the direction and implementation of the program, including three program co-directors. The core and elective courses in the proposed program can be sustained by existing faculty as most of the courses currently exist. If enrollment growth necessitates multiple sections, premium tuition will be leveraged to hire additional instructors as needed.

8. **Relevant Lower-level and Cognate Programs.** The MSWBGS will require a solid foundation in key electrical and computer engineering concepts as well as materials science and engineering for the graduate departmental courses selected by the student.

9. **Availability of Campus Resources (Library, Facilities, etc.).** The present holdings of the libraries at NC State are adequate for the MSWBGS. The use of other institutional libraries is not anticipated. In addition, existing NC State facilities and technologies are adequate to house and support the proposed program for the first five years.

10. **Existing Programs (Number, Location, Mode of Delivery).** Within the UNC System, both North Carolina A&T and UNC Charlotte offer master's degrees in electrical engineering using the same CIP code as that for the proposed MSWBGS. North Carolina A&T's MS in Electrical Engineering (MSEE) offers both on-campus and online delivery, while UNC Charlotte's MSEE is offered exclusively on campus. Despite sharing CIP codes with these programs, the proposed MSWBGS is uniquely focused on wide bandgap semiconductors, providing a specialized and targeted curriculum that sets it apart from the broader approaches of the aforementioned programs.

Table 7. Other UNC System Applied/Admitted /Enrolled for CIP 14.1001 — [Electrical and Electronics Engineering]

Institution	Degree Level	Counts	AY 22-23	AY 23-24	AY 24-25
North Carolina A&T	Master's	Applied	32	64	51
North Carolina A&T	Master's	Admitted	32	64	49
North Carolina A&T	Master's	Enrolled	14	25	13

Institution	Degree Level	Counts	AY 22-23	AY 23-24	AY 24-25
UNC Charlotte	Master's	Applied	104	58	54

UNC Charlotte	Master's	Admitted	88	51	47
UNC Charlotte	Master's	Enrolled	36	26	21

11. **Potential for Unnecessary Duplication.** The MSWBGS will not duplicate any existing degree programs in the UNC System, though it is acknowledged that there are two MSEE programs where select course content may be viewed as similar or overlapping. As shared in item 10, the proposed program is uniquely focused on wideband gap semiconductors while the MSEE programs provide broad coverage of this area.

12. **Feasibility of Collaborative Program**. The wide bandgap semiconductor faculty at NC State and North Carolina A&T collaborate extensively through the CLAWS Hub led by NC State. The CLAWS Hub is dedicated to advancing wide bandgap semiconductor technologies for both defense and civilian applications with a focus on critical areas such as electronic warfare, 5G/6G communications, sensors, and quantum technologies. Collaboration with UNC System institutions, particularly North Carolina A&T, is integral to the CLAWS mission. By leveraging the expertise of faculty and researchers in the UNC System, CLAWS drives innovation, enhances research capabilities, and supports workforce development.

13. **Other Considerations.** The CHIPS Act, along with the U.S. Departments of Commerce (DOC), Defense (DOD), and Energy (DOE), as well as the National Science Foundation, have identified a strong national need for academic degree programs in this field. As the recipient of a DOD ME Commons hub focused on wide bandgap semiconductors, NC State is uniquely positioned to develop and successfully manage such a transformative academic program. Its close proximity, strong connections, and shared goals with initiatives such as CLAWS and PowerAmerica further reinforce the university's capacity to lead in this critical area.

III. Summary of Review Processes

1. **Institution Review Process and Feedback.** The proposal was reviewed by the NC State faculty (department and college committees), Administrative Board of the Graduate School (ABGS), Graduate Operations Council (GOC), Council of Deans, chief financial officer, provost, Chancellor's Cabinet, and the chancellor. Approval and support were provided at all levels.

2. **UNC System Office Review Process and Feedback.** Throughout the review process, NC State provided relevant information pertaining to program requirements and resources. The institution submitted appropriate documentation and research to support the statements made.

IV. Recommendation

Staff recommends that the UNC Board of Governors approves NC State University's request to establish the Master of Science (MS) in Wide Bandgap Semiconductors (CIP 14.1001) effective spring 2026.

THE UNIVERSITY OF NORTH CAROLINA SYSTEM

Request for Authorization to Establish
Master (MABM) in Agricultural Business Management
CIP 01.0102
NC State University

I. Program Highlights

- NC State University proposes the establishment of a new 30-credit hour Master in Agricultural Business Management (MABM) that will be delivered both on campus and online (asynchronously).
- Focusing on agribusiness operations and entrepreneurship, the MABM will provide students with opportunities to learn through engagement with real-world agribusiness issues.
- Students enrolled in the MABM full time can expect to complete it in three semesters. In year 5, 38 full-time students are projected to be enrolled.
- The MABM supports the mission of NC State by uniting its strengths in science and technology with a commitment to excellence in a comprehensive range of disciplines as well as by promoting an integrated approach to problem solving that transforms lives.
- Graduates of the MABM will be empowered with the skills needed to contribute to the development of rural North Carolina through the acquisition of knowledge in agricultural policy, both at the state and federal level.

II. Academic Program Planning Criteria (UNC Policy 400.1)

1. **Relation to Campus Distinctiveness and Mission.**
Included in the mission of NC State is the university's dedication to teaching, the creation and application of knowledge, and engagement with public and private partners; its strengths in science and technology; and its promotion of an integrated approach to problem solving that transforms lives and provides leadership for social, economic, and technological development across North Carolina and the world. The proposed MABM supports each component of the university's mission through its focus on science and technology, its inclusion of public and private industries, and its focus on real-world problems. The MABM will be the only graduate degree program in the UNC System with the CIP code 01.0102. The only other credentials in the UNC System with this CIP code are NC State's undergraduate certificate and BS in Agricultural Business Management (BSABM). It is also distinct in that it will be the only graduate degree program in the UNC System with a focus on agribusiness management principles, practices, and institutions, including agribusiness analytics, agribusiness sales, agribusiness management, agribusiness marketing, and agribusiness leadership and entrepreneurship.

2. **Student Demand.**
Student demand for the MABM is demonstrated by enrollment in NC State's BSABM as well as surveys of these undergraduate students and undergraduate program alumni. The Department of Agricultural and Resource Economics at NC State offers a large BSABM with over 550 majors. Many of these students and recent graduates have expressed strong

interest in pursuing graduate study in Agricultural Business Management (ABM) but were unable to find such a program in North Carolina. Surveys of current ABM students, alumni, and other stakeholders (e.g., 20-member ABM advisory board) confirm a strong demand for the MABM.

Table 1. Other UNC System Enrolled for CIP 01.0102 — [Agribusiness/Agricultural Business Operations], [Master's]

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23	AY2023-24	AY2024-25
None	N/A	N/A	N/A	N/A	N/A	N/A

Table 2. Other UNC System Completions for CIP 01.0102 — [Agribusiness/Agricultural Business Operations], [Master's]

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23	AY2023-24	AY2024-25
None	N/A	N/A	N/A	N/A	N/A	N/A

Table 3. IPEDS Peer Institutions Completions for CIP 01.0102 — [Agribusiness/Agricultural Business Operations], [Master's]

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23
Texas A&M University – College Station	7	2	5	8
University of Georgia	24	10	9	11

3. **Employment Opportunities for Graduates.**
   The MABM will equip graduates with strong knowledge and skills in business management and agricultural policy, opening doors across the agribusiness value chain. Graduates will be well-positioned for leadership roles that bridge agriculture, business strategy, and economics, with career tracks in agribusiness management, finance, policy, consulting, and entrepreneurship. Included among the many possible job titles for graduates of the MABM are general and operations managers; advertising and promotions managers; marketing managers; sales managers; public relations managers; administrative services managers; financial managers; and transportation, storage, and distribution managers.

Table 4. Median Wage for SOC Codes Cross-walked to CIP Code: 01.0102 [Agribusiness/Agricultural Business Operations]

Educational Level Requirement	SOC Count	Median Wage
Some College or Associate Degree	0	
Bachelor's Degree	21	$105,717
Doctoral or Professional Degree	0	

Table 5. Estimated Employment in North Carolina for SOC Codes Cross-walked to CIP Code: 01.0102 with a Matching Education Level Requirement

Education Level Requirement	Count of SOC Codes	2022	2032 Estimate	Net Change	Percent Change
Bachelor's Degree	21	357,794	399,428	41,634	11.6%

4. **Impact on Access and Affordability.**
   Courses in the MABM will be offered both on campus and online, increasing the program's accessibility for both traditional learners and those who may be working professionals. The master's in economics at NC State is the degree program most closely related to the MABM. According to the U.S. Department of Education College Scorecard, the master's in economics has an excellent debt-to-earnings ratio of 3.5 percent, which is well below the recommended eight percent. It is anticipated that the MABM will have a similar ratio. The MABM will require the completion of 30 credit hours at a cost of $26,549 for a full-time, in-state student.

5. **Program Specific Fees or Tuition**. NC State is requesting tuition differential for the MABM.

Table 6. Full-Time 2025-2026 Master's Tuition and Fees per Year (In Dollars)

Category	Resident	Nonresident
Tuition	10,230.00	31,528.00
Tuition Differential	5,400.00	5,400.00
Mandatory Fees (Athletics, Student Activities, Health Services, Educational & Technology, Campus Security, Debt Service, ASG)	2,280.00	2,280.00
Special Fees	0.00	0.00

6. **Expected Quality.**
   As part of the MABM, students will complete 10 required courses. Students will have the option to complete either a 3-credit hour research or experiential internship project. Full-time students can expect to complete the MABM in three semesters, though a maximum of six years will be allowed for completion. Among the admissions requirements are an undergraduate GPA of 3.0 or better and an undergraduate degree in business, sales, agriculture, entrepreneurship, or similar field from an accredited college or university. Once admitted to the program, students will be required to maintain an average GPA of 3.0.

7. **Faculty Quality and Number.**
   The MABM will have a core group of 13 faculty who will be directly responsible for the direction and implementation of the program, including two program co-directors and three new faculty members hired during the first four years of the program. Prior to the new faculty hires joining NC State, teaching responsibilities will be covered by existing faculty through teaching overload sections and/or expanding the number of sections taught by adjunct faculty.

8. **Relevant Lower-level and Cognate Programs.**
   Currently, there are two cognate programs at the undergraduate level at NC State: (1) the undergraduate certificate in ABM and (2) the BSABM. The MABM will also incorporate graduate courses in subject areas offered through NC State's College of Agriculture and Life Sciences as well as the Poole College of Management.

9. **Availability of Campus Resources (Library, Facilities, etc.).**
   The present holdings of the libraries at NC State are adequate for the MABM. The use of other institutional libraries is not anticipated. In addition, existing NC State facilities and technologies are adequate to house and support the proposed program from years one through 10.

10. **Existing Programs (Number, Location, Mode of Delivery).**
    Within the UNC System, only NC State currently offers a degree program in ABM. This program is at the undergraduate level and uses CIP 01.0102. NC State and North Carolina Agricultural and Technical State University are also the only UNC System institutions to offer master's level degree programs using the two-digit CIP of 01.

    North Carolina A&T offers an MS in Agricultural and Environmental Systems (CIP 01.0308 – Agroecology and Sustainable Agriculture). As part of this degree, students can select from one of three concentrations, including Agribusiness and Food Industry Management. The program is offered on campus and has a strong focus on science, including biotechnology, immunology, microbiology, nutrition, and physiology in poultry and livestock production. Unconditional admission to their graduate program requires an undergraduate degree in animal science or a closely related discipline that includes work with lab or farm animals. Students completing the BSABM at NC State are not required to complete courses in these fields of study, which is why the NC State BSABM is not a feeder for North Carolina A&T's graduate program. NC State expects that most students who pursue the MABM will be alumni of its BSABM.

Table 7. Other UNC System Applied/Admitted /Enrolled for CIP 01.0102 — [Agribusiness/Agricultural Business Operations]

Institution	Degree Level	Counts	AY22-23	AY23-24
None	Not applicable	Applied	N/A	N/A
None	Not applicable	Admitted	N/A	N/A
None	Not applicable	Enrolled	N/A	N/A

11. **Potential for Unnecessary Duplication.**
    The MABM will not duplicate any existing degree programs in the UNC System. As described in items one and 10 above, NC State is currently the only institution in the UNC System that offers a degree program in ABM and a degree program with CIP 01.0102. In addition, the MS in Agricultural and Environmental Systems offered by North Carolina A&T, while based in agriculture, has a limited range in agribusiness through a concentration. This concentration provides students with measurably less breadth and depth in business and entrepreneurship when compared to the program proposed by NC State.

12. **Feasibility of Collaborative Program**.
    NC State foresees strong potential for collaboration with other institutions that offer agribusiness or agribusiness-related programs in the form of joint course offerings. The online

option for the MABM will facilitate these collaborative opportunities.

13. **Other Considerations.**
    A 20-member board of directors has been established for the MABM and includes representatives from a number of state, regional, and national entities, including Rabo AgriFinance, SAS Institute, Reynolds America Inc., the North Carolina Department of Agriculture and Consumer Services, the North Carolina Sweetpotato Commission, the North Carolina Department of Commerce, the U.S. Soybean Export Council, Bayer U.S. Crop Protection, and the U.S. Department of Agriculture.

III. Summary of Review Processes

1. **Institution Review Process and Feedback.** The proposal was reviewed by the NC State faculty (department and college committees), Administrative Board of the Graduate School (ABGS), Graduate Operations Council (GOC), Council of Deans, chief financial officer, provost, Chancellor's Cabinet, and the chancellor. Approval and support were provided at all levels.

2. **UNC System Office Review Process and Feedback.** Throughout the review process, NC State provided relevant information pertaining to program requirements and resources. The institution submitted appropriate documentation and research to support the statements made.

IV. Recommendation

Staff recommends that the UNC Board of Governors approves North Carolina State University's request to establish the Master (MR) in Agricultural Business Management (CIP 01.0102) effective fall 2026.

Request for Authorization to Establish
Master of Science (MS) in Data Science CIP 11.0701
University of North Carolina at Chapel Hill

I. Program Highlights

- The University of North Carolina at Chapel Hill proposes the establishment of a Master of Science (MS) in Data Science in the School of Data Science and Society (SDSS).
- The proposed program will prepare students with skills to analyze structured and unstructured data and apply advanced methodologies, computational tools, and emerging technologies, including artificial intelligence, across multiple disciplines. By year 5, cumulative enrollment is projected to reach 100 students.
- The program emphasizes interdisciplinary applications, supporting workforce needs in science, health, social sciences, and engineering. The curriculum is a three-semester, 30-credit, research-based program with four specialization tracks: Advanced Data Science Foundations and AI; Applications in Physical, Biological, and Health Sciences; Applications in Social Sciences and Humanities; and Data Engineering. Students will complete a one-credit professional development course each semester and may pursue an optional summer internship.
- The proposed degree aligns with UNC-Chapel Hill's mission and the UNC System mission to educate students in emerging areas and solve the world's most challenging problems. Graduates will be ethically trained, master's-level professionals in industry and academia.
- The proposed program will meet societal and labor market demand with graduates serving in managerial roles in organizations, engaging on research teams, and implementing new analytic and computational tools and technologies.
- According to the U.S. Bureau of Labor Statistics (US BLS), the data science profession will grow 36 percent from 2023 to 2033, compared to a five percent growth rate for all occupations (May 2024). It estimates 20,800 job openings in data science annually, and it ranked North Carolina fifth in the nation for data science employment (ibid). LightCast found that data scientists, machine learning engineers, data architects, and statisticians have the greatest proportion of graduate degree holders (2023). *Burtch Works' 2025 AI & Data Science Compensation Report* shows that the majority of data science and AI professionals hold a graduate degree, with 64 percent holding an MS. It also found that AI-related job postings in the U.S. more than doubled from 66,000 to nearly 140,000 between January and April 2025 (ibid). Multiple data sources show a promising employment landscape, especially as artificial intelligence progresses from experiment to scalable platforms.

II. Academic Program Planning Criteria (UNC Policy 400.1)

1. **Relation to Mission.**
   The UNC System's mission is "to discover, create, transmit, and apply knowledge to address

the needs of individuals and society" and will do so "through instruction, research, scholarship, and creative activities" that contribute to "the solution of societal problems and enriches the quality of life in the State" (UNC BOG, 1995). The MS curriculum aligns with these missions by creating a new educational program that advances common goals toward professionalization, scholarship, and research in service to North Carolina and beyond. The program also aligns with the UNC System strategic plan goals, one of which is to increase graduate student success by increasing the number of graduate degrees awarded per 100 FTE graduate students by 1 percent each year until 2027. The MS will not only contribute to the graduate degree efficiency but will do so in a way that supports another UNC System goal — to award 33,000 STEM and health sciences credentials annually. SDSS will also advance the UNC System Office's goal to increase research productivity by generating $2.1 billion in sponsored research by 2027, given the program's research focus.

2. **Student Demand.**

Table 1. Other UNC System Enrolled for CIP 11 [Computer and Information Sciences and Support Services], [MS]. NOTE: Some MS in Data Science/Analytics do not use CIP 11, which may not be captured in the figures below. Source: UNC System Office Dashboard

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23	AY2023-24	AY2024-25
App State	35	41	55	50	75	63
ECU	60	124	125	120	78	92
N.C. A&T	133	130	129	122	148	146
NCCU	110	105	85	55	43	47
NC State	725	508	639	777	804	891
UNC-Chapel Hill	123	105	156	199	171	172
UNC Charlotte	678	472	639	735	956	970
UNCG	190	199	222	249	217	190
UNCW	71	68	84	84	91	94
WSSU	9	5	7	12	13	12

Table 2. Other UNC System Completions for CIP 11 [Computer and Information Sciences and Support Services], [MS] Source: UNC System Dashboard; AY24-25 Data not available

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23	AY2023-24	AY2024-25
App State	24	23	31	25	45	N/A
ECU	38	31	42	44	35	N/A
N.C. A&T	63	71	69	62	76	N/A
NCCU	26	43	36	42	18	N/A
NC State	456	424	227	530	370	N/A
UNC-Chapel Hill	76	67	58	109	106	N/A
UNC Charlotte	422	356	277	498	543	N/A
UNCG	76	92	90	131	106	N/A
UNCW	29	34	27	39	42	N/A
WSSU	7	1	2	5	3	N/A

Table 3. IPEDS Peer Institutions Completions for CIP 11 [Computer and Information Sciences and Support Services], [MS]

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23
UVA	185	235	143	114
Univ of Florida-Gainesville	348	516	294	599
Univ of Wisconsin-Madison	106	152	104	211
Univ of Michigan-Ann Arbor	236	291	392	536
Univ of Washington-Seattle	-	666	665	757
Univ of Illinois–Urbana-Champaign	742	910	1,014	1,441
Univ of Texas-Austin	224	227	238	422
UC-Berkeley	341	378	385	614
UCLA	132	135	117	153

3. **Employment Opportunities for Graduates.** The US BLS estimates a national mean annual wage of $124,590 for data scientists, with North Carolina ranking fifth in the nation for data science employment (May 2024). NCCareers.org estimates median wages for data scientists in North Carolina to be at least $115,380, and SDSS expects its MS students to earn wages at the 75th ($146,850) to 90th percentile ($173,170). Industries with the highest employment for data scientists include computer systems design and related services; management of companies and enterprises; management, scientific, and technical consulting services; insurance carriers; and scientific research and development services (ibid). *Burtch Works' 2025 AI & Data Science Compensation Report* found that employers preferred to hire individuals with a master's degree, outpacing hires with a bachelor's degree (August 2025).

Table 4. Median Wage for SOC Codes 15-2051 Cross-walked to CIP Code: 11.0701 [Computer Science]
The US BLS and the Department of Labor do not provide median wages by degree for SOC 15-2051 (Data Scientist), but BLS does provide percentiles (BLS, May 2024).

Educational Level Requirement	SOC Count	Median Wage
Some College or Associate Degree	N/A	N/A
Bachelor's Degree	15-2051	$80,240 (25th percentile) $112,590 (50th percentile)
Doctoral or Professional Degree	15-2051	$146,850 (75th percentile) $173,170 (90th percentile)

Table 5. Estimated Employment in North Carolina for SOC Code 15-2051 Cross-walked to CIP Code: 11.0701.

Education Level Requirement	Count of SOC Codes	2022	2032 Estimate	Net Change	Percent Change
Graduate	15-2051	5,433	7,716	+3.6 percent 616 annual positions	42.2

4. **Impact on Access and Affordability.** SDSS is not seeking tuition differential or special fees in

a commitment to affordability. Further, the school has designed a three-semester curriculum to lower the debt burden and expedite entry into the workforce. MS graduates can expect a promising employment landscape with higher-than-median wages, according to multiple sources, as previously noted. With median compensation at $112,590, students will see an immediate return on investment.

5. **Program Specific Fees or Tuition**. UNC-Chapel Hill is not requesting any program-specific fees or tuition differential for this program.

Table 6. Full-Time Academic Year Degree Level Tuition and Fees per Year (In Dollars)

Category	Resident	Nonresident
Tuition	$10,764.00 ($598/credit hour with semester max of $5,382)	$29,420.00 ($1,634 per credit hour with a semester max of $14,710)
Tuition Differential	-NONE	-NONE
Mandatory Fees	2,073.00 ($1,036.50 per semester)	2,073.00 ($1,036.50 per semester)
Special Fees	-NONE	-NONE

6. **Expected Quality.** The MS in Data Science is a full-time, residential degree housed within a dedicated professional school of data science. The degree is research-focused, building on UNC-Chapel Hill's expertise in physical and health sciences, humanities, and the social sciences. As such, it offers a pathway to SDSS's concurrently proposed Ph.D. in Data Science through a separate admission process after the first year. Its curricular features include four 15-credit-hour specialization tracks, dedicated professional development, support for an optional internship, and the option to complete either a capstone project or research thesis.

7. **Faculty Quality and Number.** As of July 2025, SDSS has 28 main/affiliated research-active faculty who are experts in various areas of data science. SDSS plans to have 38 faculty members total with either full, joint, or secondary appointments in the school in the next two fiscal years. It has made joint appointments in Sociology, Communications, Statistics and Operations Research, Biostatistics, Genetics, Pathology, and Maternal and Fetal Medicine.

8. **Relevant Lower-level and Cognate Programs**. Undergraduates who obtain a degree in data science or a near-adjacent major represent a pipeline of students who will look for an advanced degree option to further their knowledge and skills. In addition to UNC-CH's and UNC Charlotte's bachelor's degrees in data science, other UNC System institutions offer near-adjacent undergraduate degrees that position students to pursue a MS in Data Science: Nearly every UNC institution offers a bachelor's degree in mathematics or applied mathematics (CIP 27.0101); NC State, UNC Greensboro, and UNC-Chapel Hill offer bachelor's degrees in Statistics and Statistics and Analytics (CIP 27.0501); App State, ECU, ECSU, FSU, N.C. A&T, NC State, UNC Asheville, UNC Charlotte, UNC Greensboro, UNC Wilmington, and UNC-Chapel Hill offer undergraduate majors in Computer Science (11.0701).

9. **Availability of Campus Resources.** SDSS will use resources provided by the UNC-Chapel Hill

libraries, which include hundreds of thousands of physical books and e-books, the latest scholarly articles, and specialized databases. UNC-Chapel Hill has several computational resources, including Longleaf and Sycamore clusters equipped with GPUs and undergoing continuous upgrades and NC Share partnership with a GPU-as-a-service initiative through a National Science Foundation grant.

10. **Existing Programs (Number, Location, Mode of Delivery).** See Table 7 below.

Table 7. Other UNC System Applied/Admitted /Enrolled for CIP VARIES. Below represents programs identified by the Graduate Council and statewide feedback as peer programs to the proposed MS. "Enrolled" refers to new enrollment, not cumulative. Data not available or the institution did not respond to email requests for: North Carolina Agricultural & Technical State University MS in Data Analytics (30.7101), NC A&T MS in Data Science and Engineering (14.9999), and Duke University MS in Interdisciplinary Data Science.

Institution	Degree Level	Counts	AY 22-23	AY23-24
App State	MS in Data Analytics (11.0802): Residential	Applied	133	117
		Admitted	50	37
		Enrolled	29	15
ECU	MS of Data Science (30.7001): Online	Applied	28	34
		Admitted	16	33
		Enrolled	9	20
NC State	MS of Data Analytics (11.0802): Residential	Applied	547	426
		Admitted	129	115
		Enrolled	95	98
NC State (Program did not exist)	MS of Foundations in Data Science (30.3001): Online	Applied	N/A	35
		Admitted	N/A	15
		Enrolled	N/A	12
UNC Charlotte	MS in Data Science and Business Analytics (52.1399): Residential	Applied	796	727
		Admitted	343	328
		Enrolled	120	122
UNC Charlotte	MS in Health Informatics (51.2706): Online	Applied	168	153
		Admitted	111	106
		Enrolled	31	42
UNC-Chapel Hill (Program did not exist in AY22-23)	MS in Applied Data Science (30.7001): Online	Applied	N/A	286
		Admitted	N/A	188
		Enrolled	N/A	105
UNC-Chapel Hill	MS in Statistics, Analytics, and Data Science (27.0502): Residential	Applied	138	221
		Admitted	21	38
		Enrolled	3	6
UNC Greensboro	MS in Informatics and Analytics (11.0104): Online	Applied	71	70
		Admitted	61	57

		Enrolled	32	33
UNC Wilmington	MS in Business Analytics (52.1399): Residential	Applied	99	92
		Admitted	95	81
		Enrolled	68	61

11. **Potential for Unnecessary Duplication.** The SDSS MS in Data Science is a full-time, residential program housed within a school dedicated solely to data science. Many comparable state programs are part-time, online, or located in varied academic units. This program offers a distinct research focus, enabling students to apply to the concurrently proposed Ph.D. in Data Science after the first year. Employment data demonstrate the need for multiple graduate programs serving different regions, populations, and institutional strengths. Collectively, these programs complement one another by building the skilled workforce required to meet statewide and national data science needs.

12. **Feasibility of Collaborative Program**. SDSS is working with community colleges by sharing its undergraduate curriculum and supporting upward transfers directly to the school. SDSS will also create a community of practice by hosting annual in-person events and a speaker series. SDSS participates in external efforts with the NC School of Science and Mathematics Data Science Institute, Workshops in Science of Data and Mathematics Conference, and the Carolina Student Transfer Excellence Program. The school opens its Data Science Day to all UNC System institutions.

III. Summary of Review Processes

1. **Institution Review Process and Feedback.** This proposal has undergone review and approval from the following UNC-Chapel Hill committees and approving bodies: School of Data Science and Society Faculty, Academic Programs Consulting Team, Academic Policy Committee, Graduate School Administrative Board, Provost's Office, CFO and Finance and Operations, and chancellor.

2. **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 the statements made.

IV. Recommendation

Staff recommends that the UNC Board of Governors approves the University of North Carolina at Chapel Hill request to establish the Master of Science (MS) in Data Science (CIP 11.0701) effective spring 2026.

Request for Authorization to Establish
Doctor of Philosophy (Ph.D.) in Data Science
CIP 11.0701
University of North Carolina at Chapel Hill

I. Program Highlights

- The University of North Carolina at Chapel Hill proposes the establishment of a Doctor of Philosophy (Ph.D.) in Data Science in the School of Data Science and Society (SDSS).
- The proposed program will prepare students to enter academia or industry across a spectrum of disciplines. SDSS anticipates admitting 10 students in the first year and eight students every year after. By year 5, the cumulative enrollment will be 42 students.
- The degree will be a five-year, 50-credit research-based curriculum with specialization tracks, including (1) Advanced Data Science Foundations and AI, (2) Applications in Physical, Biological, and Health Sciences, (3) Applications in Social Sciences and Humanities, and (4) Data Engineering. Students will complete three eight-week research exploration rotations with SDSS faculty during the first year, tailored to the interdisciplinary nature of data science, student interests, and faculty research. Students also have the opportunity for an optional summer internship to apply data science knowledge at different organizations.
- The proposed degree aligns with UNC-Chapel Hill's mission and the UNC System mission to educate students in emerging areas and solve the world's most challenging problems. Graduates will be ethically trained, Ph.D.-level professionals in industry and academia who will support discovery and deliver higher education instruction.
- According to the U.S. Bureau of Labor Statistics (US BLS), the data science profession will grow 36 percent from 2023 to 2033, compared to the 5 percent growth rate for all occupations (May 2024). It estimates 20,800 job openings in data science annually, and it ranked North Carolina fifth in the nation for data science employment (ibid). LightCast found that data scientists, machine learning engineers, data architects, and statisticians have the greatest proportion of graduate degree holders (2023). Burtch Works' 2025 AI & Data Science Salary Report shows that the majority of data science and artificial intelligence professionals hold a graduate degree. Sixty-four percent of AI and data science professionals hold an MS, and 27 percent of AI and data science professionals hold a Ph.D. It also found that AI-related job postings in the U.S. more than doubled from 66,000 to nearly 140,000 between January and April 2025 (ibid). Multiple data sources show a promising employment landscape, especially as AI progresses from experiment to scalable platforms.

II. Academic Program Planning Criteria (UNC Policy 400.1)

1. **Relation to Campus Distinctiveness and Mission.**
   The UNC System's mission is to discover, create, transmit, and apply knowledge through instruction, research, and scholarship to address societal needs and improve quality of life in North Carolina (UNC BOG, 1995). The proposed Ph.D. aligns with this mission by advancing

instruction, scholarship, and research that serve the state and beyond. It supports the UNC System strategic plan goal of increasing graduate student success, specifically by raising graduate degrees awarded per 100 FTE graduate students annually through 2027. The program also contributes to awarding 33,000 STEM and health sciences credentials annually, another System priority. With its strong research emphasis, SDSS will advance the System Office's goal of generating $2.1 billion in sponsored research by 2027.

2. **Student Demand.**

Table 1. Other UNC System Enrolled for CIP 11 [Computer and Information Sciences and Support Services], [Ph.D. in Computer Science or Data Science]. The data source is the UNC System Office Dashboard for Enrollment Measure: Student Count.

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23	AY2023-24	AY2024-25
N.C. A&T	28	28	25	27	30	26
NC State	196	204	205	208	221	247
UNC-CH	150	142	142	147	141	150
UNC Charlotte	196	204	205	208	221	247

Table2. Other UNC System Completions for CIP 11 [Computer and Information Sciences and Support Services], [Ph.D. Research/Scholarship]. Both UNC Charlotte and UNC-Chapel Hill are using CIP 11.0701 for their Ph.D. in Data Science. The CIP Group number 11 is a STEM-based field of study that encompasses more than data science. As such, other Ph.D. programs in the state within CIP Group 11 are listed, but do not represent an exact comparison to the field of data science. The data source is the UNC System Office Dashboard.

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23	AY2023-24
N.C. A&T	5	4	4	4	4
NC State	28	18	27	26	35
UNC-Chapel Hill	22	14	14	16	25
UNC Charlotte	12	20	21	15	21

Table 3. IPEDS Peer Institutions Completions for CIP 11 [Computer and Information Science and Support Services], [Ph.D. Research/Scholarship]. *University of Virginia (UVA) is the only external peer with a Ph.D. in Data Science, established in AY23-24.

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23
*UVA	10	7	12	18
Univ of Florida-Gainesville	11	19	13	18
Univ of Wisconsin-Madison	22	13	22	21
Univ of Michigan-Ann Arbor	10	7	10	17
Univ of Washington-Seattle	56	57	56	61
Univ of Illinois–Urbana-Champaign	61	67	72	51
Univ of Texas-Austin	19	32	26	28
UC-Berkeley	43	54	50	49
UCLA	21	28	45	30

3. **Employment Opportunities for Graduates.** The US BLS estimates a national mean annual wage of $124,590 for data scientists, with North Carolina ranking fifth in the nation for data science employment (May 2024). NCCareers.org estimates mean wages for data scientists in North Carolina to be at least $115,380, and SDSS expects its Ph.D. students to earn wages at the 75th ($146,850) to 90th percentile ($173,170). Industries with the highest employment for data scientists include computer systems design and related services; management of companies and enterprises; management, scientific, and technical consulting services; insurance carriers; and scientific research and development services (ibid).

Table 4. Median Wage for SOC Codes 15-2051 Cross-walked to CIP Code: 11.0701 [Computer Science]
The US BLS and the Department of Labor do not provide median wages by degree for SOC 15-2051 (Data Scientist), but it does provide percentiles (BLS, May 2024).

Educational Level Requirement	**SOC Count**	**Median Wage**
Some College or Associate Degree	N/A	N/A
Bachelor's Degree	15-2051	$80,240 (25th percentile) $112,590 (50th percentile)
Doctoral or Professional Degree	15-2051	$146,850 (75th percentile) $173,170 (90th percentile)

Table 5. Estimated Employment in North Carolina for SOC Code 15-2051 Cross-walked to CIP Code: 11.0701.

Education Level Requirement	**Count of SOC Codes**	**2022**	**2032 Estimate**	**Net Change**	**Percent Change**
Graduate	15-2051	5,433	7,716	+3.6 percent 616 annual positions	42.2

4. **Impact on Access and Affordability.** The Ph.D. in Data Science will provide students with five years of full funding through teaching assistantships and research assistantships. Using UNC-Chapel Hill Office of Scholarships and Student Aid data, near-adjacent Ph.D. programs in Computer Science, Statistics and Operations Research, Biostatistics, and Mathematics show no debt upon graduation because the departments fully fund students' degrees as SDSS plans to do. SDSS Ph.D. students can expect to graduate with no or minimal debt while securing employment with higher-than-median wages, yielding an immediate return on investment.

5. **Program Specific Fees or Tuition**. UNC-Chapel Hill is not requesting any program-specific fees or tuition differential for this program.

Table 6. Full-Time PH.D., Year 1 and 2 Tuition and Fees per Year (In Dollars)

Category	Resident	Nonresident
Tuition	$10,764.00 ($598/credit hour with semester max of $5,382)	$29,420.00 ($1,634 per credit hour with a semester max of $14,710)
Tuition Differential	-NONE	-NONE
Mandatory Fees	2,073.00 ($1,036.50 per semester)	2,073.00 ($1,036.50 per semester)
Special Fees	-NONE	-NONE

6. **Expected Quality.** UNC-Chapel Hill's proposed Ph.D. in Data Science will be distinct given its research emphasis that builds on strengths across UNC-Chapel Hill academic units, including expertise in physical and health sciences, humanities, and the social sciences. The Ph.D. offers unique curricular features, including four 15-credit-hour specialization tracks, eight-week research rotations, and support for an optional internship. The program is designed to prepare students for careers in academia and industry.

7. **Faculty Quality and Number.** As of July 2025, SDSS has 28 main/affiliated research-active faculty who are experts in various areas of data science. SDSS plans to have 38 faculty members in all with either full, joint, or secondary appointments in the school in the next two fiscal years. It has made joint appointments in Sociology, Communications, Statistics and Operations Research, Biostatistics, Genetics, Pathology, and Maternal and Fetal Medicine.

8. **Relevant Lower-level and Cognate Programs.** Undergraduates in data science and related majors represent a strong pipeline of students seeking advanced degree options to further their knowledge and skills. UNC-Chapel Hill and UNC Charlotte offer bachelor's degrees in data science with strong enrollment. Many other UNC System institutions provide related undergraduate programs in mathematics, applied mathematics, statistics, analytics, or computer science that prepare students for doctoral-level study. These programs also generate demand for doctorally prepared faculty to support continued undergraduate growth. Collectively, these academic pathways position the proposed Ph.D. in Data Science to both attract students and meet critical faculty workforce needs.

9. **Availability of Campus Resources.** SDSS will use resources provided by the UNC-Chapel Hill libraries, which include hundreds of thousands of physical books and e-books, the latest scholarly articles, and specialized databases. UNC-Chapel Hill has several computational resources, including Longleaf and Sycamore clusters equipped with GPUs and undergoing continuous upgrades and NC Share partnership with a GPU-as-a-service initiative through a National Science Foundation grant.

10. **Existing Programs (Number, Location, Mode of Delivery).** UNC Charlotte offers an on-campus Ph.D. in Data Science.

Table 7. Other UNC System Applied/Admitted /Enrolled for CIP 11.0701 — [Ph.D. in Data Science]

Institution	Degree Level	Counts	AY (e.g., 23-24)	AY (e.g., 24-25)
UNC Charlotte	Ph.D. in Data Science	Applied	N/A	86
UNC Charlotte	Ph.D. in Data Science	Admitted	N/A	20
UNC Charlotte	Ph.D. in Data Science	Enrolled	N/A	11

11. **Potential for Unnecessary Duplication.** UNC Charlotte is the only other UNC System Institution that has established a Ph.D. in Data Science. SDSS leadership reached out to North Carolina peers Dr. Dongsong Zhang and Josh Hertel of UNC Charlotte in December 2024. Discussions showed that each university relies on distinct institutional strengths and offers different curricula. SDSS will build upon UNC-Chapel Hill's strengths in medicine, public health, social sciences, and humanities. SDSS has designed a curriculum that leverages UNC-Chapel Hill's research and scholarly environment by requiring students to complete a specialization track and lab rotations. UNC Charlotte has strengths in its engineering and business programs, and it focuses on six research domains: Artificial Intelligence and Machine Learning, Nanoscale Science and Materials, Online Misinformation Detection, Smart and Sustainable Cities, Leadership, and Urban Health. UNC Charlotte has a different curricular approach; its Ph.D. students pursue 36 hours of electives under the guidance of a faculty advisor.

12. **Feasibility of Collaborative Program**. SDSS is working with community colleges by sharing its undergraduate curriculum and supporting upward transfers directly to the school. SDSS will also create a community of practice by hosting annual in-person events and a speaker series. SDSS participates in external efforts with the NC School of Science and Mathematics Data Science Institute, Workshops in Science of Data and Mathematics Conference, and the Carolina Student Transfer Excellence Program. The school opens its Data Science Day to all UNC institutions.

III. Summary of Review Processes

1. **Institution Review Process and Feedback.** This proposal has undergone review and approval from the following UNC-Chapel Hill committees and approving bodies: School of Data Science and Society faculty, Academic Programs Consulting Team, Academic Policy Committee, Graduate School Administrative Board, Provost's Office, CFO and Finance and Operations, and chancellor.

2. **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 the statements made**.**

IV. Recommendation

Staff recommends that the UNC Board of Governors approves the University of North Carolina

at Chapel Hill request to establish the Doctor of Philosophy (Ph.D.) in Data Science (CIP 11.0701) effective Spring 2026.

Request for Authorization to Establish
Master of Science (MS) In Entrepreneurship
CIP 52.0701
University of North Carolina at Charlotte

I. Program Highlights

- The University of North Carolina at Charlotte proposes the establishment of a Master of Science (MS) in Entrepreneurship.
- The MS in Entrepreneurship, offered by the Belk College of Business (BCOB), is a one-year cohort-based program designed to train and develop entrepreneurs who seek to launch a new business or product. Given the hands-on nature of the program and the involvement of the entrepreneurial community, the projected enrollment in year 5 and at the steady state is estimated at 20 students.
- The MS in Entrepreneurship integrates academic coursework with a structured incubator, ensuring students acquire both advanced business training and practical experience. Students collaborate with the university's Center for Entrepreneurship and Innovation to design and refine ventures. The program incorporates mentorship from experienced entrepreneurs, business planning guidance, and structured investment pitch preparation. Students formally present to venture capitalists, with opportunities to strengthen concepts through subsequent feedback and support. With no comparable programs in the state and few regionally, the degree addresses a critical workforce and innovation gap.
- One component of the UNC Charlotte mission is to be a leading urban research university with a significant local-to-global impact. The MS in Entrepreneurship program supports this mission by providing rigorous academic training along with mentorship from the entrepreneurial community that will lead to business and product creation that has an impact in Charlotte and beyond. The proposed program aligns with the university's following three pillars: (1) Transform Students' Lives Through Educational Opportunity and Excellence, (2) Power the Future Through Inquiry, Research, and Creative Discovery, and (3) Drive Progress for North Carolina and Beyond**.**
- The MS in Entrepreneurship is designed to provide academic training and mentorship to allow students to successfully launch their business or product. A report commissioned by Hanover Research found that demand growth for entrepreneurship-related positions is slightly above average across all geographic levels, with the highest growth in North Carolina. Further, the Bureau of Labor Statistics shows an 11.64 percent increase in 2032 projected demand over 2022 workforce demand with an annual median wage of $108,795 for relevant professions.

II. Academic Program Planning Criteria (UNC Policy 400.1)

1. **Relation to Campus Distinctiveness and Mission.** Enrollment in the MS in Entrepreneurship program will be limited but designed for high impact on the Charlotte region and the state of North Carolina. Located in Uptown Charlotte at the Dubois Center and supported by CO-LAB, UNC Charlotte's innovation hub, the program will strengthen the entrepreneurial ecosystem. It directly aligns with the City of Charlotte's goal of developing the North Tryon Tech Hub, fostering entrepreneurship, corporate collaboration, and academic research. The program also provides UNC Charlotte with an academic and student-facing presence in the city's growing innovation district. Supporting the UNC System's mission and strategic plan, the program advances access, student success, affordability, efficiency, economic impact, and community engagement by preparing graduates to launch ventures that contribute to regional growth.

2. **Student Demand.**

Table 1. Other UNC System Enrolled for CIP 52.0701 — Entrepreneurship/Entrepreneurial Studies, Master of Science

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23	AY2023-24	AY2024-25
N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 2. Other UNC System Completions for CIP 52.0701 — Entrepreneurship/Entrepreneurial Studies, Master of Science

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23	AY2023-24	AY2024-25
N/A	N/A	N/A	N/A	N/A	N/A	N/A

Table 3. IPEDS Peer Institutions Completions for CIP 52.0701 — Entrepreneurship/Entrepreneurial Studies, Master of Science

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23
N/A	N/A	N/A	N/A	N/A

3. **Employment Opportunities for Graduates.** Graduates of the MS in Entrepreneurship program will be prepared to successfully launch their own business or product. In addition, coursework and training in the program will provide the skills for graduates to pursue a variety of entrepreneurial ventures or allow them to fulfill roles in corporate settings that require entrepreneurial change. The Standard Occupational Classification (SOC) crosswalk for CIP 52.0701 includes positions aligned with this program goal including: Chief Executives (11-1011), General and Operations Managers (11-1021), Managers (11-9199), and Postsecondary Business Teachers (25-1011).

Table 4. Estimated Employment in North Carolina for Standard Occupational Classification Codes (SOC) Cross-walked to CIP Code: 52.0701 with a Matching Education Level Requirement

Education Level Requirement	Count of SOC Codes	2022	2032 Estimate	Net Change	Percent Change

Bachelor's Degree	3	135,586	151,364	15,778	11.64%

Table 5. Median Wage for SOC Codes Cross-walked to CIP Code: 52.0701 [Entrepreneurship/Entrepreneurial Studies]

Educational Level Requirement	SOC Count	Median Wage
Some College or Associate Degree	0	N/A
Bachelor's Degree	2	$108,795
Doctoral or Professional Degree	0	N/A

4. **Impact on Access and Affordability.** The MS in Entrepreneurship is a one-year, cohort-based program with coursework across three terms, designed to minimize time to degree while maintaining affordability. Master's programs in the Belk College of Business include a $420 per-credit-hour tuition increment, capped at nine hours per semester. The total academic year cost for North Carolina residents is $20,372, while nonresidents pay $39,061, positioning the program competitively compared to national peers. Median graduate debt in comparable Belk College programs ranges from $20,284 to $32,283, suggesting expected debt levels for Entrepreneurship students will remain within this range. Post-Secondary Employment Outcomes data indicate comparable bachelor's programs in entrepreneurship yield salaries between $35,000 and $122,000, supporting a favorable debt-to-earnings ratio for program graduates.

5. **Program Specific Fees or Tuition**. UNC Charlotte will request a tuition differential for this program. This tuition differential is the same currently applied to all master's programs in the Belk College of Business.

Table 6. Full-Time 2025-2026 Master of Science Tuition and Fees per Year (In Dollars)

Category	Resident	Nonresident
Tuition	$6,379	$25,068
Tuition Differential	$10,800	$10,800
Mandatory Fees (Athletics, Student Activities, Health Services, Educational & Technology, Campus Security, Debt Service, ASG)	$3,913	$3,913
Special Fees	0	0

6. **Expected Quality.** The MS in Entrepreneurship is a cohort-based, 30-credit-hour program emphasizing academic rigor and applied practice. Students complete eight courses in entrepreneurship and two mentored practicums, ensuring experiential learning. The Belk College of Business maintains AACSB accreditation, and the program will be included within this scope. Accreditation standards provide external accountability and continuous benchmarking against global best practices. Program quality will also be monitored through systematic assessment of student learning outcomes, ensuring effectiveness and ongoing improvement.

7. **Faculty Quality and Number.** The Belk College of Business currently has seven full-time faculty across three departments (Management, Economics, and Finance) who conduct academic research and/or have professional engagement in various aspects of entrepreneurship. These faculty include two endowed chair professors, two professors, two associate professors, and one assistant professor. Further, UNC Charlotte is regularly ranked among the top 20 in the world, and top dozen in the U.S., in entrepreneurship research productivity by the TCU Global University Entrepreneurship Research Productivity Rankings. Additionally, the Center for Entrepreneurship and Innovation is housed in the Belk College of Business and provides a network of the entrepreneurial community in Charlotte. Taken together, the faculty have the depth and breadth in the research areas related to the curriculum and connectedness with the entrepreneurial community to provide practical experience for the students.

8. **Relevant Lower-level and Cognate Programs.** The proposed MS in Entrepreneurship builds on UNC Charlotte's MBA, Graduate Certificate in Entrepreneurship and Innovation, and BS in Business Administration. These programs are taught by faculty experts in leadership, communication, strategy, entrepreneurship, and international business. Existing programs prepare students for diverse career paths including small business ownership, corporate leadership, and consulting. The MS in Entrepreneurship extends these foundations by emphasizing new venture creation, product development, and enhanced mentoring and networking opportunities. The Center for Entrepreneurship and Innovation further supports the program by linking academic expertise with entrepreneurial activity in the Charlotte region.

9. **Availability of Campus Resources (Library, Facilities, etc.).** No new square footage is needed for this program; existing technology, information technology, and services will be adequate at inception. The J. Murrey Atkins Library has sufficient holdings in this area to support student research. Given the program's intended size, any long-term effects on existing technology, information technology, and services will be negligible.

10. **Existing Programs (Number, Location, Mode of Delivery).** There are very few degrees, and no master's programs, in the UNC System with the same CIP (52.07) as the proposed MS in Entrepreneurship. No peer institutions offer master's programs with this CIP. Along the Atlantic coast, only Florida, Pennsylvania, and New York report master's completions above a dozen annually, with 145, 400, and 396 respectively, in 2023. Florida programs demonstrate growth and success despite being located in regions with less business activity than Charlotte. The lack of regional programs, combined with Charlotte's emerging North Tryon Tech Hub and strong community support, indicates unmet demand and likely student interest in UNC Charlotte's program.

Table 7. Other UNC System Applied/Admitted /Enrolled for CIP 52.0701 — Entrepreneurship/Entrepreneurial Studies. There are no other master's level programs for this CIP. The table below includes the bachelor's enrolled data.

Institution	Degree Level	Counts	AY (e.g., 22-23)	AY (e.g., 23-24)
East Carolina University	Bachelor's	Enrolled	9	22
UNC Greensboro	Bachelor's	Enrolled	5	10

11. **Potential for Unnecessary Duplication.** The proposed MS in Entrepreneurship will be the

only master's degree in Entrepreneurship (CIP 52.07) in the UNC System. With the program's focus on admitting individuals who have a business or product idea and connecting them with the entrepreneurial community in Charlotte, this program will serve a student population that is not seeking a more traditional master's degree. Further, there is a desire among the existing entrepreneurial community in Charlotte to further grow the entrepreneurial community, and this program provides a focal point for that growth.

12. **Feasibility of Collaborative Program**. As the MS in Entrepreneurship program matures, UNC Charlotte will explore collaboration with other institutions, particularly those that have an affiliated small business technology development center.

13. **Other Considerations.** None.

III. Summary of Review Processes

1. **Institution Review Process and Feedback.** This proposal has been reviewed and approved by the following individuals in the Belk College of Business: associate dean for Graduate Programs (acting as program director for this interdisciplinary program), senior associate dean (acting as department chair for this interdisciplinary program), and dean, as well as the Belk College of Business Graduate Council and regular members of the graduate faculty of the Belk College. The dean of the graduate school, Graduate Council, and Faculty Council have also reviewed and approved this proposal. Leadership support and approval for the proposed program includes the provost and vice chancellor for Academic Affairs, the vice chancellor for Business Affairs, and the chancellor.

2. **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 the statements made.

IV. Recommendation

Staff recommends that the UNC Board of Governors approves the University of North Carolina at Charlotte request to establish the Master of Science (MS) in Entrepreneurship (CIP 52.0701) effective fall 2026.

THE UNIVERSITY OF NORTH CAROLINA SYSTEM

Request for Authorization to Establish
Bachelor of Science (BS) in Agriculture
CIP 01.0000
University of North Carolina at Pembroke

I. Program Highlights

- The University of North Carolina at Pembroke proposes the establishment of a Bachelor of Science (BS) in Agriculture.
- The proposed degree aims to provide a broad-based agricultural education by offering a program of study in crop and animal sciences. The proposed UNCP agriculture degree will be an applied science degree that focuses on preparing students to enter the agriculture sector and meet increasing local, national, and worldwide demands. Projected enrollment in year 5 is 40 students.
- The agriculture program supports the UNC System's mission "to discover, create, transmit, and apply knowledge to address the needs of individuals and society." The program is based on three primary principles: education, research, and knowledge transfer, which are embodied in classroom lectures, faculty-mentored research, and participation in community outreach. Further, a BS in Agriculture degree supports UNC Pembroke's primary goals of teaching and service for underserved and low-income populations.
- The proposed program will address the region's long-standing need for accessible postsecondary education in agriculture, helping to eliminate common barriers such as cost and geographic proximity. By offering a comprehensive curriculum that includes both crop and animal science, the program will prepare students with the knowledge and skills needed to support and grow the state's $100 billion agriculture industry.
- Students who graduate from the agriculture program will be positioned for well-paid jobs upon graduation. According to LightCast consultants, job postings from 2021 to 2023 advertised 2,700 agriculture-related jobs in Bladen, Cumberland, Lee, Robeson, and Sampson counties with 1,700 requiring a four-year degree. Agriculture job listings represented approximately 30 percent of all job listings posted in the surrounding six-county region. The median starting wage is $26.28 per hour, indicating a 39.9 percent increase from 2021.

II. Academic Program Planning Criteria (UNC Policy 400.1)

1. Relation to Campus Distinctiveness and Mission.

UNC Pembroke is committed to increasing enrollment and graduation among low-income students, improving four-year graduation rates, and expanding the number of graduates from programs aligned with critical workforce needs. The proposed program allows educational access to students located in the region and enhances the university's strength in providing education to a varied student body. The program will provide an accessible and affordable option for traditional and nontraditional students in southeast North Carolina and increase student success by providing a small university experience at an institution with a history of reaching underserved populations.

2. Student Demand.

The Biology Department has a BS in Environmental Science degree with a Sustainable Agriculture Track and a Sustainable Agriculture Major. The enrollment of the current programs is provided below illustrating continued growing interest in the Agriculture Science Emphasis. We anticipate that the revised curriculum of the proposed BS in Agriculture will draw additional students to meet our projected enrollment within five years.

Past Enrollment in Agriculture Related Programs at UNC Pembroke

Agriculture Related Programs	F2020	F2021	F2022	F2023	F2024
BS Biology: Agricultural Science Emphasis	10	13	19	21	19
BS Env. Science: Sustainable Ag. Track	6	3	4	2	3
Sustainable Agriculture Minor	1	1	0	2	5

Table 1. Other UNC System Fall Enrolled for CIP 01.0000- Agriculture, General, Bachelor's

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23	AY2023-24	AY2024-25
NC State	92	102	102	104	118	148
N.C. A&T	108	127	138	141	144	154

Table 2. Other UNC System Completions for CIP 01.0000- Agriculture, General, Bachelor's

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23	AY2023-24
NC State	26	32	23	40	17
N.C. A&T	26	24	28	27	25

Table 3. IPEDS Peer Institutions Completions for CIP 01.0000- Agriculture, General, Bachelor's

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23
Eastern New Mexico	4	0	2	3
Texas A&M Commerce	22	18	25	26
West Texas A&M	21	21	18	31

3. Employment Opportunities for Graduates.

Individuals with a BS in Agriculture have access to a broad spectrum of career opportunities across the diverse industries that support and depend on agriculture. These careers span roles in education, such as agricultural science teachers and extension agents, as well as positions in agribusiness, including supply chain specialists, sales representatives, and operations managers. Graduates may also pursue careers in food systems analysis, research, and agricultural processing. The degree opens pathways into horticultural fields, with opportunities in fruit and vegetable production, greenhouse and nursery management, and the ornamental plant industry. Additional pathways for animal science include animal consulting, husbandry,

management, reproduction, and pre-veterinary work. Overall, the degree prepares students for dynamic roles that support both the science and business of agriculture.

Table 4. Median Wage for SOC Codes Cross-walked to CIP Code: 01.0000- Agriculture, General

Educational Level Requirement	SOC Count	Median Wage
Some College or Associate Degree	1	$37,110
Bachelor's Degree	1	$78, 770
Doctoral or Professional Degree	3	$89,023

Table 5. Estimated Employment in North Carolina for SOC Codes Cross-walked to CIP Code: 01.0000 with a Matching Education Level Requirement

Education Level Requirement	Count of SOC Codes	2021	2030 Estimate	Net Change	Percent Change
Bachelor's Degree	1	37,200	40,100	2,900	8%

4. Impact on Access and Affordability.

The U.S. Department of Education College Scorecard estimates the average cost for students for degree programs at UNCP is $11,160/year. The entry level salary estimate for a recent graduate from UNCP with a BS in Agriculture would be $41,470. Therefore, the expected income of a UNCP graduate with a Bachelor of Science in Agriculture would be 272 percent higher than the expected cost of the program. Median total debt post-graduation from UNCP is $25,000 at an estimated monthly repayment cost of $265 per month. The estimated salary of those graduating with a major in agriculture is $45,000 for precision agriculture technicians and farm inspectors and up to $65,000-$75,000 for farm managers, first-line supervisors, buyers and purchasing agents, and soil and plant scientists. More specifically, the projected monthly salary for a UNCP graduate in agriculture is $3,456 per month for a $41,470 annual salary. Graduates with the proposed BS in Agriculture at UNCP should be able to repay student debt.

5. Program Specific Fees or Tuition.

UNC Pembroke is not requesting any program-specific fees or tuition differential for this program.

Full-Time 2025-2026 Undergraduate Tuition and Fees per Year (In Dollars)

Category	Resident	Nonresident
Tuition	$1,000.00	$5,000.00
Tuition Differential	--	--
Mandatory Fees (Athletics, Student Activities, Health Services, Educational & Technology, Campus Security, Debt Service, ASG)	$2,611.00	$2,611.00
Special Fees	--	--

6. Expected Quality.

The program is expected to prepare graduates to enter the agricultural workforce or pursue graduate studies at larger North Carolina institutions. The BS in Agriculture requires 120 credit hours including general education requirements, major requirements, and elective courses. There are no required licensure or professional accreditation standards to be met for the program. Like all other undergraduate degree programs at UNC Pembroke, the proposed program will meet all the required university accreditation standards set by SACSCOC using evaluative instruments embedded in two key required courses: Pest Management and Sustainable Agriculture.

7. Faculty Quality and Number.

The Biology Department consists of 28 full-time faculty, many of whom are involved in teaching introductory or elective courses in the proposed program. Four key faculty teach the majority of the agriculture required courses and most of the electives: Dr. Bryan Sales (associate professor, agriculture program director), Dr. Nicolás Negrin Pereira (assistant professor), Dr. Jeffrey Beasley (Marion F. Bass Endowed Professor in Agriculture Science), and Dr. Kaitlin Campbell (associate professor). Combined, our agriculture faculty have over 50 years of experience teaching and working in agriculture.

The agriculture program faculty have received university awards for teaching, research mentorship, and service to the community and have won competitive grants to support student research in agriculture. Dr. Sales is co-PI on a Bezos Earth Fund grant focusing on sustainable alternative proteins with NC State University ($7.5 million). Dr. Campbell is co-PI on a USDA NIFA AFRI grant ($6.5 million) with Utah State University focusing on enhancing sustainability of rangelands. Dr. Beasley is co-PI on a US EPA Region IV grant ($1.5 million) with Louisiana State University Agricultural Center related to reducing nutrient runoff with wetlands. Additionally, Dr. Negrin Pereira has submitted a USDA-NIFA grant application for a collaborative project with NC State and UNC-Chapel Hill focusing on fertility in beef bulls.

8. Relevant Lower-level and Cognate Programs.

The Department of Biology offers Bachelor of Science degrees in Biology, Environmental Science, and Science Education. The Biology degree has concentrations in Botany, Zoology, Molecular Biology, and Environmental Biology and emphases in Agricultural Science, Biomedical Sciences, and Biotechnology. The Environmental Science degree has a track in Sustainable Agriculture, and the Science Education degree has concentrations in Biology 9-12, Chemistry 9-12, Earth Science 9-12, Physics 9-12, and Middle Grades Science 6-9.

9. Availability of Campus Resources (Library, Facilities, etc.).

Existing campus physical spaces and infrastructure are sufficient to support the program. No new space is needed.

10. Existing Programs (Number, Location, Mode of Delivery).

Based on the UNC System Academic Program Inventory, there are several specialized bachelor's degrees offered in agriculture at UNC System institutions including, agricultural business management (01.0102), agricultural and environmental systems (01.0308), animal science (01.0901), biological and agricultural engineering technology (01.0201), crop and soil science (01.1102), fermentation sciences (01.1099), food science (01.1001), horticultural science (01.1103, laboratory animal science (01.0999), and poultry science (01.0907) among others.

UNC institutions offering single or multiple specialized degrees in agriculture include NC State University (9), N.C. A&T State University (3), and Appalachian State University (1). Only two universities, NC State University and N.C. A&T, currently provide a general agriculture degree (01.0000). The mode of delivery for most coursework for a BS in general agriculture at these institutions is on-campus instruction. Some General Education coursework may be available online.

11. **Potential for Unnecessary Duplication.**
Conversations with colleagues at institutions offering a BS in general agriculture indicate that demand remains positive with students entering a variety of positions in various sectors of agriculture upon graduation. Agriculture continues to be a leading driver in the North Carolina economy. Therefore, faculty at UNCP believe that the BS in Agriculture will generate substantial enrollment because the southeastern area of the state is rural and has a strong agricultural industry. Unlike well-established programs in agriculture currently in North Carolina that offer highly specialized programs, the proposed curriculum is focused on general agriculture. This will provide students with a well-rounded education in agriculture that includes courses in both crop and animal science.

12. **Feasibility of Collaborative Program**.
Establishment of a BS in Agriculture at UNCP would continue to strengthen collaborative opportunities not only with other UNC System institutions that offer majors in agriculture but also present new collaborative opportunities with institutions across the UNC system that have faculty and student research interests with agricultural applications. For example, UNCP professors currently teaching courses in agriculture serve on several graduate committees, participate in grant activities with other universities (e.g. NC State University, Utah State University, UNC- Chapel Hill), and recruit students for internship programs at other institutions.

13. **Other Considerations.** None.

III. Summary of Review Processes

1. **Institution Review Process and Feedback.**
The proposed program was reviewed by the Agriculture Committee of the Department of Biology, chair of the Department of Biology, and dean of the College of Arts and Sciences. It was also reviewed and approved by the Faculty Senate and the Faculty Senate Subcommittee on Curriculum and Academic Affairs Committee.

2. **UNC System Office Review Process and Feedback.** Throughout the review process, UNC Pembroke provided relevant information pertaining to program requirements and resources. The institution submitted appropriate documentation and research to support the statements made.

IV. Recommendation

Staff recommends that the Board of Governors approves the University of North Carolina at Pembroke's request to establish the Bachelor of Science (BS) in Agriculture (CIP 01.0000) effective 2026.

THE UNIVERSITY OF NORTH CAROLINA SYSTEM

Request for Authorization to Establish
Bachelor of Fine Arts (BFA) in Design and Visual Communications
CIP 50.0401
Western Carolina University

I. Program Highlights

- Western Carolina University proposes the establishment of a Bachelor of Fine Arts in Design and Visual Communications.
- The purpose of the proposed program is to prepare students for multiple disciplines within contemporary design practice by promoting the development of sustainable solutions, holistic research practices, and understanding of relationships among people, context, and content. The projected enrollment in year 5 is 78 residential students.
- The proposed program will allow WCU to expand the offering of graphic design curriculum to students in a stand-alone degree program that provides both foundational concepts and in-depth experiences, which prepare students for multiple design disciplines, thereby strengthening their career readiness and enhancing their competitiveness in the field. Through applied experiences, students will learn the design thinking process, best practices in user testing, and a human-centered research approach as early as their first semester in the program.
- WCU is dedicated to academic excellence through innovative teaching, exceptional student support, and connectedness to the region. The proposed program is poised to deliver an improved educational experience for students interested in design by delivering a more design-focused curriculum than what students are currently receiving in the program embedded within the Art BFA. The proposed program is uniquely focused on human-centric design, applying design thinking, and empathetic research processes to address regional, national, and global problems.
- Graduates from the proposed program will be prepared to work in the fields of illustration, animation, and motion design; interface and experience design; product design; or branding and identity design. Specific job titles include web and digital interface designer; art teacher; set and exhibit designer; photographer; graphic designer; commercial and industrial designer; art director; special effects artist and animator; and fine artist, including painter, sculptor, and illustrator.

II. Academic Program Planning Criteria (UNC Policy 400.1)

1. **Relation to Campus Distinctiveness and Mission.** The proposed program supports one of WCU's Strategic Goals to deliver a high-quality educational program that enhances students' intellectual, creative, personal, and social development and prepares them for career fields as well as to advance and excel as 21st century citizens. The proposed program also supports the UNC System Strategic Goals, specifically access, student success, and affordability and efficiency.

2. **Student Demand.** WCU currently has a graphic design curriculum that is embedded within the

Art BFA program (a concentration/emphasis). This concentration has seen steady and substantial enrollment for nearly a decade. Recent enrollments are between 80 and 90 students. Students enrolled in the concentration would benefit from enrollment in a stand-alone degree program that covers both a broad and deep design focus. The enrollment in the current concentration is a strong predictor of student demand and projected enrollment.

Table 1. Other UNC System Enrolled for CIP 50.0401 — Design and Visual Communications, General, BFA and for CIP 50.0409 — Graphic Design, BFA

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23	AY2023-24	AY2024-25 [1]
App State	204	216	261	279	247	215
ECSU	43	57	58	60	54	63
NC State[1]	103	105	109	114	118	126
NC State[2]	124	121	122	114	103	120
UNC Charlotte			92	126	126	130

Bachelor's degree in Art and Design; [2] Bachelor's degree in Graphic and Experience Design

Table 2. Other UNC System Completions for CIP 50.0401 — Design and Visual Communications, General, BFA and for CIP 50.0409 — Graphic Design, BFA

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23	AY2023-24	AY2024-25 [1]
App State	53	44	42	42	24	N/A
ECSU	4	8	10	15	10	N/A
NC State[1]	18	22	20	28	21	N/A
NC State[2]	30	23	28	30	19	N/A
UNC Charlotte		1	13	21	25	N/A

Bachelor's degree in Art and Design; [2] Bachelor's degree in Graphic and Experience Design

Table 3. IPEDS Peer Institutions Completions for CIP 50.0401 — Design and Visual Communications, General, BFA and for CIP 50.0409 — Graphic Design, BFA

Institution	AY2019-20	AY2020-21	AY2021-22	AY2022-23
Eastern Washington University	N/A	N/A	N/A	2
Ferris State University	29	39	47	30
Northern Kentucky University	13	18	21	9
Pennsylvania Western University	N/A	N/A	12	10
St. Cloud State University	N/A	N/A	N/A	11
Southern Illinois Univ. – Edwardsville	21	17	13	11

3. **Employment Opportunities for Graduates.** Graduates from the program will be well-equipped for a wide variety of employment opportunities. With experience in technologies associated with augmented and virtual reality, collaborative design software, conversational interfaces, and 3D printing (to name a few), graduates will realize employment in special effects, advertising and marketing, web and digital interface design, and illustration. Data below indicates median wages and anticipated growth in seven applicable employment sectors including designers of various types such as set and exhibit designers, commercial and industrial designers, graphic designers, and web and digital interface designers. Salaries

and employment opportunities for art teachers, art directors, and artists are included as well.

Table 4. Median Wage for SOC Codes Cross-walked to CIP Code 50.0401 — Design and Visual Communications, General and for CIP Code 50.0409 — Graphic Design

Educational Level Requirement	SOC Count	Median Wage
Bachelor's Degree	7	$64,300

Table 5. Estimated Employment in North Carolina for SOC Codes Cross-walked to CIP Code: 50.0401 — Design and Visual Communications, General and CIP Code 50.0409 – Graphic Design with a Matching Education Level Requirement

Education Level Requirement	SOC Count	2022	2032 Estimate	Net Change	Percent Change
Bachelor's Degree	7	16,127	18,547	2,420	15%

4. **Impact on Access and Affordability.** Western Carolina University is among the most affordable institutions for undergraduate education in the state. The average annual cost is $12,579 for a WCU in-state student receiving federal financial aid, which is over $7,000 less than the midpoint for four-year colleges. About 45 percent of WCU undergraduates receive federal loans, and borrowers who graduate have a median debt of $21,868, which results in a typical monthly loan payment of $232. Assuming the median wage of $64,300 shown in Table 4 (equivalent to a monthly median wage of $5,358), the debt-to-earnings ratio for a graduate from the proposed program is 4.3 percent. (All data is from College Scorecard except the median wage in Table 4, which is from NC Commerce / Bureau of Labor Statistics.)

5. **Program Specific Fees or Tuition**. Western Carolina University is requesting a program-specific fee for this program in the amount of $125 per semester ($250 per year). This fee is equal to the existing fees for the institution's other arts programs. The program fee is used to support the cost of instructional supplies, equipment, and studio maintenance. Specific examples include the purchase of consumables and maintenance for instructional tools used in design fabrication such as 3D printers, routers, and laser cutters. The fee has a direct impact on the quality of the program as well as student success. For instance, individually, students would not be able to purchase some of the expensive equipment associated with a high-quality design education. The state-of-the-art equipment made available from the collection of this fee provides critical access to the use of modern tools a graduate would be expected to have in an entry-level position in the field of design and visual communication.

Table 6. Full-Time 2025-2026 Undergraduate Tuition and Fees per Year (In Dollars)

Category	Resident	Non-Resident
Tuition	$1,000.00	$5,000.00
Tuition Differential	--	--
Mandatory Fees (Athletics, Student Activities, Health Services, Educational & Technology, Campus Security, Debt Service, ASG)	$3,685.00	$3,685.00
Special Fees	$250	$250

6. **Expected Quality.** The program will seek accreditation from the National Association of Schools of Art and Design (NASAD), the association that currently accredits the Art BFA program and the existing graphic design concentration. In a prior program review, NASAD recommended the change to a stand-alone degree program, and Western Carolina University is embracing the opportunity to offer additional discipline-specific coursework for the students interested in studying design. Review of student learning outcomes tied to NASAD standards will occur annually while holistic program review that includes external reviewers will occur at least every seven years as required by UNC Policy 400.1. The next NASAD review is not scheduled until 2034, so a special request for an initial accreditation review will occur within the first five years of program implementation.

7. **Faculty Quality and Number.** The program will be served by three full-time, tenure-track and tenured faculty. These include John Seefeldt (associate professor and program director), Jillian Ohl (assistant professor), and Maddy McLaughlin (assistant professor). These faculty all hold MFA degrees in design or closely related fields; they are well equipped to expand course offerings in specialty areas to support the varied interests and career pathways of students.

8. **Relevant Lower-level and Cognate Programs.** The curriculum makes use of a limited amount of existing coursework in the institution's art programs. The proposed program incorporates five foundational art courses related to drawing, 2D and 3D design, and art history. Students also choose an additional art elective. These courses provide broad-based exposure to important design concepts that lay the groundwork for the design coursework.

9. **Availability of Campus Resources (Library, Facilities, etc.).** Because the institution currently offers other art programs, facilities including studio spaces for students and faculty are well-established. The existing BFA in Art currently supports an emphasis in graphic design (to be discontinued upon approval of the proposed program), which maintains materials, equipment, and space for students enrolling in the proposed program. Also, current library resources are sufficient to support the instructional and research needs of the proposed program.

10. **Existing Programs (Number, Location, Mode of Delivery).** The following institutions offer bachelor's degrees in fields related to the proposed program: Appalachian State University, Elizabeth City State University, North Carolina State University, and University of North Carolina at Charlotte. Other institutions, such as University of North Carolina at Greensboro and East Carolina University, also offer programming that is structured similarly to our existing program in which a "concentration" is embedded within another degree. While these offerings provide options for students, admissions data for these institutions (shown below) suggests that demand persists for the proposed program. Admission rates vary from 70-80% at Appalachian State University and Elizabeth City State University to around 30 percent at North Carolina State University. Furthermore, enrollments in art programs are often capped due to capacity. Program leaders at UNC Charlotte and App State shared that the programs at those institutions are at capacity, but rather than prioritizing growth, directors are managing a steady enrollment while becoming more selective. This approach suggests there exists unmet demand from highly qualified applicants that Western Carolina University could serve. Further evidence of demand for a program at WCU is enrollment within the institution's existing Art BFA graphic design concentration. This program has enjoyed robust total

enrollments of 80-100 students consistently for over five consecutive years and demand persists.

Table 7. Other UNC System Applied/Admitted /Enrolled for 50.0401 — Design and Visual Communications, General and CIP Code 50.0409 – Graphic Design

Institution	Degree Level	Counts	2022-2023	2023-2024
App State	Bachelor's (BFA – Graphic Design)	Enrolled	95	105
ECSU	Bachelor's (BS in Graphic Design)	Enrolled	22	18
NC State	Bachelor's (B in Art and Design)	Enrolled	30	18
NC State	Bachelor's (B in Graphic and Experience Design)	Enrolled	25	24
UNC Charlotte	Bachelor's (BFA in Graphic Design)	Enrolled	29	29

11. **Potential for Unnecessary Duplication.** Establishing the proposed program as a stand-alone degree will enhance the experience of students currently pursuing design and visual communications at Western Carolina University. These students are now enrolled in the graphic design concentration of the Art BFA. The accrediting body, the National Association of Schools of Art and Design, has recommended development of more specialized coursework through a dedicated degree. If approved, Western Carolina would be one of only two NC Promise institutions offering a bachelor's in design and visual communications, expanding affordable access. The program is also distinctive for requiring a design-specific professional preparatory course and internship, further differentiating it within the state.

12. **Feasibility of Collaborative Program**. There are not currently any plans to establish a joint or collaborative program. However, the institution welcomes opportunities to collaborate with other programs in the UNC System.

13. **Other Considerations.** None.

III. Summary of Review Processes

1. **Institution Review Process and Feedback.** The proposed program was reviewed and approved by the following individuals and committees at Western Carolina University: program director, School Curriculum Committee, school director, College Curriculum Committee, associate dean, dean, University Curriculum Committee, Academic Policy and Review Council, Faculty Senate, Provost Council, associate provost, chief financial officer, provost and vice chancellor for Academic Affairs, and chancellor.

2. **UNC System Office Review Process and Feedback.** Throughout the review process, WCU provided relevant information pertaining to program requirements and resources. The institution submitted appropriate documentation and research to support the statements made.

IV. Recommendation

Staff recommends that the UNC Board of Governors approves the Western Carolina University request to establish the Bachelor of Fine Arts (BFA) in Design and Visual Communications (CIP 50.0401) effective fall 2026.

Request for Authorization to Discontinue and/or Consolidate

Academic Degree Programs

North Carolina Central University – Master of Science in Chemistry (MS)

(CIP 40.0501)

Overview: The Master of Science in Chemistry (40.0501) at North Carolina Central University will be discontinued effective fall 2025. This request to discontinue the degree program has been reviewed by the appropriate institutional committees and approved by the appropriate academic authority(ies).

The request to discontinue the Master of Science in Chemistry is based on a low return on investment. No faculty or staff positions will be affected because of the program's discontinuation. Faculty and staff who previously had the majority of their teaching assignments in the graduate program will be reassigned to the new Bachelor of Science in Formulation and Packaging Sciences. Students currently enrolled in the Master of Science in Chemistry who maintain appropriate academic progress will be able to complete the program, with most expected to graduate by summer 2027.

Recommendation: It is recommended that the Board of Governors approve North Carolina Central University's request to discontinue the delivery of the Master of Science in Chemistry (40.0501) effective fall 2025.