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# Agenda

## Academic and Student Affairs

Wednesday, April 23, 2025

11:00 AM

Claiborne Building, 1st Floor ▪ Louisiana Purchase Room 1–100  
1201 N. Third St. ▪ Baton Rouge, LA 70802

- I. Call to Order
- II. Roll Call
- III. Consent Agenda
  - A. Routine Staff Approvals
- IV. Academic Programs
  - A. BS Coastal Meteorology – Louisiana State University and A&M College
  - B. BS Construction Engineering – Louisiana State University and A&M College
  - C. BS Cybersecurity Technology – Louisiana State University of Alexandria
  - D. BS Integrative Sciences – University of Louisiana Monroe
  - E. BS Scientific Visual Communication – Louisiana Tech University
  - F. PhD Biomedical Sciences – Louisiana State University Health Sciences Center New Orleans
- V. Cybersecurity Education Management Council and Louisiana Cybersecurity Talent Initiative Fund
- VI. Other Business
- VII. Adjournment

Committee Members: Terri P. Sterling, Chair; David J. Aubrey, Vice Chair; Christian C. Creed; Ted H. Glaser III; Darren G. Mire; K. Samer Shamieh; LCTC System Representative; LSU System Representative; SU System Representative; UL System Representative  
Staff: Dr. Tristan Denley, Deputy Commissioner for Academic Affairs and Innovation

**AGENDA ITEM III.A.**

**Routine Academic Requests & Staff Approvals**

<b>Institution</b>	<b>Request</b>
LSU HSC-NO	Request to offer the Doctor of Nursing Practice (DNP) 100% online. <b>Approved.</b>
LSU HSC-NO	Request to establish the following Graduate Certificate (GC) programs: <ul style="list-style-type: none"><li>• GC Marriage and Family Counseling</li><li>• GC Mental Health Counseling</li><li>• GC Play Therapy</li><li>• GC Rehabilitation Counseling</li><li>• GC School Counseling</li></ul> <b>Approved.</b>
LSUS	Request to establish a Graduate Certificate (GC) in First Year College English. <b>Approved.</b>
BOR	Request to add English Creative Writing (LCCN-CENL 2523) to the options listed in the Fine Arts Category on the TOPS U diploma pathway. This has already been approved internally by LDOE and approved with a majority vote by the postsecondary campuses, for students entering grade 9 in 2025–2026. <b>Approved.</b>

## AGENDA ITEM IV.A.

### Proposed Bachelor of Science in Coastal Meteorology Louisiana State University and A&M College

#### **Background Information**

Louisiana State University and A&M College (LSU) requests Board of Regents approval to offer a Bachelor of Science (BS) in Coastal Meteorology. The proposal was approved by the LSU Board of Supervisors then submitted to Regents for consideration. Because the proposed program was not included in year one of the 2024–2025 Academic Plan, the institution was required to submit an off-cycle review request including justification for the program’s urgency and readiness for implementation. Staff approved the request and Chief Academic Officers statewide reviewed the program proposal.

#### **Staff Summary**

Louisiana experiences significant weather hazards, including tropical cyclones, floods, and droughts, yet none of the State’s research institutions offer a meteorology degree that can prepare students to pursue careers in meteorological research and operations. The proposed BS in Coastal Meteorology will attract students and faculty that can more effectively develop and disseminate meteorological advancements across the State to combat its growing coastal environmental issues.

1. **Value:** Per Regent’s policy, this program meets the criteria of a Quality Credential of Value.
- a. **Workforce Demand and Job Opportunities:** The proposed program combines scientific knowledge, practical skills, and interdisciplinary approaches that prepare students to address environmental issues affecting the state’s coast. The curriculum will focus on Earth system interactions, atmospheric processes, and the analysis of digital weather data, ensuring students can contribute to advancing meteorological knowledge and solutions.

Occupation	LWC Star Rating <sup>1</sup>	Current Jobs <sup>2</sup>	Projected Jobs 2034 <sup>2</sup>	% Change <sup>2</sup>	Average Salary <sup>2</sup>
Environmental Scientists	4-star	1,425	1,491	5%	\$79,040
Natural Sciences Managers	4-star	440	483	9.8%	\$103,355

<sup>1</sup>Source – LWC

<sup>2</sup>Source – Lightcast (in Louisiana)

- b. **Curriculum Alignment with Employer Needs:** The proposed meteorology degree was developed in response to a growing need for skilled professionals in the state and beyond. Despite significant investments in disaster prevention and mitigation, a shortage of research meteorologists in the state has led to Louisiana relying on out-of-state institutions for projects like the Louisiana Watershed Initiative, reflecting the state's "brain drain" of meteorology talent. The proposed program is necessary to address this gap, ensuring that Louisiana cultivates its own skilled meteorologists to support its growing needs for disaster mitigation, environmental protection, and research in coastal and weather-related fields.
- c. **Same or Similar In-State Programs:** The program will distinguish itself from, yet complement, the Atmospheric Sciences program at the University of Louisiana at Monroe (ULM). LSU’s extensive research portfolio offers unique opportunities for undergraduate research. This would be the first coastal meteorology program in the state.
- d. **Student Enrollment and Completion:** The LSU College of the Coast & Environment coordinates College-specific recruitment events, in which coastal meteorology faculty will participate. The program’s coastal

focus and LSU's leading role in this field will position it to draw students from a larger service area than just in state.

	Year 1	Year 2	Year 3	Year 4
TOTAL Estimated Program Enrollment	8	20	35	50
TOTAL Estimated Program Graduates	0	0	0	5

2. **Resources:** Although the research mission of the Coastal Meteorology program would be much better fulfilled with the hire of an additional tenure-track faculty member, the college has a plan in place for proceeding with the program if not approved to make the hire for several years, including utilizing local, qualified, experienced professionals who could be available to assist on an ad hoc basis.

	Current	Needed	Additional Costs
<b>Faculty</b>	Existing faculty will support the proposed program.	One full-time instructor.	Yr. 1+: \$68,404
<b>Physical (Facilities, Equipment, Library, &amp; Technology)</b>	Existing facilities are adequate to support the program.	Minimal costs for travel and supplies.	Yr. 1: \$10,000
<b>Student Support</b>	Existing student support resources will support the program.	No additional resources are needed.	\$0

3. **Master Plan Priorities:** The following aspects of the proposal directly address priorities or goals of the statewide attainment goal and 2030 Master Plan.

- **Accessibility:** Courses in the proposed program will be delivered in person, with two required courses offered online.
- **Affordability:** The proposed in-state program offers cost savings and a unique coastal focus, attracting students from neighboring states with similar academic interests.
- **Partnerships:** The proposed Coastal Meteorology program will partner with local meteorologists, including Jay Grymes, chief meteorologist at WAFB in Baton Rouge, and members of the College of the Coast & Environment Advisory Council. These collaborations will help promote the program through media outreach. Additionally, the program will build on existing 2+2 memorandums of understanding (MOUs) with Baton Rouge Community College and River Parishes Community College to facilitate student transfers.
- **Work-based Learning:** Faculty in the proposed Coastal Meteorology program have established partnerships with local TV stations, the National Weather Service offices in Slidell, Shreveport, and Lake Charles, and the LSU AgCenter to promote work-based learning opportunities. These collaborations will provide students with hands-on internships in operational meteorology settings and agricultural applications, making summer internships more accessible to students across Louisiana. The new elective course, OCS 3998, will offer students' academic credit for these experiential learning opportunities.
- **Other program attributes that contribute to closing the achievement gap with underserved populations:** The program provides flexible enrollment options to accommodate part-time students. Additionally, 2+2 agreements will offer streamlined pathways for underserved and low-income students.

### **Staff Analysis**

The proposed BS in Coastal Meteorology will be a specialized program designed to meet the growing need for meteorological expertise in Louisiana. The establishment of this degree will attract students and faculty that can more effectively develop and disseminate meteorological advancements across the State to combat its growing coastal environmental issues.

### **STAFF RECOMMENDATION**

**Senior Staff recommends conditional approval of the proposed Bachelor of Science in Coastal Meteorology (CIP 40.0499) at Louisiana State University and A&M College, with a progress report on program implementation submitted as part of the institution's 2025–2026 Academic Plan.**

## AGENDA ITEM IV.B.

### Proposed Bachelor of Science in Construction Engineering Louisiana State University and A&M College

#### **Background Information**

Louisiana State University and A&M College (LSU) requests Board of Regents approval to offer a Bachelor of Science (BS) in Construction Engineering. The proposal was approved by the LSU Board of Supervisors then submitted to Regents for consideration. Because the proposed program was not included in year one of the 2024–2025 Academic Plan, the institution was required to submit an off-cycle review request including justification for the program’s urgency and readiness for implementation. Staff approved the request and Chief Academic Officers statewide reviewed the program proposal.

#### **Staff Summary**

Construction engineering is a blend of civil engineering, construction management, and business. The proposed BS in Construction Engineering (CONE) will address the growing demand for skilled professionals in Louisiana’s construction industry. As the state undergoes significant infrastructure and reconstruction projects, there is an increasing need for engineers with specialized knowledge in construction processes and project management. This program will equip students with the technical expertise needed to lead and contribute to the successful execution of construction projects, focusing on structural design, materials selection, construction methods, and project planning.

The program will be accredited by the Accreditation Board for Engineering and Technology (ABET), ensuring that it meets industry standards and prepares students for professional practice, including the Fundamentals of Engineering (FE) exam. Additionally, students will be encouraged to take the AIC Level I exam to become Certified Associate Constructors. This program will include an interdisciplinary curriculum that supports both technical and managerial roles in the construction industry.

1. **Value:** Per Regent’s policy, this program meets the criteria of a Quality Credential of Value.
- a. **Workforce Demand and Job Opportunities:** During the early stages of the program’s development, LSU’s Department of Construction Management hosted an Industry Insights Panel (IIP) where the department invited input from employers and community leaders about the program. The department also has a well-established industry advisory board called the Construction Industry Advisory Council (CIAC). Both groups expressed a need for the program, both as an entry point to the industry and as a pathway for professionals to advance into leadership roles.

Occupation	LWC Star Rating <sup>1</sup>	Current Jobs <sup>2</sup>	Projected Jobs 2034 <sup>2</sup>	% Change <sup>2</sup>	Average Salary <sup>2</sup>
Construction Manager	5	4,462	4,913	10%	\$119,683
Project Management Specialist	5	6,373	7,175	13%	\$87,797

<sup>1</sup>Source – LWC

<sup>2</sup>Source – Lightcast (in Louisiana)

- b. **Curriculum Alignment with Employer Needs:** Through the CIAC Curriculum and Accreditation Committee there was faculty engagement with alumni, community representatives, employers, and construction organizations (Associated General Contractors and Associated Builders and Contractors). Input from these agencies played a pivotal role in shaping the design and curriculum of the proposed

degree.

- c. **Same or Similar In-State Programs:** Current programs in the state include civil engineering and construction management, but there are currently no other construction engineering degree programs in Louisiana.
- d. **Student Enrollment and Completion:** The proposed program will have the option to be 100% online giving the program more appeal to students currently employed and from a broader geographic region. Based on market analysis and growing demand in the field for trained individuals in construction engineering, LSU estimates significant and rapid growth in program enrollment.

	Year 1	Year 2	Year 3	Year 4
TOTAL Estimated Program Enrollment	15	52	110	180
TOTAL Estimated Program Graduates	0	0	0	7

2. **Resources:** Initially, no new additional faculty will be needed as most of the courses are existing courses and are currently being offered for other degree programs. As the program grows, there may be a need for an additional CONE faculty by year 4.

	Current	Needed	Additional Costs
<b>Faculty</b>	Existing faculty will support the proposed program.	One new faculty member may be hired in year 4 if enrollment grows significantly.	Yr. 4+: \$135,450
<b>Physical (Facilities, Equipment, Library, &amp; Technology)</b>	Existing facilities are adequate to support the program.	No new physical resources are needed.	\$0
<b>Student Support</b>	Existing student support resources will support the program.	One additional staff advisor will be hired.	Yr. 2+: \$71,000

3. **Master Plan Priorities:** The following aspects of the proposal directly address priorities or goals of the statewide attainment goal and 2030 Master Plan.
  - **Accessibility:** The CONE program will be delivered both on campus and 100% online, providing students with the flexibility to work, intern, or co-op during daytime hours. Some courses will also be available in a hybrid format, combining online and campus delivery, to further accommodate students' work schedules.
  - **Affordability:** Prior Learning Assessments will be used when applicable, particularly for students with professional certifications or military credit.
  - **Partnerships:** The department currently works with several partners to create career pipelines for students. These include members of the CIAC (made up of 104 companies) and Professional Associations like Associated General Contractors and Associated Builders and Contractors.
  - **Work-based Learning:** Students will be strongly encouraged to pursue an industry internship. Due to the department's strong relationship with industry, nearly 85% of students secure at least one paid internship prior to graduation. In some cases, employers have funded students' education while they were employed.
  - **Other program attributes that contribute to closing the achievement gap with underserved populations:** Flexible online course delivery will especially support adult students (age 25+) who seek additional education. The CIAC has an active student mentorship program that helps close the

achievement gap with underserved populations. In addition, there are several industry-funded scholarships available to students.

### **Staff Analysis**

The proposed BS in Construction Engineering not only meets current industry demands but also positions graduates to thrive in the evolving job market by combining technical expertise with managerial and business insights. The program was developed through direct engagement with industry ensuring that the program will align with employer needs.

### **STAFF RECOMMENDATION**

**Senior Staff recommends conditional approval of the proposed Bachelor of Science in Construction Engineering (CIP 14.3301) at Louisiana State University and A&M College, with a progress report on program implementation submitted as part of the institution's 2025–2026 Academic Plan.**



## AGENDA ITEM IV.C.

### Proposed Bachelor of Science in Cybersecurity Technology Louisiana State University at Alexandria

#### **Background Information**

Louisiana State University at Alexandria (LSUA) requests Board of Regents' approval to offer a Bachelor of Science (BS) in Cybersecurity Technology. The proposal was approved by the LSU Board of Supervisors then submitted to Regents for consideration. The program was favorably reviewed by Chief Academic Officers statewide and was included in the institution's 2024–2025 Academic Plan.

#### **Staff Summary**

The purpose of the proposed BS in Cybersecurity Technology is to address the critical need for specialized education to protect networks, systems, and data in an era of escalating cyber threats. The program is designed to produce graduates with the technical expertise and practical experience required to meet workforce demands in Louisiana and beyond. The curriculum will focus on the technology used in the cybersecurity field and will include opportunities for students to complete industry-based credentials during the program. Currently, LSUA offers a Bachelor of General Studies (BGS) with a concentration in Cybersecurity, which has demonstrated strong enrollment and student interest. While the BGS provides a flexible academic pathway, the proposed BS in Cybersecurity Technology will deliver a more structured, rigorous curriculum aligned with industry and accreditation standards.

**1. Value:** Per Regent's policy, this program meets the criteria of a Quality Credential of Value.

- a. **Workforce Demand and Job Opportunities:** Cybersecurity is a well-known statewide and national high demand occupation field. According to Cyberseek, an online tool that provides data and insights into the cybersecurity job market, "there were 457,433 openings this year requesting cybersecurity-related skills, and employers are struggling to find workers who possess them. On average, cybersecurity roles take 21% longer to fill than other IT jobs." The following table includes information for Louisiana.

Occupation	LWC Star Rating <sup>1</sup>	Current Jobs <sup>2</sup>	Projected Jobs 2035 <sup>2</sup>	% Change <sup>2</sup>	Average Salary <sup>2</sup>
Information Security Analyst	5-star	691	925	33.8%	\$90,085
Computer Systems Analyst	5-star	2,620	3,003	14.6%	\$82,659

<sup>1</sup>Source – LWC

<sup>2</sup>Source – Lightcast

- b. **Curriculum Alignment with Employer Needs:** The program's curriculum was developed, in part, with input and feedback from local industry partners who have pledged support of the program, including C3 Integrated Solutions, Crest Industries and Turner Teleco Alexandria.
- c. **Same or Similar In-State Programs:** Other institutions nearby (Louisiana State University and A&M College, the University of New Orleans, and Southern University and A&M College) offer Computer Science degrees with cybersecurity as an optional concentration. Grambling and SUNO have both established cybersecurity degrees in recent years. The proposed program will provide a unique focus for students entering the cybersecurity profession and be the only program of its kind in its service area.

- d. **Student Enrollment and Completion:** The current cybersecurity concentration was introduced in 2023 and has grown from four to thirty-five students over that time demonstrating strong student interest in the program. Based on the results of a recent survey of current students and on prospective student inquiries, a standalone program with a more robust curriculum is expected to draw significantly more students to the program.

	Year 1	Year 2	Year 3	Year 4
TOTAL Estimated Program Enrollment	20	30	45	68
TOTAL Estimated Program Graduates	0	0	12	18

2. **Resources:** Faculty from the existing cybersecurity concentration in the BGS, including one full-time and two part-time faculty will support launch of the proposed new standalone degree. One additional full-time faculty member may be hired to implement the program with one additional faculty member hired in year two if resources are available. No other staff or physical resources are needed in the foreseeable future.

	Current	Needed	Additional Costs
<b>Faculty</b>	Existing faculty from the cybersecurity concentration will support the program.	One new full-time faculty for implementation with a second for Year 2.	Yr. 1: \$119,000 Yr. 2+: \$238,000
<b>Physical (Facilities, Equipment, Library, &amp; Technology)</b>	Existing facilities are sufficient to support the program.	No additional resource needs are projected	\$0
<b>Student Support</b>	Existing resources will meet the needs of the program for the foreseeable future.	No additional resource needs are projected.	\$0

3. **Master Plan Priorities:** The following aspects of the proposal directly address priorities or goals of the statewide attainment goal and 2030 Master Plan.

- **Accessibility:** The proposed BS in Cybersecurity Technology will be offered as both an on campus and 100% online program, which meets the needs of non-traditional students already in the workforce or with family responsibilities, and as an on-campus program, catering to local and regional students who prefer the benefits of an on-campus experience. Students in the 100% online program will take their courses in seven-week sessions, a format that provides greater flexibility compared to the traditional 15-week format. On-campus students will have the option to enroll in both the traditional 15-week sessions and the seven-week online sessions.
- **Affordability:** Open Educational Resources (OER) will be used whenever possible to decrease book costs, Prior Learn Assessment (PLA) will be considered when applicable. LSUA will accept the Cybersecurity Universal Transfer Pathway (UTP).
- **Partnerships:** LSUA is currently partnering with local and regional companies such as C3 Integrated Solutions, CLECO, Kinetix, Turner Teleco Alexandria, and CSCI to provide internships and potential job placement opportunities for BGS in Cybersecurity students. These opportunities will also be extended to the proposed BS in Cybersecurity Technology. Additional collaborations with industries and community organizations will be established to enhance learning opportunities further. LSUA is also exploring membership of the Louisiana Cyber Academy.
- **Work-based Learning:** As part of the proposed BS in Cybersecurity Technology degree, all students will be required to take CYBR 4997 - Current Trends and Projects in Cybersecurity, which provides

students with hands-on experience in addressing real-world cybersecurity issues. In addition, the program strongly encourages students to take CYBR 4991 - Cybersecurity Internship, which offers further experiential learning opportunities. The university is currently partnering with local and national companies to offer cybersecurity internships through the CYBR 4991 course, providing students with valuable work-based learning experience.

- **Other program attributes that contribute to closing the achievement gap with underserved populations:** Every student admitted to LSUA is automatically considered for available university scholarships and invited to apply for any of the nearly 147 scholarships provided through the LSUA Foundation. Many of the foundation scholarships are designed to meet the needs of first-generation college students and require that recipients have been awarded the Pell Grant.

### **Staff Analysis**

LSUA's proposed BS in Cybersecurity Technology will support Louisiana's efforts to grow and sustain a more robust cyber workforce especially in the Alexandria region. The institution has already seen success in the existing concentration and will better meet student demand and employer need through a full standalone degree.

### **STAFF RECOMMENDATION**

**Senior Staff recommends conditional approval of the proposed Bachelor of Science in Cybersecurity Technology (CIP 42.0404) at Louisiana State University at Alexandria with a progress report on program implementation submitted as part of the institution's 2025–2026 Academic Plan.**

## AGENDA ITEM IV.D.

### Proposed Bachelor of Science in Integrative Sciences University of Louisiana Monroe

#### **Background Information**

The University of Louisiana Monroe (ULM) requests the Board of Regents' approval to offer a Bachelor of Science (BS) in Integrative Sciences. The proposal was approved by the Board of Supervisors for the University of Louisiana System (ULS) and submitted to the Board of Regents for consideration. The proposal was reviewed by Chief Academic Officers statewide and the proposed program was included in the institution's 2023–2024 Academic Plan.

#### **Staff Summary**

The proposed 120-credit-hour interdisciplinary program is intended to prepare students for successful careers in medicine, research, science, and many other technical professions, benefiting both the local and broader communities. The program's curriculum, which integrates concentrations such as Biomedical Sciences or Earth System Sciences, technical writing, communication, critical thinking, and ethics, ensures that graduates are equipped with essential skills for various scientifically oriented professional fields.

**1. Value:** Per Regent's policy, this program meets the criteria of a Quality Credential of Value.

- a. **Workforce Demand and Job Opportunities:** The demand for skilled professionals in technical fields continues to grow in both Louisiana and the United States. Although the proposed program is not limited to a single discipline, the BS in Integrative Science provides students with the interdisciplinary background necessary for careers in high-demand industries. The concentrations within this degree program support workforce needs by preparing well-qualified leaders and supervisors, strengthening the talent pipeline for industries in Louisiana.

Related Occupation	LWC Star Rating <sup>1</sup>	Current Jobs <sup>2</sup>	Projected Jobs 2034 <sup>2</sup>	% Change <sup>2</sup>	Average Salary <sup>1</sup>
Medical and Health Services Managers	5-star	5,591	7,224	29%	\$113,402
Environment Scientists and Specialists	4-star	1,425	1,491	5%	\$79,040

<sup>1</sup>Source – LWC

<sup>2</sup>Source – Lightcast (in Louisiana)

- a. **Curriculum Alignment with Employer Needs:** Initial discussions with medical schools, including Edward Via College of Osteopathic Medicine (VCOM) located on the ULM campus, biomedical research firms, and government agencies highlighted the need for a more interdisciplinary approach than traditional biology programs. In response, a single Integrative Science degree with multiple concentrations was developed, ensuring flexibility to address current and future workforce demands.
- b. **Same or Similar In-State Programs:** Currently there are no similar programs in the state. The BS in Integrative Sciences would be the first in Louisiana.
- c. **Student Enrollment and Completion:** Primary interest in the proposed BS in Integrated Sciences has been from current ULM students majoring in other science areas like Biology, Chemistry, and Atmospheric Sciences. The Biomedical Sciences and Earth System Sciences concentrations within the proposed program align with existing student interests.

	Year 1	Year 2	Year 3	Year 4
TOTAL Estimated Program Enrollment	12	28	43	55
TOTAL Estimated Program Graduates	0	3	9	13

2. **Resources:** All personnel and facilities required for the startup of the program are already available. The new program will strategically combine the resources of different departments to produce a new undergraduate program in integrative sciences. Anticipated revenue generated through enrollment will adequately cover the cost to sustain the program.

	Current	Needed	Additional Costs
<b>Faculty</b>	Existing faculty in the department will support the program.	No additional faculty is needed.	\$0
<b>Physical (Facilities, Equipment, Library, &amp; Technology)</b>	Existing facilities are sufficient to support the program.	No additional resources needed.	\$0
<b>Student Support</b>	Existing resources will meet the needs of the program for the foreseeable future.	No additional resources are needed.	\$0

3. **Master Plan Priorities:** The following aspects of the proposal directly address priorities or goals of the statewide attainment goal and 2030 Master Plan.
- **Accessibility:** The proposed degree program expands access by building on existing courses at ULM, which are available in face-to-face, hybrid, and online formats. With flexible course delivery and a range of concentration options, students can tailor their studies to fit their needs.
  - **Affordability:** The program's core courses will use Open Educational Resources (OER) whenever feasible. ULM accepts transfer courses from accredited institutions of higher learning, including local community colleges, and will accept the Biology Universal Transfer Pathway (UTP) for this degree.
  - **Partnerships:** ULM currently partners with the National Weather Service (NWS) and the National Oceanic and Atmospheric Administration (NOAA) on projects that will be part of the proposed program.
  - **Work-based Learning:** All concentrations in this program will offer students the option to complete experiential internships as part of their upper-division coursework.

### **Staff Analysis**

The proposed BS in Integrative Sciences at ULM will be the only such program offered in the state, which will greatly increase access to this important medical, science, and technical field for residents of Louisiana and neighboring states. The program's interdisciplinary curriculum ensures that graduates are not only well-versed in aspects of integrative sciences but also equipped with essential skills for various professional fields. The proposal has received support from entities including VCOM, NWS, and NOAA.

### **STAFF RECOMMENDATION**

**Senior Staff recommends conditional approval of the proposed Bachelor of Science (BS) in Integrative Sciences (CIP 30.1801) at University of Louisiana Monroe with a progress report on program implementation submitted as part of the institution's 2025–2026 Academic Plan.**

## AGENDA ITEM IV.E.

### Proposed Bachelor of Science in Scientific Visual Communication Louisiana Tech University

#### **Background Information**

Louisiana Tech University (LA Tech) requests Board of Regents approval to offer a Bachelor of Science (BS) in Scientific Visual Communication. The proposal was approved by the Board of Supervisors for the University of Louisiana System (ULS) then submitted to Regents for consideration. The program was reviewed by Chief Academic Officers statewide and was included in the institution's 2024–2025 Academic Plan.

#### **Staff Summary**

The proposed BS in Scientific Visual Communication will provide an interdisciplinary approach that merges science and art to equip students with the skills necessary to create accurate, compelling visual representations of complex scientific concepts. Unlike traditional medical and scientific visualization programs, which focus primarily on biology and medical illustration, this degree will allow students to explore a broad range of scientific disciplines while mastering visual communication techniques that are essential for understanding and collaboration across fields.

**1. Value:** Per Regent's policy, this program meets the criteria of a Quality Credential of Value.

- a. **Workforce Demand and Job Opportunities:** The development of this program is a direct response to a growing need for professionals who can translate scientific information into accessible visual formats for diverse audiences. The COVID-19 pandemic emphasized the importance of clear, accurate scientific communication, highlighting the role of skilled visual communicators in educating the public and supporting research dissemination. The BS in Scientific Visual Communication will extend beyond these models by integrating studio art, graphic design, and scientific study into a comprehensive undergraduate program that prepares students for careers in medical illustration, biomedical research, science communication, and related fields. It also lays a strong foundation for continued study in graduate and professional programs in fields such as art, science, and healthcare.

Occupation	LWC Star Rating <sup>1</sup>	Current Jobs <sup>2</sup>	Projected Jobs 2034 <sup>2</sup>	% Change <sup>2</sup>	Average Salary <sup>2</sup>
Biological Technician	3-star	225	272	21%	\$50,897
Graphic Designer	3-star	1,147	1,248	9%	\$49,192

<sup>1</sup>Source – LWC

<sup>2</sup>Source – Lightcast (in Louisiana)

- b. **Curriculum Alignment with Employer Needs:** The foundation for this program was established through nearly a decade of interdisciplinary collaboration led by key faculty in the School of Design and the Department of Biological Sciences. Courses in digital painting and scientific visualization consistently attracted students from a variety of disciplines, including Studio Art, Graphic Design, Biology, Biomedical Engineering, and Chemistry. That popularity led to two interdisciplinary minors, Pre-Medical Illustration and Scientific Visualization, and the creation of the Louisiana Tech VISTA (Visual Integration of Science Through Art) Center. VISTA has served as a hub for these efforts, providing students with hands-on opportunities to create illustrations for research publications, grant proposals, and community outreach projects. The recent National Association of Schools of Art and Design (NASAD)

review of Louisiana Tech’s Studio Art, Graphic Design, and Interior Design programs endorsed the further development of Scientific Visualization into a degree.

- c. **Same or Similar In-State Programs:** The proposed program would be the first program in the state specializing in scientific visual communication.
- d. **Student Enrollment and Completion:** The program builds upon existing coursework and initiatives at LA Tech, including the Pre-Medical Illustration minor, the Scientific Visualization minor, and the Biological Visualization undergraduate certificate, all of which have demonstrated strong demand among students from diverse academic backgrounds.

	Year 1	Year 2	Year 3	Year 4
TOTAL Estimated Program Enrollment	12	20	35	50
TOTAL Estimated Program Graduates	0	0	5	10

2. **Resources:** The university would like to hire a new faculty member to teach 3D modeling and animation and a Student Experience Coordinator to support students and assist with administrative tasks. If they are unable to make these hires, existing faculty with some of these skills will teach the courses in the curriculum. Staff will determine course offerings to responsibly utilize faculty time and overload budget if necessary.

	Current	Needed	Additional Costs
<b>Faculty</b>	Existing faculty will support the proposed program.	One new faculty member to teach 3D modeling/animation.	Yr. 3: \$65,000 Yr. 4: \$68,000
<b>Physical (Facilities, Equipment, Library, &amp; Technology)</b>	Existing facilities are adequate to support the program.	No additional resources are needed.	\$0
<b>Student Support</b>	Existing student support resources will support the program.	A Student Experience Coordinator.	Yr. 2: \$40,000 Yr. 3+: \$42,000

3. **Master Plan Priorities:** The following aspects of the proposal directly address priorities or goals of the statewide attainment goal and 2030 Master Plan.
  - **Accessibility:** The program will be offered on-campus through in-person instruction and will be open to all students without prerequisite requirements, ensuring accessibility for those with diverse academic backgrounds.
  - **Affordability:** Students will not incur additional expenses beyond standard tuition and fees, and there are no prerequisite requirements for admission or degree completion.
  - **Partnerships:** The VISTA Center at LA Tech has cultivated long-standing partnerships with organizations such as the Lincoln Health Foundation, The Health Hut, the Foundation for Angelman Syndrome Therapeutics (FAST), the Louisiana Cancer Research Center (LCRC), the City of Ruston, and MedCamps.
  - **Work-based Learning:** The VISTA Center at LA Tech has received nearly \$100,000 in grants to date, along with support from privately sponsored client projects. These funds provide students with work-based learning experiences through courses such as ART 303 and ART 495. Students in the program can collaborate with clients, including the Lincoln Health Foundation, The Health Hut, the



City of Ruston, and MedCamps, to complete projects that meet client needs. Whether earning course credit or receiving compensation, students can gain professional experience and build portfolios.

- **Other program attributes that contribute to closing the achievement gap with underserved populations:** Louisiana Tech University offers support services to help students succeed, with a focus on serving underserved populations. The Bulldog Achievement Resource Center provides academic and co-curricular resources. Academic advisors, success coaches, and a dedicated retention specialist in the College of Liberal Arts provide additional guidance.

### **Staff Analysis**

The proposed BS in Scientific Visual Communication will allow students to pursue an area of scientific interest, whether in natural sciences, biomedical sciences, or physical sciences, and master the visual communication skills necessary to work collaboratively and communicate effectively. LA Tech's industry partnerships will provide critical experiences and connections for students and graduates and will meet the growing demand for professionals with scientific communication skills.

### **STAFF RECOMMENDATION**

**Senior Staff recommends conditional approval of the proposed Bachelor of Science in Scientific Visual Communication (CIP 51.2799) at Louisiana Tech University, with a progress report on program implementation submitted as part of the institution's 2025–2026 Academic Plan.**

## AGENDA ITEM IV.F.

### Proposed PhD in Biomedical Sciences Louisiana State University Health Sciences Center New Orleans

#### **Background Information**

Louisiana State University Health Sciences Center New Orleans (LSUHSC-NO) requests Board of Regents' approval to offer a PhD in Biomedical Sciences. The proposal was approved by the LSU Board of Supervisors then submitted to Regents for consideration. The proposal was reviewed by external consultant, Dr. Christy C. Bridges, Director of the PhD in Biomedical Sciences Program at Mercer University School of Medicine. Dr. Bridges was supportive of the proposed program. The program was favorably reviewed by Chief Academic Officers statewide and was included in the institution's 2024–2025 Academic Plan.

#### **Staff Summary**

The proposed PhD in Biomedical Sciences at LSUHSC-NO will consolidate and replace seven existing PhD programs - Biochemistry & Molecular Biology, Physiology, Pharmacology & Experimental Therapeutics, Neuroscience, Cell Biology & Anatomy, Microbiology, Immunology & Parasitology, and Human Genetics - into a single interdisciplinary degree. This integration will provide students with a strong foundation in core biomedical sciences while allowing them to explore multiple fields before selecting a specialization. The redesigned curriculum will incorporate discipline-specific coursework and relevant clinical applications, which will equip students with the necessary skills for careers in academia, industry, and healthcare research. With an emphasis on interdisciplinary training and research, the program will prepare students to advance scientific discovery and contribute to innovations in biomedical science.

1. **Value:** Per Regent's policy, this program meets the criteria of a Quality Credential of Value.

- a. **Workforce Demand and Job Opportunities:** The demand for professionals with expertise in biomedical sciences is growing rapidly. According to the U.S. Bureau of Labor Statistics, employment of medical scientists is projected to increase by 10 percent from 2022 to 2032, outpacing the average job growth.

Related Occupation	LWC Star Rating <sup>1</sup>	Current Jobs <sup>2</sup>	Projected Jobs 2034 <sup>2</sup>	% Change <sup>2</sup>	Average Salary <sup>1</sup>
Medical Scientist	4-star	440	523	19%	\$82,784
Biological Scientist, All Other	4-star	642	662	3%	\$71,843

<sup>1</sup>Source – LWC

<sup>2</sup>Source – Lightcast (in Louisiana)

- b. **Curriculum Alignment with Employer Needs:** The proposed doctoral program addresses Louisiana's pressing need for a stronger healthcare workforce. Over the past decade, LSUHSC-NO has secured more than \$450 million in research funding, resulting in over 370 inventions, 40 patents, 50 licenses, and nearly \$5 million in commercialization and industry partnering revenues. The proposed program strengthens these efforts by equipping students with essential science research skills while also addressing a critical gap in Louisiana and the Southeast, creating opportunities for graduates to drive advancements that improve health outcomes in the region.
- c. **Same or Similar In-State Programs:** While Tulane University School of Medicine offers a similar program, the proposed program would be the first PhD in Biomedical Sciences offered at a public institution in the state of Louisiana.

- d. **Student Enrollment and Completion:** Projected enrollment for the PhD program was determined by considering students in existing programs, anticipated new enrollment, and estimated attrition. Conversations with prospective applicants indicated strong interest in an integrated program that combines the basic sciences within a single curriculum. Given the limited availability of PhD programs in Biomedical Sciences in Louisiana, the proposed program is expected to attract a large pool of qualified students.

	Year 1	Year 2	Year 3	Year 4
TOTAL Estimated Program Enrollment	25	49	83	127
TOTAL Estimated Program Graduates	0	0	5	12

2. **Resources:** The program will be implemented without the need for new faculty, though additional research-focused faculty will be hired as funding allows as part of the Health Sciences Center and School of Medicine's strategic plan to support future growth. Faculty from the seven existing PhD programs will transition to the new Biomedical Sciences program. Existing graduate assistantships and tuition and fee support will transition to the newly combined degree program totaling approximately \$650,000 per year by year four.

	Current	Needed	Additional Costs
<b>Faculty</b>	Faculty currently teaching the seven PhD programs will be shifted to the new Biomedical Sciences program.	No new faculty are needed.	\$0
<b>Physical (Facilities, Equipment, Library, &amp; Technology)</b>	Existing facilities and technology are sufficient to support the program.	No new facilities or equipment is needed.	\$0
<b>Student Support</b>	Existing resources will meet the needs of the program.	No additional resources are needed.	\$0

3. **Master Plan Priorities:** The following aspects of the proposal directly address priorities or goals of the statewide attainment goal and 2030 Master Plan.
- **Accessibility:** The proposed program offers flexibility by allowing students to tailor their learning paths through advanced coursework and research opportunities in collaboration with their graduate advisors. While courses are offered on campus, students have access to synchronous online lectures, course materials, and recorded sessions. Although research opportunities take place in person, schedules are determined jointly by students and their advisors based on project requirements.
  - **Affordability:** The program uses Open Educational Resources (OER) and provides all students with graduate teaching and research assistantships. Prior learning credits can be transferred according to LSUHSC-NO's policy for transfer credits.
  - **Partnerships:** The Office of Innovation & Partnerships at LSUHSC-NO supports students through orientation, formal presentations, and guest speaker sessions. Several other partnerships and organizations provide resources for students and offer unique opportunities for career development and expansion of their research. Examples include the New Orleans BioInnovation Center, the Louisiana Tumor Registry and the Louisiana Clinical and Translational Science Center (LACaTs).
  - **Work-based Learning:** Students will receive personalized training plans in their first year, along with career training, faculty mentorship, and opportunities to present at conferences. LSUHSC-NO's

Graduate School supports work-based learning opportunities by offering students tuition credit and a stipend through the Graduate Research Assistantship program. In the first year, students receive stipends from the Graduate School, while in subsequent years, funding is provided through federal grant funds awarded to mentors, training grants, pre-doctoral grants awarded to students, or intramural funding.

- **Other program attributes that contribute to closing the achievement gap with underserved populations:** The program supports underserved graduate students with individualized advising, a diverse faculty, a foundational first-year curriculum, and a "buddy" program pairing incoming students with advanced doctoral students. Graduate assistantships will provide stipends of \$30,000 annually for research work, helping to alleviate living expenses.

### **Staff Analysis**

The proposed PhD in Biomedical Sciences at LSUHSC-NO will merge seven existing PhD programs into a single interdisciplinary degree, combining core biomedical sciences with discipline-specific coursework and clinical applications. Designed to prepare students for careers in academia, industry, and healthcare research, the program emphasizes interdisciplinary training and scientific innovation. An external evaluation by Dr. Christy C. Bridges affirms its strong curriculum, supportive environment, and the ability to meet regional and national needs while producing well-prepared graduates.

### **STAFF RECOMMENDATION**

**Senior Staff recommends conditional approval of the proposed PhD in Biomedical Sciences (CIP 26.0102) at Louisiana State University Health Sciences Center New Orleans with a progress report on program implementation submitted as part of the institution's 2025–2026 Academic Plan.**

## **AGENDA ITEM V.**

### **Cybersecurity Education Management Council and Louisiana Cybersecurity Talent Initiative Fund**

#### **Background Information**

Act 57 of the 2020 Regular Legislative Session commissioned the Cybersecurity Education Management Council (CEMC) and created the Louisiana Cybersecurity Talent Initiative Fund. As cyber threats persist across every industry sector and domain and cyberattacks on critical infrastructure raise state and national security concerns, confronting these threats demands a knowledgeable and highly trained workforce. However, the state and nation face a critical shortage of security professionals to respond to current and near-term challenges. To address this gap, the CEMC, under the auspices of the Louisiana Board of Regents, is tasked with “advising and making recommendations to the board with respect to distributions from the fund,” and annually “review[ing] the list of degree and certificate programs upon which the distribution is based and the final distribution amounts.”

The purpose of the Louisiana Cybersecurity Talent Initiative Fund (CTIF) is to provide a mechanism for donations and/or appropriations of funding to support the development of degree and certificate programs in cybersecurity fields offered by public postsecondary education institutions. The goal of the fund is to develop, train, produce, and retain Louisiana’s workforce-ready cybersecurity professionals and improve cybersecurity literacy across industry sectors through programmatic support to institutions.

#### **Process and Timeline for the Cybersecurity Talent Initiative Fund Distribution of Dollars**

A Request for Applications (RFA) is released annually to solicit innovative solutions from Louisiana’s public postsecondary institutions. Key topics included in the RFA are project requirements, metrics and reporting, project tracks, eligibility, and the application review process. The CEMC members discussed the 2024-25 Request for Applications (RFA), which largely mirrored previous years’ requests, during their November 2024 quarterly meeting.

The FY 2024-25 timeline for soliciting, reviewing, making funding recommendations, and distributing CTIF funds is as follows:

- December 18, 2024 – Request for Applications (RFA) released
- March 14, 2025 – Deadline for questions regarding the RFA
- March 21, 2025 – Application submission deadline
- March 24–April 4, 2025 – Applications evaluated by CEMC members using scoring rubrics aligned with program priorities and objectives and published in the RFA
- May 2025 – CEMC meets to review score results and render decisions on applications
- May–June 2025 – Agreements negotiated and executed with selected institutions

As of the March 21 submission deadline, eleven campuses submitted one proposal each, requesting a total of \$1,734,660.00. Of these submissions, seven are requests to sustain previously funded projects in addition to four new requests. Applications include:

<b>Campus</b>	<b>New/Sustained Program</b>	<b>Total Requested</b>
<b>Fletcher Technical Community College:</b> Enhancing Experiential Learning for Cybersecurity Honors Students to Strengthen Workforce Readiness	Sustained	\$150,000
<b>Bossier Parish Community College:</b> The LA Cyber Academy (Statewide)	Sustained	\$120,000
<b>Northwestern State University:</b> Central Louisiana Cybersecurity Talent Enhancement Program	Sustained	\$40,000
<b>LSU Shreveport:</b> Comprehensive Cyber Talent Pipeline	Sustained	\$133,243
<b>Grambling State University:</b> Preparing a Workforce Ready Cybersecurity Undergraduate Students Equipped with Cyber Analytics Skills.	Sustained	\$248,059
<b>Southern University A&amp;M:</b> Empowering Cybersecurity Leaders by Establishing an Executive Master's Program in Cybersecurity, Mentorship, and Industry-Partnered Certificates	Sustained	\$155,265
<b>University of New Orleans:</b> Development of an Advanced Cybersecurity Certificate Program	Sustained	\$105,804
<b>LA Tech University:</b> Cyber Security Talent Advancement and Mastery Program (C-STAMP)	New	\$320,380
<b>Southeastern Louisiana University:</b> Building Career Pathways: A Workforce Certification Initiative	New	\$124,640
<b>University of Louisiana at Lafayette:</b> Strengthening Energy Cybersecurity Through Education and Resources	New	\$207,737
<b>University of Louisiana at Monroe:</b> AI-Powered Cybersecurity Education to Address the Industry Skills Gap	New	\$129,532

### **STAFF RECOMMENDATION**

**Senior Staff recommends funding be provided from the Cybersecurity Talent Initiative Fund for applications selected by the Cybersecurity Education Management Council (CEMC) during its May meeting, with a report to be provided to the Board in June on CEMC's funding decisions.**