SUS 30 Areas of Expertise: University Selections

University	Areas of Expertise
FAMU	Health, Pharmacological Research, Allied Health Sciences and Workforce Readiness
FAMU	Business Innovation in Supply Chain, Accounting, and Cyber Policy
FAMU	Innovation in Architecture, Agricultural Engineering, and Environmental Design
FAU	Neuroscience Research and Infrastructure
FAU	Ocean Science and Engineering/Environmental Studies
FAU	Entrepreneurship
FGCU	Multidisciplinary Research Excellence through The Water School
FGCU	Health Span: enhance access to quality-of-life and aging support
FGCU	Resort, Golf, and Hospitality Management
FIU	Risk and Resilience Mitigation: Natural and Built Environment
FIU	Health: Precision Imaging and Personalized Health
FIU	Economic Freedom
FL Poly	Industry-Integrated STEM Education and Applied Research
FL Poly	Industrial and Phosphate Research
FSU	A Healthy Florida
FSU	Advancing Materials
FSU	A Resilient Future
NCF	Artificial Intelligence for Liberal Arts Learning, Research, and Innovation
NCF	Economics and Finance
NCF	Marine Sciences
UCF	Engineering and Computer Science
UCF	Immersive User Experiences
UCF	Defense and Natural Security
UF	AI & Applications
UF	Hamilton School for Classical and Civic Education
UF	Neuroscience and Neuromedicine at UF Health
UNF	Experiential Learning
UNF	Supply Chain Innovation
USF	Molecular Medicine, Science, and Biology
USF	Applied Artificial Intelligence
USF	Human and Infrastructure Security
UWF	Public Archaeology and Community Heritage
UWF	Computational Intelligence
UWF	Cybersecurity

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Florida A&M University | Areas of Expertise

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Final Submission: August 12, 2025

Institutional Areas of Expertise Overview

Florida A&M University (FAMU) is a top-performing institution within the State University System of Florida, nationally known for its ability to produce highly prepared graduates who advance critical workforce and research priorities. As a public, land-grant, doctoral university with a strong emphasis on health professions, innovation in business, agriculture, engineering, and architecture, FAMU's mission-driven approach supports the evolving needs of Florida's communities and industries. In alignment with the SUS Performance-Based Funding Model and the FAMU Boldly Striking Strategic Plan, the university has identified **three institutional areas of expertise**. These areas represent FAMU's distinct capacity to meet Florida's most urgent workforce demands, improve graduate employment outcomes, and elevate the research ecosystem. FAMU's primary Center of Distinction, the **Florida A&M Health Professions Readiness and Research Center (FHPRRC)**, will serve as the cornerstone of this effort, advancing interdisciplinary alignment, licensure and certification pipelines, faculty scholarship, and systemwide student success.

FAMU Areas of Expertise will embed legislative policy and governmental affairs preparation into the development of the next generation of leaders. Given our proximity to the state capital in Tallahassee, Florida, it is imperative that we incorporate government affairs education and engagement opportunities for both undergraduate and graduate students across all disciplines. This strategic focus will ensure that students are equipped to understand policy, navigate legislative processes, and lead effectively in civic and governmental arenas—regardless of their field of study.

FAMU seeks to be a distinctive institution in the following areas:

1. Area of Expertise 1: Health, Pharmacological Research, Allied Health Sciences and Workforce Readiness
    a. Center of Distinction | Proposed Title Florida A&M Health Professions Readiness and Research Center (FHPRRC)

2. Area of Expertise 2: Business Innovation in Supply Chain, Accounting, and Cyber Policy
3. Area of Expertise 3: Innovation in Architecture, Agriculture Engineering, and Environmental Design

Narrative

Area of Expertise 1: Public Health, Pharmacological Research, and Workforce Readiness

Florida A&M University is a nationally recognized leader in producing graduates in pharmacy, nursing, public health, and biomedical sciences. With a deep commitment to addressing the health workforce needs of Florida, FAMU's academic units—including the College of Pharmacy and Pharmaceutical Sciences, Institute of Public Health (CoPPS, IPH), School of Nursing, and health science departments—prepare students for high-impact careers that lead to licensure and employment across the state.

FAMU's health-related research portfolio is set to grow rapidly based on the projected career advancement and workforce needs in the north Florida region. Additionally, by hiring and employing world class faculty advancing discoveries in clinical pharmacology, pharmaceutical engineering, disease prevention, chronic illness, infectious disease, and more. These efforts directly support the state's goals for better health access, outcomes, and readiness.

Center of Distinction | Florida A&M Health Professions Readiness and Research Center (FHPRRC)

FAMU will establish the **Florida A&M Health Professions Readiness and Research Center (FHPRRC)** as the single, system-supportive Center of Distinction. FHPRRC will coordinate simulation-based training, licensure support, interdisciplinary research, and health systems data analytics. It will also serve as FAMU's strategic platform to align with the FAMU Boldly Striking Strategic Plan for FAMU Health leverage and utilize a key partnership with **FSU Health** to build complementary pipelines and support Florida's evolving public health infrastructure. This Center of Distinction is strong and stands out for FAMUs area of expertise, partnering with the School of Nursing, the School of Allied Health Sciences, and other interdisciplinary programs across the institution to meet the wholistic needs of health care sciences. Additionally, the two additional areas of expertise, while not directly related to health, can bolster FAMUs indelible mark in the state and the nation. The areas tied to business, innovation, and architecture and engineering make our top programs a priority for the future.

Table 1: University Metric Alignment (BOG PBF + FAMU Boldly Striking)

University Metric	Goal/Target	Data Source / Tracking	Peer Comparison
Bachelor's Graduates Employed or Enrolled (earning ≥ $40k)	≥ 75% within 1 year of graduation	FETPIP, BOG Data Dashboards	SUS median; Top PBF performers

Median Wages of Graduates	≥ $50,000	BOG Accountability Plan, FETPIP	SUS peers with health focus
4-Year FTIC Graduation Rate	≥ 58%	FAMU IR, BOG Metrics	HBCUs and peer R2 institutions
Second-Year Retention with GPA ≥ 2.0	≥ 90%	FAMU IR, Academic Progress Reports	SUS average
Degrees in Strategic Emphasis (Health & STEM Fields)	+20% increase over 3 years	BOG Degree Production Reports	State universities w/ health focus
Graduate Degrees in Strategic Emphasis	+25% increase over 3 years	BOG Grad Outcomes Dashboard	SUS comparators
Experiential Learning (Workforce/Career Readiness)	≥ 75% complete ≥2 experiences	Internship logs, Exit Surveys, Registrar	R2 universities & SUS peers
University Access (Pell Grant % at Entry)	≥50%	BOG Accountability Plan	SUS average

Table 2: Budget Alignment

Initiative	FY 25–26 Funding	PBF & Boldly Striking Alignment
FHPRRC Launch (staff, simulation labs, data systems)	$2,000,000	Licensure, job placement, and interdisciplinary research
Dual-Degree and Health Scholar Pipeline	$500,000	Retention, licensure pathway expansion
Research Faculty Cluster (Health Fields)	$1,500,000	Research grants, graduate mentorship
Summer Bridge for Health Majors	$500,000	Academic progress and 4-year graduation rates
Health Systems & Clinical Partnerships Expansion	$1,000,000	Workforce development and employment pipelines

Area of Expertise 2: Business Innovation in Supply Chain, Accounting, and Cyber Policy

Narrative

Through its legacy-rich School of Business and Industry (SBI), FAMU is preparing students to lead in the fields of business analytics, supply chain innovation, accounting, cybersecurity policy, and risk management. FAMU's programs emphasize AI, workforce readiness, and decision science—essential skills for Florida's economic and technological competitiveness.

FAMU's **FHPRRC** will support business-health integration by offering workforce readiness modules in health finance, systems analysis, and cyber-infrastructure. The center's applied research and student experiential components will benefit business, tech, and public sector readiness statewide.

Table 1: University Metric Alignment

University Metric	Goal/Target	Data Source / Tracking	Peer Comparison
Bachelor's Graduates Employed or Enrolled (earning ≥ $40k)	≥ 75% within 1 year of graduation	FETPIP, SBI Career Services	SUS business-focused programs
Median Wages of Graduates	≥ $50,000	BOG Employment Dashboards	FIU, UCF, USF
4-Year FTIC Graduation Rate	≥ 58%	FAMU IR, Navigate	R2 SUS institutions
Second-Year Academic Progress	≥ 90%	GPA reports, Navigate system	SUS average
Degrees in Strategic Emphasis (Business, Tech, AI)	+20% increase	BOG Data, Institutional Reports	Florida schools/colleges of business
Graduate Degrees in Strategic Emphasis	+25% increase	Institutional Research, SBI Dean's Office	SUS with MBA and MSIT programs
Experiential Learning (Internships, Labs, Practicums)	≥ 75% students complete 2+	Registrar, Faculty Logs	AACSB-accredited institutions
University Access (Pell Grant Entry Rate)	≥50%	BOG Performance Reports	Public R2s and HBCUs

Table 2: Budget Alignment

Initiative	Funding	Performance Alignment
Future Business Leaders Scholarship Program	$300,000	Retention, job placement
Faculty Cluster Hiring: AI, Cyber Policy, Accounting and Supply Chain	$1,800,000	Research productivity and graduate readiness
Executive Education & Innovation Labs	$1,000,000	Experiential learning and workforce connection

Area of Expertise 3: Innovation in Architecture, Agriculture Engineering, and Environmental Design

Narrative

FAMU provides strategic expertise in architecture, engineering, agricultural science, construction science, and design. The **FAMU-FSU College of Engineering** serves as a joint platform for workforce readiness, applied research, and R1 advancement. These programs directly contribute to Florida's needs in resilient infrastructure, food systems, water management, and environmental design.

Though architecture and agriculture are distinct disciplines, and at FAMU, **FHPRRC** is the selected Center of Distinction. It will bridge design, environmental systems, and engineering with health data modeling, systems planning, and regional workforce analytics—supporting state and systemwide needs.

Table 1: University Metric Alignment

University Metric	Goal/Target	Data Source / Tracking	Peer Comparison
Bachelor's Graduates Employed or Enrolled (earning ≥ $40k)	≥ 75% within 1 year	BOG Employment Dashboards, Career and Professional Development	Land-grant SUS institutions
Median Wages of Graduates	≥ $50,000+	FETPIP, Dept. of Labor	SUS with agri/enviro/infra focus
4-Year FTIC Graduation Rate	≥ 58%	Institutional Research, Navigate	Peer SUS colleges of engineering
Second-Year Academic Progress	≥90%	GPA monitoring, advising reports	SUS benchmark
Degrees in Strategic Emphasis (Ag, Env, STEM)	+20% increase	BOG Productivity Reports	Colleges of agri and design tech
Graduate Degrees in Strategic Emphasis	+25% increase	Graduate School Reports, Research Office	Peer engineering & ag colleges
Experiential Learning (Internships, Capstones, Design Labs)	≥ 75% complete ≥2 experiences	Program Coordinators, Registrar	Architecture/Engr colleges SUS
University Access (Pell Grant Entry Rate)	≥50%	Financial Aid and IR	Land-grant and access institutions

Table 2: Budget Alignment

Initiative	Funding	Performance Alignment
Pre-Agriculture and Engineering Summer Academies	$750,000	Academic progress, access, and early retention
Infrastructure & Water Innovation Training	$250,000	Applied research and systems modeling
FAMU-FSU Engineering Partnership Expansion	$5,000,000	Research alignment with R1 and workforce readiness

University Area of Expertise Proposal

University:	
University Contact Name	James Capp
University Contact Title:	Associate Vice President
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Area(s) of Expertise:	1 - Neuroscience 2 - Ocean Science and Engineering / Environmental Sciences 3 - Entrepreneurship
Date Approved by University President:	August 11, 2025

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 1

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

   Florida Atlantic University (FAU) previously identified the interdisciplinary topic of **Neuroscience** as an area of expertise, which emerged in its 2012 and 2015 strategic plans. Subsequently, the university developed strengths in terms of infrastructure, teams of researchers, and academic degree programs that all contribute to the understanding of neurodegenerative disorders such as Alzheimer's disease, psychiatric illnesses and mental health, spinal cord injuries, eye disease, dementia, cognition, and communication disorders. Researchers also seek to unlock the secrets of brain development, function and plasticity and how the mechanisms uncovered can be compromised to drive other brain disorders, such as autism, schizophrenia, addiction, and depression. This initiative is now anchored by the Stiles-Nicholson Brain Institute, located on FAU's John D. MacArthur campus in Jupiter. The institute is a hub for neuroscience and broader life sciences research, and it is co-located with the Max Planck Florida Institute for Neuroscience and the Herbert Wertheim UF Scripps Institute for Biomedical Innovation and Technology, creating a world-class research ecosystem.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

   FAU currently uses an interdisciplinary approach for hiring world-class faculty and recruiting top-performing students in neuroscience. The Stiles-Nicholson Brain Institute provides an organizational structure for researchers to collaborate across university silos, regardless of their traditional home "discipline." More than 100 neuroscience faculty-level investigators located at both FAU and affiliate research centers accelerate the Brain Institute's state-of-the-art research and innovative educational activities. Faculty affiliates and scientists coordinate their research efforts through the Brain Institute, but their instructional assignments are tied to their traditional academic disciplines, which may be medicine, biology, psychology, chemistry, or one of many other additional departments within multiple academic colleges.

3. How will your area of expertise collaborate with industry and business leaders?

   FAU's neuroscience programs actively engage with industry partners across the biomedical, healthcare, and technology sectors. Collaborations include joint research initiatives, clinical trials, and community efforts. For example, the Brain Institute's Masterminds Distinguished Lecture Series serves as a high-profile platform for engaging with global thought leaders in neuroscience, biotechnology, and healthcare innovation. These events foster dialogue between researchers and industry professionals, including representatives from pharmaceutical companies, medical device manufacturers, and venture capital firms focused on neurotechnology. FAU also partners with the Max Planck Florida Institute for Neuroscience, Herbert Wertheim UF Scripps Institute for Biomedical Innovation and Technology, and Palm Health Foundation to advance collaborative research and community-based health initiatives. Additionally, FAU works with community health organizations to address mental health challenges and improve access to care. The Brain Institute works with local hospitals, schools, and nonprofits to promote brain health literacy and expand access to neuroscience education. Initiatives such as Brainy Days, NeuroArts, and NeuroExplorers connect researchers with educators, caregivers, and members of the community, creating pathways for innovation and workforce development.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

Florida Atlantic University's robust offerings on the Jupiter campus – including neuroscience doctoral students and postdoctoral fellowships, the Harriet L. Wilkes Honors College's rigorous STEM undergraduate experience, as well as graduate-level health and education programming – makes the university ripe to serve as a state center of distinction. Given its shared location with UF Scripps and the Max Planck Florida Institute for Neuroscience, the Jupiter campus already hosts shared core facilities and cross-institutional research teams. Within the field of neuroscience and novel therapeutics for neurodegenerative diseases, FAU already offers multiple centers on the Board of Governors inventory of institutes and centers; the university is home to the Center for Complex Systems and Brain Sciences and the Center for Molecular Biology and Biotechnology. In addition, the International Max Planck Research School for Synapses and Circuits (IMPRS-SC) provides innovative and individualized doctoral training in interdisciplinary neuroscience research. The IMPRS for Synapses and Circuits is a partnership between MPFI and Florida Atlantic University (FAU) and is the only IMPRS program in the United States. Students from additional interdisciplinary neuroscience programs across the System, as well as their research staff members and faculty members, could participate in shared training experiences using novel instrumentation and microscopy. In 2017, the Florida Atlantic University Brain Institute was designated a Nikon Center of Excellence. In addition to providing access to their faculty of state-of-the-art instrumentation, Centers of Excellence provide training courses on basic and advanced microscopy techniques and act as a training location for Nikon staff.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Number of neuroscience faculty hires	+5 by 2028	NSF HERD Survey for Research Personnel	Peer R1 universities
Peer-reviewed neuroscience publications	Increase by 20% over 5 years	Web of Science / Scopus / SciVal	Top 100 neuroscience programs nationally (e.g. Research.com, Niche, and US News & World Report)
External research funding in neuroscience	$25M annually by 2028	NSF HERD Survey for Research Expenditures	NSF HERD Survey listings for Life sciences, Biological and Biomedical sciences, and Health

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
Neuroscience faculty hires (Stiles-Nicholson Brain Institute, Jupiter Life Sciences Initiative, and Schmidt College of Medicine)	$6,182,388.00	Number of neuroscience faculty hires

Graduate Student and Resident Support	$1,833,368	Increase neuroscience graduate student enrollment by 15% and support increase of neuroscience faculty hiring efforts
Neuroscience start-up and infrastructure	$2,012,021	20% increase in peer-reviewed neuroscience publications over 5 years and $25M annual in external research funding by 2028

Area of Expertise 2

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

   FAU has selected **Ocean Science & Engineering / Environmental Sciences** as a strategic area of expertise, anchored by the State's Florida Office of Ocean Economy—established by the Legislature in 2024 and housed at FAU—to connect research, talent, industry and policy for a resilient, high-value ocean economy. This office frames Florida's ocean economy as a $96B GSP engine supporting ~909,000 jobs (6% of the state economy), creating a powerful statewide platform for FAU researchers and students to advance solutions in water quality, coastal resilience, ocean technology, sustainable aquaculture, and maritime logistics.

   At FAU, the area is operationalized through ECOS—the School of Environmental, Coastal, and Ocean Sustainability—a multidisciplinary partnership between the Charles E. Schmidt College of Science and the Harbor Branch Oceanographic Institute (HBOI). ECOS integrates academic programs (advanced bachelor's through doctoral and certificate options), research, and outreach into a comprehensive environmental hub that leverages partners across government, industry and education to enhance FAU's collective environmental capabilities.

   The research core is powered by HBOI's globally recognized programs in Marine Ecosystem Conservation; Ocean Health: Human Health; Aquaculture Innovation & Global Food Security; and Ocean Engineering & Applied Technology, with solution-oriented projects spanning Florida's Indian River Lagoon to global field sites, and partnerships with the U.S. Department of Defense and major defense contractors. These strengths align directly with statewide priorities—coastal resilience, clean water, national security applications, and blue-economy

innovation—under the Office's mission to catalyze sustainable growth, quality jobs, and smarter investment in coastal assets.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

   FAU will recruit elite faculty and students by pairing mission-driven impact with top-tier infrastructure and clear career pathways, which establishes a compelling statewide platform. The Florida Office of Ocean Economy provides a unique, state-sanctioned mechanism to translate discovery into impact—through data coordination, workforce alignment, innovation acceleration and policy—at the scale of Florida's $96B ocean economy and 14 deep-water ports. Faculty and students can plug into multi-sector initiatives in water quality, coastal resilience, and ocean tech commercialization. In addition, this approach provides for a multidisciplinary academic home. ECOS offers advanced degrees (e.g., M.S. Marine Science & Oceanography; M.S. Environmental Science; Ph.D. Integrative Biology—Environmental or Marine tracks) plus undergraduate pathways and certificates, enabling cohort recruiting and joint appointments across science, engineering and policy. All of these efforts can be supported by campuses with ocean access, foremost of which is the immense research portfolio and world-class facilities at HBOI in Fort Pierce. A 144-acre campus on the Indian River Lagoon with 200+ scientists, engineers, educators and students and $20M+ in annual research support; globally visible programs in aquaculture, marine biotech, HAB impacts, and ocean engineering; and DOD-aligned tech development—an immediate draw for PIs and graduate talent. Combined with the SeaTech site situated at the mouth of Port Everglades, the university is ripe for field-based learning and experiential pipelines. Signature programs – such as Semester by the Sea, the HBOI Summer Internship, the Marine & Oceanographic Academy high school, and Mission: Ocean Discovery – all offer authentic fieldwork and lab immersion that attract high-achieving undergraduates and accelerate graduate recruitment. With Florida projecting strong growth in marine sectors and urgent workforce gaps (e.g., aquaculture, port logistics, environmental engineering), FAU's integrated research-to-workforce approach is a differentiator for prospective faculty and students seeking purpose-driven careers.

3. How will your area of expertise collaborate with industry and business leaders?

   FAU's industry engagement is structured and continuous, especially with project-based R&D with defense and blue-tech firms. HBOI collaborates with major defense contractors and the U.S. Department of Defense to advance sensing, modeling and operational ocean knowledge—translating engineering and biological insights to maritime security and dual-use technologies. Our ocean-access campuses are the prime setting for corporate start-ups and commercialization of research. Through the Office of Ocean Economy's focus on research-to-impact and

access to capital—and Florida's broader accelerator ecosystem—FAU teams align with companies in water-quality monitoring, coastal resilience, aquaculture systems, and marine energy for pilot deployments and scale-up across the state's ports and coastal municipalities. In terms of applied problem solving with utilities and local governments, faculty currently work with municipalities and regional authorities on nutrient reduction, HAB mitigation, septic-to-sewer planning, and shoreline adaptation—areas the State is actively funding and standardizing, creating predictable partnership channels and real-world learning for students. ECOS and HBOI partner with schools and employers to expand stackable credentials and field-based training so employers from shipyards to environmental consultants can hire graduates with enhanced skills.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

   With ocean access at Harbor Branch Oceanographic Institute in Fort Pierce and the Institute for Ocean and Systems Engineering (SeaTech) site in Dania Beach, FAU is well positioned for ocean and environmental science and engineering. Recently aligned through ECOS, FAU is poised to support statewide efforts for environmental and ocean sciences by cordinating interdisciplinary research & degree programs that span departments and campuses; facilitating external partnerships with agencies, consortia, NGOs, and industry; and promoting community engagement through retreats, affiliate memberships, student poster competitions, and field-to-classroom outreach. Complementing ECOS, HBOI's education and outreach portfolio (Mission: Ocean Discovery, Ocean Science Lecture Series, internships, and the on-site Marine & Oceanographic Academy) broadens participation and supports faculty labs with mentoring pipelines and community-engaged scholarship. Together, ECOS and HBOI provide a turnkey ecosystem—academics, research infrastructure, workforce alignment, and public engagement—to support units across the State University System as they partner on proposals, placements, and technology transfer.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Number of ocean and environmental faculty hires	+5 by 2028	NSF HERD Survey for Research Personnel	Peer R1 universities
Peer-reviewed ocean and environmental publications	Increase by 20% over 5 years	Web of Science / Scopus / SciVal	Top 100 earth and marine science programs nationally (e.g. QS Rank by Subject, Niche, and US News & World Report)
External research funding in ocean and environmental disciplines	$25M annually by 2028	NSF HERD Survey for Research Expenditures	NSF HERD Survey listings for Ocean/ Marine Sciences, Geosciences, and Earth Sciences

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
Ocean and environmental faculty hires (Harbor Branch, SeaTech, Ocean Engineering, ECOS)	$11,684,143.00	Number of ocean and environmental faculty hires

Graduate Student Support	$176,276.00	Increase ocean and environmental graduate student enrollment by 15% and support increase of ocean and environmental faculty hiring efforts
Ocean and environmental start-up and infrastructure	$4,297,029.00	20% increase in peer-reviewed ocean and environmental publications over 5 years and $25M annual in external research funding by 2028

Area of Expertise 3

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

   Florida Atlantic University (FAU) has built a comprehensive **Entrepreneurship** ecosystem anchored in the Adams Center for Entrepreneurship (College of Business), complemented by the Madden Center for Value Creation and the Phil Smith Center for Free Enterprise. Together these centers develop entrepreneurial leaders, support venture creation, and advance scholarship and practice on value creation and free enterprise principles.

   At the core, the Adams Center for Entrepreneurship, housed in the Carl DeSantis Pavilion on the Boca Raton campus, “brings students, faculty, and the community together to fuel the innovation needed to create new venture opportunities” and prepares FAU students across many disciplines to become entrepreneurs through ownership and venturing. The Center’s mission is to create and educate entrepreneurial leaders who find sustainable solutions to economic and social problems, and it has been recognized as Top 50 in Entrepreneurship by *The Princeton Review*, including undergraduate globally and nationally, and graduate nationally. Signature activities include the FAU Business Pitch Competition with tracks that connect finalists to local angel/venture capital groups, Global Entrepreneurship Week, the Family Business Initiative, the Shrimp Tank CEO interview series, an Entrepreneur Boot Camp certificate program, structured mentoring with The Runway at FAU, and participation in I-Corps South commercialization cohorts. The Adams Center has also been designated an Oasis of Excellence by American Council of Trustees and Alumni, signaling a commitment to foundational arts and sciences and viewpoint diversity.

   The Madden Center for Value Creation infuses the entrepreneurship portfolio with a value-creation lens. Supported by a $3M gift from the Madden family, its mission is threefold: (1) promote value creation as a guiding principle for

widespread prosperity; (2) build a worldwide educational platform motivating young people to be value creators; and (3) focus academic research on the firm as the fundamental unit of economic progress with attention to knowledge building and systems thinking. The Center runs an advisory board, conferences, faculty grants, fellows/visiting scholars, a student club, and a knowledge repository, and it offers a Certificate in Value Creation (developed with Executive Education) that equips participants to evaluate and build value in their organizations.

The Phil Smith Center for Free Enterprise, named in recognition of Broward entrepreneur and FAU alumnus Phil Smith, was launched through a $5M gift and supports chaired professorships, research and educational programs, visiting faculty, and a lecture series focused on the principles of free enterprise and how they affect growth and prosperity. The Center articulates five guiding principles from Smith's career—integrity, respect, principled risk-taking, mutual value creation, and accountability—that align tightly with entrepreneurship education and practice.

The Runway at Florida Atlantic is a South Florida public-private partnership that accelerates technology development and incubates startups. Companies gain mentoring, introductions to early-stage capital, grants/seed-funding opportunities, a rigorous boot camp, and connections to a regional innovation network—positioning FAU as a convenor for founders, investors, and industry partners across the region.

Collectively, these centers create a stacked pathway from entrepreneurial mindset and value-creation fundamentals to venture readiness and launch, with industry connectivity through mentors, judges, and regional investors.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

   In terms of world-class faculty recruitment strategies, FAU boasts endowed/chaired support & research programs. We will continue to leverage the Phil Smith Center's support for chaired professorships, visiting scholars, and research/education programs to recruit high-impact scholars in entrepreneurship, innovation, and entrepreneurial finance; feature Phil Smith fellow/professor profiles to showcase community, resources, and research visibility. We will use the Madden Center's faculty grants, fellows and visiting scholars, and research & scholarly works programming to attract scholars committed to value-creation research focused on firms and systems thinking, amplifying FAU's appeal to mission-aligned researchers. There is also an important professional development approach at the university, which promotes its certificate in value creation collaborations and conference activity as vehicles for research translation and doctoral training, reinforcing an ecosystem where top scholars can link research to practice.

To recruit high-achieving students, FAU will differentiate its academic programming and highlight the Adams Center's Top-50 entrepreneurship recognition and a dense menu of experiential offerings that fast-track venture readiness and investor exposure. To adequately engage the South Florida community, FAU will promote the Veterans Florida Entrepreneurship Program cohorts and its dedicated veteran pitch tracks, as well as market Spanish-language Boot Camp and youth tracks to widen the pipeline. Lastly, the Phil Smith lectures and Madden events connect students with thought leaders, investors, and policy discussions on free enterprise and value creation, strengthening recruitment yield for high-achieving, impact-oriented students.

3. How will your area of expertise collaborate with industry and business leaders?

   FAU's entrepreneurship enterprise collaborates with industry through an integrated ecosystem anchored by the Adams Center for Entrepreneurship and The Runway at Florida Atlantic, connecting founders with mentors, investors, and professional service partners across the region. Through the Adams Center's mentoring (aligned with FAU Runway onboarding), founders receive one-on-one guidance from seasoned entrepreneurs and executives as they develop and launch ventures. The annual FAU Business Pitch Competition adds direct connectivity to local angel and venture capital groups and provides preferred access to the Runway Venture Program for promising teams. The Runway Venture Program then delivers more than $100,000 in resources and services per company—team-based mentoring, entrepreneurial education, customer discovery, targeted introductions to early-stage capital, free office hours with attorneys and accountants, and curated access to regional business and technology events. The Runway's mentor program—modeled on MIT's Venture Mentoring Service—uses highly vetted, formally trained experts across domains, deepening industry ties and improving venture outcomes through a structured team-mentoring model. Regular convenings such as Global Entrepreneurship Week, the Shrimp Tank CEO series, and the Family Business Initiative bring executives and family-firm leaders to campus for panels, pitch practice, and applied projects. Veteran-focused cohorts and a dedicated veteran track further expand collaboration with statewide employers, mentors, and investors, culminating in FAU's competition and the Veterans Florida Expo. Finally, Executive Education partnerships—most notably the Madden Center's Certificate in Value Creation—engage practitioners in classroom instruction and case development, reinforcing a two-way knowledge flow between FAU and the business community.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

FAU is ready to designate the Adams Center for Entrepreneurship as a statewide Center of Distinction, fully integrated with The Runway at Florida Atlantic to provide venture-building capacity. By providing broader state access to faculty and staff who are focused on entrepreneurship, the Madden Center for Value Creation and Phil Smith Center for Free Enterprise can ensure research, value-creation principles, and free-enterprise education flow directly into startup pathways across the whole State University System. FAU has the existing infrastructure to support faculty through seed grants, visiting scholar programs, and case development, while students gain access to Boot Camps, mentoring, I-Corps prep, and Runway cohorts. Staff and system partners will benefit from FAU's internationally recognized Executive Education certificates, as well as shared mentor/onboarding toolkits. Together, these assets will create a unified ecosystem that scales entrepreneurship education, research translation, and venture creation across not just South Florida and FAU's service region – but throughout the entirety of the State University System.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Cohorts & companies served	Conduct 2 Venture Class cohorts; admit ≥ 24 startups total	Application portals; cohort rosters; venture intake	Compare to South Florida incubators/ accelerators with 2+ cycles per year.
Student engagement (intern placements with ventures)	≥ 80 student internship placements	Intern placement logs through FAU Handshake and academic records	Compare to internship counts at regional venture programs.
Visibility & ecosystem events (Innovation Awards, Venture Class showcases)	≥ 3 marquee events; ≥ 600 attendees	Event registrations; attendance analytics	Attendance vs. peer innovation hubs; media mentions.

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
Entrepreneurship hires (Runway, Madden, Phil Smith, and Adams Center)	$1,166,511.00	Cohorts and companies served
Start-up and infrastructure	$599,200.00	Student engagement (intern placements with ventures)

University Area of Expertise Proposal (1)

University:	
University Contact Name	Dr. Debbie M. Thorne
University Contact Title:	Executive Vice President and Provost
University Contact Phone:	239 590 7000
University Contact Email:	dthorne@fgcu.edu
Area(s) of Expertise:	Water
Date Approved by University President:	August 11, 2025

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 1

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

After Florida Gulf Coast University became a university of distinction in 2019 for The Water School (TWS), expertise in TWS anchors the university-wide interdisciplinary initiative designed to address Florida's most pressing challenges to water, environment, and community resilience. Quality of life, the economy, and the health of natural areas are inextricably linked to water in Florida. FGCU's location in Southwest Florida, a region vulnerable to tropical storm activity and water quality impacts, provides a living laboratory for applied research and science, community partnerships, and student engagement.

The Water School at FGCU brings together faculty and students from the environmental and physical sciences with those from engineering, health, business, and the social sciences in a comprehensive approach to solving problems. These efforts focus on four interrelated domains: coastal resilience, ecosystem health, human health and well-being, and restoration and remediation. This strategic focus brings to bear talent and expertise on important issues of statewide concern and educates and trains students to meet growing workforce demands and leadership opportunities in response to these issues.

As a regional comprehensive university, FGCU is committed to applied research that benefits local communities and builds regional capacity. This approach relies on strong and sustainable partnerships that leverage the impact of expertise and innovations at FGCU. The Water School has partnerships with local communities, other universities in Florida and beyond, government agencies, and nonprofit organizations. In FY2025, faculty in The Water School were awarded 33 grants and contracts, with funding from the Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, South Florida Water Management District, National Oceanic and Atmospheric Administration, National Institutes of Health, and U.S. Army Corps of Engineers. The Water School has expanded its water-related research efforts across Florida through funding from the State Legislature via the Florida Department of Environmental Protection.

With a multidisciplinary faculty, a focus on applied research to address problems of regional and statewide concern, an extensive network of internal and external partners, and success in securing external funding, The Water School is already serving as a center of distinction at FGCU. With the development of recent large-scale projects related to water quality, FGCU is also building a wider network of collaborators and partners to address needs related to water.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

The state of Florida has supported the growth of The Water School since it was formally established in spring 2019. The Water School initially began building additional capacity in research and teaching via the World Class Faculty and Scholars Program through the State University System of Florida (SUS). High-quality faculty were recruited in the fields of waterborne pathogens, environmental economics, environmental health, coastal resilience, environmental (water) toxins. Soon after, the SUS created an opportunity for additional recurring funds for Florida's nine non-preeminent institutions via the Universities of Distinction program. These funds were used to hire an additional 14 faculty members. The Water School provides competitive start-up packages for a regional comprehensive university and has state-of-the art research space and specialized facilities at a marine lab in Bonita Springs, Florida, and the Wetlands Everglades Research Park at the Kapnick Center in Naples, Florida.

The Water School offers undergraduate and graduate STEM programs related to water and the environment. Many graduates enter the growing sustainability workforce to apply the skillsets acquired in these programs. Program design incorporates high-impact learning practices and opportunities for research and internships in some of Florida's most important environments and ecosystems. The Water School supports 36 undergraduate research assistantships each year through its Undergraduate Research Experience program, and 48 undergraduates were supported by grant funding in FY2025.

Hiring world-class faculty is key to recruiting top-performing graduate students to programs in The Water School. In FY25, FGCU and The Water School provided approximately $520,000 in graduate student financial support, with $191,000 deriving from faculty grants and sponsored programs. Finally, FGCU is positioning itself to attract top-performing students through a proposed Ph.D. program in Coastal Watershed Science and Policy. When approved by the Florida Board of Governors, this will be the first Ph.D. program at FGCU.

3. How will your area of expertise collaborate with industry and business leaders?

   Through a wide range of industry, community, and government partnerships, FGCU builds and sustains initiatives that align and propel economic, educational, policy, and community progress. For example, The Water School works closely with representatives of agriculture, through FGCU's Center for Agribusiness, on mutual interests in water and nutrients. Partnerships with industry and government representatives (e.g., Apex, Black & Veatch, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Kimley-Horn, RESPEC, SAS, and Soil and Water Engineering Technology, Inc.) routinely occur via career fairs, job placements, workshops and events, and research collaboration.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

   The Water School has already been formally recognized by the State University System of Florida through its Universities of Distinction program and is engaged with faculty, students, and staff at other SUS institutions. With state-of-the-art research laboratories and logistical support (i.e., field stations, dormitories, boats, vehicles) for conducting research in the Gulf of America, Florida Keys, Florida Everglades, Ten Thousand Islands, Caloosahatchee River Estuary, and Lake Okeechobee, FGCU is set to continue expanding its impact on water education and research throughout the SUS.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.

Expenditures of sponsored research projects in water-related areas	Increase research expenditures by 10% over the next 5 years. Benchmarks (2024-2025): $7.2 million research expenditures	Office of Research & Sponsored Programs data; grant awards; HERD survey	Yes - compared to other relevant SUS programs
Annual number of undergraduate students participating in undergraduate research and internships	Increase undergraduate research and participation in internships by 10% in The Water School. Benchmarks (2024-2025): 36 undergraduate research assistantships, 48 students grant funded, 49 students completed senior project research, 88 students completed internships	Track students completing internships and research projects. Data provided by our student information system and collected by The Water School.	N/A
Number of community and industry partnerships that champion sustainable practices and resiliency	Develop 5 new community and industry partnerships over 5 years and increase attendance and the number of community engagement events hosted each year related to sustainability and resilience. Benchmark (2024-2025): 3 public events, 325 participants	Memorandums of understanding developed over the next 5 years; annual number of relevant events hosted and attendance.	N/A

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

The 2025-2026 FY budget for The Water School is over $9.0 million. This budget includes all current faculty salaries, staff salaries, graduate assistant salaries, research and equipment, field stations, and operating expenses to support SUS's strategic plan to elevate student success, engage in operational excellence,

innovate in research and economic development, and recruit and retain world-class faculty, staff, and students.

For 2025-2026 FY, FGCU is exploring opportunities to enhance faculty capacity, high-impact practices for students, and community partnerships related to its water expertise.

University Area of Expertise Proposal (2)

University:	
University Contact Name	Dr. Debbie M. Thorne
University Contact Title:	Executive Vice President and Provost
University Contact Phone:	239 590 7000
University Contact Email:	dthorne@fgcu.edu
Area(s) of Expertise:	Health Span
Date Approved by University President:	August 11, 2025

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 2

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

Florida Gulf Coast University (FGCU) is fully engaged in enhancing the health span of Southwest Florida and beyond by taking a holistic approach to quality of life, health and well-being across the lifespan, and integrating physical, mental, emotional, social, economic, and financial dimensions. This expertise is anchored by the Marieb College of Health & Human Services, the Shady Rest Institute on Positive Aging, and the Golisano Intellectual & Developmental Disability Initiative (GIDDI) as well as programs in nursing, social work, counseling, rehabilitation sciences, and health sciences. Additional activity, including research, overlaps with the Whitaker College of Engineering, The Water School, and the College of Arts and Sciences.

With current and growing expertise in the health span, FGCU is committed to actualizing the untapped potential of aging adults and positioning Southwest Florida as a national and global model for healthy, purposeful, and engaged aging. Through this collaboration, FGCU aims to decrease the gap between health span and lifespan, extend the "purpose-span" (i.e., the number of years individuals live with meaning, contribution, and engagement), and mobilize a coalition of regional leaders to support, scale, and sustain the work.

FGCU's commitment to applied learning, interprofessional collaboration, and community engagement positions it as a leader in preparing the workforce needed to address the evolving needs of Southwest Florida and beyond. The university's living laboratory model and partnerships with several organizations (e.g., Arthrex, Lee Health, Naples Comprehensive Health, David Lawrence Centers, and The Golisano Foundation) further enhance its capacity to innovate in health education and service delivery.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

FGCU supports the health span area of expertise by offering strong recruitment packages and faculty development options, applied research opportunities, and active engagement with industry partners and community organizations. Faculty with both academic and industry expertise and interests are also attracted to FGCU because of the living laboratory of health span initiatives in Southwest Florida.

Students are attracted by current and future clinical partnerships and industry collaborations that ensure high-impact experiential learning opportunities. This enhanced learning environment is critical to promoting and maintaining excellent licensure pass rates and full-time employment rates in key health and human services programs. FGCU will continue to expand stackable credentials and other industry-aligned programs to differentiate itself in the market for both faculty and students (e.g., medical device sales certificate and senior partner care credentials).

3. How will your area of expertise collaborate with industry and business leaders?

FGCU partners with regional healthcare systems, nonprofits, and companies like Arthrex to co-develop curriculum, provide internships, and conduct applied research. These collaborations ensure that graduates are workforce-ready and faculty research addresses real-world challenges. Collaborations with Lee Health, Naples Community Health (NCH), David Lawrence Centers, and the Healthcare Network (HCN) will continue for clinical placement as well as research and training opportunities.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

In 2022, FGCU launched a new institute for positive aging after the initial support of a $5 million philanthropic gift. Although in its formative years, The Shady Rest Institute of Positive Aging aims to actualize the untapped potential of aging adults and position Southwest Florida as a national and global model for healthy, purposeful, and engaged aging. In addition to FGCU's Golisano Intellectual &

Developmental Disability Initiative (GIDDI), as well as programs in nursing, social work, counseling, rehabilitation sciences, and health sciences, FGCU will continue to synergize efforts to expand our work and impact in health span initiatives. A center of distinction may follow as efforts mature.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Expenditures of sponsored research projects in health/life sciences	Increase by 25% over 5 years	Office of Research & Sponsored Programs data; grant awards; HERD survey	Yes - compare to other relevant SUS programs
Licensure pass rates for Nursing and Physical Therapy programs	100% licensure pass rate	Licensure application records	Yes – compare licensure pass rate to other relevant SUS institutions
Number of Southwest Florida residents participating in or served by programs	Reach 10,000 residents annually	Program participation logs; community health surveys	Yes - compare with similar outreach programs at UNF and USF

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

The 2025-2026 FY budget for the Marieb College of Health & Human Services is $21.5 million. This budget includes all current faculty salaries, staff salaries, graduate assistant salaries, equipment, and operating expenses to support SUS's strategic plan to elevate student success, engage in operational excellence, innovate in research and economic development, and recruit and retain world-class faculty, staff, and students.

For 2025-2026 FY, FGCU is exploring opportunities to enhance facilities, experiences, and community partnerships related to its health span expertise and impact.

University Area of Expertise Proposal (3)

University:	
University Contact Name	Dr. Debbie M. Thorne
University Contact Title:	Executive Vice President and Provost
University Contact Phone:	239 590 7000
University Contact Email:	dthorne@fgcu.edu
Area(s) of Expertise:	Resort, Golf, and Hospitality Management
Date Approved by University President:	August 11, 2025

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 3

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

Florida Gulf Coast University (FGCU) delivers a comprehensive, multi-dimensional education that prepares students for leadership in the global resort, golf, and hospitality industries. FGCU supports three career-ready undergraduate programs in the Lutgert College of Business: the B.S. in Resort & Hospitality Administration (RHA), B.S. in Hospitality & Tourism Management (HTM), and B.S. in PGA Golf Management (PGM). Firmly rooted in the economic, social, and cultural landscape of Southwest Florida and Florida, these programs benefit from over 300 industry partnerships and a 100 percent internship placement rate. Students gain hands-on experience and develop strong business acumen, service excellence, and strategic insight, all hallmarks of FGCU's nationally recognized, applied hospitality education.

The PGA Golf Management program is one of only 16 accredited programs by the PGA of America and the sole program in Florida. After securing eligible full-time employment, PGM graduates can be elected to Class A PGA membership. The RHA and HTM programs, which are offered in Lutgert's School of Resort and Hospitality Management, prepare graduates for roles in revenue management, club, food, and beverage operations strategy, financial planning, real estate development, and data analytics. While RHA focuses on micro-level business operations, HTM and PGM provide broader, guest-centered and

industry-wide perspectives, emphasizing tourism development and service innovation.

Together, these programs offer business-intensive and industry-focused academic tracks aligned with distinct career pathways. This dual-track approach equips students to lead at every level, from front-line service to business strategy, thus enhancing FGCU's impact in one of Florida's key economic sectors. All three degrees hold prestigious accreditations, including from the Accreditation Commission for Programs in Hospitality Administration, AACSB - the Association to Advance Collegiate Schools of Business, and PGA of America.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

Because they are part of a business school, these programs attract a broad and multi-faceted faculty talent pool, including experts in revenue management, data analytics, and tourism economics. Interdisciplinary collaboration with business faculty enhances academic offerings, while competitive salary structures and professional development and research opportunities make FGCU appealing to faculty with both academic and industry interests and experience. The university supports this area of expertise by offering strong recruitment packages and development options, applied research opportunities, and active engagement with industry partners and community organizations through advisory boards and funded initiatives.

FGCU's resort, golf, and hospitality academic model combines business-focused and industry-specific pathways and is highly attractive to students. The model intentionally exposes students and graduates to a broad range of career opportunities in Florida's robust tourism and hospitality economy. To attract top students, FGCU emphasizes the living laboratory of Southwest Florida, national accreditation and quality standards, and strong internship and post-graduation employment outcomes. Continued focus on industry partnerships, high impact practices and student outcomes, and location advantages will strengthen both faculty and student recruitment and propel FGCU's leadership in resort, golf, and hospitality education.

3. How will your area of expertise collaborate with industry and business leaders?

FGCU maintains strong partnerships with resorts and hospitality companies, clubs, golf facilities, professional associations, and tourism organizations. Industry advisory boards ensure alignment with current trends and workforce demands, as do a wide range of activities each year. Purposeful collaborations with industry and business leaders result in guest lectures, student mentorship programs, internship and employment placements, fundraising initiatives, alumni

engagement, and industry events. Leading employers and adjunct instructors contribute specialized knowledge, with initiatives like Marriott's Voyage Program and PGA HOPE (Veteran Golf Training) enriching student engagement and experiences.

To assess effectiveness, the program tracks metrics such as active partnerships, guest lecture frequency, student internship rates, and collaborative events. Peer benchmarking against programs like UCF's Rosen College and FIU's Chaplin School as well as other PGM programs helps FGCU maintain competitive excellence and continuous improvement in resort, golf, and hospitality education.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

While FGCU has not formulated specific plans for a center of distinction in resort, golf, and hospitality management, the university continues to build capacity for greater impact. A center of distinction to support other SUS institutions may emerge due to the availability of unique experiential and high impact opportunities in Southwest Florida, particularly in resort and golf management. A center may also emerge as FGCU enhances extension programming at Babcock Ranch, the Buckingham facility (eastern Lee County), and other areas.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Internship placement rate for HTM and PGM majors	Achieve and maintain a 100% internship placement rate for HTM and PGM majors	Internship data and tracking by program directors	N/A
Four-year graduation rate for HTM and PGM majors	First Time in College (FTIC) four -year	Student information system	SUS institutions with HTM and PGM majors

	graduation rates >52%		
Enrollment in hospitality programs	Increase overall RHA and HTM enrollment by 20% annually over the next five years	Student information system and enrollment files	SUS institutions with peer hospitality programs (FSU, UCF, FIU)

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

The 2025-2026 FY budget for the School of Resort & Hospitality Management (SRHM) and the Professional Golf Management (PGM) program is $2.25 million. This budget includes all current faculty salaries, staff salaries, graduate assistant salaries, equipment, and operating expenses to support SUS's strategic plan to elevate student success, engage in operational excellence, innovate in research and economic development, and recruit and retain world-class faculty, staff, and students.

For 2025-2026 FY, FGCU is exploring opportunities to enhance facilities, experiences, and community partnerships at its Buckingham location related to expertise in resort, golf, and hospitality management.

University Area of Expertise Proposal

University:	Florida International University
University Contact Name	Elizabeth M. Bejar
University Contact Title:	Provost, Executive Vice President & Chief Operating Officer
University Contact Phone:	(305) 348-2151
University Contact Email:	bejare@fiu.edu
Area(s) of Expertise:	1. Risk and Resilience Mitigation: Natural and Built Environment 2. Health: Precision Imaging and Personalized Health 3. Economic Freedom
Date Approved by University President:	August 11, 2025

Instruction

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 1

Risk and Resilience Mitigation: Natural and Built Environment

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

Florida International University (FIU) is a globally recognized leader in disaster resilience, infrastructure design and testing, environmental research, and innovative technologies. The university is home to premier research assets, including the NSF-funded Wall of Wind, the Aquarius Reef Base, the internationally recognized Institute of the Environment with more than 40 years of Everglades research and coastal ocean science leadership, the Extreme Events Institute (which includes the International Hurricane Research Center), the Center of Excellence on Water Quality and Coastal Resilience, and the State of Florida Public Loss Model. These assets form the backbone of FIU's expertise in Coastal Resilience and Risk Mitigation.

FIU faculty work across environmental sciences, engineering, computer science, and public policy to develop scalable, data-driven solutions that protect drinking water and

ecosystems, strengthen infrastructure, and fortify communities against sea-level rise, salt-water intrusion, extreme heat, hurricanes, and other disasters. These efforts directly align with Florida's strategic priorities in infrastructure investment, disaster mitigation, environmental resilience, and economic stability – safeguarding families, protecting public investments, and enabling the development of safer, more resilient homes, businesses, infrastructure, and local economies.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

FIU will expand interdisciplinary faculty clusters in engineering, environmental science, planning, and computer science, with targeted recruitment of nationally recognized experts in infrastructure resilience and disaster mitigation. Competitive start-up packages and access to unique research assets such as the Wall of Wind will support new faculty. Specialized academic programs, undergraduate research experiences, and graduate assistantships will attract top-performing students focused on strategies for ensuring environmental resilience and water security, quality, and supply, as well as innovative infrastructure design, and disaster preparedness and recovery.

3. How will your area of expertise collaborate with industry and business leaders?

FIU will strengthen its longstanding public-private partnerships with leading developers, engineering firms, start-ups, public utilities, and government agencies to co-create solutions for environmental resilience, including innovative natural and built infrastructures, new climate technologies, AI-enabled robotics and monitoring, and risk modeling. The Wall of Wind, the NIST Robotics and Autonomous Vehicle Center and other FIU testing facilities serve as active hubs for joint R&D, performance-based product validation, and standards development used across Florida and beyond. Advisory councils and applied research consortia will help shape industry best practices and workforce pipelines.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

Yes. As outlined in FIU's 2026–2027 Legislative Budget Requests, the university proposes the establishment of three new centers:

1. Center for Emergency Preparation, Disaster Mitigation, and Recovery
2. Center for Water Security, Quality, and Supply
3. Florida Center for Advanced Manufacturing

These centers will build on the proven success and impact of FIU's leading research entities, including the Extreme Events Institute, the Academy for International Disaster Preparedness, the Institute for Resilient and Sustainable Coastal Infrastructure, the Institute of the Environment, and the Cold Spray and Rapid Deposition Laboratory.

1. Center for Emergency Preparation, Disaster Mitigation, and Recovery

This center will advance innovations in infrastructure designed to protect communities from disasters. Key initiatives will include:

- Developing novel building materials through advanced manufacturing.
- Conducting large-scale performance testing at the NSF-funded Wall of Wind and related facilities.
- Exploring natural infrastructure solutions such as mangrove barriers to enhance resilience.
- Training the regional workforce in emergency preparation, response, and recovery policies and procedures.

2. Center for Water Security, Quality, and Supply

This center will focus on safeguarding long-term freshwater availability and advancing resilience in Florida's water systems by:

- Modeling and mitigating compound flooding.
- Conducting water quality monitoring using next-generation robotics and autonomous sensing platforms.
- Enhancing community, private-sector, and business engagement in water security initiatives.
- Expanding Everglades and coastal oceans research, restoration, and management through new AI, robotics, and environmental resilience technologies.
- Leveraging the Aquarius Reef Base as a national testbed for emerging technologies.

3. Florida Center for Advanced Manufacturing (FCAM)

FCAM will accelerate the translation of basic manufacturing research into market-ready applications by:

- Expanding university-industry collaborations.
- Leveraging FIU's engineering expertise and advanced manufacturing facilities to support Florida's industrial base.
- Attracting manufacturing companies from other states to Florida.
- Driving the state's advanced manufacturing capacity in high-growth sectors.

Leveraging our strength: Driving Statewide Impact

We expect these three centers to build on FIU's strong foundation of collaboration, its deep history of partnership across the State University System, and its proven record of turning research into real-world solutions. FIU has distinguished itself through impactful work with fellow institutions and policymakers to address Florida's most pressing challenges – from safeguarding water quality and restoring the Everglades to

strengthening hurricane-related building codes and reducing disaster losses. This track record uniquely positions FIU to deliver transformational, statewide impact through the establishment of these new centers.

These centers will be shared assets for faculty, students, and staff across the State University System, providing:

- Shared infrastructure for testing, simulation, training, and applied research.
- Interdisciplinary and cross-institutional research collaborations addressing disaster resilience, water security, water quality and supply, and advanced manufacturing.
- Specialized workforce development and upskilling programs aligned with state and national priorities.
- Clustered industry-university partnerships to enhance technology transfer, commercialization, and job creation.
- A statewide knowledge and innovation hub to strengthen Florida's leadership in disaster preparedness, infrastructure resilience, water preservation and restoration, and manufacturing innovation.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
External research funding in resilience and infrastructure	Increase in grant dollars and expenditures	NSF HERD data; Sponsored Research Office reports	Yes. Compared to other R1 public universities with significant programs in risk and resilience
Number of joint research projects with industry	Increase number of Industry engagements; Increase the number of National Academy Members in these disciplines;	Sponsored Research Office contracts and partnership database; Faculty hiring records	Yes. Benchmarked with peer institutions with dedicated testing facilities

	Recruit and retain professors of practice		
Students enrolled in resilience-related academic programs	Expand undergraduate-to-graduate program enrollments	Institutional Effectiveness; Program Enrollment Reports	Yes. Compared to state and national programs in engineering resilience
Industry-Academia partnerships and commercialization's	Increase patents and/or commercialization innovations in disaster mitigation technologies Increase innovation input	FIU Technology Transfer and Innovation Office US Patent and Trademark Office (USPTO)	Yes. Peer reviewed with top patent-producing public universities
Number of policy briefs or advisories delivered to public agencies	Expand applied research impact	Center reporting; Faculty deliverables	Yes. Compared to state and national peers

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
Launch of the Center for Emergency Preparation, Disaster Mitigation, and Recovery	Existing recurring and non-recurring funding	Growth in contracts and grants; Faculty and student recruitment
Expansion of the work of the Institute of the Environment and the Extreme Events Institute, including the Wall of Wind and Aquarius Reef Base. These are key for infrastructure breakthroughs and industry testing.	New and recurring state funding (LBR)	Increase in joint academic-government-industry projects; Research output

Completion of faculty cluster hires in resilience, infrastructure systems, and urban risk modeling	New and renewed Research grants; State hiring	Recruitment of nationally recognized scholars; Industry testing and contract research growth
Development of graduate fellowships and student research stipends in disaster and resilience studies	Funding from new enrollment in related programs	Boost in enrollment; Expansion of experiential learning and credential programs

Area of Expertise 2

Precision Imaging and Personalized Health

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

Florida International University (FIU) is focused on securing investments that will position us as a leader in advancing the frontiers of precision medicine by integrating expertise across medicine, public health, nursing, biomedical sciences, and engineering. Through translational research, AI-driven diagnostics, and patient-tailored therapies, FIU is accelerating innovation in cancer, neurological disorders, and metabolic diseases. The university's investments in state-of-the-art infrastructure, facilities and equipment will start coming online in 2025. These investments include what will be Florida's first PET Cyclotron at a public university facility — the only one south of Jacksonville — and advanced clinical imaging platforms that support cutting-edge research and clinical applications. The university is in active conversations to expand its industry partnerships, including those in imaging, and strategic relationships around cutting-edge research around boron neutron. We will be poised to work alongside leading health systems that further position FIU as a hub for personalized health innovation, addressing critical healthcare challenges across Florida and beyond.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

FIU will recruit top-tier faculty through interdisciplinary cluster hires aligned with strategic investments in advanced biomedical imaging, nanomedicine, and AI-enabled diagnostics. Competitive start-up packages and endowed chairs will support translational health innovation, with infrastructure including new testing facilities and imaging labs.

To attract high-performing graduate and professional students, FIU will offer research-intensive academic tracks and integrated clinical training in collaboration with premier healthcare partners such as Baptist Health, Nicklaus Children's Health System and Cleveland Clinic.

3. How will your area of expertise collaborate with industry and business leaders?

FIU will expand collaborations and partnerships with healthcare systems, biotechnology firms, and imaging technology companies to accelerate the development and deployment of personalized diagnostics and therapies. The university's imaging infrastructure will serve as a platform for joint translational research, commercialization, and clinical trials focused on cancer, neurological disease, metabolic disorders, and cardiovascular diseases. Industry partners will also contribute to curriculum development, externship opportunities, and innovation priorities – and accelerate bench to bedside opportunities – ensuring alignment between academic discovery and patient-centered, market-driven healthcare solutions.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

Yes. FIU is establishing the Center for Imaging Science in partnership with a leading industry collaborator. This center will serve as a multidisciplinary hub for research, education, and commercialization in precision imaging and diagnostics. It will support faculty, students, and staff across the State University System by:

- Providing shared access to advanced imaging technologies and specialized facilities for cross-disciplinary research and innovation.
- Developing collaborative research programs that bring together experts in engineering, computer science, medicine, physics, and related fields.
- Offering training and workforce development programs to prepare students and professionals for careers in advanced imaging science, diagnostics, and related industries.
- Facilitating technology transfer and commercialization of imaging innovations through industry partnerships.
- Advancing Florida's leadership in precision diagnostics to improve health outcomes, support economic growth, and expand research capacity statewide.

FIU is also developing two new initiatives focused on healthcare innovation, including the launch of the: (1) the Center for Innovation in Cardiovascular Health and (2) The AI Healthcare Innovation Institute.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Research funding in precision imaging and translational health	Increase in grant dollars and expenditures Increase NIH-funded research grants Increase standing in HERD rankings Increase the number of National Academy Members in these disciplines	Sponsored Research Office reports; NIH Reporter; HERD; Faculty hiring records	Yes, Compared to public R1 universities with biomedical research focus
Number of clinical research partnerships and trials	Expand clinical trial activity and partnerships; Recruit and retain top-tier faculty	Clinical Trials Registry; Sponsored Programs Office	Yes, Benchmarked against state universities with academic health centers
Graduate and professional student enrollment in precision health tracks	Increase enrollment and industry engagement	Enrollment reports; Faculty research tracking; Office of Technology Management	Yes, Compared with AAU and R1 medical and biomedical programs
Publications in high-impact journals (health/imaging)	Increase scholarly output and impact; Scale undergraduate-to-graduate program pipelines	Citation databases; Institutional Research; Enrollment reports	Yes, Peer-reviewed journal and citation metrics in translational health
Number of patents or licensed imaging-related technologies	Expand innovation and commercialization	Office of Technology Management; USPTO	Yes, compared to national imaging research centers

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
PET Cyclotron operations and expansion of translational imaging lab infrastructure	Existing recurring and non-recurring funding	Growth in research capacity and clinical trial activity
Faculty cluster hires in AI health diagnostics, nanomedicine, and imaging sciences	New and renewed research grants	Recruitment of top interdisciplinary faculty
Endowed chairs in precision health and imaging	Philanthropic and institutional investment	Enhance national leadership in health innovation
Expand impact of the Center for Translational Science in Port St. Lucie	New Recurring State Funding (LBR); New and renewed Research	Increase research output and clinical partnerships
Student research fellowships and clinical externships in partnership with hospitals	Partnership funding with hospitals	Improve student learning outcomes and clinical placement
Development of the FIU Center for Imaging and Personalized Diagnostics	University capital investment; Industry/pharma partnerships	Establish translational and commercialization collaborations

Area of Expertise 3

Economic Freedom

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

Florida International University (FIU) is a global leader in advancing economic freedom and free enterprise, supported by nationally top-ranked programs in international business, law, real estate, and hospitality management. At the heart of this expertise is the Adam Smith Center for Economic Freedom, a legislatively established hub for research, education, and public engagement on capitalism, global prosperity, and open markets.

FIU leverages its location in Miami – one of the world's most dynamic centers for international finance – to shape policy, education, and workforce development aligned with the evolving global economy. Additionally, FIU's name and preeminent students and faculty position FIU to grow its international presence and seize opportunities to grow our student and faculty recruitment, engagement, foster collaborative relationships and grow the FIU brand. FIU believes this is key to supporting the State of Florida's rise to a top 10 global economy.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

FIU will recruit leading nationally and globally recognizable faculty in economics, hospitality leadership, real estate, finance, and political economy through targeted searches, visiting scholar programs, and distinguished professorships housed within the College of Business and the Adam Smith Center for Economic Freedom. These hires will be supported by institutional strengths in ranked academic programs, deep industry partnerships, and global convenings of thought leaders. Top-performing students will be drawn to FIU's career pipelines with Fortune 500 companies and international firms, as well as unique opportunities for engagement with global business and policy leaders.

3. How will your area of expertise collaborate with industry and business leaders?

FIU will strengthen its collaboration with global corporations, law firms, leading national and international universities focused on economic freedom, hospitality brands, real estate developers, and policy institutes to advance thought leadership, applied research, and workforce readiness in sectors vital to Florida's economy. Industry leaders will continue to serve on advisory boards, co-teach courses, host internships, and participate in public forums hosted by the Adam Smith Center. Through executive education, entrepreneurship programs, and global summits, FIU will foster two-way knowledge exchange between academia and industry to advance free-market innovation and economic competitiveness.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

No new center is proposed. FIU's expertise in economic freedom is anchored in the Adam Smith Center for Economic Freedom, a legislatively created and fully operational center that supports faculty, students, and staff across the institution.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Number of convenings/summits hosted by the Adam Smith Center	Increase engagement with global thought leaders; Engagement via executive & community programs	Center records; event rosters	Yes, Benchmarked against free-market centers at public institutions
Student enrollment in economics, international business, and policy programs	Grow undergraduate and graduate enrollment	Registrar enrollment data	Yes, Compared to top public institutions in economics and international business
Faculty recruitment and productivity	Expand reach through publications, partnerships and thought leadership Recruit and retain top leading faculty	Advancement and Development Office reports; Adam Smith Center publications database	Yes, we will compare leading public universities and peer centers. We will work to establish peer lists (Centers and universities)
External funding and philanthropic gifts for center research and programs	Increase financial support for research and engagement	Advancement Office; Sponsored Research Office	Benchmarked against AAU universities with public policy centers
Career placement and industry partnership expansion	Strengthen workforce pipelines and employer engagement	Career and Talent Development; Alumni surveys	Peer comparison with public policy centers at AAU universities; Compared to top undergraduate business schools

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
Global engagement and summit series on economic freedom and prosperity	Existing recurring and non-recurring funding for the Adam Smith Center	Increase national/international visibility; Influence Florida economic policy
Undergraduate and graduate research assistantship and curricular enhancement	Existing and future tuition revenue	Grow student interest and program impact
Career placement and industry partnership expansion	Public engagement via grants and sponsored work	Strengthen workforce readiness and employer collaboration
International business and real estate experiential learning programs	Sponsored projects and industry partnerships	Elevate academic reputation in political economy and business
Public policy research, white paper series, and policy dialogues	Grants and contracts from government, industry, or public sector partners	Advance thought leadership and policy impact

University Area of Expertise Proposal

University:	Florida Polytechnic University
University Contact Name:	Brad Thiessen
University Contact Title:	Provost
University Contact Phone:	863-874-8409
University Contact Email:	bthiessen@floridapoly.edu
Area(s) of Expertise:	1. Industry-integrated STEM education and applied research 2. Industrial & Phosphate Research
Date Approved by University President:	07/31/2025

Area of Expertise 1: Industry-Aligned STEM Education & Applied Research

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

Florida Polytechnic University specializes in high-impact STEM education and research tightly aligned with industry needs and emerging technologies. As Florida's only all-STEM public university, Florida Poly produces graduates to fill high-tech, high-wage employment gaps by offering undergraduate and graduate degrees in:

- Applied Mathematics
- Civil Engineering
- Computer Engineering (Machine Intelligence, Robotics)
- Computer Science (AI, Simulation, Cybersecurity, Software Engineering)
- Cybersecurity Engineering
- Data Science and Business Analytics
- Electrical Engineering (Autonomous Systems, Energy Systems)
- Environmental Engineering
- Industrial Engineering
- Mechanical Engineering (Aerospace, Advanced Materials, Automotive)
- Physics (Astrophysics, Applied Quantum Physics)

All programs are guided by Industry Advisory Boards to emphasize hands-on learning through labs, applied research, and real-world projects. Every Florida Poly student completes at least one internship and a year-long capstone project to tackle open-ended, interdisciplinary challenges proposed by industry sponsors.

Florida Polytechnic University further integrates industry into the professional lives of students through high-impact career fairs. At these semi-annual events, 100+ high-tech companies actively recruit students into internships and full-time employment opportunities. Nearly 50% of Florida Poly students participate in these career fairs each semester.

This industry-integrated approach extends beyond the classroom through applied research and faculty-industry collaboration. Through partnerships with organizations such as Catapult, IMSA (International Motor Sports Association), Polk County Sheriff's Office, IFF (International Flavors & Fragrances), and OCOM (the Orlando College of Osteopathic Medicine), Florida Poly students and faculty deliver solutions in areas including autonomous systems, smart infrastructure, and cybersecurity.

With a curriculum aligned to workforce needs and applied research embedded in industry partnerships, Florida Poly serves as a catalyst for Florida's innovation economy – producing job-ready graduates and research that solves real-world challenges.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

To support its distinctive expertise in industry-integrated, high-tech STEM education and applied research, Florida Polytechnic University will recruit world-class faculty and top-performing students through a strategic approach grounded in academic excellence, innovation, and real-world impact.

<u>Faculty Recruitment Strategy: Attracting World-Class Talent</u>

1. **Targeted hiring in emerging fields**
   Faculty searches will prioritize expertise in high-demand, interdisciplinary domains – such as aerospace and space systems engineering; AI and cybersecurity; biomedical sciences and devices; and autonomous systems and smart infrastructure – to align with academic program growth and industry needs.

2. **Industry collaboration**
   Florida Poly will recruit faculty eager to apply their expertise to real-world challenges through deep, sustained industry engagement. Candidates will be attracted by opportunities to lead sponsored research, secure patents, and guide student teams in capstone and entrepreneurial projects tied to real-world problems. As part of this approach, Florida Poly will pursue embedded faculty partnerships, placing faculty members directly within partner organizations to co-develop solutions in high-impact areas. This "faculty in residence within industry" model will be supported by joint appointments, industry-sponsored research projects, and co-developed curricula.

3. **Faculty development, support, and recognition**
   Florida Poly will offer nationally-competitive salary packages and startup funding, including access to modern labs and equipment, a forthcoming University Research Park, and an Office of Patents and Technology Transfer, to attract and retain faculty with strong industry, research, and innovation track records. Through our new Faculty Center for Teaching and Innovation, Florida Poly will support continuous professional growth, pedagogical innovation, and leadership development. This will create a thriving, collaborative academic community that values excellence and impact.

Student Recruitment Strategy: Attracting Top-Performing STEM Learners

1. **High-touch, data-driven recruitment**
   Florida Poly will expand digital outreach, personalized communication, and admissions counselor engagement to reach academically high-achieving students—particularly those with strong math and science preparation and interests in STEM careers. As outlined in our retooled Strategic Enrollment Management model, this includes the deployment of AI to inform student recruitment processes, prospective student communication, and admissions decision-making.

2. **Scholarships and ROI messaging**
   Florida Poly will leverage its reputation for the #1 Return-on-Investment degree in the South, the highest graduate salaries, and the lowest student debt to attract top students seeking meaningful, affordable, high-wage STEM pathways. Scholarships will be strategically awarded to national merit scholars and top STEM competitors.

3. **Immersive experiences, signature programs, and accelerated pathways**
   To differentiate the Florida Poly experience, the university will showcase hands-on, project-based learning from day one – offering admitted student preview days, summer bridge programs, dual enrollment options, and early access to industry projects and research labs. Combined bachelor's/master's pathways, articulation agreements with FCS schools, and the development of 3-year bachelor's degree programs will appeal to academically ambitious students, especially those seeking early research involvement, graduate study, or entrepreneurship opportunities.

3. How will your area of expertise collaborate with industry and business leaders?

Florida Polytechnic University is co-creating the future of STEM education and innovation through intentional, reciprocal partnerships with industry. These collaborations are central to our mission and are embedded within our academic and research activities.

1. **Industry Curriculum Advisory Boards for every academic program**
   Every academic program is guided by an Industry Curriculum Advisory Board composed of engineers, executives, and technologists who inform curriculum design, ensure workforce alignment, and identify emerging skillsets and technologies. This includes the identification of essential (soft) skills reinforced to students through leadership training opportunities.

2. **Industry-sponsored capstone projects and internships**
   Industry partners play an active role in shaping student experiences by sponsoring capstone projects, offering internships and co-ops, and mentoring student teams. These partnerships ensure students are solving real problems with real consequences, which strengthens the technical and professional readiness of our graduates.

3. **Embedded faculty/industry collaborations**
   Florida Poly will collaborate with industry partners to embed faculty directly within companies and organizations to lead joint research projects, develop new technologies, and support workforce development initiatives. This embedded model will enhance applied research productivity and foster long-term innovation partnerships.

4. **Co-development of new programs and credentials**
   Florida Poly will co-develop new degree programs, certificates, and micro-credentials in collaboration with industry partners. This will ensure rapid response to workforce needs in emerging fields.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

Because this proposed area of expertise is central to the mission of our entire university, Florida Polytechnic University does not plan to create a separate center of distinction.

Even without a separate center of distinction, Florida Polytechnic University will support faculty, students, and staff throughout the SUS in applied STEM innovation by openly sharing curriculum toolkits, advisory board frameworks, capstone project models, and industry-aligned micro-credential modules and certificates that can be adopted or adapted by other SUS institutions.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Percent of bachelor's graduates enrolled or employed ($40k+) within one year of graduation	85% for our 2029-30 graduates	Source: PBF metric #1 We will track progress through our Accountability Plan.	Accountability Plans provide comparisons across the SUS. Other public sources (e.g., Niche, GlassDoor, PayScale) provide similar data for peer comparisons.
Median wages of bachelor's graduates employed full-time within one year of graduation	$72,000 for our 2029-30 graduates	Source: PBF metric #2 We will track progress through our Accountability Plan.	Accountability Plans provide comparisons across the SUS. Other public sources (e.g., Niche, CollegeScoreCard, CollegeTransitions) provide similar data for peer comparisons.
Percent of bachelor's graduates with 2+ workforce experiences (including internships)	100% for our 2029-30 graduates	Source: PBF metric #10 We will track progress through our Accountability Plan.	We will search for peer comparison data.
Percent of graduating seniors completing industry-sponsored capstone projects	90% for our 2029-30 graduates	Source: Internal data We will list this as an institution-specific metric in our Accountability Plan.	We are not aware of any publicly available data on this.
Number of faculty with active industry collaboration projects	10% by 2029-30	Source: Internal data (Faculty Activity Reports)	We are not aware of any publicly available data on this.
Utility patents awarded (cumulative)	Increase from 1 to 20 by 2030	Source: Accountability Plan	Accountability Plans provide comparisons across the SUS.
Headcount enrollment	3,000 by Fall 2030	Source: Accountability Plan	Accountability Plans provide comparisons across the SUS.
# of new credential programs co-developed with industry	6 by Fall 2030	Source: Academic Program Inventory and Catalog	No.

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2: Anticipated FY26 Funding for University Initiatives

University Initiative	Anticipated Funding	Associated Metric/Goal
New faculty recruitment, including startup	$5.00M (FY26 appropriation)	Number of faculty with active industry collaboration projects; Number of new credential programs co-developed with industry
Student career counseling and internships	$2.45M (performance funds)	Percent of bachelor's graduates enrolled or employed ($40k+) within one year of graduation; Median wages of bachelor's graduates employed full-time within one year of graduation
Faculty Center for Teaching & Innovation	$2.25M (performance funds)	Headcount enrollment
Industry outreach, including Industry Advisory Boards and industry collaboration grants	$1.30M (FY26 appropriation)	Percent of graduating seniors completing industry-sponsored capstone projects; Number of faculty with active industry collaboration projects; Number of new credential programs co-developed with industry
Student recruitment enhancements	$1.00M (FY26 appropriation)	Headcount enrollment
Patents & Technology Transfer	$500k (FY26 appropriation)	Utility patents awarded (cumulative)
Capstone enhancements	$500k (FY26 appropriation)	Percent of graduating seniors completing industry-sponsored capstone projects; Percent of bachelor's graduates with 2+ workforce experiences (including internships)
Total	$13M	

This area of expertise aligns with Florida Poly's $15M Legislative Budget Request (*Rising to 3,000: Expanding Florida Poly's Economic Impact*), that calls for the development of five innovative academic programs to fill high-skill employment gaps, the enhancement of existing academic programs, the build-out of enrollment management capacity, and the improvement of student success outcomes in order to meet student and employer demands and produce an even greater number of Florida Poly graduates.

Area of Expertise 2

Area of Expertise 2: Industrial and Phosphate Research

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

The Florida Industrial and Phosphate Research Institute (FIPR Institute) was created in 1978 as a research institute to study phosphate issues that impact Florida. In 2010, legislation broadened the Institute's capabilities globally and to non-phosphate topics such as energy, and the mining and processing of minerals other than phosphate. In 2012, the FIPR Institute legislatively became part of Florida Polytechnic University.

Through its long history, the FIPR Institute has gained a reputation as a leader in research and knowledge related to phosphate mining and fertilizer production activities. It has published hundreds of research reports on many topics in the field. As such, the expanded mission of the Institute leverages this expertise to offer its research capabilities globally on phosphate issues and similar issues in other industries.

FIPR currently has four main areas of focus:

(1) Mining and beneficiation (mineral processing)
Developing technology to help Florida's phosphate industry become more efficient and environmentally sound and separating phosphate rock and rare earth elements from waste clay and sand.

(2) Chemical processing / phosphogypsum
Chemical processing of phosphate rock into fertilizer products

(3) Remediation and reclamation
Finding the best ways to reclaim land for more intensive human uses, to minimize environmental hazards, and to improve aesthetics

(4) Environmental health
Protecting the health of Florida citizens and the environment through a focus on waste disposal, environmental radioactivity, and air and water pollution

(5) Environmental Engineering
Florida Poly's Bachelor of Science in Environmental Engineering degree program collaborates closely with FIPR to provide long term, real-world projects for project-based learning throughout the curriculum. Faculty and students in the program will have the resources, experience and connections of the Institute available to support their research

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

Florida Polytechnic University recruits Environmental Engineering faculty to support the work of FIPR through a competitive internal grant process. FIPR also offers internships to Florida Poly students interested in chemistry and environmental engineering.

3. How will your area of expertise collaborate with industry and business leaders?

FIPR's knowledgeable staff and in-house facilities and equipment provide expert laboratory and consulting services on phosphate, associated minerals, and other applied industrial purposes to industry on a contractual basis. Laboratory facilities of the FIPR Institute include an analytical chemistry lab (with a wet bench chemistry room and a separate analytical instrument room), a metallurgical lab (with an adjacent secure outdoor compound) and a biological laboratory (and associated greenhouse area).

FIPR staff also provide valuable consulting services in areas such as:

- Florida phosphate issues
- World phosphate issues
- Mining and beneficiation (mineral processing)
- Chemical processing
- Reclamation (terrestrial and aquatic systems)
- Phosphogypsum management and applications
- Flotation processes
- Mineral separation
- Sulfur recovery from residuals
- Clay/fines consolidation
- Dewatering processes
- Waste minimization
- Associated energy production

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

The FIPR Institute was established by the Florida Legislature. As such, it is able to provide support to other faculty, students, and staff throughout the system.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Utility patents awarded (cumulative)	Increase from 1 to 20 by 2030	Source: Accountability Plan	Accountability Plans provide comparisons across the SUS.
FIPR contracts and laboratory services revenues	Increase from $120k to $500k by 2030	Source: FIPR Annual Report	No
FIPR grant revenue	Increase from $210k to $1M by 2030	Source: FIPR Annual Report	No

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
Laboratory and consulting services; develop national recognition	$1M	FIPR contracts and laboratory services revenues
Expansion of federal, state, and local grants	$500k	FIPR grant revenue
Patents development and research commercialization	$500k	Utility patents awarded (cumulative)

University Area of Expertise Proposal

University:	
University Contact Name	Rick Burnette
University Contact Title:	Sr. Vice Provost & Chief Strategy Officer
University Contact Phone:	850-644-1532
University Contact Email:	rburnette@fsu.edu
Area(s) of Expertise:	A Healthy Florida
Date Approved by University President:	08/21/2025

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 1

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

A HEALTHY FLORIDA

FSU has created FSU Health as a bold initiative to build a health care ecosystem that will improve health and healthcare in North Florida, NW Florida, and beyond. By integrating education, research, and healthcare delivery, FSU Health fosters talent, innovation, and robust partnerships that drive impactful outcomes. FSU Health leverages existing strengths and strategically invests to achieve national and international prominence.

a. Successful Aging

Successful aging emphasizes the enhancement of health span for all individuals. FSU's expertise spans a wide range of disciplines, including psychology, biomedicine, neurocognitive sciences, and social sciences. Specific areas of focus at FSU include investigating biological, genetic, and lifestyle factors that contribute to healthy aging, developing strategies to maintain or improve cognitive function in older adults and delay cognitive decline, creating technologies to help older adults maintain independence and improve their quality of life, examining the impact of social connections, community engagement, and mental health on aging, testing exercise regimens, physical therapies, and assistive technologies to enhance physical fitness and mobility, studying the relationship between aging and chronic diseases such as cardiovascular diseases,

diabetes, and neurodegenerative disorders, exploring how cultural and societal attitudes toward aging influence and the aging experience, and researching healthcare systems, policies, and programs designed for older adults.

b. Mental and Behavioral Health

Mental and behavioral health has been a cornerstone of FSU driven by critical factors such as community needs, the shortage of behavioral health treatment services (particularly in rural areas of Florida), and the overlaps and co-occurrence between mental illness and other diseases/disorders that are prevalent in our region. Additionally, the opioid crisis, the intersection of legal, illegal, and medical uses of cannabis products, and the importance of drug and alcohol as fundamental probes for CNS research further underscore the importance of this field. FSU has a strong foundation and the potential to expand its research programs in areas including co-occurring substance use disorders and mental illness, developmental effects and early influences such as prenatal exposure, child/adolescent exposure, vulnerable periods, and neurobehavioral effects, mental health/substance abuse interventions such as pharmacotherapy, non-invasive neuromodulation, and behavioral therapy development, commonalities between obesity and addiction, pain and analgesia, technology-based interventions, prevention and early intervention, epidemiology and population-based studies, reduction in health disparities, experiences of stigma, and discrimination, cultural and social determinants, HIV/AIDS and substance use, genetics and epigenetics, and underage and college-age drinking, substance use, and co-occurring mental illness.

c. Health Technologies

Innovation in health technology is critical to the success of FSU Health to aid in the delivery of quality healthcare to all, especially the underserved, rural, and hard-to-reach populations and for those suffering from rare or hard to diagnose conditions. FSU has made strategic investments in the understanding and implementation of telemedicine for remote consultation and virtual appointments, and real-time data and remote monitoring of patients using wearables and sensors like smartwatches, fitness trackers, and biosensors; artificial intelligence and machine learning applications for diagnostics, drug discovery, personalized medicine, and predictive analytics to help identify patterns, assist in diagnosis, and suggest treatment plans; biomedical imaging with the National High Magnetic Field Laboratory, and the FSU Biology and Chemistry departments' development of imaging agents; precision medicine based on individual variability in genes, environment, and lifestyle; robotics and automation for surgery, rehabilitation, and caregiving; healthcare data interoperability; 3D printing for prosthetics, implants, and tissue/organ bioprinting; virtual and augmented reality; and blockchain for improved data security, integrity, and privacy. Further, data are being generated at an unprecedented rate. Harnessing these data and developing our data science capacity in emerging fields such as artificial intelligence and machine learning is essential to advancing basic, translational, and clinical research efforts across the university.

d. Human Performance & Well-Being

FSU houses strong expertise in human performance across the entire lifespan and range of physical and cognitive function, with a common focus on optimizing performance of the body's systems. Advancements in these interdisciplinary areas can

lead to improvements in individual and organizational/team performance in sports, healthcare, education, and workplace productivity. Specific opportunities for research include bone health and fracture risk and repair; joint health, inflammatory diseases of joints, bones, and muscles; motor development and the nervous system; neuromuscular interaction; kinesiology and exercise physiology; movement disorders; physical therapy and rehabilitation/recovery; obesity and weight management; bioengineering of medical devices, implants, and robotic prosthetics; novel pain management and musculoskeletal approaches to treatment; military and defense performance; performance in extreme environments; athletic training and performance enhancement; cognitive enhancement and brain performance; human factors and ergonomics; skill acquisition and expertise development; human-computer interaction to optimize performance; age-related differences in cognitive and physical development and function; and real-time feedback and performance monitoring.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

We have launched FSU Health, an ambitious initiative to develop a true academic health model in Northwest Florida by combining research, education, and effective clinical delivery to help improve quality and access to care in our region. We are partnering to help move our vision into reality and have built strong partnerships with the Mayo Clinic of Florida, the Andrews Institute in Pensacola, Tallahassee Memorial HealthCare (TMH), and Tallahassee Orthopedic Clinic (TOC). We are hiring joint faculty with our partners (TOC, TMH and Andrews so far) and are developing joint research projects, providing new opportunities for students, and developing unique clinical delivery mechanisms that lay the foundation for impact for decades to come.

Our focus has been on hiring established national leaders that align with our long-term goals. The relevant Deans and Department Chairs are incentivized through startup investments and additional space coming on-line through the new FSU Health facility that will be located on the TMH campus in Tallahassee. FSU is also taking advantage of our distributed model for clinical education, featuring our Regional Medical Centers, to demonstrate our impact across Florida. We will also use these hires to grow existing, and initiate new, health-related academic programs that will produce needed graduates in these fields.

3. How will your area of expertise collaborate with industry and business leaders?

True academic health is informed by industry and translates research and education to the bedside through strategic partnerships. FSU has recently invested in the creation of an Industry and Business Solutions group to foster innovation and commercialization with the public and private sectors. An industry liaison has been recruited to specifically work in the health space. Additionally, our partnerships with clinical providers across the state provide insights and connections with private sector partners. Additional investments have been made to revamp the FSU commercialization office with a focus on hiring licensing professionals with specific expertise, including life sciences and health.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

FSU recently created the Institute for Pediatric Rare Diseases (IPRD) and the Institute for Connecting Nutrition and Health (ICON Health). We are also in the process of creating Centers of Excellence in Behavioral Health and Aging and have requested State support for both in our Legislative Budget Requests. FSU Health is a broad initiative that includes more specific and targeted centers and institutes that directly support unique health challenges. These Institutes allow for strategic recruitment and investment but also remain part of the larger FSU Health initiative and allow others within and outside FSU to more directly participate.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
1. Increase world class faculty in health-related disciplines	Add 20 faculty in disciplines that align strategically with FSU Health by 2030	OMNI-HR, Faculty recruitment Dashboard (ADP), and Academic Analytics	No peer comparison World-class relative to SUS/UF Health, AAU R1s
2. Increase university collaborations with industry leaders and healthcare providers to address State healthcare needs	50% increase in university partnerships by 2030 10 new industry collaborations by 2030	MOUs; Patent Office; Licenses; Academic Analytics Medical Insights	LCME / AUTM licensing activity survey
3. Increase funding from federal, state, and industry sources for health-related research	• $100M annual health research by 2030 • 50% increase in industry-sponsored health research by 2030	NSF HERD, OVPR/IR reporting	Benchmark against Top 50 NIH-funded publics
4. Increase enrolled students in health majors/programs to support State	• 5% increase in undergrad health enrollment by 2030 • 10% increase in	IPEDS/SUDS	SUS benchmarking

healthcare needs	**graduate health enrollment by 2030**		

5. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
Recruit World-Class Faculty	**$1.5M comp $5-7M start-up**	**1. Hire world class faculty in key areas for FSU Health 2. Increase university collaborations with industry leaders and healthcare providers 3. Increase funding from federal, state, and industry sources for health-related research 4. Increase enrolled students in health majors/programs**
Develop and grow Centers and Institutes that maximize the impact of FSU Health in key areas (IPRD, ICON, aging, mental & behavioral, health, medical, public health)	**$2M for Sunshine Genetics/IRPD and ICON. FY 25-26 will be spent developing the additional centers with investment in faculty and resources to follow**	**1. Hire world class faculty in key areas for FSU Health 2. Increase university collaborations with industry leaders and healthcare providers 3. Increase funding from federal, state, and industry sources for health-related research**
Expand Efforts to Collaborate with Industry and Business Leaders	**$500K patents/legal $250K comp**	**2. Increase university collaborations with industry leaders and healthcare providers**
Recruit top-Performing Students	**$6M scholarships $1-2M fellowships**	**4. Increase enrolled students in health majors/programs**

Facilities (Hospital, Innovation Park…	**$50M-$60M PCB Hospital** **$70M Academic Health Center**	**These facilities will affect Goals 1, 2, and 3 but gains will not be realized until completion**
Enhance research equipment	**$1-2M lab equipment**	**1. Hire world class faculty in key areas for FSU Health** **3. Increase funding from federal, state, and industry sources for health-related research**

University Area of Expertise Proposal

University:	
University Contact Name	Rick Burnette
University Contact Title:	Sr. Vice Provost & Chief Strategy Officer
University Contact Phone:	850-644-1532
University Contact Email:	rburnette@fsu.edu
Area(s) of Expertise:	Advancing Materials
Date Approved by University President:	08/21/2025

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 2

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

ADVANCING MATERIALS

Advanced materials play a pivotal role in driving innovation and progress across various fields, including technology, energy, and healthcare. FSU has a distinguished history in studying and developing materials characterized by their unique properties and capabilities, which enable the creation of cutting-edge technologies that enhance performance, efficiency, and sustainability. The continuous advancement of materials science is essential for achieving breakthroughs that drive progress and improve the quality of life across nearly every critical domain and FSU is committed to expanding our expertise and impact in these areas.

a. Superconductivity

FSU is the host institution to the National High Magnetic Field Laboratory (MagLab), the Applied Superconductivity Center, and the Center for Advanced Power Systems (CAPS). These highly impactful research centers position the university as a key player in the research and development of superconductors and superconducting technologies. Advancing fundamental research and innovation in superconductors help strengthen other vibrant programs and provide opportunities for research in condensed matter physics, solid state chemistry, and materials science and engineering, with a strong impact on cutting-edge research areas such as topological and quantum materials, composite manufacturing, cryogenics, and AI-driven materials discovery.

b. Quantum Science and Engineering

Quantum science and engineering technology promises a deeper understanding of our universe, ultra-precise measurements, and new advanced materials and materials properties. With the initial $20 million recurring investment into the FSU Quantum Initiative and the construction of the Interdisciplinary Research and Commercialization Building, the university has enhanced its opportunity to quickly emerge as a national leader in quantum information science and engineering (QISE). The QISE initiative builds on the work of more than twenty FSU faculty already securing external funding for QISE research. Significant, new federal and venture capital investments in this area provide additional vast opportunities for FSU to secure large-scale projects and increase its impact in QISE. The MagLab should be leveraged to continue building our leadership position on a national and international QISE stage, with specific research opportunities in quantum devices and quantum theory.

c. Polymer Composites and Manufacturing

Polymer science provides critical elements for many current and emerging technologies, from optical components to wearable electronics and biomedical devices. Advances in synthesis, engineering, and theory are bringing next generation polymeric materials closer to the biomacromolecules that encode our genetics and provide the natural world with adaptive, protective, self-healing, and self-replicating materials. FSU has built a strong core of polymer researchers within the FAMU-FSU College of Engineering and the College of Arts & Sciences, positioning the university to make a national-level impact in this area. Research into polymers stimulates new cross-disciplinary ideas and opportunities for research applications including sensors, composite materials, energy, and beyond.

d. Drug Discovery and Delivery

FSU's notable drug development history includes the life-saving anti-cancer drug Taxol that was developed in Dr. Robert Holton's lab. FSU faculty continue to develop promising drug candidates, taking them through early-stage clinical trials; several have been licensed to pharmaceutical companies for further development and testing. FSU has multiple research groups in Chemistry, Biology, Medicine, and Engineering focused on drug discovery and delivery. These efforts create a critical mass for significant opportunities to grow a larger multidisciplinary drug discovery and development enterprise. Opportunities for research include compounds that can be used widely across drug categories, and the development of small and large molecule therapeutics for a variety of indications such as fibrosis, ADHD, corneal diseases, antivirals, and cancer.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

FSU launched a new Materials Science and Engineering department this year and has hired five new faculty with several searches underway to support this new department. The department builds upon existing strengths at FSU particularly in unique materials including superconductors and composites. The department will be housed in the new Interdisciplinary Research and Commercialization Building (IRCB). The new research

space has expanded opportunities for strategic recruitment and has helped bring multiple colleges together for more collaborative work.

FSU launched a quantum science and engineering (QSE) initiative in 2023 and has successfully recruited eight new faculty focused on the areas of quantum theory, devices, and communication. We also launched a distinguished QSE postdoctoral fellow program (recruited eleven new QSE postdocs) as a potential pipeline for additional talent and bandwidth in this area. The QSE initiative has been successful because it is collaborative. While two colleges were interested and typically recruit independently, the QSE hires were required to be reviewed by a joint search committee and approved by both Deans. Further, these new faculty will be co-located within the IRCB and will work as a team to develop next generation quantum technologies.

3. How will your area of expertise collaborate with industry and business leaders?

Materials and materials science are the basis for nearly every industry. FSU is focused on bringing together industry with our researchers through our new Industry and Business Solutions group who facilitate connections. We have also recently stood up an innovation and partner collaboration space for Inspiring the Generation of New Ideas and Translational Excellence – IGNITE Tallahassee, which is a perfect new facility for new startup companies to partner with the Office of Research and the Jim Moran College of Entrepreneurship to work with our researchers to derisk their ideas and grow their businesses in Tallahassee.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

FSU has several existing Centers and Institutes that support the area of Advancing Materials. The National High Magnetics Laboratory (the MagLab), the Applied Superconductivity Center (ASC), the High-Performance Materials Institute (HPMI), and the Florida Center for Advanced Aero-Propulsion (FCAAP) are just a few that are located near the new Interdisciplinary Research and Commercialization Building (IRCB) facility. Co-location at Innovation Park will help bring the necessary facilities and talent together to develop new and innovative solutions faster and ensure they have the best possible chance of moving forward into the marketplace. These centers also provide unique opportunities for students to work in more real-world environments and at industry scale. The experiences within these centers ensure FSU students are better prepared for their future careers and ready to hit the ground running upon graduation.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
1. Increase world class faculty in materials science disciplines	Add 15 faculty in disciplines that relate to advancing materials science discoveries by 2030	OMNI-HR, Faculty recruitment Dashboard (ADP), and Academic Analytics	No peer comparison World-class relative to SUS/UF Health, AAU R1s
2. Increase university collaborations with industry leaders in materials science	50% increase in university partnerships with technology, energy, and healthcare industry leaders by 2030	IGNITE tracking/reporting and Business and Industry Solutions (OVPR)	COE SUS, national labs
3. Increase funding from federal, state, and industry sources for materials science research	• $75M annual m materials science research by 2030 • 50% increase in industry-sponsored materials science research by 2030	NSF HERD, OVPR/IR reporting	Benchmark against Top 50 funded publics, national labs
4. Increase publications and citations from our world class faculty and researchers	• 30% increase in materials science-related publications by 2030 • FWCI ≥ 1.2 in materials science fields	SciVal/Scopus	R1 norms and SUS

5. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the

initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
Recruit World-Class Faculty	**$1M compensation $3-5M start-up**	**1. Increase world class faculty in materials science disciplines** **2. Increase university collaborations with industry leaders in materials science** **3. Increase funding from federal, state, and industry sources for materials science research** **4. Increase publications and citations from our world class faculty and researchers**
Develop and expand Centers and Institutes that advance materials science discoveries in key areas (high performance materials, advanced aero-propulsion)	**$5M**	**1. Increase world class faculty in materials science disciplines** **2. Increase university collaborations with industry leaders in materials science** **3. Increase funding from federal, state, and industry sources for materials science research** **4. Increase publications and citations from our world class faculty and researchers**
Expand Efforts to Collaborate with Industry and Business Leaders	**$500K patents/legal** **$250K comp (redundant with other Areas of Expertise)**	**2. Increase university collaborations with industry leaders in materials science**
Facilities (Mag Lab, IRCB, Innovation Park…	**$20M MagLab** **$10M InSPIRE** **$4M Quantum Renovations**	**These facilities will affect Goals 1, 2, 3, and 4 but gains will not be realized until completion**
Enhance research equipment	**$1-2M lab equipment**	**1. Increase world class faculty in materials science disciplines**

		2. Increase university collaborations with industry leaders in materials science

University Area of Expertise Proposal

University:	
University Contact Name:	Rick Burnette
University Contact Title:	Sr. Vice Provost & Chief Strategy Officer
University Contact Phone:	850-644-1532
University Contact Email:	rburnette@fsu.edu
Area(s) of Expertise:	A Resilient Future
Date Approved by University President:	08/21/2025

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 3

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

A RESILIENT FUTURE

Resiliency is a hallmark of Florida and Floridians approach a variety of challenges. Resilience is more than just a word; it is a defining characteristic of the State of Florida, and its people also defines broad areas of expertise at Florida State University. This trait has been forged from our responses to a range of challenges from natural disasters to community and personal dynamics, ensuring Floridians remain some of the most adaptable and tenacious people in the United States.

a. Extreme Weather

FSU faculty are working to strengthen our understanding of weather-related disasters by fostering interdisciplinary research, developing new technologies, and strengthening education in atmospheric science in Florida to better anticipate direct and indirect impacts on Florida and Floridians to mitigate risk and property damage. Building on our existing expertise, FSU is positioned to lead efforts that prepare and protect communities and infrastructure from the effects of extreme weather events and natural disasters by researching the interplay between various ecosystems – earth, sea, and atmosphere – to not only understand their impact on human health, and the abundant plant and animal species in Florida but to improve forecasting, interventions, and impact analyses.

b. Disaster Recovery and Economic Impacts

FSU has deep expertise in disaster recovery, resilience, and the economic impacts of disasters. FSU faculty are committed to supporting the State of Florida, which is uniquely susceptible to natural disasters such as hurricanes due to its lengthy coastline and much of its land at or near sea level. Improving our ability to respond to and recover from disasters is one of the most pressing issues of our time, spanning from financial losses and environmental destruction to the direct impacts on people's physical, mental, and even cultural well-being. FSU will expand the pipeline of people trained to plan for emergency responses by developing an academic program in Emergency Management that expands upon the existing certificate program. Research opportunities include: disaster-proof or resistant buildings and structures; coastal hazards; transportation issues; post-disaster material recycling and reuse; post-disaster field hospitals locations; modular solar systems to shorten outages and keep electricity flowing during and post-disaster; therapeutic arts programming designed to aid in survivors' recovery; community disaster resilience: community variance in post-disaster resilience and recovery; and the impact of natural disasters on insurance trends.

c. Trauma and Violence Prevention and Response

FSU is committed to creating a future that is resilient in the face of trauma and violence by strengthening the ability of individuals, families, communities, and the workforce to prevent and respond effectively. FSU has a strong foundation and is developing additional expertise in areas including: neuroscience and behavioral approaches to post-traumatic stress disorder; traumatic brain injury treatment; stress, trauma, and substance use; crisis interventions, trauma treatment, social support, and stress reduction programs for target populations like Florida's rural communities; trauma programs for incarcerated populations; gene-environment interactions; trauma-informed housing design; poetry, art, and music therapy; violence causes and effects; violent crime prevention; systemic interventions for traumatic event exposure; partner/family violence; intergenerational cycles of violence in infancy and early childhood; workplace violence for frontline workers; professional continuing education with a focus on resilience; and trauma awareness and resilience certifications. FSU's expertise in fostering student resilience to address behavioral health and other challenges has been a national model for the past few years.

d. Sustainable and Resilient Infrastructure

FSU is a leader in strategies to future-proof Florida, with over 250 FSU faculty from nearly every college engaged in sustainability investigations across the campus. In 2019, FSU was identified as a top performer in the field of sustainability, ranking #1 in the research category of the Association for the Advancement of Sustainability in Higher Education Sustainable Campus Index. FSU is also home to the Sustainability and Governance Lab, an interdisciplinary research hub that investigates the planning, adoption, implementation, and effectiveness of policies and programs that promote sustainable development. Broad work in sustainability and resiliency is currently active at: Center for Advanced Power Systems; Center for Economic Forecasting and Analysis; the Center for Environmental, Energy, and Land Use Law; Center for Ocean-Atmospheric Prediction Studies; Coastal and Marine Laboratory; the Florida Climate Institute; Florida Resources and Environmental Analysis Center; and the Resilient Infrastructure & Disaster Response Center.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

FSU has made significant investments in faculty recruiting, including enhanced startup packages and space considerations for established, world-class faculty. These topics are increasingly of interest to potential students. Focusing additional efforts on these programs will encourage high-performing students to apply. Additionally, new facilities including Earth, Ocean, and Atmospheric Sciences (EOAS) and Legacy Hall have helped attract the best talent in these areas.

3. How will your area of expertise collaborate with industry and business leaders?

Business and industry in Florida are dependent on future-proofing strategies. FSU is developing new ways to engage with businesses to ensure they are aware of our research and connected with our unmatched student talent. For example, FSU has hosted several business leadership events in the past couple of years, we have been more involved in city and county recruitment of industry conferences and meetings to help bring business leaders from around the world to Tallahassee to see first-hand what Florida has to offer.

FSU is focused on bringing industry together with our researchers through our new Industry and Business Solutions group, who facilitate connections. We have also recently launched IGNITE Tallahassee, which is a perfect new facility for new startup companies to work alongside our researchers to derisk their ideas and grow their businesses in Tallahassee. IGNITE Tallahassee also offers training and networking opportunities for companies of all types and sizes.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

FSU has several long-standing centers that will continue to contribute to growing our national prominence in this area: Center for Ocean and Atmospheric Prediction Services (COAPS), Resilient Infrastructure & Disaster Response Center (RIDER), the Institute for Trauma and Resilience Studies (ITRS), the Institute for Child Welfare (ICW), Center for Advanced Power Systems (CAPS), Stoops Center for Communities, Families, and Children, Florida Center for Prevention Research, Florida Center for Prevention and Early Intervention, are just some examples. These centers support faculty research, experiential learning for students, and provide valuable services to Floridians who need it most.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
1. Hire world class faculty in key areas supporting a resilient future	Add 10 faculty in disciplines that relate to sustainability and resiliency by 2030	OMNI-HR, Faculty recruitment Dashboard (ADP), and Academic Analytics	No peer comparison World-class relative to SUS & AAU R1s
2. Increase university collaborations with industry leaders in resilience and sustainability	50% increase in university partnerships with industry leaders in sustainability and resilience by 2030	Academic Analytics Industry Insights	SUS and R1 Peer Rankings
3. Increase funding from federal, state, and industry sources for sustainability and resilience research	• $10M annual in sustainability and resilience research by 2030 • 50% increase in industry-sponsored sustainability and resilience research by 2030	NSF HERD, OVPR/IR reporting	Benchmark against Top 50 funded publics
4. Increase publications and citations from our world class faculty and researchers	• 30% increase in publications related to sustainability and resilience by 2030 • FWCI ≥ 1.2 in materials science fields	SciVal/Scopus	R1 norms and SUS

5. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the

initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
Recruit World-Class Faculty	**$750K comp $2-3M start-up**	**1. Hire world class faculty in key areas supporting a resilient future 2. Increase university collaborations with industry leaders and resilience and sustainability 3. Increase funding from federal, state, and industry sources for resilience-related research 4. Increase publications and citations from our world class faculty and researchers**
Expand centers and Institutes that advance discoveries in key research areas (extreme weather, disaster recovery, trauma and violence prevention and response) and in sustainable and resilient solutions for Florida	**Included in faculty and facilities investments**	**1. Hire world class faculty in key areas supporting a resilient future 2. Increase university collaborations with industry leaders and resilience and sustainability 3. Increase funding from federal, state, and industry sources for resilience-related research 4. Increase publications and citations from our world class faculty and researchers**
Expand Efforts to Collaborate with Industry and Business Leaders	**$250K patents/legal $250K comp (redundant with other Areas of Expertise)**	**2. Increase university collaborations with industry leaders in resilience and sustainability**
Facilities	**$40M Legacy Hall $2M RIDER**	**These facilities will affect Goals 1, 2, 3, and 4 but gains will not be realized until completion**
Research equipment	**$500K equipment**	**1. Hire world class faculty in key areas supporting a resilient future 2. Increase university collaborations with industry**

		leaders and resilience and sustainability **3. Increase funding from federal, state, and industry sources for resilience-related research** **4. Increase funding from federal, state, and industry sources for resilience-related research**

University Area of Expertise Proposal

University:	
University Contact Name	Dr. Manuel Lopez
University Contact Title:	Associate Provost for Student Academic Affairs; Director, A.I. Lab Initiative
University Contact Phone:	941-487-4203
University Contact Email:	mlopezzafra@ncf.edu
Area(s) of Expertise:	Artificial Intelligence for Liberal Arts Learning, Research, and Innovation
Date Approved by University President:	

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 3

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

   New College of Florida is pioneering a bold, future-focused movement to redefine the intersection of liberal arts and artificial intelligence, setting a national precedent to place the liberal arts at the center of how society understands and responds to artificial intelligence. Through the creation of the A.I. L.A.B. (Artificial Intelligence Liberal Arts Bridge), New College is positioning itself—and the State of Florida—as a national leader in human-centered AI education, policy engagement, and interdisciplinary innovation.

   The AI Lab is Florida's flagship academic institute—an intellectual powerhouse tackling AI not just as code, but as a transformative societal force. The Lab is dedicated to addressing AI not merely as a technical development, but as a civilizational force that is transforming education, labor, democracy, and human identity. Our approach fuses the college's historic strength in philosophy, the great books, and civic education with forward-looking engagement in data, technology, and policy. In doing so, we model how small liberal arts institutions can lead in shaping the ethical and societal future of AI.

The Lab is the vital bridge connecting humanistic inquiry with cutting-edge technical skill, ensuring our graduates are fluent in both ethical reflection and AI innovation. between our deep traditions of humanistic inquiry and our growing investments in technical education. It will leverage the expertise and momentum of our Data Science and Computer Science programs, helping to integrate these fields into a broader institutional conversation about AI's place in society. By aligning technical skill development with civic and philosophical reflection, the Lab strengthens the *technē* dimension of our educational mission.

This integration is part of a larger, intentional framework guiding our new General Education curriculum, built around the enduring tension and productive relationship between *logos* (reason, language, ethical reflection) and *technē* (craft, applied knowledge, and technology). At the heart of this curriculum are courses organized around Enduring Human Questions—a category that asks students to wrestle with the same kinds of timeless issues raised in the great books: What is justice? What is a good life? What should not be automated?

Through the Lab, students don't just study AI, but shape its destiny, ensuring it serves humanity with wisdom and responsibility, grounded in the liberal arts, oriented toward public purpose, and prepared to navigate both the promises and perils of life in an AI-driven world.

Core Initiatives Driving Transformational Impact::

1. A Civic Platform for Policy and Societal Response: The AI Lab will serve as a statewide hub and national voice for examining the broad implications of AI. From legislative briefings to public forums, we will contribute to the shaping of AI policy and civic understanding, ensuring that conversations about technology remain grounded in human nature and philosophical inquiry. We lead policy discussions that shape the ethical and legal future of AI.

2. AI in Pedagogy and Curriculum: The AI Lab empowers faculty to thoughtfully engage with the pedagogical challenges and opportunities posed by artificial intelligence. Whether integrating AI tools into the classroom or designing AI-resistant approaches that safeguard human judgment and originality, the Lab provides individualized consultations and microgrants to support curricular redesign across disciplines. Our work recognizes that AI will reshape how students learn, write, and create. The Lab helps faculty adapt syllabi, develop new assignments, and critically assess AI's role in teaching—ensuring that technological change enhances, rather than undermines, the values of a liberal arts education. Through workshops, teaching circles, and collaborative course development, we are cultivating a new generation of educators prepared to lead in an AI-shaped academy.

3. AI in Research and Creative Practice: The AI Lab is a vital resource for student and faculty research that explores AI's capacities and limits. We support the full research continuum, from AI-assisted literature reviews and data analysis to speculative inquiry, artistic production, and policy innovation. Students receive guidance on using AI responsibly in coursework, Independent Study Projects, and Senior Theses, with a strong emphasis on maintaining academic integrity and methodological rigor. Faculty benefit from tailored support to accelerate or deepen their scholarship, and interdisciplinary collaborations are encouraged through a competitive microgrant program. These grants fund projects that interrogate or apply AI in novel ways, from civic discourse and historical interpretation to storytelling, economic modeling, and creative expression. At its core, the Lab promotes research that bridges technē and logos, advancing both technical fluency and philosophical depth.

4. Career Pathways & Applied AI Skills: We fuse the enduring wisdom of the liberal arts with the transformative power of AI, creating thought leaders for a new era. The AI Lab plays a key role in preparing students for impactful careers at the intersection of technology, public service, and liberal arts inquiry. In partnership with the Master's in Applied Data Science program, the Lab will promote and expand the 3+2 pathway—enabling students to complete a bachelor's degree in any field and a master's in Data Science within five years, including a semester-long industry practicum that connects classroom learning to real-world applications. Our graduates don't just find jobs—they shape industries.

Working closely with the Center for Career Engagement & Opportunity (CEO), the Lab will also help students translate their academic experiences into competitive career pathways. Through internships, mentorships, workshops, and exposure to emerging fields, the Lab bridges liberal arts learning with the practical skills needed for success in data science, policy, education, and the rapidly evolving AI economy.

By embedding AI into the fabric of New College's academic mission and existing curriculum, the A.I. Lab offers a distinctive approach, one that combines humanistic inquiry with technological fluency in a rapidly transforming world.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

The A.I. L.A.B. positions New College of Florida as the premier destination for those ready to engage the most urgent technological and ethical challenges of our time through a liberal arts framework. By combining interdisciplinary collaboration, public impact, and a curriculum grounded in

the enduring relationship between logos and technē, the Lab will elevate New College's visibility across the state and nation.

Our unique competitive advantage—placing artificial intelligence in the heart of civic purpose and philosophical depth—cannot be found anywhere else. We do this within a context of human meaning, civic responsibility, and philosophical depth, setting us apart from peer institutions and attracting faculty who want to shape the future of AI education and scholarship. The Lab will support and amplify this work through microgrants for course innovation, joint faculty-student research, and opportunities for collaborative teaching and public programming.

We anticipate new faculty positions that are jointly appointed between the undergraduate program and the Master's in Applied Data Science. These dual roles offer faculty the rare opportunity to teach across levels—working closely with undergraduates in a liberal arts environment while also engaging advanced students in applied, data-driven problem solving. This structure is especially attractive to scholars and educators who seek the intellectual intimacy of a small college.

On the student side, the Lab is a powerful recruitment tool for high-achieving students who want to explore not only how AI works, but what it means for democracy, labor, identity, education, and the arts. Our 3+2 accelerated pathway, allowing students to earn a bachelor's degree in any field and a master's in Applied Data Science in five years, provides a compelling combination of intellectual exploration and career preparation. Our graduates will be shaping the future of AI for the next generation.

Additionally, our Summer AI Bridge Program, launched in 2025 and expanding in 2026, introduces high school and entering college students to New College's liberal arts approach to AI. This immersive program will showcase how we integrate technical literacy with ethical reflection, appealing to future students who want to lead in a rapidly changing world.

Together, these initiatives will position New College as a nationally recognized model for recruiting mission-driven faculty and students who want to place human purpose at the center of AI innovation.

3. How will your area of expertise collaborate with industry and business leaders?

Industry and Career Integration: In collaboration with the Center for Career Engagement and Opportunity, the Lab equips students with not only the skills, but the influence, to lead in the AI economy. The Lab will connect liberal arts learning to real-world career preparation. We will develop:

- Professional Skills Workshops: Hands-on sessions on prompt engineering, no-code tools, AI literacy, data storytelling, and ethical design

for students across majors. These can be stand alone or woven into classes and ISPs.

- Industry Partnerships: Collaborations with local and regional employers to provide internship pipelines, site visits, guest lectures, and applied project opportunities in areas like healthcare, education, arts, sustainability, and entrepreneurship. Several such partnerships are already in place for our graduate Data Science program.

- Curriculum Development: Courses and modules co-designed with employers and alumni that equip students with in-demand skills and help them articulate how their liberal arts education prepares them for an AI-driven economy.

These efforts will ensure that New College students are not only reflective thinkers but also adaptable professionals, capable of translating their education into meaningful and future-ready careers.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

Yes, New College of Florida is creating the AI Lab, a high-visibility, high-impact center of distinction that redefines AI education nationwide. It will serve as a formal center to unify and expand our existing AI-related initiatives under a single institutional vision. Unlike many institutions where AI work is distributed across isolated departments or divisions, our Lab will provide a cohesive, campus-wide platform that connects faculty, students, and staff across disciplines and programs. This unified structure will allow us to advance a clear, strategic approach to AI education and research that integrates ethical reflection, civic purpose, and technological innovation.
The AI Lab will serve as a central hub not only for New College but also for collaboration and resource-sharing across the State University System (SUS). It will:

- Host faculty development workshops and inter-campus working groups to foster collaboration between liberal arts, STEM, and policy programs throughout the SUS.
- Offer curricular models, assignment templates, and course design guidance to support other institutions interested in embedding AI across disciplines.
- Serve as a testbed for liberal arts-aligned AI tools, ethical frameworks, and classroom practices, with a focus on transferability to other small colleges and public institutions.

- Convene annual statewide conferences on AI and the liberal arts, featuring SUS faculty, students, and external experts.
- Publish white papers, implementation toolkits, and policy briefs for distribution across the SUS and beyond.
- Support student research fellowships, faculty-student projects, and summer institutes that allow SUS partners to engage directly with the Lab's work.

By uniting and amplifying these efforts into a cohesive strategy, we set a standard other institutions will strive to emulate. Within a high-visibility center, New College will not only distinguish itself within Florida's higher education landscape, but also provide a scalable, mission-driven model for other institutions navigating the opportunities and challenges of the AI era.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Number of AI-inclusive or AI-resistant courses	3-5 new courses by the end of AY 25-26	AI Lab course design consultations, Registrar data	Peer liberal arts colleges
Student participation in AI workshops or programs	Up to 200 students annually	Lab attendance records, Canvas module participation	Internal benchmarks
Faculty use of AI in research or course redesign	20 faculty supported via consultations	Lab support logs, grant submissions	Amherst, Colby, Haverford
Collaborative microgrant projects funded	6 projects per year	Microgrant application and award records	Based on SLAC AI initiatives
Public talks/events hosted	6-8 events per year	Event registration logs	N/A (public engagement focus)
Number of interdisciplinary student research outputs	15 projects per year	Student research reports, ISP evaluations	Honors college consortia

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
Faculty microgrants for AI pedagogy and research	$30,000	6 collaborative projects; 10 course redesigns
Speaker series and public workshops	$10,000	6-8 events/year; community outreach
Student fellowships and summer internships	$25,000	15 research outputs; student participation
Lab staffing and consultation support	$40,000	Support 20 faculty; 200 student engagements
Software, data tools, and hardware for experimentation	$15,000	Faculty research and creative practice
Annual AI and Liberal Arts Symposium (system-wide)	$20,000	Host SUS-wide convention; publish proceedings
Curriculum development retreats	$10,000	Support course redesign; cross-campus faculty

University Area of Expertise Proposal

University:	
University Contact Name	Dr. Sherry Yu
University Contact Title:	Professor of Economics
University Contact Phone:	941-487-4207
University Contact Email:	syu@ncf.edu
Area(s) of Expertise:	Economics and Finance
Date Approved by University President:	

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 1

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

Economics is among the three most sought-after areas of study at New College of Florida, and demand is growing rapidly. To meet this demand, New College is building on its established economics program and faculty with new hiring and targeted development in areas of concentration that match the comparative strengths of our faculty and the distinctive opportunities of a New College liberal arts education.

Economics at New College blends the rigor of economic reasoning and quantitative methods with the breadth, critical thinking, and interdisciplinary study that define the liberal arts. As in all Areas of Concentration at New College, economics faculty work closely with students to design individualized courses of study and guide them in developing original projects and theses. Students learn to understand complex systems, analyze data, and test hypotheses, while developing the ability to think historically, argue philosophically, and examine the institutional and cultural contexts of economic activity.

New College is developing its comparative advantage in economics through distinctive Areas of Concentration, courses, and co-curricular opportunities along three strategic lines:

1) **Financial Economics** – providing students with the analytical tools to understand and shape financial markets, manage risk, and make informed

investment decisions. This pillar blends economic theory, quantitative methods, and institutional knowledge, preparing graduates to lead in rapidly evolving areas such as banking, asset management, fintech, and corporate finance.

2) **International Business** – integrating economic analysis with interdisciplinary study in political, cultural, and historical perspectives to prepare students for leadership in an interconnected global economy. Students explore global trade, cross-border investment, international market institutions, and develop the cultural competencies necessary for effective engagement in international business.

3) **Philosophy, Politics, Psychology, and Economics (PPPE)** – combining the insights of economics, political science, moral psychology, and philosophy to examine how markets operate within the framework of political institutions and moral principles. Students learn to analyze policy trade-offs, assess institutional design, and engage with enduring debates about justice, freedom, and economic prosperity.

This blend of technical competence and humanistic insight gives our graduates unique advantages in the workforce, prepares them to understand policy and the conditions underpinning a free, democratic society as citizens, and prepares them for graduate or professional study.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

New College has recently created new Areas of Concentration in Financial Economics and International Business and is in the process of creating a new Area of Concentration in Philosophy, Politics, Psychology, and Economics (PPPE). These developments expand New College's long-standing strengths in economics while creating distinctive pathways that appeal to high-achieving students seeking an interdisciplinary liberal arts education.

In the last year, New College hired a senior professor of finance with more than 30 years of teaching experience, including 10 years as department chair in a program that grew from five faculty 40 majors to 12 full-time faculty and 440 finance majors. This program builder founded an Institute for Financial Services in the 1990s that connected directly to Wall Street, bringing extensive experience in launching and expanding academic programs.

Since arriving at New College, this professor has:

- Established New College's Bloomberg Terminal Lab, giving students access to professional-grade market analysis tools.
- Secured New College's participation with local and national CFA societies and competitions.

These initiatives build on the work of established New College faculty who already teach corporate finance, money and banking, and offer specialized tutorials preparing students for the first CPA exam.

New College also hired two new faculty members this year with expertise in PPPE—one in economics who taught PPPE at the School for Civic and Economic Thought and Leadership at Arizona State University and one in philosophy who taught PPPE at the University of Arizona's Center for the Philosophy of Freedom. The new PPPE Area of Concentration will coordinate with New College's Pre-Law, Environmental Studies, and Financial Economics programs, beginning with an introductory course in PPPE and classes such as Law and Economics, Environmental Economics, Environmental Ethics, and Business Ethics.

To complement these hires, the economics program will launch a search in Fall 2025 for a new faculty member in applied microeconomics, further broadening the department's expertise and supporting cross-disciplinary initiatives.

These faculty investments—combined with close faculty-student mentorship and individualized course design—position New College to recruit both world-class faculty and top-performing students to its economics program.

3. How will your area of expertise collaborate with industry and business leaders?

New College's economics programs already maintain and are expanding strong connections with industry and business leaders in finance, policy, and global commerce. These partnerships create pathways for internships, applied research, and student placement, while also informing curriculum development.

Finance and Professional Associations

- Partnerships with CFA Tampa Bay and the Florida CFA Society provide students with opportunities to participate in the CFA Global Research Challenge and the Florida Ethics Invitational.
- The newly established Bloomberg Terminal Lab gives students access to professional-grade financial data and analytics, enabling them to complete Bloomberg Market Concepts certification and conduct applied research for local firms and nonprofit organizations.

Internships and Experiential Learning

- The New College Career Engagement and Opportunity Office (CEO) works closely with economics faculty to place students in internships with firms such as ServisFirst Bank, Williams Wealth Management, Romulus Enterprises, Gorman & Company, and the Pioneer Medical Foundation.
- Students in Financial Economics and International Business also intern with global trade and logistics companies connected to Florida's ports and with policy organizations engaged in economic development.

Alumni and Professional Networks

- Alumni in investment banking, asset management, consulting, law, and public policy mentor students, host site visits, and collaborate on research projects.
- The growing network of alumni in the CFA and CPA professions provides mentorship for exam preparation and career planning.

International Business and Policy Engagement

- The International Business Area of Concentration will work with the CEO Office to connect students to opportunities in multinational companies, international NGOs, and policy institutes.
- Faculty maintain relationships with organizations involved in trade policy, cross-border investment, and regional economic development, opening doors for collaborative projects.

Through these relationships, New College is able to offer its students the kind of industry engagement and applied learning that prepares them for competitive careers in finance, international business, policy analysis, and beyond.

The new director of our career center has been particularly tasked with developing high-quality internships and experiential activities, including with ServisFirst Bank, Williams Wealth Management, Pioneer Medical Foundation, Hoyt Architects, Romulus Enterprises, the City of Sarasota, Gorman and Company, and the Pioneer Medical Foundation. Apparently 44% of Economics majors had a capstone internship experience. New College faculty have also trained and brought students to the Tampa Bay CFA ethics competition.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

   There are no plans for a center at this time.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

We hope to see increases in the study of economics in many areas, which we will track: number of students in our new major, International Commerce and Society; number of students pursuing finance, an area of strategic emphasis for the Board of Governors; number of students who have an internship/experiential experience; the number of students certified to use Bloomberg terminals; the number of students who take at least one class in accounting

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Most spending for developments in Economics are part of current budgets. We plan on hiring a new line in microeconomics in the fall ($100K), and we have ongoing payments for the use of our thirteen Bloomberg terminals.

University Area of Expertise Proposal

University:	
University Contact Name	Dr. Heidi Harley
University Contact Title:	Founder and Chief Research Officer, Marine Mammal Studies
University Contact Phone:	941-487-4934
University Contact Email:	harley@ncf.edu
Area(s) of Expertise:	Marine Science
Date Approved by University President:	

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 2

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

   Marine Science is a signature strength at New College of Florida, uniquely positioned to lead the way in coastal and oceanic research thanks to our unparalleled location, cutting-edge facilities, and visionary programs. Given its proximity to Sarasota Bay and the many active faculty in the area, the world-class Pritzker Marine Biology Research Center on campus, and the recently-inaugurated MS degree in Marine Mammal Science, New College is leading the way in Marine Science.

   At New College, Marine Science is an inter-divisional, interdisciplinary field, with faculty in biology, chemistry, physics, psychology, neuroscience, political science, and environmental studies teaching and doing research. Liberal arts education fuels the heart of our marine science program, empowering students with critical thinking, creativity, and a deep understanding of humanity's relationship with the oceans. The interdisciplinary approach, with literacy and critical thinking at the core, underscores the connections between humans and the marine environment. Faculty engage students in research education, publishing and participating in conferences. Faculty work directly with students to advise on their curriculum choices and their career goals. Staff at the marine

center work with faculty and students to maintain research animals and to teach students aquatic maintenance skills.

Marine science graduates leave prepared for high-impact careers across the globe, from marine conservation and environmental consulting to groundbreaking research and policy leadership. Broad coursework across the liberal arts enable students to take a holistic view of the discipline. Students may choose to join the workforce directly after graduating in areas such as environmental consulting, civilian corps with Coast Guard, NGO research projects such as Sarasota Bay Watch, or abroad at a research station internship. Many choose to further their educations in graduate schools or professional schools, including medical school, veterinary school, and law school). Students in marine science can also join the Master's in Applied Data Science or Marine Mammal Science at the college.

Marine Science helps develop the economy and protect the environment, in Florida and beyond.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

1. World-class facilities anchor our program: Built in 2001, the Pritzker Marine Biology Research Center offers unmatched opportunities for immersive research and discovery. The 10,000-square-foot Jack and Rhoda Pritzker Marine Biology Research Center on the New College campus provides hands-on research experiences for the next generation of scientists and conservation leaders. The Center is conveniently located about 100 yards from Sarasota Bay, which is a 56-mile-long urbanized coastal lagoon system with five embayments, as well as a U.S. Congress-designated Estuary of National Significance. In the last two years, the college has invested substantial resources in the Center to upgrade the facility.

The Center features seven research labs with more than 400 species of marine and freshwater organisms–including fish and invertebrates. The Living Ecosystems and Teaching Research Aquarium (LETRA) room houses a 12,000-gallon research/display tank and six large aquaria (up to 2,000 gallons each). LETRA is used for hosting classes, research seminars, workshops and K-12 summer programs (it is also a public aquarium that is open year-round and hosts more than 1,200 visitors annually). There is also a second large lab classroom, updated in 2019, with versatile aquaria.

The Center's flexible laboratory spaces can be quickly modified to meet the needs of any marine research project. Aquaria come in various sizes and are suitable for holding a wide variety of organisms–from marine plants and delicate invertebrates to sharks and larger fish. Three storage silos (10,000 gallons each) hold the conditioned seawater supply for the building. Aquaria effluent is returned to the bay through a uniquely constructed wetland

(created as part of a senior capstone project) west of the building, which acts as a natural filtration system by scrubbing gray water before it becomes bay water.

The Center also includes a 15,000-gallon flow tank and specialized facilities for coral propagation, tissue histology, and microscopy and imaging. Under a permit FKNMS-2009-073, the lab is permitted to hold, display and conduct limited non-destructive research on Caribbean coral obtained from a Florida Keys rescue site.

The Pritzker Marine Biology Research Center has been a vibrant hub of student and faculty research, teaching, and outreach. The lab is a member of the National Association of Marine Laboratories (and its southern division, the Southern Association of Marine Laboratories), as well as the Florida Institute of Oceanography and the Gulf of Mexico Coastal Ocean Observing System Regional Association. Faculty and staff are also active in the Florida Marine Sea Educators Association and the Council for Undergraduate Research.

There are research vessels available for faculty and student work. There is a dock for deploying the boats on south campus, and plans for a much larger boathouse. Students doing research requiring a vessel work with a faculty member to combine trips for the boat use with the larger vessels. Smaller vessels such as hard inflatables and kayaks are also coordinated with faculty to assure safe boating. Boat use and etiquette are key skills that students learn. Hands-on research is the heartbeat of our program.

Faculty and students are already positioned to work on projects using seagrass and other marine plants in the newly constructed greenhouse on campus.

2. A one-of-a-kind graduate program: New College offers the nation's only research-oriented MS in Marine Mammal Science—melding academic rigor, elite faculty, and hands-on conservation experience. Our MS in Marine Animal Science is an interdisciplinary academic program providing research and graduate/undergraduate education of the highest quality in marine mammal science through the collaboration of experts and students dedicated to scientific excellence, marine mammal conservation, and outreach.

Florida is rich in marine mammals and the scientists who study them. New College, housed on Sarasota Bay, home to the longest studied society of bottlenose dolphins in the world, brings together Florida's marine mammal scientists to support student work and marine mammal welfare in our state. This program offers in-house faculty expertise in marine mammal science through Professors Gordon Bauer (Emeritus), Peter Cook, Heidi Harley, and Athena Rycyk. In addition, we have formal partnerships with (1) the Sarasota Dolphin Research Program, led by the "Jane Goodall" of dolphin

research, Dr. Randy Wells, whose team has focused on the study of these animals for more than 50 years across six generations of dolphins, and (2) the Clearwater Marine Aquarium Research Institute, providing access to both in- and ex-situ dolphins and manatees as well as the scientists who track Florida's rehabilitated manatees after release.. Through these partnerships, our students are supported by additional mentors, animal access, longitudinal databases, and unique facilities.

3. Expanding our talent bench: We are actively recruiting leading scientists to broaden our expertise and fuel new research frontiers. New College will be hiring an additional marine biologist in 25-26. We have already requested two positions in geology; these are pending approval. This will increase our breadth already represented by a chemist specializing in minerology who works with students who have a marine interest and a physicist who works in marine physics. With our proximity to the coast, we are in an ideal position to attract researchers in coastal and sedimentary geology. We need more facilities to support these positions, either in our marine center or our natural sciences complex.

This year we also have approval to hire another faculty member in marine mammal science with expertise in quantitative modeling and technical design. We expect that this faculty member will help us expand our current grant-funded work in security (a Department of Defense grant focusing on building better Navy sonar based on dolphin biosonar) and health (the effects of harmful algal blooms on cognitive functioning).

As our faculty grows, it is likely that we will continue to use grant money from foundations and national sources to support not only our research education, but also our teaching. Where possible, members of the area will include a postdoctoral position with teaching responsibilities, an excellent way to support the next generation of scientists. Teaching postdocs can work with students to teach skills and techniques while themselves learning effective ways to nurture each student's talents and interests. Such postdocs tend to maintain contact with their mentors after leaving the position, thus broadening the network of opportunities for collaboration and for creating internships for our students at other institutions.

We hope to add a visiting scientist program. This will increase opportunities for our faculty to collaborate and for our students to work with a variety of researchers. The size of the student body and expertise of the faculty are now ripe for bringing this to fruition. Our area is particularly attractive because of the proximity to the coast, our marine center, the quality of our students, and the strong network of researchers in the area. There are opportunities to share visitors with places like Mote Marine Laboratory when interests overlap.

4. Pioneering new research frontiers: We are advancing into high-potential areas like microbiome research, positioning our students at the forefront of

science and innovation. An area that we have strengthened is microbiome research. This area is a part of the “10 Big Ideas to guide future investments at the frontiers of science and engineering” put forward by the National Science Foundation. With a small core of people already in place, we would like to expand the faculty in microbiome research. This area exposes students to advances in genetics, cell biology, and microbiology as well as ecology, development, and evolution. It also connects to students interested in health and disease where they can explore non-human models. Those interested in data analytics and bioinformatics can also receive excellent workforce training and post-baccalaureate education in these areas; marine biology would connect with our growing program in artificial intelligence in the liberal arts. We expect a portion of our students to take advantage of the Master’s in Applied Data Science 3-2 program to move into their careers in marine science. We also expect that the 3-2 graduate marine mammal science program will continue to grow and attract students to our undergraduate program. The MS Marine Mammal Science program was accredited in May 2024, opened in August 2024 with 10 graduate students, and will increase its student body by 160% this year which, with its 100% retention rate, will be 26 students.

5. Extraordinary student research opportunities: We ensure every student experiences direct collaboration with faculty mentors on projects that matter. Increasing faculty also means increasing students. We would keep the faculty to student ratio below 10:1 to maintain close working relationships with students. We want to continue to find the “outliers” as described in Malcolm Gladwell’s book of the same title Outliers: The Story of Success who might be overlooked at a large R-1 but who could be nurtured at a small, liberal arts college. We have many examples of these outliers that we plan to feature on our increased web presence.

We plan to establish showcases for our student research education through continued participation of students in national and international scientific meetings. Faculty will continue to publish with students. Student work will be featured through podcasts, presence in social media through our marine center, and through an annual showcase will give us a chance to recruit students as well as gain interest from potential faculty. Our emphasis on internships and experiential learning should continue to attract students. Marine Science faculty plan to collaborate more closely with the career center to add more types of internship experiences for students, increasing our chances to collaborate with business and industry. Our alumni don’t just find jobs—they lead in shaping the future of our oceans.

This year our Marine Mammal Science graduate student, Carson Hood, received international attention in the press for her collaborative published work on the ability of a sea lion to track rhythms better than most humans who engaged in the same task. Fellow student, Sophie Flem, also hit the press when she published her collaborative work in neuroscience

comparing brain regions focused on sound processing across several cetacean (dolphins and whales) species.

6. A truly global perspective: We offer unparalleled study abroad and field research programs that connect students to marine science on an international scale. New College offers unique study abroad experiences in the marine sciences, a long-standing summer program in Honduras, and with a new position dedicated to global education we plan to expand opportunities quickly.

3. How will your area of expertise collaborate with industry and business leaders?

In addition to professional organizations such as FIO (Florida Institute of Oceanography), SAML (Southern Association of Marine Labs) and NAML (National Association of Marine Labs), Pritzker Marine Lab collaborates with many entities, including the following:

Bay Shellfish Company (local clam hatchery)

Joe Island Clams (local clam hatchery)

Oyster Boys (oyster conservation)

Learning with Jasmin LLC

Sarasota Bay Watch (Local non-profit working to improve water quality in Sarasota Bay)

Siesta Key Homeowners Association

FWRI/FWC (Fish and Wildlife Research Institute and Florida Fish and Wildlife Conservation Commission

NOAA (National Oceanic and Atmospheric Association)

NASA

STRI (Smithsonian Tropical Research Institute in Panama)

Mote Marine Laboratory

Clearwater marine aquarium

Gobabeb Namib Research Institute

Sarasota Audubon Society

Save Our Seabirds

Sarasota Bay Estuary Program

Tampa Bay Estuary Program

Environmental Discovery Awards Program

Suncoast Waterkeepers

Jake's SCUBA Adventures (Cayos Cochinos Honduras)

Sarasota Shell Club

The new Marine Mammal Science program also works with TEKMARA, Brookfield Zoo Chicago, Clearwater Marine Aquarium, the Fish and Wildlife Service, NOAA, Woods Hole Oceanographic Institute, the Navy's Marine Mammal Program, National Marine Mammal Foundation, University of Santa Cruz, St. Andrew's University (Scotland), the University of Florida's College of Veterinary Medicine's Aquatic Animal Health Program, Carnegie Mellon University, the Manatee Rescue and Rehabilitation Program, and more. This year we worked with Florida Polytechnic to create a device to mimic dolphin echolocation, with the University of Michigan on acoustic devices to process biosonar, and Carnegie Mellon University on a project related to devices to expand and improve brain imaging.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

   We are building a statewide and global network, forging powerful collaborations to expand research impact and opportunities for our students and faculty over the next 5 years with other Florida institutions. Members already are in the FIO (Florida Institute of Oceanography), so initial connections are there with relevant institutions. As we grow and expand our student body and research areas, we expect to create a consortium focused on undergraduate research education through collaborations with sister institutions. Initial discussions about a center have begun.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Engage in meaningful research and build career skills	Have each student in major have experience on a research vessel	Logs of marine center and of internships and other activities	Perhaps some data from NAML, although these are difficult to quantify
Engage students in meaningful research	Give every student in the marine science program opportunity to publish work and/or participate in a professional meeting	Faculty activity reports; student grant applications; student exit interviews at graduation	Through national organizations such as NAML, can compare with other undergraduate marine science programs; CUR can also provide data
Engage in internship opportunity	Student engage in at least one internship directly related to marine science	CEO	Comparison of CEO and NAML data
Graduation	At least 75% of those in marine science majors graduate in 8 semesters	Institutional research	Compare with graduates from other SUS and FIO institutions

Professional development of Marine Mammal Science students	25% of MMS students will submit work to a journal before graduation	Faculty and student reporting	
Professional development of Marine Mammal Science students and undergraduate Marine Science students	Strengthen partnerships with Florida zoos and aquariums, with at least 6 graduate students and 20 undergraduates engaged in year one, with numbers increasing each year	Faculty and student reporting	
Professional development of Marine Mammal Science students and undergraduate Marine Science students	Strengthen partnerships with Woods Hole Oceanographic Institution, St Andrews University, Navy Marine Mammal Lab, and the Manatee Rescue and Rehabilitation Partnership, with increasing numbers of undergraduate and graduate students participating each year	Faculty and student reporting	

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
Student research showcase and social media	$15,000	Recruit students and world-class faculty, graduation rates
Strengthen study abroad	Increase student research and travel grants to $40,000 each semester	Engage students in meaningful research
Support summer research for students with faculty	$60,000	Engage students in meaningful research and move to graduation
Increase student participation in conferences	Increase student research and travel grants to $40,000 each semester	Engage students in meaningful research
Support visiting scientist program	$30,000 per year	Recruiting students and world-class faculty and engage students in meaningful research
Support for boat use	$5,000 for student and faculty use	
Purchase trailer for transporting small boats	$4,000 to transport small boats such as kayaks and rigid inflatable boats	Engage in meaningful research

Increase internship opportunities	$20,000	Internship opportunity in marine science
Deepen connections with Clearwater Marine Aquarium	As much as $300,000	Increase opportunities for both undergraduate and graduate students in Marine Science and beyond

University Area of Expertise Proposal

University:	
University Contact Name	**John Buckwalter**
University Contact Title:	**Provost**
University Contact Phone:	**407-823-1267**
University Contact Email:	**John.Buckwalter@ucf.edu**
Area(s) of Expertise:	**1. Engineering and Computer Science** **2. Immersive User Experiences** **3. Defense and National Security**
Date Approved by University President:	

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

UCF was founded just over 60 years ago to educate the engineers and technologists who would become the talent pipeline for the United States' growing space program, based just 35 miles to UCF's east at Cape Canaveral. Embracing this bold mission from the start, UCF has become America's Space University, home to leading-edge expertise, programs, and research that are moving our world forward. Today, UCF is also Florida's Premier Engineering and Technology University — the top provider of talent to the aerospace and defense industries and a leading R1 institution whose workforce development, partnership with government and industry, and legacy of innovation power our state's future.

Area of Expertise 1

College of Engineering and Computer Science

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

Our first area of expertise is the **College of Engineering and Computer Science.** Like each of our identified areas of expertise, this supports the vision of UCF as *Florida's Premier University of Engineering and Technology*.

This expertise is based on the existing strength of programs in this college – best or close to the best among Florida's universities – and the existing and future economy of Central Florida, which is a national leader (and the state's hub) of

high-technology industry and innovation. According to the Computing Technology Industry Association's "State of the Tech Workforce 2025" report, Orlando is now second among all U.S. metropolitan regions for technology job growth. Over the past five years the metro area's tech workforce has grown by 21%, twice the national rate. UCF is determined to provide the quality workforce and world-leading research needed to support this critical economic sector.

In doing so, we plan to become the state's highest-quality and most impactful university for disciplines within engineering and technology, including civil engineering, computer science, electrical and computer engineering, construction engineering, industrial engineering, mechanical and aerospace engineering, materials science and engineering, modeling and simulation, and optics. We are investing in technology innovations in energy, hypersonics, space commercialization, digital twin, transportation, semiconductor manufacturing, AI, cybersecurity, FinTech, data science, and others.

This very ambitious plan is based on our current performance. A few examples to demonstrate UCF's strength: UCF produces the most graduates in engineering in the state, workers in high demand (e.g., Aviation Weekly ranks our graduates as the second-most desired in the nation). UCF's College of Engineering and Computer Science (CECS) is ranked among the top 50 public colleges, with most of its programs highly ranked. CECS, in each of the last two years, exceeded $60M annually in external research funding, with 22% coming from industry. UCF Artificial Intelligence faculty outperform all other Florida institutions in scholarly productivity (ranked 39 nationally by CSRANKINGS.ORG followed by FSU at 72, UF 82 and USF at 106).

UCF's vision to become Florida's premier university for engineering and technology is captured in UCF's 2022-2027 strategic plan, *Unleashing Potential*, and in the university's legislative budget requests for four successive years. UCF's 2022-2027 strategic plan has the following focus areas: Space Technologies and Systems, Entertainment and Immersive Experiences, Health and Human Performance, Energy and Sustainability, Transformative Technologies and National Security.

This area of expertise focuses on the two main goals described below.

Goal 1: Ranking as a Top 25 Public Engineering College: UCF's scholarly engineering productivity is on par with several institutions that are currently ranked in the Top 25 of public engineering colleges around the nation. State and internal investments have permitted UCF to hire top producing faculty in CECS and other STEM-focused UCF colleges, in critical areas such as AI, Cybersecurity, Energy, Semiconductors, Space, Transportation, and Digital Twin technology, to name a few. These investments helped grow the number of research-active faculty in CECS by 46% over four years (to 175 in FY2024). These new faculty hires, in areas of critical importance for the state and nation, boost student preparation in these critical areas. Continuing investment will continue movement towards the top 25 public engineering colleges.

Research funding is an important component of national ranking in engineering. Growth in research is a key metric in achieving Goal 1. In FY2024, CECS funding level exceeded $66M for the first time. From FY2013 to FY2024, external awards increased by 163%, and annual research funding per faculty member increased by 82% (to $344K). The quality of hires is indicated by receipt of 18 NSF CAREER awards in three years, putting UCF's engineering college among the top universities in the country.

Goal 2: Top Producer of Engineering and Computer Science Talent: UCF's goal is to enroll 25,000 students in engineering and related technology fields. This is a critical goal for meeting the needs of Florida's established and emerging hi-tech industries.

UCF's Engineering and Computer Science has the third highest enrollment in the nation. According to the most recent (2023) ASEE (American Society of Engineering Education) Engineering Degrees report, Engineering and Computer Science at UCF is ranked:

- No. 8 nationwide in the number of BS engineering and computer science degrees awarded
- No. 4 in the number of BS Mechanical Engineering degrees awarded
- No. 4 in the number of BS Computer Science degrees awarded
- No. 6 in the number of BS Aerospace Engineering degrees awarded
- No. 6 in the number of BS Computer Engineering degrees awarded
- No. 8 in the number of BS Electrical Engineering degrees awarded
- No 9 in the number of BS Civil Engineering degrees awarded

Enrollment in UCF's engineering and computer science is growing rapidly, by 1,800 additional students in the past two years and an expected additional 1,000 in the 2025-26 academic year. Despite this magnitude and growth, related industries statewide report an even greater need for skilled workforce. Approximately 90% of UCF's graduates in these fields are employed six months after graduation, with some two thirds working in Florida. This provides Florida with a competitive edge in attracting businesses and industries that rely on a highly educated workforce and facilitates impactful partnerships with these industries, such as Lockheed Martin, Siemens-Energy, Mitsubishi Power, Duke, Northrop Grumman, Orlando Health, and many others.

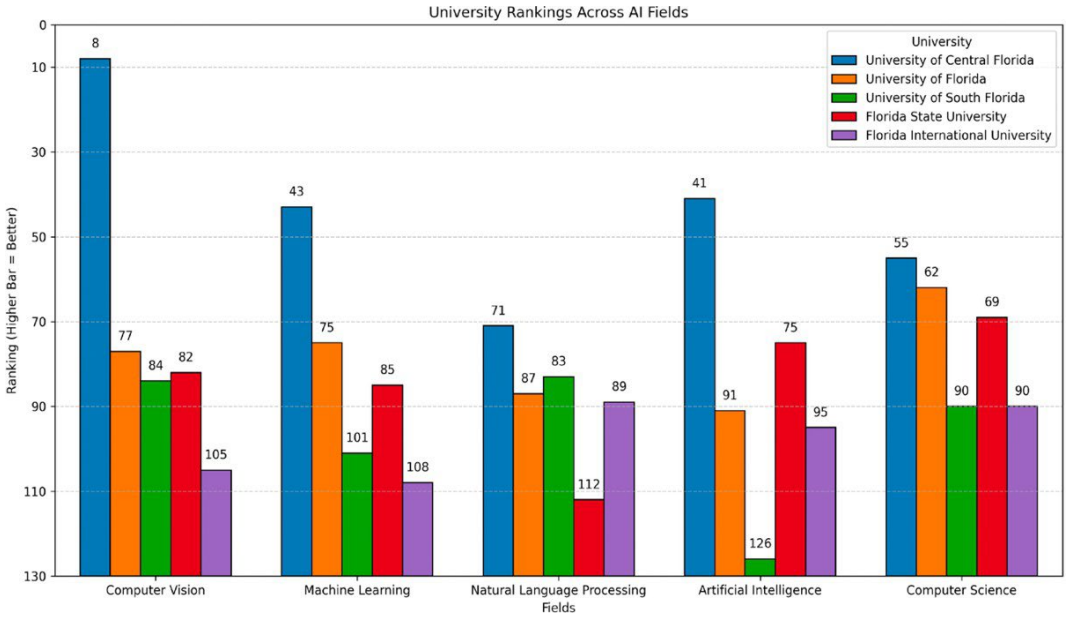
A top College of Engineering and Computer Science results from high-level success in many areas. Here we provide a few examples of UCF's areas of focused investment.

Artificial Intelligence (AI) is the defining force of the 21st century, revolutionizing science, business, healthcare, defense, and education. With recent AI-driven Nobel recognition and breakthroughs in generative AI, language models, and autonomous systems, universities that lead in AI will shape the future of innovation and workforce development. UCF is poised to surpass its current

leading role in this transformation by consolidating its existing strengths and scaling a unified AI enterprise.

UCF's research productivity in AI leads among Florida's universities. AI has been a key area of investment for UCF, resulting in some 25 faculty members who together make up the core of a new UCF Institute for Artificial Intelligence. The Institute includes faculty developing core AI technology such as Computer Vision, Robotics, Natural Language Processing, and Machine Learning, and others pioneering AI use in fields including National Defense & Intelligence, Homeland Security, Environmental Monitoring, Life Sciences and Biotechnology and Robotics. Last year alone, UCF's AI faculty published, respectively, 19 and 12 papers in the top 2 and top 7 publication venues in all sciences. AI faculty have developed the state's first master's degree in Robotics and Autonomous Systems, and UCF's "AI for All" initiative seeks to incorporate AI appropriate knowledge into all undergraduate programs.

This Institute builds on the Center for Research in Computer Vision, created at UCF in 2012. UCF Computer Vision research is internationally renowned, ranked 8th in the United States. Graduates are in high demand. The center offers the only MS program in Computer Vision in a U.S. public university. It offers the longest-running NSF REU site in the country, and its UCF-101 video dataset is included in the Annual AI Index published by Stanford. CRCV's YouTube channel has amassed more than 25,000 subscribers, and with more than 100,000 views. Center director Dr. Mubarak Shah, UCF's most-cited author, was co-PI of a $26M NSF grant on Smart Streetscape.



Semiconductors are the backbone of modern technology and play a critical role in driving the U.S. economy, enabling innovation across sectors from consumer electronics to defense systems. They are also vital to national security, powering advanced computing, communications, and surveillance capabilities essential for

defense and space missions. Given the urgent national priority to strengthen domestic semiconductor manufacturing and innovation, Florida is well positioned to contribute significantly. With its robust aerospace, defense, and space industries, and a growing network of research universities, Florida offers a strategic environment for advancing semiconductor science and engineering. Investing in this area will catalyze economic development, workforce training, and technological leadership in the state and beyond.

Over the past three years, UCF has made targeted and substantial investments to establish itself as a leader in semiconductor research, education, and workforce development. These investments include the recruitment of more than a dozen faculty. Their expertise includes semiconductor growth and processing, semiconductor-based sensors and detectors, semiconductor devices for harsh environments, semiconductor modeling, and Beyond CMOS circuits and systems. Other new hires are in the area of quantum devices and systems and photonic devices and circuits. With these recent hires, there are now more than 30 faculty members at UCF who are active in areas of research under the umbrella of semiconductors.

Student enrollment and research productivity have surged. Multiple UCF research groups presented at the prestigious Solid-State Sensors and Actuators Conference (Transducers 2025), where UCF students received the Best Poster Award, underscoring the quality and impact of their work. In addition, student teams from UCF earned Best in Competition Awards at the International Microwave Symposium (IMS 2025), the most prestigious conference in the field of microwave engineering. CECS faculty in semiconductor-related fields have secured over $3 million in new research contracts from federal agencies and industry partners including Intel and several startup companies.

Semiconductor faculty members are developing a new 2+2-degree program in Semiconductor Engineering and Technology in collaboration with Valencia College, aimed at 1) Creating a direct pipeline of skilled graduates for Florida’s growing semiconductor industry; and 2) Providing hands-on training and experiential learning opportunities tailored to industry needs. These strategic investments position UCF to play a central role in advancing the semiconductor ecosystem in Florida and nationally.

UCF is part of a collaborative regional coalition in Central Florida involved in the NSF Regional Innovation Engines program, focusing on semiconductor manufacturing and advanced packaging at NeoCity in Osceola County. The partnership aims to expand semiconductor manufacturing in Florida, leveraging federal investments such as the CHIPS and Science Act funds. UCF’s contribution focuses on modeling, simulation, and digital twin technologies that support semiconductor advanced packaging and microelectronics systems.

UCF works closely with major industry leaders in the semiconductor space, including AMD, Intel, Texas Instruments, and Northrop Grumman. These companies are deeply engaged in our programs, with a primary focus on talent

development to meet their growing workforce needs. Through internships, curriculum input, and research engagement, we are successfully preparing students for high-demand roles in the semiconductor industry. These relationships will be expanded through UCF's Pegasus Partnerships program, which provides a streamlined, strategic framework for university-industry engagement.

As these partnerships mature, we are actively exploring opportunities to expand their scope to include joint research projects, industry-funded fellowships, and early-career support for faculty and postdocs. We also envision growing these relationships into capital partnerships, with the potential for naming rights for UCF's proposed new research building and its labs, which will house our advanced cleanroom facilities and semiconductor-focused research spaces.

Located in the heart of Florida's High-Tech Corridor and in close proximity to industry leaders such as L3Harris, Northrop Grumman, AMD, and Lockheed Martin, UCF benefits from strong ties to both the defense and commercial technology sectors. The university's longstanding collaborations with NASA and Space Florida, combined with its strengths in microelectronics, materials science, and photonics, provide a strong foundation for interdisciplinary research and innovation. By aligning our academic strengths with industry needs and providing clear pathways for collaboration, UCF is building a model for sustainable university-industry engagement that drives innovation, economic development, and national competitiveness in the semiconductor sector.

UCF consistently ranks highly in Transportation Science and Technology. UCF was ranked 6th in the U.S. and 33rd globally in Shanghai Ranking's 2024 Global Ranking of Academic Subjects. Our transportation program is recognized for its strong research and faculty, particularly in transportation technology and its application to urban challenges. Research in Transportation at UCF focuses on travel demand modeling, transportation safety, traffic engineering, evacuation modeling, intelligent transportation systems, data analytics, and technological innovations including connected and autonomous vehicles, smart cities, and computer vision techniques. Transportation graduates are in demand in industry, government agencies, and academia.

To address complex workforce needs and promote emerging technologies, the Legislature created the Florida Transportation Research Institute (FTRI) as a consortium of higher education institutions. UCF plays a significant role within FTRI as one of the member institutions collaborating on transportation research and workforce development. UCF researchers focus on advancing transportation systems and technologies. The university is involved in innovative projects addressing urban mobility, smart city infrastructure, and transportation safety. This work is supported by federal, state, and local partners, including the National Science Foundation, National Academies of Science, Engineering and Medicine, U.S. Department of Transportation and Federal Highway Administration. Transportation faculty work closely with various stakeholders such as metropolitan agencies (Metroplan) and Florida counties (Orange,

Seminole, Lake, Sumter, Lee and Hillsborough). UCF leads research and testing of intelligent transportation systems aimed at improving pedestrian safety and traffic congestion, supported by a major federal grant partnership with the Florida Department of Transportation and MetroPlan Orlando. Through these efforts, UCF supports FTRI's mission to drive cutting-edge research, education, and workforce training to improve Florida's transportation infrastructure and systems. This collaboration helps prepare a skilled workforce and promote innovation across the state's transportation sector.

Our intention is to elevate the entire College of Engineering and Computer Science, not only the three illustrative programs above. Our future will need graduates in all fields with the critical thinking and leadership skills to innovate, lead, and adapt at incredible speeds. UCF is focused on leveraging our strength in engineering and computer science to innovate across all disciplines to ensure every graduate is prepared to leverage AI and technology.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

Recruiting World-Class Faculty: There are several reasons why UCF has been able to hire outstanding faculty members. The university's vision to be Florida's premier Engineering and Technology University appeals to faculty applicants. Our visible priority initiatives are built around existing strong faculty members, increasing excellent collaborative opportunities for potential candidates. UCF's metropolitan nature and proximity to one of the nation's largest regions for high-tech industries gives opportunities for the faculty applicants to develop diverse funding portfolios. The growing student population in Engineering and Computer Science instills confidence that they will be able to attract a strong team of students to help with their research efforts. All of these, combined with competitive startup and university research support programs, give a greater likelihood of career success and help attract top applicants.

Recruiting Top-Performing Undergraduate Students: Prospective students increasingly recognize the unique opportunity offered by getting an engineering or technology education in a major metropolitan area in the heart of Florida's defense, aerospace, and high-tech industries. Widespread internship opportunities right next door, faculty who partner with regional industries, and an orientation towards career success have led to UCF's rapid growth in engineering and related enrollments.

We also recruit widely to ensure that top students discover this opportunity.

UCF's Burnett Honors College houses about 2,400 students of exceptional quality – entering GPAs at or above 4.5 and an average SAT score above 1450. At UCF, unlike most universities, Honors students skew heavily towards STEM majors: almost three in four are in STEM fields, with about half in Engineering and Computer Science. The Honors College recruits aggressively, working hand in hand with the College of Engineering and Computer Science.

CECS has developed strong recruiting efforts. “CECS Showcase” is a dynamic recruitment event hosted on the UCF campus that is aimed at attracting high-performing students by offering an immersive look into the college’s academic excellence, research opportunities, and career pathways. In addition to the in-person campus event, a virtual showcase expands the offering to students who are further away from campus. Interested students and their guests attend college and departmental presentations, explore state-of-the-art labs and maker spaces, and engage directly with faculty and student leaders. Very importantly, prospective students also engage in panel discussions featuring industry partners: an interaction that helps them see the career opportunities provided by a UCF engineering or technology degree.

The showcase highlights UCF’s commitment to student success and its role as a leading workforce supplier to all areas of engineering and computer science. Student panelists share inspiring stories of academic success and leadership, reinforcing the value of UCF’s hands-on learning and mentorship. The event also spotlights career readiness through internships, co-ops, and senior design projects, giving prospective students a clear view of how UCF prepares graduates for impactful careers. The CECS Showcase positions UCF as a top choice for ambitious students seeking a vibrant, innovative, and supportive engineering and computer science education. These events have been successful in attracting high-performing students and making UCF CECS the first choice for students interested in engineering or computer science.

Recruiting Top-Performing Graduate Students: The university’s approach to attracting top-performing graduate-level students is a multi-faceted, collaborative effort. With the support of the College of Graduate Studies, units such as CECS and others regularly carry out the following: (1) implement contemporary graduate programs, (2) offer competitive fellowships and assistantship opportunities, (3) encourage top-performing UCF-connected undergraduate students to advance to graduate programs, (4) showcase its programs through virtual open houses and digital platforms, and more.

3. How will your area of expertise collaborate with industry and business leaders.

UCF’s Engineering and Computer Science programs have impressive collaborations with industry, taking advantage of our location at the center of Florida’s high-tech industry. To maximize the benefit of these collaborations, both for UCF and for its industry partners, UCF recently developed a central partnership office to coordinate corporate relationships. UCF has also defined a new level of relationship called a “Pegasus Partnership” – a sustained long-term multi-faceted relationship that concentrates on mutual interests in workforce and research. UCF has four existing Pegasus partners, Advent Health, Orlando Health, Siemens-Energy, and Lockheed Martin. These and anticipated future Pegasus Partnerships develop from strong existing relationships. For example, the Siemens-Energy partnership relied on the strong interest and relationships that Siemens-Energy has built throughout the years with the UCF’s

turbomachinery, power systems, smart grid, and energy-focused faculty. The Lockheed Martin Pegasus partnership came to fruition primarily because of a long-standing internship program (the College Work Experiences Program) that they have supported for more than 40 years. This program supports 350 or more year-long interns at Lockheed Martin's premises, providing students with real-world experiences with the intent, upon availability of funds and interest, that they will be provided with a job offer upon graduation.

CECS and its departments have long term relationships with many other industry partners through their participation in Industry Advisory Boards, support of workforce talent development efforts, support of research efforts (through internal R&D funds, collaborative efforts in the pursuit of federal funding, or other activities). Examples of these companies include Duke Energy, Universal, AMD, Intel, Texas Instruments, Mitsubishi Power, Northrop Grumman, L3Harris, and many others.

The CECS Senior Design Showcase is a capstone event where graduating seniors present their final engineering and computer science projects. This too is carried out in collaboration with industry, with design projects sponsored by many industry partners such as Lockheed Martin, Northrup Grumman, Siemens, NASA, L3Harris, Duke Energy, Leidos, Raytheon and FDOT. The final showcase includes a panel of judges mostly from industry. The CECS Capstone class is a simple way for new companies to begin partnering with CECS (through their sponsored capstone projects, mentoring opportunities, and judging).

We continue to expand internships, a main step in developing new industry partnerships. In 2025-2026 we expect that approximately 500 students will take advantage of a new for-credit internship opportunity.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students and staff throughout the System?

We have several centers associated with this area of expertise. Among them are the Center for Advanced Turbomachinery and Energy Research (CATER), the Cyber Security and Privacy Center (forming), and our recently developed Institute for Artificial Intelligence (IAI). Additionally, we have already leveraged our strength to work with other system universities in the following areas: 1) Florida Transportation Research Institute (FTRI) founded by the legislature in 2025; 2) Florida Semiconductor Research Institute – a statewide hub for research, development, and workforce initiatives in semiconductor technologies; 3) Florida University Space Research Consortium – an alliance of Florida universities formed to strengthen space research and innovation across the state; 4) Hypersonics Research Facility in collaboration with Embry Riddle Aeronautical University to drive advanced hypersonic technologies.

The institutes and centers above offer collaborative platforms for partnership and shared state resources. UCF understands that the most effective way to meet

Florida's technology and workforce needs is to leverage the talent across its top ranked higher education system, and we strive to establish collaborative partnerships that generate more return on state investment.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in the selected area of expertise. These goals and metrics should reflect measurable outcomes and developments not just rankings.

The metrics fall into several groups:

Education and Workforce Talent Development.
Research: Scholarly Productivity
Research: Funding Productivity
Partnerships for Workforce Development and Research

In the metric goals identified for the Education/Workforce Development the intent is to be a high producer of critically needed engineering and computer science talent. This supports Florida's economy and also compares favorably with select Top 25 public Engineering and Computer Science colleges. In the metric goals identified for Research, the intent is to stand alongside select Top 25 public Engineering colleges nationally. In the metric goals identified for Partnerships the intent is to continuously expand industry partnerships in Education and Research. Pegasus partnerships deepen our ties with industry, covering education, research, workforce talent development, and other relationships. This metric also includes partnerships with other external stakeholders, such as our DoD partners in the Research Park, Space Force at the Cape, National Labs, the Defense Innovation Unit, etc., as well as long term partnerships with other educational institutions.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Education and Workforce Talent Development	Convert 3 M.S. degrees in high industry demand to on-line option Create 2 new specialized degrees in areas of high industry demand	Institutional data	Offerings at select SUS institutions and top 25 public peer institutions

	Increase enrollment in engineering and technology fields to 25,000 National Top 10 in BS, MS, and PhD graduates	Institutional Data ASEE (American Society of Engineering Education) Degree Reports	Select SUS institutions and select top 25 public peer institutions
Research: Scholarly Productivity	Match top 25 peer institutions in Engineering and Computer Science	U.S. News & World Report CSRankings.org Shanghai Rankings for Transportation Science & Tech	Select SUS institutions and select top 25 public peer institutions
Research: Funding Productivity	Match top 25 peer Institutions in research expenditures per faculty member and total research expenditures and achieve top 10 status in at least one of AI, semiconductors, transportion	US News and World Report	Select SUS institutions and select top 25 public peer institutions
Partnerships	Continue to increase number of education and internship partnerships Increase collaborative research funding with and/or from industry by 50% 2 additional Pegasus partnerships	Institutional Data	

6. Using the table below, provide a summary of anticipated university spending during the 2025-2026 FY to support this area of expertise. Pease list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
College of Engineering and Computer Science	$ 72.2m	All goals listed in Table 1, above
College of Optics & Photonics	$9.3m	All goals listed in Table 1, above

Area of Expertise 2

Immersive User Experiences

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

The second area of expertise, **Immersive User Experiences**, also grows from UCF's vision as Florida's premier university for engineering and technology. This rapidly growing economic sector includes modeling and simulation (a $7 billion industry centered in the adjacent Central Florida Research Park), simulation for training and treatment in health care, electronic gaming, themed experiences (in theme parks and more), and a rapid growth in the use of these technologies in other economic sectors (to choose one example, immersive experiences for athletic competitions, both in stadiums and in broadcasts).

Existing strengths at UCF include top-ranked programs in modeling and simulation, game design (UCF's Florida Interactive Entertainment Academy is #1 nationally), digital media (with nationally top ten programs in undergraduate game design and animation), themed experience, and world-leading research programs in the use of simulation, digital twin, and other technologies in health care, hospitality, and other business sectors (e.g., digital twin in semiconductor production, new technology in hospitality, the treatment of PTSD in UCF RESTORES, UCF's DeVos Sport Business Management Program for innovations in athletics). This area of expertise is called out explicitly in the university's strategic plan.

One example of this area of expertise is Digital Twin, an initiative spanning disciplines including computer science, electrical and computer engineering, mechanical and aerospace engineering, civil environmental and construction engineering, and modeling and simulation. UCF investments have brought ten new faculty members in these areas. With a multidisciplinary team advancing technology and applications across sectors such as healthcare, manufacturing, smart cities, transportation, defense, and the arts, UCF is a leader in the digital twin area. Our faculty are advancing digital twin technologies, particularly in transportation and manufacturing sectors. For example, UCF received an $8.8 million grant from the U.S. Department of Commerce as part of the Build Back Better Regional Challenge. This project involves creating a digital twin of NeoCity's Center, a hub for semiconductor manufacturing, to enhance microchip production efficiency, reliability, and innovation.

The digital twin initiative faculty members also focus on developing standards and leveraging them for smart cities, transportation, and urban challenges. Another focus is semiconductor manufacturing, using digital twins to improve supply chain efficiency and productivity. UCF received a $1M+ million U.S. Department of Education grant to establish a graduate certificate program focused on digital twin technology, aiming to develop a skilled workforce by

teaching design, implementation, and management of digital twins. This effort integrates digital twin applications across transportation, smart cities, healthcare, and manufacturing, positioning UCF as a national leader in this transformative field and receiving strong interest from government, industry and academia.

The Digital Twin Strategic initiative is influenced by immersive technologies such as AR/VR/XR, an area that attracts the interests of companies such as Apple, Meta and Amazon. An example of our expertise in AR/VR/XR is UCF's VARLab. Positioned at the forefront of virtual and augmented reality innovation, UCF's VARLab develops high-performance, human-centered systems that integrate digital twins, collaborative 3D environments, visual analytics, sensor-driven immersive displays, and gesture-based interfaces. This is a premier interdisciplinary research lab advancing the science and engineering of immersive technologies and digital twins supporting a broad range of application areas in defense, space, health care, entertainment and others. Its research drives transformative applications across defense, space, energy, healthcare, entertainment, and beyond. Students working in VARLAB receive internships at Google, Meta, Amazon, Haliburton and other industries. VARLab co-director Dr. Carolina Cruz-Neira was inducted into the XR Hall of Fame, Modeling and Simulation Hall of Fame, and the US Congressional Record.

Digital twin faculty members have an established history of collaborating with defense-focused businesses and industry partners. They have attracted support for critical infrastructure (e.g., oil & gas, airport, utility providers), health, smart cities, and defense. UCF researchers are in an environment surrounded by start-ups and major industry corporations focused on defense and national security. Ongoing research partners include the Army Research Institute, TSMO, PEO STRI, and NAWCTSD, among others, focused on training and testing, team science, and simulation and modeling development. Faculty members tackle advanced engineering and computational challenges by architecting and implementing large-scale, real-time software systems. These systems are rigorously designed for performance, scalability, and reliability, delivering rich interactive and immersive experiences and digital twins that enable agile decision-making and transformative end-user experiences.

Industry turns to UCF's technical strengths in this area to solve pressing needs. UCF's applied strengths include the Institute for Simulation and Training and its academic partner the School of Modeling and Simulation, which directly support industry and the defense establishment. Immersive user experiences are also crucial for entertainment, hospitality, and gaming. UCF is home to the top-ranked graduate gaming program in the nation, the Florida Interactive Entertainment Academy. Coupled to this are renowned undergraduate digital media programs in game design, visual effects, and animation. Another related UCF strength is the nation's first public graduate program in Themed Experiences, graduates of which design and produce themed experiences such in theme parks, zoos, aquariums, themed retail, hospitality, and more.

All of this takes place in a region which is the nation's hub for modeling, simulation, and training, a multibillion dollar industry located in the adjacent Central Florida Research Park; a center of video game production and design, including our strong partnership with Electronic Arts; and of course, as represented by theme parks, the international hub of the themed entertainment industry.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

See Answer in Area 1.

3. How will your area of expertise collaborate with industry and business leaders?

See Answer in Area 1. UCF has very strong ties with the military and the modeling and simulation contractors in the Central Florida Research Park, with the gaming industry as exemplified by our ties to Electronic Arts, and with Disney, Universal, and the other themed entertainment leaders.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

This is an area of significant existing strength for UCF and our emphasis has been on collaborative research opportunities with industry and other government agencies and the military. As noted above, UCF currently has several institutes (Institute for Simulation and Training, Florida Interactive Entertainment Academy, etc.) and multiple research labs that support strong education and research in this area. We believe an opportunity exists to develop a state-wide effort that could accelerate the research and education in the rapidly developing area and anticipate initiating steps to explore partnering across the SUS and with industry.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Education and Workforce Development	Achieve top 5 national ranking in	U.S. News & World Report	Select SUS institutions and select

	undergraduate and graduate game design Match top 25 institutions in doctoral degrees granted and PhD students per faculty member in Modeling & Simulation and Digital Twin	Princeton Review Animation Career Review Institutional data	top 25 public peer institutions
Research	Match top 25 institutions in total research expenditures and research expenditures per faculty member in Modeling & Simulation and Digital Twin	U.S. News & World Report Institutional data	Select SUS institutions and select top 25 public peer institutions
Partnerships	Increase collaborative research funding with and/or from industry by 50% in Modeling & Simulation and Digital Twin	Institutional data	

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the

initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
School of Modeling and Simulation Training	$1.7m	Achieve top 5 national ranking in undergraduate and graduate game design Match top 25 institutions in doctoral degrees granted and PhD students per faculty member in Modeling & Simulation and Digital Twin
Institute of Simulation Training	$3.0m	Match top 25 institutions in doctoral degrees granted and PhD students per faculty member in Modeling & Simulation and Digital Twin Increase collaborative research funding with and/or from industry by 50% in Modeling & Simulation and Digital Twin
Themed Experience & Game Design	$3.8m	Achieve top 5 national ranking in undergraduate and graduate game design Match top 25 institutions in doctoral degrees granted and PhD students per faculty member in Modeling & Simulation and Digital Twin

Area of Expertise 3

Defense and National Security

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

The third area of expertise, **Defense and National Security**, stems from UCF's founding vision to be Florida's premier university for engineering and technology, combined with its long-standing partnerships with Central Florida's robust defense and aerospace industries. Located in a major hub for defense activity, UCF hosts six DoD headquarters in its Research Park and recently signed an agreement to provide educational programs for Patrick Space Force Base. The university is deepening its collaboration with the U.S. Space Force and Air Force by hosting a combined use Sensitive Compartmented Information Facility (SCIF) and two new cutting-edge wargaming centers on campus. UCF's expertise spans both engineering and non-engineering disciplines critical to national defense, including hypersonic propulsion, directed energy, turbine development, high-energy lasers, optics and photonics, forensic science, emergency response, and space research supporting the commercial space sector.

UCF operates the Townes Institute for Science and Technology Experimentation Facility (TISTEF), a unique laser testing facility within the secure area of Kennedy Space Center, offering a controlled environment with advanced diagnostic tools. The university has hosted high-profile DoD events including the Space Force's Schriever International Wargame and DOT&E's AI Conference. Additionally, UCF collaborates closely with national security organizations such as D.C.-based think tanks, the Director of National Intelligence (which funds UCF's Intelligence Community Center for Academic Excellence), National Defense Industrial Association (NDIA), the National Center for Simulation, and the National Training and Simulation Association, reinforcing its role as a central player in defense research and education.

As with the other two areas of emphasis, here we give some examples of UCF strengths in this area.

UCF's Center for Advanced Turbomachinery and Energy Research (CATER) addresses topics of great importance for the military and for national security: resilient, affordable and reliable power generation; fission and fusion energy including small modular reactors; energy and power plants for lunar and Martian habitats and for space; advanced computing and simulation (augmented by AI and quantum computing) for digital twins for power propulsion; space propulsion; advanced air mobility, including air taxis and urban air mobility; advanced testing facilities for ground-based and flight-based validation of propulsion, thermal management and harvesting, and sensors and diagnostics for hypersonics; and hypersonic drones. In just the latest fiscal year, CATER garnered $20.3M in new research awards. Research expenditures averaged $1.5M per faculty member, significantly higher than any top-ten engineering college in the nation.

UCF has partnerships with Boeing, Siemens Energy, Kairos Power, Sandia National Lab, AFRL, ARPA-E and NASA. Sponsored by the Air Force Research Laboratory, and in partnership with Boeing, UCF has established a unique testing facility at Valkaria Airport south of Melbourne, Florida for the ground demonstration of flight hardware for hypersonic vehicles. This facility is also used for the energy needs of the military bases.

In partnership with Siemens Energy, Kairos Power (a developer of next-generation nuclear technologies and small modular reactors) and Sandia National Laboratories, another off-campus facility is being established on the grounds of the Sanford Airport. This facility will include the world's largest molten salt medium through which nuclear energy for several next generation nuclear technologies can be transferred to power cycles for power generation. A five-year program supported by the National Nuclear Security Administration is funding UCF students to receive specialized training on topics important to national security. Work with the Defense Innovation Unit is underway on hypersonic drones, resilient power and energy for military bases and the role of ammonia for these purposes, and small modular reactors for marine applications relevant for U.S. Central Command and U.S. Special Operations Command. The team is working with military installations around the country to develop advanced solutions for resilient power and energy for military bases.

Cybersecurity and Privacy: The need for sustained research and education in cybersecurity cannot be overstated, with the estimated cost of cybercrime worldwide expected to eclipse 23 trillion dollars in 2027. Given the continued rapid digitization of society, better practices, tools, and process to ensure cybersecurity and privacy are sorely needed. This is particularly true in the context of the rapid advancement of technology and technology adoption, including AI.

UCF has invested substantially in the Cyber Security and Privacy cluster with. faculty spanning three colleges who work in both core technical areas and different economic sectors, with security-centric analyses of software and computer systems, the creation of new tools and techniques to support secure and private computing, and socio-technical work that examines the important role of human factors in cyber security. UCF is also a leader in cyber security education, leading pedagogical efforts to create rigorous and practical degree programs that aim to train the next generation of cyber security professionals.

According to CSRankings.org, UCF faculty scholarly productivity ranks first in Florida in six areas related to cybersecurity: Hardware Design and Automation *(No. 8 in the nation)*, Computer Architecture *(No. 20 in the nation)*, Software Engineering, Human Computer Interaction, Machine Learning, and Natural Language Processing), and second in one area (Computer Security); see Figure 1 below. These are all areas related to cyber security and privacy, and they cover a wide swath of areas in Computer Science that are of critical national importance.

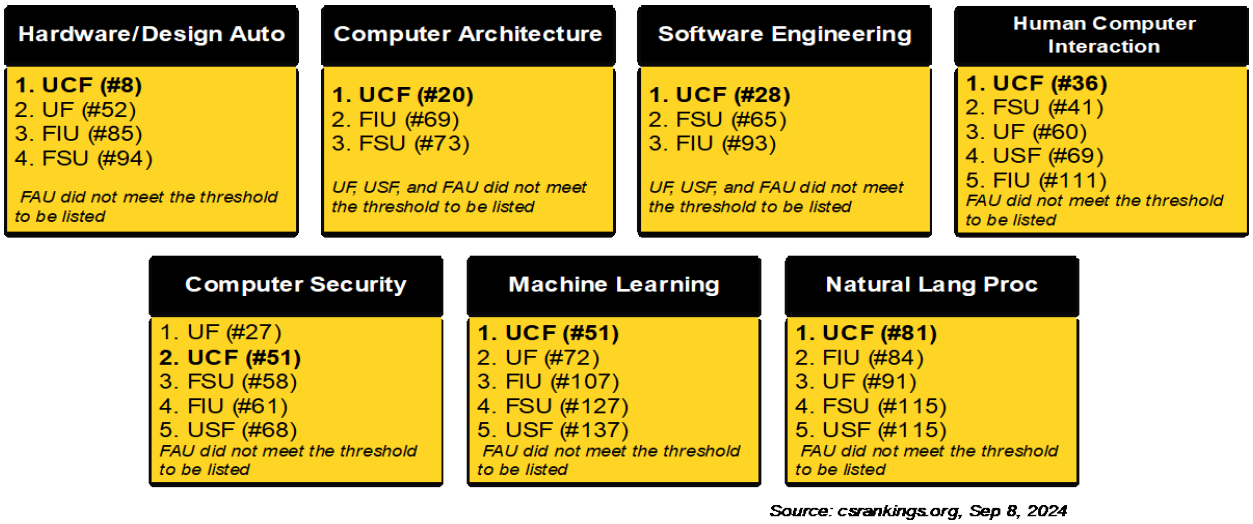


Figure 1: University scholarly rankings (per CSRankings.org) in areas related to cybersecurity. This Figure shows UCF's rankings, nationwide, and compared to other Florida institutions.

UCF offers an emphasis on "Secure Computing and Networking" as part of the Computer Science B.S. program, a graduate certificate program in Cyber Risk Management, and two M.S. cyber programs in Digital Forensics and Cyber Security and Privacy. The M.S. in Digital Forensics, established in 2008, was one of the first graduate programs of its type in the nation, and is ranked 23rd by U.S. News & World Report in the category "best online graduate computer information technology programs."

UCF's Collegiate Cybersecurity Competition (C3) Team dominates collegiate cybersports, ranking in the top 1% of all U.S. and international teams. Notable accomplishments for the latest year include winning UCF's 5th National Championship in the DOE CyberForce competition, winning the 2025 NCAE Cyber Games National Championship, and winning the inaugural HTB Hack-the-Madness Tournament Series. Since its inception, the C3 has won 14 national championship titles. These include six Collegiate Cyber Defense Competition National Championships, an unmatched feat.

Team members come from UCF's Hack@UCF Club (with over 300 members), founded in 2013 to establish a computer security community within the university, The club is an important piece of how UCF helps produce a talented security aware workforce for the state and the nation.

UCF obtained a National Centers of Academic Excellence in Cyber Defense designation in 2016 (valid through 2027), and a National Centers of Academic Excellence in Cyber Research in 2017.

Hypersonics: The UCF Hyperspace Center of Excellence is the nation's leading center for hypersonic and space propulsion research for both defense and

commercial applications. The Center is supported by government and industry sponsors and charged with identifying new directions for hypersonics and space propulsion technologies with a military, industry, and academia alliance. Faculty research hypersonic and space propulsion, modeling, aerodynamics, laser diagnostics/sensors, high temperature materials, and additive manufacturing. New hires are planned in additive manufacturing, laser diagnostics and sensors and aerodynamics/AI. UCF researchers are tasked to demonstrate the world's first stabilized detonation propulsion through a series of eight hypersonic flights based on a UCF 2021 discovery. The UCF team is leading the eight hypersonic test experiments making history with the world's first high-hypersonic detonation propulsion (Mach 8 to 17).

UCF's faculty have close partnerships with AFOSR, AFRL, ONR, Army, DoD, UCAH/JHTO, DLR Germany and major aerospace and defense companies (Lockheed Martin, SpaceX, Blue Origin, United Launch Alliance, L3 Harris, Raytheon, Leidos, Aerojet Rocketdyne). These companies all have a presence in Florida with corresponding workforce needs.

While we have illustrated UCF strengths in defense and national security with three examples, there are many other directly connected activities (directed energy research with DoD, high-energy lasers, establishing SCIFs in partnership with the Navy, educational support of Space Force, close ties with the intelligence community, etc.).

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

See Area 1.

3. How will your area of expertise collaborate with industry and business leaders?

See Area 1.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

Centers described in Area 1 above are also directly related to Defense and National Security. In particular, the Florida Semiconductor Research Institute, CATER, UCF's recently formed Hyperspace Center, and the Hypersonics Research Facility in collaboration with Embry Riddle Aeronautical University, have strong overlap. We see an opportunity to grow a broader collaborative partnership across the state to realize a center of distinction in hypersonic technologies and are beginning to explore this further.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics

should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Education and Workforce Development	Match top 25 institutions in doctoral degrees granted and PhD students per faculty member in cybersecurity, hypersonics, CATER	U.S. News & World Report Institutional data	Select SUS institutions and select top 25 public peer institutions
Research	Match top 25 institutions in total research expenditures and research expenditures per faculty member in cybersecurity, hypersonics, CATER	U.S. News & World Report Institutional data	Select SUS institutions and select top 25 public peer institutions
Partnerships	Increase collaborative research funding with and/or from industry by 50% in cybersecurity, hypersonics, CATER	Institutional data	

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the

initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
Optics and Photonics	$9.3m	Match top 25 institutions in total research expenditures and research expenditures per faculty member in cybersecurity, hypersonics, CATER Match top 25 institutions in doctoral degrees granted and PhD students per faculty member in cybersecurity, hypersonics, CATER
Center for Advanced Turbomachinery and Energy Research	$3.2m	Match top 25 institutions in total research expenditures and research expenditures per faculty member in cybersecurity, hypersonics, CATER
Hyperspace Center for Excellence	$4.2m	Match top 25 institutions in total research expenditures and research expenditures per faculty member in cybersecurity, hypersonics, CATER
Cybersecurity and Privacy Cluster	$1.4m	Match top 25 institutions in total research expenditures and research expenditures per faculty member in cybersecurity, hypersonics, CATER

University Area of Expertise Proposal

University:	
University Contact Name	Joseph Glover
University Contact Title:	Provost
University Contact Phone:	352-392-2404
University Contact Email:	glover@ufl.edu
Area(s) of Expertise:	AI & Applications
Date Approved by University President:	

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 1

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.
   UF identifies Artificial Intelligence & Applications as one of its areas of expertise. UF began its AI initiative in 2020, long before the launch of ChatGPT in 2022. UF's initiative has several distinctive features. (i) UF is home to HiPerGator, the most powerful university-owned AI supercomputer in the U.S. UF has built a sophisticated ecosystem around HiPerGator that enables faculty and students to optimize its use. (ii) UF features "AI Across the Curriculum", ensuring that AI is taught in all its colleges, so that every student who wants to invest the time can graduate AI-literate, AI-competent, or AI-expert. This augments student skills portfolios and gives them a leg up with prospective employers. No other university has managed to replicate UF's comprehensive success with AI Across the Curriculum to date. (iii) UF plans to remain at the forefront of AI and recently concluded its AI BlueSky Task Force that begins a strategic plan for the further evolution of the UF AI environment over the next five years.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

UF has already had tremendous success in recruiting world-class faculty and top-performing students and will continue to do so. The success is due to (i) the presence of HiPerGator that provides a unique and powerful resource for cutting edge research and instruction in AI and applications, (ii) the institution-wide nature of the AI initiative that signals to faculty and students that AI is increasingly part of the university's DNA, (iii) the invention of AI Across the Curriculum that allows students to learn AI in the context of their chosen major and future occupation, (iv) increasing awareness of the importance of AI as a new research tool for faculty and as a skill employers expect of students, and (v) a $20M appropriation from the State Legislature that accelerated the recruitment of world-class faculty in AI and Applications and the UF AI Initiative.

3. How will your area of expertise collaborate with industry and business leaders?
   AI pervades almost all sectors of the economy. Since colleges and departments are increasingly integrating AI capabilities into their disciplinary specialties, they are positioning themselves for fruitful collaboration with industry and business. For example, UF-IFAS is building a new Center for Applied AI in Balm, FL to drive the integration of AI techniques into agriculture. The Warrington College of Business collaborates with multiple businesses in FinTech. The College of Education is driving the development of AI curriculum in the K-12 system. The College of Design, Construction, and Planning has partnered with multiple companies to integrate AI techniques into building construction and in the development of digital twins.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?
   UF has created three centers so far to support and drive the AI Initiative. The first is the AI^2 Center (the "AI-squared Center"). This Center promotes AI Across the Curriculum, helps faculty who need to incorporate AI techniques into their coursework, and collects learning outcome data connected with the UF Quality Enhancement Plan "AI Across the Curriculum".
   The second center is the Artificial Intelligence and Informatics Institute. The institute aims to build a stronger UF AI research community, enhance UF's external AI visibility, and support AI research across

campus with a focus on four major areas: (i) AI and Informatics Techniques and Technologies, (ii) Biomedical and Life Science Informatics and AI Applications, (iii) AI and Informatics for Engineered Systems and the Physical Sciences, and (iv) AI and Informatics in Social Science, Humanities and Education.
The third center is mentioned above: the Center for Applied AI in Balm to drive the integration of AI techniques into agriculture.
UF has made HiPerGator available to faculty and students in the SUS since its arrival in 2020. Faculty throughout the system may use HiPerGator to teach AI at no cost. They may also use HiPerGator for research projects and are asked to pay the same research costs as UF faculty are asked to pay. In addition, UF provides substantial support and instruction in AI throughout the SUS, the state college system, and K-12. For example, a few years ago, UF assisted Palm Beach State College by training its faculty so they can incorporate AI instruction into their classes.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
# of substantive collaborations with industry /business	**Every college should have a meaningful set of collaborators**	**Reports from individual colleges**	**Perhaps eventually**
Pledges / donations to support the AI Initiative	**Raise funds to support faculty, students, and AI Initiative**	**UF Foundation**	**Perhaps eventually**

# of students enrolled in courses with AI content	**Eventually, 60% of students per year**	**AI^2 Center collects this data each year**	**Perhaps eventually**
Research award dollars supporting AI-related research	**maximize**	**Vice President for Research**	**Perhaps eventually**

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
Research Software Engineers & AI Support	**$1.4M**	**Design, architect & implement AI-driven solutions to address complex research problems.**
Personalized AI tutor for gateway courses. AI Factory.	**$1M**	**Each student will have an AI-based tutor for freshman courses. Create university-wide ecosystem so all agents become interoperable.**
AI^2 Center and AI & Informatics Institute	**$2M**	**Faculty support and data collection. Research promotion.**
Center for Applied AI (in agriculture)	**$18M**	**Research, development, and tech transfer for AI in agriculture. In 2026, funds primarily dedicated to construction. An additional $7M dedicated to personnel and equipment.**

AI & Academic Innovation Summit 2026	**$200K**	**Enhances UF visibility in AI**
Continuing AI faculty salaries funded by Legislature	**$20M**	**Productivity in AI teaching, research & outreach**

University Area of Expertise Proposal

University:	
University Contact Name	Joseph Glover
University Contact Title:	Provost
University Contact Phone:	352-392-2404
University Contact Email:	glover@ufl.edu
Area(s) of Expertise:	Hamilton School for Classical and Civic Education
Date Approved by University President:	

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 1

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

The Hamilton School is a multidisciplinary academic unit at the University of Florida devoted to research and teaching on the ideas, traditions and texts that form the foundations of Western and American civilization and on the principles, ideals and institutions of the American political order. The school is *the* national leader in a broader higher education reform movement, one centered on revitalizing research and scholarship on subjects which have for centuries been central to higher education. The school's work is driven by the conviction that open inquiry and the active pursuit of excellence grounded in the core texts and great debates of Western and American civilization are the foundation of liberal education, which will lead our students to thrive not just while at the University of Florida, but throughout their lives and careers.

Founded in 2022, the Hamilton School pursues its legislatively-mandated mission by offering four undergraduate and two graduate degrees. Beginning in Fall 2025, the school will offer two undergraduate degrees, one in Philosophy, Politics, Economics & Law (PPEL) and another in Great Books & Ideas (GBI). In Fall 2026, the school will add two

more undergraduate degrees, one in War, Statecraft and Strategy (WSS) and another in American Government, History, Literature and Law (AGHLL). In addition, the school will offer two graduate degrees, starting in Fall 2026: History of Ideas (HOI) and War, Statecraft and Strategy (WSS). All four undergraduate majors emphasize transferable skills and critical modes of thinking that prepare students for success in law, public policy, government, finance, consulting, nonprofit leadership, health fields, and other areas. The school's graduate degrees will prepare students both for careers in higher education and, in the case of WSS, in public policy.

The Hamilton School has also developed two undergraduate minors focused on Western religions, one on Jewish Thought and Culture and another on Christian Thought and Culture. The school also supports a range of enrichment initiatives, including the highly competitive, Rosenthal/Levy, which offers full funding to UF for recipients, and the Beren Program on Jewish Classical Education. The school maintains vibrant cross-campus partnerships with the Bud Shorstein Center for Jewish Studies, the Bob Graham Center for Public Service, the Levin College of Law and the Department of Religion, facilitating co-sponsored symposia, speaker series and collaborative research projects.

Student programming is a cornerstone of the Hamilton School's identity, cultivating intellectual community and excellence beyond the classroom. Its flagship program is the Society of Fellows, a highly competitive fellowship program open to any undergraduate major at UF. The fellows finish each academic year with a fully-funded, 10-day capstone seminar in Oxford, Cambridge and London. The Society of Fellows cohort for AY 2025–2026 has a median SAT of 1540 and an average GPA of nearly 4.0.

In addition, Hamilton officially sponsors or otherwise supports the Civil Discourse Forum, the Ideas Symposium, the Writing Workshop, the Virtue of Cinema series, reading groups, and student-led initiatives such as Geist, the Society for Jewish Thought, the *Florida Finibus* student journal and UF's *Undergraduate Law Review*.

Since its founding, the Hamilton School has hosted 34 public events—including conferences, symposia, and high-profile lectures—which have drawn over 2,800 attendees. These events have featured leading scholars and public intellectuals and reflect the school's commitment to civic engagement and academic excellence. As part of its work in civics education and civil discourse, the Hamilton School is offering multiple sections of AMS 2010: Civil Discourse and the American Political Order, which satisfies

the Board of Governors' course requirement for civic literacy competency. Hamilton developed this course specifically to meet the civic literacy competency requirement, and it is now able to be offered at all SUS schools. Finally, Hamilton is helping to strengthen civic understanding at the statewide K-12 level through teacher training, workshops, mentorship and other enrichment activities.

Together, these programs, partnerships, and initiatives position the Hamilton School as a national model for reinvigorating the liberal arts and fostering a culture of rigorous inquiry, civil debate and civic responsibility grounded in enduring ideas in the Western tradition.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

The Hamilton School currently has 48 tenured and tenure-track faculty (11 professors, 10 associate professors, 27 assistant professors) along with 5 instructional faculty. The school has recruited its faculty from the best universities here and abroad. The tenured faculty are world-leaders in their scholarly fields, while the untenured faculty are recognized as rising stars in their fields. Hamilton is recognized as having a particularly strong faculty cohort working on political thought in particular and on the history of ideas more generally. Among our tenured faculty, 5 came to Hamilton School from other AAU universities; 5 others came from Carnegie R1 universities; 3 came from Russell Group (UK) universities; and 2 others from international universities ranked higher than UF in the QS World Rankings of Universities.

UF's vision for the Hamilton School is for it to be an Oxford-style college nested inside a high-ranking AAU university committed to research excellence. At the undergraduate level, this means having small seminar-style classes, that allow for rigorous Socratic dialogue and a strong emphasis on faculty mentoring. At the graduate level, students are immersed in an environment shaped by high expectations and led by top-tier scholars committed to excellence in research and teaching.

To realize this vision, UF has invested heavily in the Hamilton School's growth and infrastructure. Thanks to a $55 million state appropriation, The Infirmary—an iconic 49,000 ft^2 historic building in the heart of UF's campus—is being fully renovated and

expanded as the Hamilton School's permanent home. Its interior is designed to evoke the feel of an Oxford college: intimate, communal and intellectually rich.

In tandem with overseeing the creation of a new physical home for Hamilton, UF has committed its substantial institutional resources of its own to Hamilton, atop the $10 million recurring state funding for the school. This has allowed the school hire over four dozen faculty in under three years.

This deep institutional support has enabled Hamilton to compete directly with other leading AAU universities—including the University of North Carolina at Chapel Hill, the University of Texas at Austin and Ohio State University, each of which is establishing similar schools focused on civic thought and leadership. In fact, Hamilton's strong recruiting has already triggered the need for active retention efforts, as faculty are now being courted by peer institutions.

In addition to public funding, Hamilton is building a strong foundation of private philanthropy to support faculty and student recruitment and retention. In just two years, the school has secured nearly $9 million in gifts and pledges. These include a $1 million gift to establish a competitive merit-based undergraduate scholarship and several six-figure contributions specifically designated for faculty support. Looking ahead, Hamilton plans to raise funds for five named and endowed chairs; a flagship undergraduate merit scholarship program modeled on the Morehead-Cain and Jefferson Scholarships at the University of North Carolina at Chapel Hill and the University of Virginia; and a set of competitive graduate fellowships to attract top-tier graduate students.

Student recruitment efforts are already yielding results. Although the School's undergraduate majors launch in Fall 2025, Hamilton is on track to enroll over 125 majors in its first class—nearly 125% more than initially projected. Much of this early interest stems from the faculty's strong presence and performance in UF's general education curriculum. Hamilton faculty currently teach 15% of all courses in Quest (UF's signature general education program) and consistently receive higher student evaluations in overall course quality which are nearly 10% higher than the university average. During AY 2025–2026, the school is set teach more than 3,000 students and aims to teach nearly 4,000 annually by FY27.

To sustain and grow this momentum, the Hamilton School is working with UF Admissions strategically to market its multidisciplinary undergraduate degrees to highly qualified students across Florida and the U.S., including top public, private and religious high schools. Hamilton aims to compete head-to-head with leading national liberal arts colleges and honors programs to attract the very best students—those seeking a rigorous, mission-driven academic experience rooted in the study of enduring ideas and public leadership

Through a combination of bold vision, institutional investment, faculty distinction and growing philanthropic support, the Hamilton School is positioned to recruit world-class faculty and top-performing students who will define the next generation of civic, scholarly, and professional leadership.

3. How will your area of expertise collaborate with industry and business leaders?

The Hamilton School has proactively identified and engaged with over 100 organizations—including government agencies, think tanks, educational institutions and archives—across the fields of public service and law. This extensive network is being cultivated to establish a robust portfolio of internship and fellowship opportunities for Hamilton undergraduate majors during their time at UF. To facilitate these opportunities, Hamilton has a dedicated student programming officer, part of whose job is to help students arrange internships in public policy and private industry.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

The Hamilton School is an academic unit of UF. The university plan to create no additional or subsidiary centers of this nature.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
DEVELOPMENT	See Table 1.1 below	UF will measure whether fundraising goals are met by the amount of dollars raised.	Hamilton's fundraising goals are set by the leadership of the UF Foundation in consultation with the Board of Trustees.
HEADCOUNT	See Table 1.2 below	UF will measure whether headcount goals are met by counting the undergraduate and graduate headcount.	UF will compare Hamilton enrollments with similar centers at AAU institutions (UNC-Chapel Hill, UT-Austin and Ohio State).
UNDERGRADUATE COURSE ENROLLMENT	See Table 1.3 below	UF will measure whether undergraduate course enrollment goals are met by counting student enrollments.	UF will compare Hamilton enrollments with similar centers at AAU institutions (UNC-Chapel Hill, UT-Austin and Ohio State).
FTE–STUDENTS	See Table 1.4 below	UF will measure whether headcount goals are met by counting the undergraduate and graduate FTE.	UF will compare Hamilton enrollments with similar centers at AAU institutions (UNC-Chapel Hill, UT-Austin and Ohio State).
EMPLOYMENT OUTCOMES	Hamilton aims for 97% of its graduates to have found full-time employment, enrolled in	Hamilton will regularly survey its graduates to measure career outcomes.	The metric is based on peer institution programs in PPE (Michigan) and Liberal Studies (Notre Dame).

	graduate school, entered service programs, joined the military or launched independent projects within six months of graduation.		

Table 1.1: Development

Fiscal Year	Fundraising Goal	Dollars Raised	Tracking Entity
FY23	$0	$1M	UFF
FY24	$1M	$2.1M	UFF
FY25	$5M	$8.7M	UFF
FY26	$11.5M	TBD	UFF

Table 1.2: Headcount

Fiscal Year	Undergraduate Major HC Goal	Undergraduate Minor HC Goal	Graduate Student HC Goal	Total HC Goal
FY25	58	20	0	78
FY26	150	50	15	215
FY27	300	120	25	445
FY28	495	240	40	775

Table 1.3: Student Course Enrollment

Fiscal Year	Enrollment Goal	Actual
FY23	500	971
FY24	1000	1318
FY25	2000	1277 (as of 7/7 – Fall only)
FY26	3000	TBD
FY27	4000	TBD

Table 1.4: FTE–Students*

Fiscal Year	Undergraduate Major FTE Goal	Undergraduate Minor FTE Goal	Graduate Student FTE Goal	Total FTE Goal
FY25	43.5	15	0	58.5
FY26	112.5	37.5	11.3	161.3
FY27	225.1	90	18.8	333.9
FY28	369.85	180	30.1	579.95

*This number is .75 of Headcount.

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
THE INFIRMARY	$55 million (state appropriation)	The Infirmary will be the Hamilton School's permanent home. Groundbreaking is in November 2025, with a move-in date slated for Summer 2027.
SALARIES & OPERATING EXPENSES	$15.35 million	This covers Hamilton faculty/staff salaries and operating expenses.

University Area of Expertise Proposal

University:	
University Contact Name	David Norton
University Contact Title:	Vice President for Research
University Contact Phone:	352-392-9271
University Contact Email:	dpnorton@ufl.edu
Area(s) of Expertise:	Neuroscience and Neuromedicine
Date Approved by University President:	

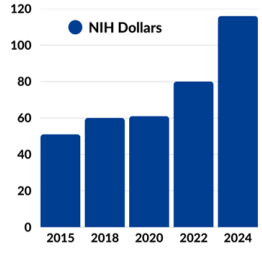
Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 1

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

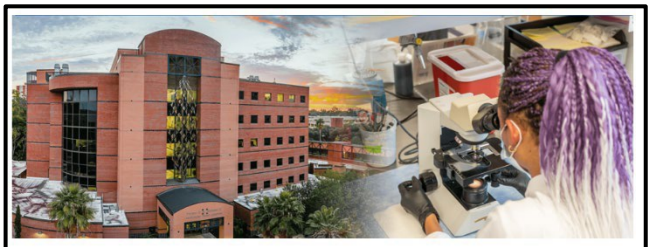
The University has identified **neuroscience and neuromedicine as a top institutional priority**. UF's neuroscience, neurology, and neurosurgery programs currently rank among the **top two** nationally in NIH research funding, according to the *Blue Ridge Report* - providing one metric of the exceptional strength and national impact of our research enterprise. UF's strength in neuroscience extends well beyond these departments, however, with more than 250 faculty members across nearly all UF colleges engaged in research relevant to brain health. Home to some of the world's experts in neuroscience, UF's faculty lead influential research programs in neurodevelopment, addiction, psychiatric disorders, pain, brain aging, neurodegenerative diseases, neural control of breathing, brain and spinal cord injury, neuromuscular function, movement disorders, and brain cancer. UF's active extramural funding for neuro-related research has been on a steep upward trajectory, now **exceeding $115M annually**.



Extramural funding for neuroscience research has grown exponentially over the past decade. *Graph shows NIH neuro-related grant funding secured by UF investigators (y-axis indicates millions).*

This portfolio, which includes PI research grant awards (R01s) and multiple large-scale collaborative research grants, highlights the vibrant and diverse neuroscience research landscape at UF.

To attract and support these researchers, UF has established a robust Center and Institute infrastructure. At the center of this effort is the Evelyn F. and William L. McKnight Brain Institute (MBI), which serves as the hub connecting UF's fundamental and translational neuroscience programs. The MBI building houses dozens of laboratories and is home to a vibrant research ecosystem that combines the creativity of individual researchers with the power of shared core resources, including microscopy, molecular biology, behavior, a brain bank of human tissues, and the internationally recognized Advanced Magnetic Resonance Imaging Spectroscopy Facility (AMRIS). Through these shared resources, robust educational programs, and public outreach, the MBI supports and facilitates scientific progress of faculty research programs. UF also houses the Norman Fixel Institute for Neurological Diseases which, together with the Neurology, Psychiatry and Neurosurgery departments in the College of Medicine, translates the latest discoveries into comprehensive care for neurological and psychiatric diseases.



The Evelyn F. and William L. McKnight Brain Institute (MBI) *is a >200,000 sq. ft. building that houses individual investigator laboratories and provides a range of core facilities, training programs, and services that broadly support brain research at UF.*

From Parkinson's disease to multiple sclerosis to essential tremor, ***the Norman Fixel Institute for Neurological Diseases at UF Health*** *provides multi-disciplinary, patient-centered care and treatment to people living with complex neurological disorders.*

While the MBI infrastructure is designed to broadly facilitate all neuroscience research at UF, it also supports a diverse array of specialized Centers that bring faculty and clinician scientists together across disciplines to address critical issues in the field. These Centers are led by nationally recognized scientific leaders and are a fertile ground for fostering collaborative and interdisciplinary approaches to enhance our fundamental understanding of the brain and rapidly advance clinical treatments. Below is a brief description of some of UF's research Centers related to neuroscience.

Research Centers in Neurological and Neurodegenerative Disorders:

- **1Florida Alzheimer's Disease Research Center (1Florida ADRC)** *The 1Florida Alzheimer's Disease Research Center (1FL ADRC), led by Glenn Smith, PhD, Professor of Clinical and Health Psychology, is a statewide consortium of top researchers and clinicians from institutions across Florida, including the University of Florida, University of Miami, Mount Sinai Medical Center, Florida Atlantic University, and Florida International University. Funded by the National Institute on Aging and the Florida legislature, the ADRC focuses on advancing Alzheimer's disease research and improving patient outcomes through a variety of initiatives, including advancements in early detection. With novel blood and cerebrospinal fluid biomarkers, the latest imaging techniques, and novel AI-powered cognitive screens, research from the ADRC is enhancing earlier, more accurate Alzheimer's diagnosis.*

- **Center for NeuroGenetics (CNG):** *Led by Distinguished Professor of Molecular Genetics and Microbiology Laura Ranum, PhD, the Center for NeuroGenetics includes leading scientists from across UF's neuroscience and genetics community involved in innovative collaborative basic and*

clinical research in neurogenetic disorders. State-of-the art genomic and proteomic tools and advances in stem cell biology are used in gene discovery efforts and in exploring the biological pathways that underlie childhood developmental or late-onset disorders of the human nervous system.

- **Center for Translational Research in Neurodegenerative Disease (CTRND)** *Led by Professor of Neurology Matt LaVoie, PhD, the CTRND's mission is to discover the earliest molecular triggers of neurodegeneration and use this new information to develop and evaluate future treatments and diagnostics for degenerative central nervous system conditions including Alzheimer's disease, Parkinson's disease, stroke, and other brain disorders. The CTRND plays an important role in supporting the 1Florida ADRC and UF Neuromedicine Human Brain and Tissue Bank.*

- **Preston A Wells, Jr Center for Brain Tumor Therapy Center** *Led by Professor of Neurosurgery, Duane Mitchell, MD, PhD, this Center serves as a hub for some of the brightest minds in the fields of neuro-oncology, neurosurgery, and radiation oncology, where leading researchers and their teams collaborate with physicians who have dedicated their entire careers to finding cures for brain cancer.*

UF Research Centers in Acquired Brain Injury:

- **Brain Injury, Rehabilitation, and Neuroresilience Center (BRAIN):** *Led by the Chair of Neurology Michael Jaffee, MD, the BRAIN Center fosters cross-disciplinary collaborations and innovation between brain injury clinicians and researchers at UF, harnessing collective strengths to improve understanding of how the brain can be programmed to be resilient to neural injury. Researchers are working to develop new diagnostic and therapeutic strategies for vascular, traumatic, or anoxic neural injury. Center faculty are also dedicated to community outreach, engaging and educating the public on brain health and injury prevention.*

- **Breathing Research and Therapeutics Center (BREATHE):** *Led by Preeminence Professor of Physical Therapy and Neuroscience Gordon Mitchell, PhD, the BREATHE Center is dedicated to preserving the neural control of breathing, which can become compromised in a wide range of clinical disorders, such as spinal cord injury, ALS, Duchenne muscular dystrophy, Pompe disease, multiple sclerosis, Parkinson's disease, stroke, and post-CoVID-19 syndrome. Although many centers in the United States are devoted to pulmonary function, the BREATHE Center is truly one of its kind as no other is focused on respiratory neuromuscular function.*

- **Comprehensive Stroke Center:** *The Comprehensive Stroke Center is certified by The Joint Commission due to advanced imaging capabilities, 24/7 availability of specialized treatments, and staff with unique education and competency standards, and boasts a robust research component, including an array of clinical trials. This includes* ***the first mobile stroke unit in Florida****. More than an ambulance, this specialized vehicle includes a diagnostic CT scanner and time-sensitive medications used to reverse the effects of stroke and brain damage.*

UF Research Centers in Cognitive, Behavioral and Sensory Disorders:

- **Center for Autism and Neurodevelopment (CAN):** *Led by Chair of Psychiatry Carol Mathews, MD, CAN provides centralized transdisciplinary diagnostic and clinical treatment services for children and adults with neurodevelopmental disorders. It also provides numerous opportunities for individuals to participate in research studies and clinical trials designed to accelerate new treatments for autism and other neurodevelopmental disabilities.*

- **Center for Cognitive Aging and Memory Clinical Translational Research (CAM):** *Led by Professor of Neuroscience Sara Burke, PhD, the CAM Center is a multidisciplinary UF research*

Center focused on brain aging and cognition. CAM Center researchers come from departments and colleges across campus and possess diverse expertise in the neurobiology of aging, neuroplasticity, physiology, behavior, and clinical intervention. The Center's researchers are dedicated to the translation of leading-edge discoveries about brain aging into interventions that will preserve cognitive function and improve quality of life for older adults.

- **Center for Addiction Research & Education (CARE):** *Led by Distinguished Professor of Psychiatry Sara Jo Nixon, PhD, CARE researchers work at all levels of addiction science ranging from molecular neuroscience and drug discovery through epidemiology and clinical trials. CARE scientists probe the neurobiological and psychosocial correlates and consequences of addictive disorders and their comorbid conditions, interrogate factors underlying risk and resiliency in across different populations, track emergence and use of novel/new psychoactive substances across the country, query the impact of substance use across the lifespan, and seek to lessen the burden of substance misuse and addictive disorders through development of pharmacologic and behavioral interventions.*

- **Center for OCD, Anxiety & Related Disorders (COARD):** *Led by Chair of Psychiatry Carol Mathews, MD, COARD brings together an interdisciplinary group of researchers and clinicians who conduct clinical and translational research in obsessive compulsive and anxiety disorders at UF. Areas of interest include understanding the genetic and environmental causes of anxiety disorders and obsessive compulsive and related disorders, including biological markers associated with the development and/or life course of these disorders, understanding the underlying brain circuitry and neurodevelopmental abnormalities, and finding ways to optimize available treatment options for adults and children.*

- **Pain Research and Intervention Center of Excellence (PRICE):** *Led by Distinguished Professor of Community Dentistry Roger Fillingim, PhD, PRICE serves as home to scientists, clinicians, and trainees dedicated to improving the understanding and treatment of pain. Bringing together diverse areas of expertise across UF, PRICE research spans basic, translational, and human clinical research.*

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

The robust collaborative community that includes many world-renowned neuroscientists, together with leading-edge core facilities and innovative training programs, uniquely positions UF to attract the upper echelon of talent in terms of both faculty and students in neuroscience and neuromedicine.

Recruiting world-class faculty: UF has been highly successful in attracting top talent across many different subfields of neuroscience, bolstering our research strength and national reputation. Below are just a few examples of faculty in the neuroscience field who have been recruited across departments and colleges at UF in recent years.

- **Daryl Fields, MD, PhD, *Dept. of Neurosurgery, College of Medicine***. Dr. Fields was recruited in 2025 from the University of Pittsburgh and is investigating spinal cord stimulation as a treatment for ALS and spinal injury.

- **Catherine Marcinkiewcz, PhD, *Dept. of Cellular and Systems Pharmacology, College of Pharmacy*.** Dr. Marcinkiewcz was recruited from the University of Iowa in 2025 and is investigating how stress contributes to psychiatric and neurodegenerative diseases.
- **Paola Giusti-Rodriguez**, **PhD, *Dept. of Psychiatry*, *College of Medicine***. Dr. Guisti-Rodriguez was recruited from UNC in 2023 and studies the genetics of psychiatric illnesses, with a focus on human-based studies of neurodevelopmental disorders.
- **Jeff Jones, PhD *Dept. of Neuroscience, College of Medicine***. Dr. Jones was recruited in 2025 from the Salk Institute and investigates why cells age and how to prevent age-related dysfunction.
- **Yasin Seven**, **PhD**, ***Dept. of Physiological Sciences, College of Veterinary Medicine.*** Dr. Seven chose to continue his independent career at UF after completing a postdoctoral fellowship. He is investigating methods to enhance respiratory function in ALS and spinal cord injury.
- **Rajesh Khanna**, **PhD**, ***Dept. of Pharmacology and Therapeutics, College of Medicine***. Dr. Khanna was recruited from New York University in 2024 and is developing non-opioid treatments for chronic pain.

Future investments in faculty are planned in the fields of cognitive aging and Alzheimer's disease, which aligns with state needs and UF strength areas. This year, UF has plans to recruit at least two senior scientists whose research focuses on maintaining cognitive health across the lifespan, and one senior scientist in Alzheimer's disease who can bolster our leadership in this area. Expansions of the UF Neuromedicine brain bank as well as other core resources and technologies at the MBI are planned to enhance successful recruitment in these areas.

Recruiting Top-Performing Students: In recent years, significant efforts have been focused on making UF a national destination for trainees pursuing neuroscience and neuromedicine careers. As of last year, UF's neuroscience PhD Program became one of only 32 in the country and the ***first in Florida*** to receive direct funding support from the NIH. The interdisciplinary neuroscience PhD program, which is also supported by the UF College of Medicine and the MBI, has mentors in over 15 academic departments spread across numerous UF colleges. The curriculum in this program has been completely modernized and now incorporates training in AI and machine learning in addition to strong discipline-based knowledge. As such, our students are equipped with the skills necessary to be at the forefront of the neuroscience field. ***Since 2020, applications to the neuroscience program have increased over 400%, reflecting the growing national reputation of UF's flagship neuroscience PhD program***.

Beyond the neuroscience PhD program, many students across campus from other areas, including Psychology, Engineering, Rehabilitation Sciences, Pharmacy, and Veterinary Medicine also conduct neuroscience research. These trainees all have access to an incredibly rich training environment that includes ***nearly a dozen specialized training programs (T32s) funded from the NIH***. These programs help attract the strongest students from across the state and country, as they augment traditional degree requirements with opportunities for honing research skills in areas such as pain, cognition, aging, respiratory neurobiology, movement disorders and restoration, and Alzheimer's disease and dementia.

In addition, the MBI has signature mentoring programs in place to attract top-tier undergraduates, graduate students, and postdoctoral fellows interested in pursuing neuroscience research careers. The **Summer Neuroscience Internship Program (SNIP)**, founded by the MBI in partnership with UF's Department of Neuroscience, celebrated its 10th anniversary this year. The

Summer Neuroscience Internship Program ***recruits exceptional undergraduates from all over the country*** in order to introduce them to the graduate training opportunities in neuroscience at UF. This program offers hands-on lab training, mentorship from leading UF neuroscientists, and professional development opportunities to prepare students for graduate school and careers in science. The SNIP program now receives hundreds of applications for 12 positions each year. Since its inception in 2016, we have hosted over 150 students, with over 80% of them now enrolled in PhD and MD programs. Many have been successfully recruited into advanced training programs at UF.

MBI researchers mentoring students in the Summer Neuroscience Internship Program which introduces undergraduates to research careers in neuroscience and neuromedicine.

Prior to graduate school, UF undergraduates can also take advantage of GATORAADE (Gators Advancing Through Opportunities in Research for Aging and Alzheimer's Disease Education), a new post-baccalaureate opportunity. This training initiative provides two years of intensive research experience in Alzheimer's disease and related dementias, preparing students for academic opportunities or health care careers.

Aligning with a stated goal of the Board of Governors to recruit more top-quality postdoctoral researchers, the MBI launched the Gator NeuroScholars (GNS) program in 2023**.** This unique fellowship is ***designed to attract the upper echelon of research talent at the postdoctoral level*** and equip them with the tools needed to rapidly advance their scientific careers. GNS has already seen tremendous success, with scholars publishing high-impact research and earning prestigious extramural fellowships from the American Heart Association and the NIH (K99/R00). Our GNS scholars also formed the NeuroPD2 Postdoc Association, which fosters collaboration and mentorship across the MBI, furthering the program's emphasis on building a supportive and collegial research environment that is crucial for attracting top postdocs to our university. With support from philanthropic partners, the MBI recently welcomed three new Gator NeuroScholars and launched a call to recruit four additional fellows.

3. How will your area of expertise collaborate with industry and business leaders?

The research programs in neuroscience and neuromedicine interface with industry and business through two major mechanisms. First, we often have funded research that is funded by or engages with industry partners. Second, we have startup companies emerging from the research performed in these areas.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

As described above, UF already has a robust center and institute infrastructure in place that is dedicated to enhancing research in the areas of neuroscience and neuromedicine.

This infrastructure will be leveraged to facilitate cross-college interdisciplinary efforts to further elevate neuroscience and neuromedicine on the UF campus.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Funding through grants and contracts in the areas of neuroscience and neuromedicine	30% increase from current funding level over 5 years	Grant data within UF system	Will compare within NIH Blue Ridge database
Increased philanthropic dollars in neuroscience and neuromedicine	30% increase from current funding level over 5 years	Data with UF Foundation system	None available
Increased number of faculty members working in areas of neuroscience and neuromedicine	3 senior hires over the next 3 years	Data from within UF system	None available
Increased UF undergraduate research opportunities in neuroscience and neuromedicine	10% increase in undergraduates conducting research through programs run by MBI and other centers and institutes	Data from within UF system	None available

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
Center and Institute Infrastructure to facilitate research in neuroscience and neuromedicine	$10,000,000	All initiatives
Searches for senior faculty working in areas of brain aging and Alzheimer's disease	$7,500,000	Increased number of faculty members working in areas of neuroscience and neuromedicine
Investment in New Technologies and Core Equipment	$2,500,000	30% increase in extramural funding from current funding level
Renovations for investigator and core laboratories	$3,000,000	30% increase in extramural funding from current funding level
Pilot and Seed funding programs to support development of new research projects and collaborations	$1,500,000	30% increase in extramural funding from current funding level
Student research training programs in neuroscience and neuromedicine	$1,500,000	Increase undergraduate research opportunities in neuroscience and neuromedicine

University Area of Expertise Proposal

University:	University of North Florida
University Contact Name	John Kantner
University Contact Title:	Sr. Assoc. Provost Faculty Success
University Contact Phone:	904-620-4650
University Contact Email:	j.kantner@unf.edu
Area(s) of Expertise:	Experiential Learning Supply Chain Innovation
Date Approved by University President:	August 11, 2025

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 1

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

UNF aspires to become known as the experiential learning university.

The Florida Board of Governor's *SUS 30 Strategic Plan* identifies Elevating Student Success as a priority area. A component of this priority area is the production of "high-skilled graduates" who will "be encouraged and supported to participate in high-impact internships or experiential learning as part of their undergraduate education." This component aligns closely with the University of North Florida's 2023–2028 Strategic Plan, which includes a priority to "ensure student success from enrollment to employment and beyond" with a key goal that 100% of graduating seniors will have participated in at least one high-impact practice (HIP) experience at UNF –far exceeding the SUS 30 goal of 40% by 2030.

To achieve this key goal, the UNF policy (2.0650P) identifying baccalaureate degree requirements was revised in April 2025. The policy now includes the stipulation, "Undergraduate students entering UNF in Fall 2025 and beyond are required to complete an experiential learning opportunity." UNF also created an Office of Experiential Learning to assist students in achieving their experiential learning opportunity. The new office is built around the March 2023 recommendations from the BOG's Task

Force on Academic and Workforce Alignment. The Office of Experiential Learning coordinates with other student-serving units that provide experiential learning opportunities, including Career Services, the International Center, the Office of Undergraduate Research, and the Office of Community Engagement and Partnerships. Such coordination ensures that students have a multitude of opportunities to engage in experiential learning, fulfill the graduation requirement, and be exceptionally prepared to enter for successful and rewarding careers after graduation.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

   When recruiting both students and faculty, UNF has consistently emphasized small class sizes, low faculty-student ratios, and the many opportunities for students and faculty to work together in the classroom, lab, field, and community. In the past year, even while rising in the rankings as an emerging research university, we have doubled down on this key aspect of our identity, defining UNF's brand promise as including "purpose-driven research, community support and collaborative partnerships that fuel growth and prosperity." This messaging is built into our recruitment materials for faculty, staff, and students alike to ensure that we deliver on this promise.

   Furthermore, UNF Marketing & Communications made experiential learning the cornerstone of UNF's recent marketing campaign, which includes a new promotional video, billboards throughout the region, and messaging to prospective students and families. All incoming students learn more about experiential learning through an online pre-orientation module and hear directly from the Office of Experiential Learning during New Student Orientation.

3. How will your area of expertise collaborate with industry and business leaders?

   As a Carnegie Community-Engaged University, UNF is an essential part of the industry and business landscape in the Northeast Florida region. While every academic unit is involved, two offices are instrumental to establishing and maintaining these deep connections.

   Career Services is most directly responsible for connecting students with industry and corporate partners for experiential learning opportunities. Career Services includes an Industry Engagement team that oversees outreach with the business community, both to establish internship opportunities and to provide career pathways for students. The Student team interfaces most directly with students to help them line up internships and career opportunities.

The Office of Community Engagement and Partnerships, led by a cabinet-level vice president, provides strategic leadership and collaborates most directly with city government and business leaders to identify opportunities for new relationships. This office plays a key role in working with city leaders to attract new industries and companies to the region.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

   There are currently no plans for a center of distinction to support experiential learning.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
(1A) Graduating Seniors Who Participated in Experiential Learning	**100% of undergrads by Spring 2029**	**This is a new graduation requirement starting in Fall 2025**	**This metric mirrors the BOG's *SUS 30* metric.**
(1B) Percent of Bachelor's Graduates Engaged in Internships	**58%**	**Tracked by enrollments in for-credit internship courses**	**No, but this metric is on UNF's Accountability Plan**

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
High-Impact Practice Grants: support for faculty developing experiential learning opportunities for students	**$250,000**	**1A and 1B**
Student Affairs International Learning Scholarships: support for students engaged in study abroad experiences that often include other experiential learning opportunities, such as internships or hands-on research	**$300,000**	**1A and 1B**
U-RSCA Training and Travel Grants: support for students engaged in hands-on research, scholarship, & creative activities	**$50,000**	**1A**

Area of Expertise 2

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

   UNF aspires to have top-ranked programs in Supply Chain Innovation, including advanced manufacturing, supply chain management, and transportation and logistics.

   One of the priority areas in the Florida Board of Governor's *SUS 30 Strategic Plan* is for each university to be a leader in innovative research and economic development. The University of North Florida's 2023–2028 Strategic Plan identifies several areas of focus that are key strengths for the university and that align with priorities identified in JAXUSA's 2023–2038 Strategic Plan. These priority areas include advanced manufacturing and transportation & logistics, along with coastal resilience and cybersecurity to protect intermodal logistics assets such as JAXPORT. Northeast Florida is an international center for multi-modal transportation, and it is becoming a hub for advanced manufacturing. UNF already has a strong reputation in these priority areas, including having well-regarded transportation & logistics undergraduate and graduate programs, the only BS Advanced Manufacturing degree in the state, and a new PhD Computing degree that focuses on cybersecurity and intelligent systems. UNF's Professional & Lifelong Learning unit also offers an industry-focused series of Logistics and Supply Chain certificate programs.

   As we have worked to implement the UNF strategic plan, we are discovering innovative connections across these priority areas and have identified an over-arching theme that unifies them: **Supply Chain Innovation.** Interdisciplinary faculty research with industry partners includes topics such as on-demand additive manufacturing, supply chain risk management, last mile logistics, intermodal transportation connectivity, and port utility security and resilience. This expertise is reflected in the creation of interdisciplinary centers such as the Crowley Center for Transportation and Logistics and a new institute we are considering that will be focused on infrastructure security and resilience, as well as cutting-edge infrastructure such as the Materials Science & Engineering Research Facility.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

   UNF has had few challenges in attracting top students to the programs that fall within the Supply Chain Innovation area of expertise. Instead, the primary issue is the need for more faculty to match the rapidly growing interest in the relevant degree programs. For example, Fall 2025 courses in BS Advanced Manufacturing courses were full and wait-listed weeks before the start of the semester. For these high-demand workforce-serving programs to grow, UNF needs to recruit additional faculty.

To address this issue, UNF is identifying resources needed to launch a faculty "cluster hiring" initiative that will allow us to strategically build out additional expertise. This initiative will allow UNF to recruit world-class talent across several disciplines, including engineering, computing, and transportation and logistics. More world-class faculty will further enable us to expand R&D collaborations with industry partners as well as grow enrollments in relevant degree programs to meet workforce demands in Northeast Florida and beyond.

3. How will your area of expertise collaborate with industry and business leaders?

   The colleges and departments that contribute to Supply Chain Innovation have advisory councils on which industry and business leaders serve. Examples include the Transportation & Logistics Advisory Council and the Engineering Advisory Board. These partners are critical for advising the university on industry trends and workforce needs while also providing internships, research opportunities, and other support.

   Additionally, most UNF faculty in relevant fields work closely with industry partners on R&D projects related to this area of expertise. For example, in addition to the transportation and logistics center referred to above that Crowley endowed at UNF, Johnson & Johnson's global 3-D Printing Center of Excellence focused on innovative additive advanced manufacturing is located at UNF. These relationships help to ensure that UNF faculty and students are engaged in relevant and impactful R&D work.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

   There are currently no specific plans for a center of distinction to support this area of expertise, although this possibility has been discussed internally.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
(2A) Enrollment in Supply Chain Innovation Degree Programs[1]	**200**	**Institutional Research maintains enrollment data by major**	**No**
(2B) Faculty Publications in High-Impact Journals	**65%**	**This metric is tracked for *US News & World Report* university rankings as a proportion of all publications.**	**While this is a component of the *US News & World Report* rankings, the data are not publicly available.**
(2C) Number of Industry-related Grants and Contracts	**50**	**This is tracked as part of the annual NSF Higher Education R&D Report.**	**This metric is the leading indicator tied to the SUS 30 Strategic Plan's Research Expenditures with Business & Industry metric.**
(2D) Ranking as Top Supply Chain/Logistics University	**Ranked**	***US News & World Report* lists the top ~25 programs at the graduate and undergrad levels**	**Yes, through the *US News & World Report* report.**

[1] For the purposes of this metric, the programs consist of the BS Advanced Manufacturing, MSCE Coastal & Port Engineering, BBA Transportation & Logistics, MS Logistics & Supply Chain Management, PhD Computing. In Fall 2024, enrollment in these programs totaled 151.

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
Graduate Research Assistantships in Supply Chain Innovation fields	**$100,000**	**2A**
Faculty Publishing Grants, which provide support for publishing articles in high-impact journals	**$50,000**	**2B**
Establish tentatively named Institute for Infrastructure Security & Resilience	**$150,000**	**2A, 2B, and 2C**

University Area of Expertise Proposal

University:	University of South Florida
University Contact Name	Prasant Mohapatra
University Contact Title:	Provost & Executive Vice President
University Contact Phone:	813-974-3320
University Contact Email:	pmohapatra@usf.edu
Area(s) of Expertise:	Molecular Medicine, Science and Biology
Date Approved by University President:	7/31/2025

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 1

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

Molecular Medicine, Science, and Biology
USF is building the future of medicine and technology by decoding and designing the molecules that will power next-generation drugs, diagnostics, and biomedical materials.

Imagine a world in which scientists can identify, design and/or produce the precise molecule needed to detect or cure a life-threatening disease, synthesize targeted therapeutic delivery systems to localize treatment at the disease site, fabricate life-changing medical implants, or engineer new biomaterials that can repair damaged tissues. This is the world being created at USF.

Bringing together leading experts in health sciences, molecular engineering, and life sciences, USF researchers form a pipeline that begins with the creation of new molecules and ends with life-saving cures and transformational technologies. USF's record of achievement in these areas - from its top-tier U.S. News medical school research rankings to its large and growing molecular research enterprise's funding and innovation – positions us as a national leader in this space. This work is accelerated by an

interdisciplinary culture, with molecular research spanning multiple colleges and disciplines as distinct as molecular and cellular biology, genetics, chemical and biomedical engineering, chemistry, pharmacology, epidemiology, nursing science, and clinical translational medicine.

With ongoing strategic investments, USF is becoming a global leader in molecular medicine, science, and biology in the coming decade. This success will transform – is already transforming – the state of Florida and American lives.

Discoveries that create new medicines, innovative diagnostics, and novel biological materials will be fueled by a next generation technology workforce. We envision a future where tomorrow's life-saving cures and transformational technologies are being conceived and built today. Our legacy will be written in healthier communities, disruptive technologies, and a new generation of scientists empowered to imagine—and realize—a better future for all.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

   USF's momentum in molecular medicine, science, and biology is already evident in its ability to attract top talent and high-achieving students. The caliber of incoming medical students ranks in the top 3% nationally, and the university's invitation to join the Association of American Universities (AAU) underscores its growing stature as a premier destination for research and innovation.

   USF has successfully recruited 40 new faculty members in these fields, with 30M in research awards over just the past two years. These accomplishments position USF as a rising leader at the intersection of biomedical science, translational research, and interdisciplinary collaboration.

   USF is now moving to grow this demonstrated success into a globally recognized nexus of molecular medicine, science, and biology. To this end, the university is launching a series of high-impact initiatives designed to accelerate discovery, attract top-tier talent, and build enduring infrastructure for interdisciplinary excellence.

   - **Strategic Faculty Recruitment and Retention**
     Recruiting and retaining top talent is central to USF's long-term strategy. The university will continue to engage in targeted cluster and interdisciplinary hires, strengthen retention through competitive compensation and career development, and leverage its AAU designation and rapidly growing research enterprise to attract globally recognized researchers, clinicians, and educators.

- **Elevated Student Recruitment and Support**
  To build a robust pipeline of future scientists and innovators, USF will expand honors programs, undergraduate research fellowships, and experiential learning opportunities. At the graduate level, the university is boosting support for fellowships and scholarships while launching new initiatives to attract diverse, high-caliber students from across the country and around the world.

Through these bold investments and strategic actions, USF is poised to become a global leader in molecular medicine, science, and biology—advancing knowledge, improving health outcomes, and transforming lives.

3. How will your area of expertise collaborate with industry and business leaders?

   Advancing molecular medicine, science, and biology from the lab to real-world applications requires robust partnerships with industry, healthcare systems, and other innovation stakeholders. The Tampa Bay region offers significant opportunities in this regard—it is home to a growing life sciences market valued at over $8 billion and employs more than 90,000 healthcare and bioscience professionals. USF's strategic location, deep institutional partnerships, and rapidly expanding research portfolio uniquely position the university as a driver of translational innovation and commercialization.

USF has strong, well-established partnerships with leading organizations—including Tampa General Hospital (TGH), Gilead, Abbott, Sanofi, and Moderna—and recently announced a new translational/private equity partnership to accelerate the path from discovery to market. USF researchers hold hundreds of active patents and are developing technologies with strong potential for licensing and commercialization. In just the past year, multiple biotech spin-off companies have launched from university-led research, such as *Antiferon* and *Dnak Therapeutics*, with more in the pipeline. These efforts are supported by a comprehensive innovation ecosystem that links academic excellence with real-world applications.

USF is also home to the **Health Institute for Translational Virology and Innovation**, a hub for cutting-edge basic and translational research in HIV, HTLV, HPV, Epstein-Barr, and emerging viral pathogens like dengue, Zika, and coronaviruses. The Institute collaborates directly with the TGH Cancer Institute and other clinical partners to accelerate discoveries in microbial oncogenesis, chronic inflammation, and immune dysfunction. With strong biotech and pharmaceutical partnerships, the Institute is already creating pathways to market through diagnostics, therapeutics, and digital surveillance tools. The Director of this institute is Dr. Robert C. Gallo, one of the most influential biomedical researchers of the 20th and 21st centuries, widely celebrated for his groundbreaking contributions to virology and global health. Best known as the co-discoverer of HIV as the cause of AIDS, Dr. Gallo's work has profoundly

shaped our understanding of infectious diseases and revolutionized public health worldwide.

Further elevating USF's global profile is its role as the **International Headquarters of the Global Virus Network (GVN)**, an elite international consortium of 80+ Centers of Excellence across 40+ countries. The GVN's presence at USF makes the university a *global epicenter* for virology innovation, with corporate and institutional collaborations that span public-private partnerships with entities such as BD (Becton Dickinson), CEPI, the CDC Foundation, and Florida's Department of Health.

Key initiatives underway include:

- **Commercialization and Licensing**: USF will continue to convert research breakthroughs into licensed technologies, launch additional biotech ventures, and attract investment through its growing IP portfolio.
- **Industry Integration**: USF and the GVN connect researchers with global industry leaders to co-develop diagnostics, therapeutics, and next-generation surveillance technologies.
- **AI-Driven Surveillance and Public Health Tools**: With TGH and GVN, USF is piloting an AI-enabled early-warning system that integrates wastewater monitoring, genomic sequencing, and weather data to track emerging viruses—positioning USF at the forefront of tech-enabled global health solutions.
- **Workforce Development and Global Training**: Through core GVN training programs, fellowships, and mentorship, USF is building the next generation of virologists and biotech innovators in partnership with global industry.

By leveraging its established strengths in research, location, and global connectivity, USF will continue to expand its role as a catalyst for innovation—driving economic growth, improving health outcomes, and building sustainable industry partnerships at the forefront of molecular medicine and virology.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

Yes, at the heart of this effort is USF's internal investment in **CREATE Grants**, which were designed to seed and incentivize the formation of high-impact, interdisciplinary research centers. These grants emerged from a university-wide internal competition—a true *marketplace of ideas*—where only the most promising and visionary proposals rose to the top. The awarded initiatives are already laying the foundation for new centers and programs that exemplify cross-college collaboration, translational outcomes, and external partnership potential:

- **Center for Antimicrobial Resistance (CAMRA)**
  CAMRA will be the first center of its kind in Florida, tackling one of the most urgent global health threats. By integrating microbiology, pharmacology, infectious disease research, and public health, CAMRA will drive innovation in diagnostics, therapeutics, and stewardship while fostering cross-campus collaboration and community impact.
- **Precision Medicine Program**
  This initiative establishes infrastructure for cutting-edge research and training in genomics, behavioral science, AI, and engineering. It supports personalized therapies and data-informed interventions, making USF a leader in this fast-evolving field of healthcare.
- **Protein-Inspired Synthetic Macromolecular Materials Program**
  By integrating protein chemistry, synthetic biology, and materials science, this program develops bio-inspired macromolecules with applications in medicine, drug delivery, and sustainable materials—merging biomedical innovation with environmental responsibility.

These CREATE-funded efforts not only spark new lines of research and external funding opportunities but also expand access to high-impact experiences for students and provide new professional development pathways for staff. Faculty across the USF System are directly engaged through joint appointments, shared instrumentation, research symposia, and interdisciplinary mentoring models.

Building on a Foundation of Institutional Strengths

This new CREATE programs will be integrally connected with several existing institutes that exemplify USF's excellence in molecular medicine and bioscience, including:

- The **Byrd Alzheimer's Institute**, advancing breakthroughs in neurodegenerative disease.
- The **Heart Institute**, focused on cardiovascular research and precision health.
- The **Center for Antimicrobial Research**, addressing drug resistance and infectious-disease threats through cutting-edge diagnostics and therapeutics.
- The **Health Institute for Translational Virology and Innovation**, bringing together world class virology to prevent, detect and mitigate future pandemics.

Together, these institutes and centers will form a connected ecosystem, enabling shared infrastructure, interdisciplinary training, joint grant development, and broader access to instrumentation, mentorship, and commercialization pathways.

Faculty across USF's three campuses will be able to engage through collaborative research programs, advisory boards, and pilot funding mechanisms. Students will benefit from expanded undergraduate and graduate research opportunities, international training programs, and industry-facing experiential learning. Staff will gain access to professional development and career pathways in scientific research, clinical trials, and innovation management.

USF centers will act as a **platform for excellence**, leveraging USF's talent, reputation, and partnerships to drive breakthrough discoveries, advance health outcomes, and elevate the university's national and global standing in molecular medicine and the biosciences.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Annual Research Awards in select fields	**Increase annually**	**Official internal institution sources; annual FY analysis**	
Commercialization metrics	**Demonstrated increases in select commercialization metrics**	**Various, depending on metric**	
Researcher recruitment in selected fields	**Hire researchers in select fields**	**USF HR/Provost office hiring records**	
Degrees awarded in related fields (undergraduate and graduate)	**Maintain or increase degrees awarded in select fields**	**Office of Decision Support / Official benchmark data**	**Select AAU public universities and select Florida Public SUS peers for select fields**
Medical Student profile	**Maintain profile**	**USF Health / official sources of reporting**	**Select AAU public universities and select Florida Public SUS peers**
Blue Ridge ranking	**Improve ranking**	**Blue Ridge ranking annual results**	**AAU public universities**

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
CREATE Awards	**Institutional funding**	**Boost research output and funding**

University Area of Expertise Proposal

University:	University of South Florida
University Contact Name	Prasant Mohapatra
University Contact Title:	Provost & Executive Vice President
University Contact Phone:	813-974-3320
University Contact Email:	pmohapatra@usf.edu
Area(s) of Expertise:	Applied Artificial Intelligence
Date Approved by University President:	7/31/2025

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 2

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

Applied Artificial Intelligence

USF applies Artificial Intelligence to redefine how we leverage the opportunities created by AI to enhance medical diagnostics, cure disease, innovate new technologies, unlock human creativity, and educate the next generation.

In an AI-powered world, intelligent systems fade into the background—quietly augmenting human judgment, creativity, and critical infrastructure. The societies that thrive will pair transparent, accountable AI with ethically-grounded policy and lifelong learning, so human decisions—not algorithms—set the direction.

USF's vision for Applied AI is bold, practical, and deeply integrated into the university's research enterprise, academic programs, and regional partnerships. What sets USF apart is its commitment to *real-world impact* through applied solutions. While many institutions focus on theoretical AI development, USF emphasizes the deployment of AI technologies in sectors where it can address urgent societal needs. These include healthcare delivery

and precision medicine, national defense, smart manufacturing, finance and decision sciences, education, environmental modeling, and public health.

USF's commitment to Applied AI is exemplified by the establishment of Florida's first college dedicated entirely to AI and cybersecurity (the Bellini College of Artificial Intelligence, Cybersecurity, and Computing) through a historic $40 million gift.

Housed in a region with one of the fastest-growing tech and defense sectors in the country, the Bellini College connects USF to a robust network of public and private partners in Tampa Bay, including MacDill Air Force Base, defense contractors, health systems, and major tech firms. This regional advantage uniquely positions USF to pilot AI-powered innovations in complex, high-stakes environments and scale them for broader application.

USF's Applied AI initiative is also intentionally interdisciplinary. It spans every college and campus, creating a distributed ecosystem of expertise in machine learning, robotics, ethics, data science, and domain-specific applications. Faculty in medicine, public health, pharmacy, nursing, engineering, education, information sciences, journalism, business, and the arts collaborate on cross-cutting research and innovation. Signature examples include:

- AI-powered diagnostics, therapeutic target identification, drug discovery and personalized healthcare; driven by USF Health and built upon our collaborative framework with Tampa General Hospital to enhance patient-centered clinical applications.
- Real-time cybersecurity tools and threat intelligence systems with regional defense and intelligence partners
- AI-assisted teaching and learning strategies to enhance student success in K–12 and higher education
- AI-driven geospatial mapping and modeling of marine environments, coastal ecosystems, and water resources
- AI – modeling and simulation integrated with the USF Security Analysis and Innovator Laboratory (SAIL), part of USF's National Security Human Dynamics initiative.

Through this approach, USF is building not only new knowledge, but also the workforce of the future. USF offers specialized undergraduate and graduate degrees in AI and data science, micro-credentials for in-demand skills, and interdisciplinary experiential learning opportunities aligned with Florida's workforce needs. In addition, professional education programs are integrating artificial intelligence training to equip physicians, pharmacists, nurses, and

other healthcare providers with the competencies required for future healthcare practice.

In short, USF's Applied Artificial Intelligence expertise represents a powerful convergence of academic excellence, regional assets, and national imperatives. It is designed to drive innovation that matters—fueling Florida's economy, securing the nation, and improving lives through ethical, practical, and scalable AI application.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

   USF is advancing a unified strategy to recruit and retain exceptional faculty and students driving innovation in applied artificial intelligence. Powered by its AAU designation, the Bellini College of Artificial Intelligence, Cybersecurity, and Computing, and its location in a growing tech and defense corridor, USF is building a cross-disciplinary community committed to solving real-world challenges.

   USF has over 200 faculty with active research expertise in AI applications across medicine, information sciences, biological and physical sciences, human dynamics, brain and decision sciences, cybersecurity, education, and business. These hires are supported by startup funding, internal grants, doctoral mentorship, and collaborative research opportunities.

   At the student level, USF is expanding enrollment through new AI-focused undergraduate, graduate, and professional pathways. Programs combine core technical training with ethical and domain-specific applications, attracting high-achieving students and working professionals alike. Competitive fellowships and proposals for federal training grants support advanced degree cohorts.

   Through its interdisciplinary structure, strategic partnerships, and focus on real-world impact, USF is positioning itself—and the state of Florida—as the preferred destination for the AI workforce needed to power future innovation and economic growth.

3. How will your area of expertise collaborate with industry and business leaders?

USF's vision for **Applied Artificial Intelligence** is built upon deep and growing collaboration with industry, healthcare, and government partners. Effective applied AI requires direct engagement with end-users and private sector stakeholders to ensure that AI technologies are not only innovative, but also relevant, deployable, and tailored to specific sector needs.

In the Tampa Bay region, USF is uniquely positioned at the crossroads of major sectors—healthcare, defense, finance, logistics, and cybersecurity—to co-develop and implement AI solutions addressing concrete, high-priority challenges within each field.

Established Industry Partnerships

USF excels at forging impactful academic-industry partnerships that bring applied AI into practice.

- **Tampa General Hospital (TGH):** USF and TGH collaborate on data-driven health innovation, including predictive modeling, AI diagnostics, and informatics.
- **Raymond James Financial:** USF partners with Raymond James to develop AI for financial analytics, fraud detection, and workforce training.
- **SOFWERX / U.S. Special Operations Command (USSOCOM):** SOFWERX provides a critical testbed for defense-focused AI technologies, with USF researchers contributing to projects in cybersecurity, autonomous systems, and tactical decision support.
- **Rapid7**: USF and Rapid7 have an established partnership in cybersecurity, AI, and ML that is now expanding into national security human dynamics.
- **Acertas**: USF has an established partnership with **Acertas, LLC** to develop and deploy next generation augmented decision intelligence in national security human dynamics. **Expanding Industry Engagement**

Building on this foundation, USF will expand its applied AI collaborations in the following ways:

- **Technology and Innovation Partnerships:** Deepening ties with regional and national tech companies to co-develop AI prototypes, pilot deployments, and joint IP ventures.
- **Healthcare and Academic Medical Integration:** Leveraging partnerships with TGH, Moffitt Cancer Center, and others to embed AI into clinical workflows, drug discovery, and personalized medicine.
- **Tampa Bay Technology Incubator (TBTI):** TBTI supports AI startups, faculty commercialization, and student innovation by offering shared space and resources for companies developing AI solutions.
- **Advisory and Governance Partnerships:** Engaging industry leaders as part of formal advisory boards to ensure alignment with workforce needs and industry standards.

Through these efforts, USF is creating a dynamic **innovation ecosystem** where AI research and commercialization thrive. The university's applied AI strategy not only strengthens its academic mission—it directly supports economic development, talent retention, and technological competitiveness for the State of Florida and beyond.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

   Rather than establishing a traditional center of distinction, USF has taken a bold, structural approach by launching the Bellini College of Artificial Intelligence, Cybersecurity, and Computing— as a **hub-and-spoke model**, the college serves as the central organizing unit that connects, supports, and amplifies a broad network of interdisciplinary centers, programs, and initiatives across the USF System.

   The Hub. As a **central hub**, Bellini College provides strategic leadership, infrastructure, and academic foundation for advancing applied AI. It houses core programs in computer science, cybersecurity, data science, and AI ethics, while also fostering interdisciplinary hiring, faculty collaboration, and research development.

   The Spokes. All other colleges serve as connecting spokes, connecting to the Bellini College and integrating existing university-wide research centers and domain-specific initiatives that apply AI in critical areas, including:

   - The **Bioinformatics Core,** led by Dr. Jeff Krischer, applies AI to biomedical and clinical research.
   - The **Center for Cryptographic Research,** linking mathematics, statistics, engineering, and computer science to secure AI systems and data infrastructure
   - The **Security Analysis and Innovation Lab (SAIL),** an AI-human dynamics research facility established through funding from the National Institute for Standards and Technology (NIST) and focused on human dynamics analysis.
   - Emerging research clusters in digital health, digital media, autonomous systems, education technologies, and more

   Through this model, Bellini College acts as a force multiplier—not just hosting applied AI activity but coordinating and elevating it university-wide. It provides system-level support to:

   - Faculty through shared computing resources, grant development, pilot funding, and research workshops

- Students through interdisciplinary curricula, AI-focused experiential learning, and a new Student AI Research Symposium
- Staff and partners through integrated training, workforce development, and public-private research collaborations

With this bold organizational model, USF stands poised to propel the frontiers of applied AI, forging powerful alliances across disciplines, industries, and communities. The Bellini College's hub-and-spoke approach not only accelerates discovery and talent development but also cements USF's role as an indispensable driver of innovation and economic growth—advancing a future where artificial intelligence, expertise, and opportunity thrive together at every level of the university and beyond.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Annual Research Awards in select fields	**Increase annually**	**Official internal institution sources; annual FY analysis**	
Commercialization metrics	**Demonstrated increases in select commercialization metrics**	**Various, depending on metric**	
Researcher recruitment in selected fields	**Hire researchers in select fields**	**USF HR/Provost office hiring records**	
Degrees awarded in related fields (undergraduate and graduate)	**Maintain or increase degrees awarded in select fields**	**Office of Decision Support / Official benchmark data**	**Select AAU public universities and select Florida Public SUS peers for select fields**

5. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
Strategic Faculty Recruitment and Retention	**Institutional funding**	**Boost research output and funding** **Talent metrics**
Elevated Student Recruitment and Experience	**Institutional funding**	**Attract top students** **Contributes to workforce development**

University Area of Expertise Proposal

University:	University of South Florida
University Contact Name	Prasant Mohapatra
University Contact Title:	Provost & Executive Vice President
University Contact Phone:	813-974-3320
University Contact Email:	pmohapatra@usf.edu
Area(s) of Expertise:	Human and Infrastructure Security
Date Approved by University President:	7/31/2025

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 3

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

Human and Infrastructure Security

USF revolutionizes the safety of our nation and people by driving innovation at the intersection of health, technology, economics, defense, human behavior, and the natural environment. Through this multidisciplinary approach, we deliver real-world solutions that safeguard every dimension of life.

In the coming century, how will we ensure American safety amid global competition, secure food for a growing population, lead in protective technologies, adapt urban areas with smart systems, and defend cities from extreme weather—all while addressing these converging challenges?

Imagine a future where Florida's coastal cities withstand the strongest storms, autonomous systems move people safely, and every community has access to clean water, secure food, and trusted infrastructure. Where hospitals are protected from cyber threats, supply chains are resilient, and families live free

from fear—because digital, physical, economic, and environmental systems work in harmony.

At the University of South Florida, this vision drives our work. We revolutionize safety by integrating human and infrastructure security—bringing together engineers, policy experts, health scientists, and social researchers to confront the challenges of tomorrow. From AI-driven defense to public health preparedness, USF is building the systems, talent, and knowledge to protect not just what we've built—but the people we build it for.

Grounded in Tampa Bay's role as a strategic hub for defense and innovation, USF's approach bridges operational readiness and human well-being. The university partners with federal agencies, military commands, industry leaders, and nonprofit organizations to translate research into action. This integration of health systems, health innovation research, applied engineering, social science, data analytics, and policy research enable USF to anticipate challenges, develop solutions, and prepare future leaders.

USF's security ecosystem spans colleges, institutes, and regional assets, and includes key pillars such as:

- The Institute of Applied Engineering (IAE): Delivers mission-ready solutions for defense, intelligence, and homeland security agencies.
- The Bellini College of Artificial Intelligence, Cybersecurity, and Computing: Drives interdisciplinary education and research in AI, cyber defense, and advanced computing.
- Cyber Florida: Serves as the state's leading entity for cybersecurity research, workforce development, and public-private partnerships.
- The Global and National Security Institute (GNSI): Anchors USF's global affairs, strategic policy, and professional education programs.
- SAIL (Security Analysis and Innovation Lab): Accelerates applied innovation in data science, threat analysis, and decision support.
- The National Security Human Dynamics Initiative: Leverages strengths in AI and predictive analysis to support security policy, operational planning, and strategic inventions.
- SAIL (Security Analysis and Innovation Lab): USF's operational hub for interdisciplinary security innovation—delivering human dynamics analysis, informing strategic decisions, and preparing future security leaders.
- Center for Global Health and Inter-Disciplinary Research: conducts translational research to combat vector-borne and infectious diseases and, with over $42 million in funding, leads global collaborations to deliver impactful public health solutions.

Expanding beyond conventional security paradigms, USF embraces a Human and Infrastructure Security framework. This model reflects a growing recognition that protecting critical systems—whether digital networks, coastal infrastructure, or food and water supplies—requires addressing the interrelated human factors that underlie security threats.

USF's applied research portfolio aligns with key dimensions of this multi-faceted approach, including:

- Cyber and Digital Security: Protecting digital infrastructure, communications, and AI systems across public and private sectors.
- Environmental and Coastal Security: Monitoring ecosystems, mitigating climate impacts, and supporting long-term viability of coastal regions.
- Economic and Workforce Security: Advancing economic modeling, workforce development, and supply chain stability.
- Health and Medical Security: Strengthening public health systems and medical preparedness to ensure the well-being of children and families in thriving communities.
- Community and Political Security: Promoting social cohesion, emergency preparedness, civic responsibility, education, and global diplomacy.

With robust cross-campus initiatives in engineering, social sciences, public health, and marine science, USF prepares the next generation of professionals through hands-on learning, mission-oriented research, and civic leadership.

Together, these efforts form a comprehensive ecosystem—one that integrates human and infrastructure security to advance strategic innovation, national readiness, and public good.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

USF now seeks to establish itself as a national and global nexus for security innovation, integrating human and infrastructure security to address the world's most pressing challenges. To realize this vision, the university is launching a suite of high-impact initiatives aimed at accelerating discovery, attracting world-class faculty and students, and building enduring interdisciplinary networks in national security.

Strategic Faculty Recruitment and Retention

Recruiting and sustaining top-tier talent is at the heart of USF's strategy. The university will continue to pursue targeted cluster and interdisciplinary hires in key disciplines, expand practitioner faculty recruitment, and leverage its AAU status and proximity to major defense and security operations. By providing

competitive compensation, internal research grants, and robust career development programs, USF will attract and retain leading academic and practitioner faculty in cybersecurity, global security policy, intelligence, military health, and related fields.

- Engagement in collaborative research across the Global and National Security Institute (GNSI), Cyber Florida, and the Institute of Applied Engineering
- Access to advanced research infrastructure and classified facilities
- Opportunities for faculty to lead major projects with defense and intelligence agencies

Elevated Student Recruitment and Support

To cultivate the next generation of security professionals, USF will broaden its approach to student recruitment and support across undergraduate, graduate, and postdoctoral levels. The university will expand honors programs, competitive fellowships, and experiential learning with leading defense, intelligence, and public health partners. Initiatives will target high-achieving traditional students, military-affiliated learners, and professionals seeking advanced credentials in security fields.

- Enhanced visibility and access to interdisciplinary degree and certificate programs tied to national security careers
- Experiential learning through internships at CENTCOM/SOCOM, capstone projects with security partners, and immersive human security programs
- Expanded research mentorship, sponsored project participation, and job placement pipelines supported by strong employer and alumni networks

Through these bold investments and strategic actions, USF is positioned to become a global leader in human and infrastructure security—and anticipate emerging risks, advance innovation, and protect communities at every level.

3. How will your area of expertise collaborate with industry and business leaders?

Advancing Human Security and Infrastructure Security

USF's approach to national security goes beyond traditional military and defense frameworks to embrace **Human Security and Strategic Integration**—recognizing that lasting global security depends on addressing underlying social, economic, educational, environmental, and political vulnerabilities.

USF collaborates with industry, nonprofit, and government partners to co-develop solutions across key domains of human security, aligned with major **HERD funding categories**:

- **Food & Water Security**
  AI-driven modeling and infrastructure innovations from **Engineering**, **Life Sciences**, and the **College of Marine Science (CMS)** help monitor, secure, and distribute resources.
- **Economic Security**
  Research from the **Muma College of Business**, **Mathematics and Statistics**, and **Social Sciences** supports workforce development, financial resilience, and economic intelligence.
- **Health Security**
  Interdisciplinary teams from **Life Sciences** and **Education** partner with healthcare systems to improve pandemic preparedness, public health infrastructure, and trauma response.
- **Environmental Security**
  CMS, **Engineering**, and the **Physical Sciences** contribute to sustainable practices and resilience planning, with strong ties to coastal industries and climate-sensitive sectors.
- **Personal & Community Security**
  Projects in **Social Sciences**, **Engineering**, and **Education** focus on violence prevention, community resilience, and public safety.
- **Political Security**
  With nationally ranked programs in **Political Science and International Studies**, USF supports research and policy advising on democratic resilience, conflict mitigation, and governance.

By working at the intersection of these domains, USF is helping to **strengthen institutions, protect human rights, foster social cohesion, and promote environmental stewardship**—all of which are essential to national and global security.

National and global security challenges are multifaceted and demand a whole-of-society approach. At the University of South Florida (USF), collaboration with **industry, government, and community partners** is central to advancing applied research, technology innovation, and workforce development across the national security spectrum. From defense systems to human security, USF is strategically positioned to lead.

Leveraging Tampa Bay's National Security Ecosystem

USF's location within the **Tampa Bay region—home to CENTCOM and SOCOM at MacDill Air Force Base—offers unmatched proximity to**

military and intelligence operations, defense contractors, cybersecurity firms, and global logistics hubs. This setting allows USF to work closely with partners across the region to co-develop technologies, inform policy, and prepare tomorrow's security workforce.

Strategic Industry and Government Collaborations

USF maintains robust partnerships:

- **Defense contractors and innovation platforms**, including **SOFWERX**, **L3Harris**, **CAE USA**, **Rapid7, Accertas,** and **Ardent Eagle Solutions**, accelerate research in threat detection, autonomous systems, cyber-physical security, and tactical resilience.
- **Cybersecurity and tech firms**, through joint ventures with the **Bellini College**, **Cyber Florida**, the **College of Arts and Sciences,** and the **Institute of Applied Engineering**, create regionally aligned AI and cyber innovation pipelines.
- **Military medical research collaborators**, including **Tampa General Hospital**, **James A. Haley Veterans' Hospital**, and DoD medical commands, coordinate via the **Office of Military Medical Innovation and Research (OMMIR)**.
- **Tampa Bay Technology Incubator (TBTI)**, will serve as a launchpad for **defense-tech and dual-use startups**, translating research into practical tools for security, healthcare, logistics, and more.
- **Policy and strategy-focused institutions**, with support from the **Global and National Security Institute (GNSI)**, work alongside think tanks, military strategists, and state agencies to inform evidence-based global security policy.

USF will also continue to engage industry through **formal advisory councils** and **informal working groups**, ensuring its programs remain responsive to mission-critical and market-driven needs.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

   Rather than establishing a new standalone center, USF is taking a more strategic and scalable approach by formally connecting and coordinating its existing, high-impact centers and institutes into Highly Integrative Basic and Responsive (HIBAR) research networks to create synergies and accelerate the time it takes for research to make it to real world applications. This collaborative model leverages USF's robust infrastructure and leadership in

defense research, military health innovation, cybersecurity, and policy—now expanded to address the full spectrum of human and infrastructure security.

A Systemwide and National Model for Security Innovation

This **National Security Research and Education Collective** will connect and coordinate the efforts of multiple leading USF centers and labs, including:

- **Global and National Security Institute (GNSI):** A cross-cutting entity integrating applied research, global policy, and national defense education.
- **SAIL (Security Analysis and Innovation Lab):** Focused on cyber-physical systems, threat detection, and applied defense technologies.
- **Office of Military Medical Innovation and Research (OMMIR):** Advancing battlefield medicine, resilience, and trauma research in collaboration with military partners.
- **National Security Human Dynamics Core Facility:** Supporting sensitive and classified research on human performance, operational readiness, and behavioral analysis.
- **Cyber Florida and the Institute of Applied Engineering (IAE):** Close collaborators in securing digital infrastructure and providing real-world engineering solutions to defense challenges.
- **Center for Global Health and Inter-Disciplinary Research**: Focused on research to combat vector-borne and infectious diseases that result in regional, national and/or global health threats and develop strategies for public health security.

By linking these powerful units under a shared vision and governance structure, USF will strengthen its role as the **central coordinating node for national security research and education in Florida**, offering shared infrastructure, interdisciplinary pathways, and enhanced systemwide engagement.

Serving the State and Beyond

By organizing its existing strengths under one cohesive structure, USF will not only enhance internal coordination but also strengthen Florida's leadership in national security innovation. The collective will act as a gateway to federal partnerships, a catalyst for defense-tech commercialization, and a platform for workforce development aligned with regional and national needs.

Through this collective, USF reinforces its position as a national model for integrated human and infrastructure security—where defense technology, social resilience, and cross-sector collaboration come together to protect

people, advance knowledge, and prepare the next generation of security professionals.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Annual Research Awards in select fields	**Increase annually**	**Official internal institution sources; annual FY analysis**	
Commercialization metrics	**Demonstrated increases in select commercialization metrics**	**Various, depending on metric**	
Researcher recruitment in selected fields	**Hire researchers in select fields**	**USF HR/Provost office hiring records**	
Degrees awarded in related fields (undergraduate and graduate)	**Maintain or increase degrees awarded in select fields**	**Office of Decision Support / Official benchmark data**	**Select AAU public universities and select Florida Public SUS peers for select fields**

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
Institute of Applied Engineering (IAE)	**Institutional funding**	**Boost research output and funding** **Faculty Retention and Success**
Bellini College of Artificial Intelligence, Cybersecurity, and Computing	**Institutional funding**	**Attract top students** **Contributes to workforce development** **Faculty Retention and Success** **Boost research output and funding**
Cyber Florida	**Institutional funding**	**Boost research output and funding**
Global and National Security Institute (GNSI)	**Institutional funding**	**Faculty Retention and Success**
SAIL (Security Analysis and Innovation Lab)	**Institutional funding**	**Boost research output and funding**

University Area of Expertise Proposal

University:	
University Contact Name	Jaromy Kuhl
University Contact Title:	Provost
University Contact Phone:	850.473.7702
University Contact Email:	jkuhl@uwf.edu
Area(s) of Expertise:	Public Archaeology and Community Heritage
Date Approved by University President:	08/08/2025

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 3: Public Archaeology and Community Heritage

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

The University of West Florida's Integrated Program in Public Archaeology and Community Heritage establishes an interdisciplinary nexus combining archaeology, history, museum studies, cultural resource management, and emerging technologies. Built on UWF's longstanding Gulf Coast heritage leadership, the program serves as a national model for applied heritage scholarship through five core pillars: applied learning and workforce development, technology integration, military and veteran engagement, public impact, and cultural-natural heritage integration.

UWF's expertise is exemplified by the identification and excavation of the internationally significant 1559 Luna Settlement and associated shipwrecks in Pensacola. The **Archaeology Institute** anchors this legacy through field and lab-based research, while the **Departments of Anthropology and History & Philosophy** provide comprehensive academic support emphasizing applied learning and community engagement.

Technology integration represents a defining strength, utilizing state-of-the-art equipment including GIS, LiDAR, ground penetrating radar, 3D modeling, and UAVs for heritage site documentation. Future collaborations with the **Institute for Human and**

Machine Cognition (IHMC), UWF's **Intelligent Systems and Robotics (ISR)**, and UWF's **Computational Intelligence Big Data Analytics** will expand machine learning applications in predictive modeling and site monitoring.

The program leverages UWF's Military Friendly designation through partnerships with local military installations and the **DOD Defense POW/MIA Accounting Agency**, offering veterans training pathways and meaningful archaeological recovery projects. Public outreach occurs through the **Florida Public Archaeology Network**, headquartered at UWF, and the **Historic Trust's** management of **Historic Pensacola Village**.

Environmental integration connects cultural heritage with natural resource expertise through collaborations with **Earth and Environmental Sciences**, the **Center for Environmental Diagnostics and Bioremediation**, and **Biology departments**. This comprehensive approach advances UWF's research, teaching, and service mission while establishing regional and national leadership in applied humanities education.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

The UWF Integrated Program in Public Archaeology and Community Heritage will attract outstanding faculty and students by leveraging the university's strong reputation for applied, community-focused heritage research and its robust network of field schools, museums, and outreach initiatives.

To recruit top-performing students, the program will offer a suite of stackable certifications and micro-credentials that provide flexible, career-relevant training aligned with industry and workforce needs. These include areas such as:

- Remote Sensing in Archaeology
- Heritage Tourism and Interpretation
- Museum Curation
- Public History
- Historic Preservation
- Cultural Resource Management (CRM)
- Geographic Information Systems (GIS)
- Heritage Technology and Innovation
- Underwater Robotics (in collaboration with IHMC and ISR)

Students will gain hands-on experience through the UWF **Archaeology Institute**, museum-based learning with the UWF **Historic Trust**, paid assistantships through academic departments, community-forward collaborations with the **Florida Public**

Archaeology Network, and interdisciplinary research opportunities that integrate humanities training with cutting-edge technologies like UAV mapping and 3D modeling.

Faculty recruitment will focus on experts whose research aligns with the program's interdisciplinary pillars. Priority hires include a public historian who may also serve as Chief Curator for the UWF Historic Trust, and an archaeologist specializing in machine learning and predictive spatial analysis. These positions will strengthen academic offerings, support partnerships with organizations like the **Institute for Human and Machine Cognition**, and expand the university's capacity in digital and maritime heritage research.

As the program grows, additional faculty and research support staff in complementary areas like museum studies, environmental history, and digital storytelling may be sought, supported by the university's research infrastructure and collaborative culture. Together, these efforts will position UWF as a destination for scholars and students committed to impactful, applied heritage work.

3. How will your area of expertise collaborate with industry and business leaders?

The Integrated Program in Public Archaeology and Community Heritage will advance UWF's strong relationship with industry and business leaders across Northwest Florida by aligning heritage research, workforce training, and public programming with regional priorities in tourism, preservation, resource management, and military-community engagement.

To support the creation of cultural tourism, the program will collaborate with organizations like **Visit Pensacola**, the **Port of Pensacola**, and regional chambers of commerce to support authentic heritage tourism and economic development (many of these are preexisting relationships). These efforts will be complemented by public programming hosted in partnership with local businesses, including speaker series, heritage celebrations, and culinary events, to engage restaurateurs, cultural experts, and local entrepreneurs in sharing the region's history and heritage traditions.

UWF can also strengthen its ties with private-sector firms in cultural resource management (CRM) firms, engineering firms, and planning, including **Recon Offshore** (alumni owned), **AECOM Engineering**, **Search Inc**, **Ardurra**, and **UES Engineering**. These industries increasingly seek graduates skilled in GIS, remote sensing, and public interpretation of heritage resources – areas supported through the program's targeted certifications and field-based training. Partnerships will provide students with internships and job placement opportunities, helping meet the region's growing demand for

archaeological and heritage professionals. (Many of these firms regularly hire our students.)

Proximity to key military installations, including **Naval Air Station Pensacola** and **Eglin Air Force Base**, offers further opportunity to collaborate with the Department of Defense and defense contractors on heritage stewardship and compliance efforts. Through coordination with UWF's **Military and Veterans Resource Center**, the program will support veterans and transitioning service members interested in heritage careers.

Finally, partnerships with environmental consulting firms, ecotourism operators, public land managers will foster integrated projects that connect cultural and natural heritage, especially as the Pensacola and Perdido Bays' recent designation as an "Estuary of National Significance" is expected to drive new investment in resource-focused scholarship and regional planning.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

As is, this program integrates UWF Academic Affairs with three pre-existing centers: **The Archeology Institute**, T**he Florida Public Archeology Institute**, and the **Pensacola Historic Trust**. Expansion and centralization of this program will allow curricular integration across departments and external entities as well as expanded partnerships across the SUS system, such as FPAN affiliates and the **Samuel Proctor Oral History Program** at the University of Florida. This would allow cross training of students, faculty, and staff from other Universities; expanded grant opportunities/partnerships, and potential sharing of information/resources.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Community and Economic Engagement	1st year: Veterans Curation Prog. est. at UWF through public/private partnership	Can track veteran participation and project expenses	Compare activities and costs to VCP operated in Augusta, GA by New South Assoc., Inc.
Student Centered and Focused	Steady increase in student participation in certificates and microcredentials	1st year: track number of Anthro and History majors engaged in certificates and microcredentials; reasonable increases expected across years 2-4.	
Infrastructure	Proposal to develop on-campus MRC and curation hub	Successful petition for funding of new research and curation complex	Unique facility will create classroom and lab spaces for students, bring Marine Research Center onto campus, and potentially generate income from curation services
Exceptional Academic Programming and Scholarship Aligned with State Needs	CRM professionals enrolled in certificates, workshops; UWF students engaged in internships at local CRM firms	1st year: track number of students in internships and professional participants; reasonable increases expected across years 2-4.	

Exceptional Academic Programming and Scholarship Aligned with State Needs	Interdisciplinary Museum studies and exhibition design between Historic Trust Museums and the Depts of Art, History, Anthropology, FPAN, Archeology Institute	Growth of certificates and majors in these and a new stand alone interdisciplinary major; student job placement; improved public outreach and foot-traffic in historic trust spaces	Whereas this interdisciplinary program is unique in the state, there are specific comparisons to parts of it with other SUS University-owned museums.

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
HIP Workshop Support	$250k annually	Student Centered and Focused; Exceptional Academic Programming and Scholarship Aligned with State Needs
Veterans Curation Program collaboration	$150K ($60-70k + benefits for archive specialist; 60k startup)	Community and Economic Engagement
Recruit Public Historian	$60-70k + benefits	Employee Success
If funding is identified, recruit Curator shared	$70k-80k + benefits	Employee Success

between Historic Trust and Art		
If funding is identified, recruit Maritime Archaeologist in tech/data analysis (potential partnership with IHMC and SRC)	$60–70k + benefits	Employee Success

University Area of Expertise Proposal

University:	
University Contact Name	Jaromy Kuhl
University Contact Title:	Provost
University Contact Phone:	850.473.7702
University Contact Email:	jkuhl@uwf.edu
Area(s) of Expertise:	Computational Intelligence
Date Approved by University President:	08/08/2025

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 2: Computational Intelligence

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

Computational Intelligence is one of UWF's designated areas of expertise, integrating multiple departments, academic programs, and research centers. Through this focus, UWF is positioning itself as a leader in building the next-generation workforce, establishing research centers of excellence, and driving innovation in key areas such as:

- Predictive and Cognitive Analytics
- Big Data Analytics
- Artificial Intelligence**,** Machine Learning, and Deep Learning
- Robotics
- Automation
- Advanced Computing
- Population Health Analytics and Modeling

These goals are being achieved through cutting-edge computational research, the commercialization of applied analytics solutions, and robust collaborations with industry and research partners. UWF has made significant investments to build a strong foundation in Computational Intelligence. Key assets include:

Hal Marcus College of Science and Engineering - Home to several high-demand programs that serve as the academic backbone for UWF's computational initiatives, including master's degrees in Data Science, Computer Science, Information Technology, Cybersecurity, Geographical Information Sciences, and Engineering.

Predictive Analytics and Modeling Lab (PAM Lab) - Established in 2019, the PAM Lab develops intuitive, data-driven tools that support decision-making and predictive analytics across sectors. Currently focused on education, the lab transforms university data into user-friendly dashboards that improve enrollment management, retention, graduation outcomes, and student success.

Center for Computational Intelligence (CCI) - Designed to foster collaboration among faculty conducting basic, applied, or interdisciplinary computational research. CCI focuses on developing and applying computational models to solve complex problems, with an emphasis on commercialization opportunities in partnership with the PAM Lab. UWF aims to grow CCI into a world-class research center of excellence, attracting significant external funding and boosting the regional economy.

Institute for Analytics and Industry Advancement $(IA)^2$ - Offers specialized Computational Workforce Development Programs, including certificates in Data Science**,** Advanced Data Science**,** Artificial Intelligence**,** Cyber Technologies, and Engineering Professional fields.

Intelligent Systems and Robotics Ph.D. Program - A research-intensive doctoral program in collaboration with the Florida Institute for Human & Machine Cognition (IHMC), it supports UWF's computational innovation goals and cultivates advanced talent. The program's unique structure fosters early, immersive research engagement, equipping graduates to drive innovation in high-demand computational fields such as artificial intelligence, machine learning, robotics, and human–machine collaboration.

Wright Family Institute for Global and Population Health (WFIGPH) - The Wright Family Institute leverages computational methodologies to address complex health challenges through advanced data analytics, predictive modeling, and machine learning applications. The institute develops evidence-based interventions and policy recommendations by applying big data analytics to large health datasets, including electronic health records and social determinants of health information. The institute's computational approach to population health research includes disease surveillance modeling, health outcome prediction algorithms, and geospatial analysis.

Together, these components underscore UWF's commitment to advancing computational science, preparing a skilled workforce, and shaping real-world applications through data-driven innovation. By establishing both CCI and WFIGPH as

Centers of Excellence, these institutes will complement each other, offering a multidisciplinary approach to understanding and addressing human health and environmental issues through computational analytics and public health research.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

Computational Intelligence at the University of West Florida is well-positioned to attract world-class faculty and top-performing students by leveraging the university's strengths in advanced research and innovative education. Key differentiators include:

- A strong and growing reputation in computational research
- Robust partnerships with leading research organizations, including the Florida Institute for Human and Machine Cognition
- Stackable certifications that lead to master's degrees in high-demand fields such as Data Science
- A one-of-a-kind Ph.D. program in Intelligent Systems and Robotics, offering a unique interdisciplinary research experience

To support this growth**,** UWF is constructing a state-of-the-art ~50,000 sq ft facility dedicated to Computational Intelligence, Cybersecurity, and Engineering. This new space will be designed to maximize research productivity, providing collaborative workspaces, advanced computing infrastructure, and dedicated labs. Plans also include specialized lab spaces for computational biology and computational chemistry, expanding UWF's research capabilities across emerging disciplines.

UWF is also enhancing its research environment and capacity by:

- Investing in dedicated resources to support faculty in developing competitive grant proposals and securing external research funding.
- Increasing the number of postdoctoral research positions and Ph.D. students through grants and contracts.
- Creating an environment where research scientists can focus exclusively on funded research.
- Laying the groundwork for new Ph.D. programs in high-demand computational fields such as Health and Human Performance Analytics.
- Expanding efforts to streamline commercialization, accelerating the pathway from research to real-world impact.

Through these investments, UWF is building a vibrant environment that not only advances computational science but also attracts elite talent to the region.

Evidence for this is the recent hiring of twelve new faculty in computational disciplines(start date August 8, 2025). These successful hires were made possible through competitive salaries, robust startup packages, course releases, good computational infrastructure, and collaborative opportunities. These hires demonstrate UWF's growing reputation as a destination for high-caliber academic talent.

The presence of the ISR Ph.D. program empowers faculty to attract top-tier students and develop robust research groups aligned with their areas of expertise. This concentrated talent and research capacity significantly strengthen UWF's competitiveness, making it highly appealing to funding agencies seeking impactful, high-quality research in computational intelligence.

On the student front, UWF continues to see record-breaking application numbers at both the undergraduate and graduate levels. Enrollment in data science degree and certificate programs is among the fastest growing on campus. This growth is fueled by targeted recruitment initiatives. In addition to university-wide efforts led by Enrollment Affairs, UWF supports specialized outreach and programming aimed at attracting and retaining top-performing students in computational fields. The ISR program has experienced tremendous growth, with applications continuing to increase. It is attracting talented students from around the world, elevating the program's profile and strengthening its academic excellence.

3. How will your area of expertise collaborate with industry and business leaders?

UWF Computational Intelligence offers a collaborative approach to creating a regional computational research cluster by leveraging the diverse assets of Northwest Florida's industry, defense, healthcare, and research sectors. UWF currently collaborates with IHMC, Leidos, healthcare systems, Navy Federal Credit Union, Air Force Research Labs, etc. The Wright Family Institute exemplifies healthcare collaboration by partnering with local health systems such as Baptist and Ascension, public health departments, IHMC, and healthcare technology companies to develop computational solutions for population health management, disease prevention, and health optimization initiatives.

Industry and government partnerships create opportunities for real-world testing of predictive models and analytics tools in clinical and community settings. UWF is uniquely positioned to provide the personnel, technology, and expertise needed to expand computational infrastructure, drive cutting-edge research, and accelerate the commercialization of analytics technologies, including predictive and prescriptive solutions.

Northwest Florida, particularly Okaloosa, Santa Rosa, and Escambia Counties, is ideally suited to integrate existing military, Department of Defense, and federal assets to

diversify and transform the region's economy. This presents a major opportunity for UWF to attract new federal investment, while building a vibrant, innovation-driven ecosystem. Several other key sectors that will benefit from and collaborate on these projects are healthcare, energy, and environmental.

Although computational research is already represented by UWF and IHMC, there is currently no unified regional hub focused on the development and commercialization of computational technologies. UWF's PAM Lab and CCI are stepping in to fill this gap, laying the foundation for a true computational innovation cluster capable of producing startups, spinoffs, and breakthrough technologies in analytics and beyond.

UWF is deeply invested in the success of this initiative. The key assets of Computational Intelligence will strengthen and expand collaborations between UWF, its research partners, and industry leaders—amplifying the region's capacity to develop, apply, and commercialize advanced computational tools.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

We would like to create a center of distinction to support Computational Intelligence. With additional funding, we can provide institutions within the Florida State University System access to student success platforms, which could include predictive models tailored to each university, with the goal of enhancing performance-based metric scores across the system.

Furthermore, Computational Intelligence is an area where UWF can stand out for superior performance, alignment with statewide priorities, and leadership in its field. Computational Intelligence represents a potential state-wide hub for research and economic development, world-class talent cultivation, and specialized programs aligned with the high skill comptational workforce needs of Florida.

1. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons ? If so, please describe.
Increase external funding expenditures	Increase computational external funding expenditures, including research grants and contracts, by 30% within the next 5 years	University research expenditures data; University annual reports	
Increase research products	Increase number of computational-related publications, presentations, and grant proposals by 30% within the next 5 years	University research data; faculty scholarly research index University annual reports	
Increase multidisciplinary cybersecurity faculty	Successfully recruit 16 new faculty with strong teaching and research expertise in multidisciplinary computational areas	University HR data; University annual reports	
Increase UWF's cybersecurity regional and state economic impact	Increase computational (1) job placement; (2) sector growth; (3) technology transfer and commercialization; (4) industry, academic and government collaborations	Economic and placement data; Economic and business reports	
Increase number of computational degrees and certificates awarded	(1) Increase enrollment in data science degree and certificate programs (Fall 2026) (2) Increase enrollment in AI in the Workplace certificate program	University enrollment and graduation data; University annual reports	

	(3) Offer new graduate AI certificate (Fall 2026)		

2. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
New research building - approx. 50,000 sqft	Florida legislature already allocated ~$22M for the building; UWF submitted a Triumph proposal for an additional ~$32M; the Triumph grant requires a 3:1 match making the total funding over 10 years about $130M	– Improve research infrastructure – Increase number of research faculty in computational-related fields – Increase external funding expenditures in computational-related fields – Enhance collaboration opportunities among computational-related areas of research
Proposed Triumph Gulf Coast Project	UWF submitted a Triumph proposal for approx. $32M that will significantly expand UWF's computational capabilities, facilities, and infrastructure	Enable transformational impact across Northwest Florida and the State – Strengthen the region's economic and workforce development – Research: Advance computational-related fields and solve real-world problems through basic and applied research – Education: Develop transformative multidisciplinary

		computational education and training programs – Partnerships: Foster mutually beneficial industry, government, and academic partnerships that advance regional and national economic and workforce development
HMCSE graduate student support	HMCSE budgeted more than $750K for graduate teaching and research assistantships during the 2025-26 academic year	– Offer additional educational pathways in computational-related fields such as Computational Biology and Chemistry – Continue competitive graduate assistant support for PhD students in Intelligent Systems and Robotics

University Area of Expertise Proposal

University:	
University Contact Name	Jaromy Kuhl
University Contact Title:	Provost
University Contact Phone:	850.473.7702
University Contact Email:	jkuhl@uwf.edu
Area(s) of Expertise:	Cybersecurity
Date Approved by University President:	08/08/2025

Instructions:

Complete each section in its entirety for each area of expertise identified. Each university may select up to three areas of expertise. Copy and paste additional areas of expertise sections as needed.

Area of Expertise 1: Cybersecurity

1. What is your university's selected area of expertise? Please provide a detailed narrative of the identified area of expertise.

The University of West Florida (UWF) is a nationally recognized leader in cybersecurity education, workforce development, and research. Home to the first stand-alone Department of Cybersecurity in the SUS, UWF offers high-quality academic programs, including the NCAE-designated and ABET-accredited B.S. in Cybersecurity, an M.S. in Cybersecurity, and numerous interdisciplinary certificates and programs across multiple colleges. Enrollment in these programs continues to grow significantly, reflecting UWF's commitment to preparing the next generation of cyber professionals. UWF cybersecurity graduates have a strong job placement track record and often receive multiple job offers prior to graduation. UWF will be one of the first ten universities across the country to offer an NCAE-designated AI in Cybersecurity undergraduate specialization and will also launch several new undergraduate and graduate AI in Cybersecurity certificates.

The UWF Center for Cybersecurity has earned national awards and recognition for its innovative workforce development, industry certification training, and outreach efforts. Over the past nine years, the Center has secured more than $33 million in external grants to advance cybersecurity education, workforce

initiatives, and research. The Center leads the National Cybersecurity Workforce Development Program, CyberSkills2Work.org, which has prepared over 3,500 transitioning military personnel, veterans, and first responders for 17 industry certifications and 30 cybersecurity work roles via a coalition of 10+ CAE-designated institutions nationwide, including FIU and USF-CF. Funded by the NSA and CISA, the program has been recognized by the White House Office of the National Cyber Director as an exemplar for public-private partnerships and training veterans. The Center also offers the UWF Florida Cybersecurity Training Program, which has prepared 3650+ Florida state and local government personnel at 84% of state agencies and 81% of counties for evolving cybersecurity work roles over two years.

In 2024, UWF earned the prestigious CompTIA Cybersecurity Pathway Champions Award for outstanding contributions to integrating employer-needed credentials and certifications into its programs and its high certification exam pass rates, which exceed the global average. The UWF Center for Cybersecurity placed first in 2023 and second in 2024 and 2025 for the Cybersecurity Community Outreach Award among 480 NCAE-designated universities and colleges nationwide. This award recognizes UWF's ongoing efforts to support K12 pathways, community engagement, and other institutions through numerous faculty development workshops.

UWF has cultivated robust partnerships across the Cyber Coast®, collaborating with industry leaders such as Booz Allen Hamilton, IBM, Lockheed Martin, Leidos, Navy Federal Credit Union and Northrop Grumman, as well as key defense partners at Corry Station, Eglin AFB, and other bases. Through these initiatives, UWF continues to shape and strengthen the national cybersecurity ecosystem.

2. How does your university intend to recruit world-class faculty and top-performing students to support this area of expertise?

UWF is located along the rapidly growing Cyber Coast®, home to many cybersecurity private sector companies, defense assets, and research organizations. This thriving ecosystem helps to attract world-class faculty and employers to the region. As the leading higher education institution in the region, UWF continues to attract top-performing students in cybersecurity and related areas and serves as the main talent pipeline for the region.

The recent hiring of four new tenure-track assistant professors in the Department of Cybersecurity/IT and two new faculty in the Center for Cybersecurity (Aug 8,

2025, start date) are good indicators that UWF can attract high-caliber faculty and staff in cybersecurity. With a mixture of competitive salaries, good startup packages, course releases, good computational infrastructure, and potential collaborations with colleagues inside and outside UWF, the searches conducted in 2024-25 attracted a good number of highly qualified candidates. With its strategic plan to increase the overall faculty number by almost 50%, expand its research activities in key areas such as Cybersecurity and Computational Intelligence, and invest considerable resources in infrastructure updates (e.g. ~$32M for a new research building), UWF is strengthening its foundations to recruit additional world-class faculty in cybersecurity and “adjacent” fields such as Computer Science, Engineering, Math, and Intelligent Systems. UWF is also planning to recruit multidisciplinary faculty focused on cybersecurity for AI, healthcare, engineering, and other areas.

Student applications to UWF at both graduate and undergraduate levels continue to attain record levels during the last few years. Enrollment in the cybersecurity degree programs and certificates is among the fastest growing at UWF. UWF continues to attract and retain top-performing students through a variety of initiatives that target middle and high schools, technical academies, state colleges, and others. Besides the general recruitment initiatives through Enrollment Affairs, UWF supports a variety of activities specifically targeted at cybersecurity students. The following are examples:

- **Scholarships:** UWF offers a variety of generous scholarships to its top recruits and some that are specifically targeted at cybersecurity students. These include:
    - **NSF CyberCorps® Scholarship for Service:** The program aims to recruit and train the next generation of highly skilled cybersecurity professionals with the goal of placing them in government positions with at least 80% of the scholarship recipients securing placement in an executive agency.
    - **DoD Cyber Service Academy Scholarship:** The program is both a scholarship program for the Department of Defense and a cybersecurity capacity building tool for the nation.
- **GenCyber Camps:** Provide K-12 students and teachers with an introduction to cybersecurity educational programs and career paths utilizing engaging instruction and hands-on skills development.
- **Cybersecurity Ambassadors:** UWF student ambassadors visit K-12 schools in Northwest Florida to share their cybersecurity expertise and increase students' cybersecurity awareness through engaging activities and demos.

- **Career Pathways Agreements:** UWF has an agreement with Escambia County School District to award up to six college credits to graduates of the Cybersecurity Academy at Pine Forest High School.
- **Articulation Agreements:** UWF has articulations agreements in cybersecurity with numerous state colleges, including Miami Dade College and Pensacola State College.
- **CyberPatriot:** A National Youth Cyber Education Program developed by the Air Force Association. The CyberPatriot competition places middle and high school students in the position of newly hired IT professionals tasked with managing the network of a small company.

3. How will your area of expertise collaborate with industry and business leaders?

UWF enjoys strong relationships with various industry partners who engage with our students, provide experiential learning opportunities, and communicate trends in the workplace. Industry, government, and community leaders in cybersecurity are members of various advisory boards, including the Center for Cybersecurity, Hal Marcus College of Science and Engineering (HMCSE), and the Department of Cybersecurity and Information Technology. The advisory boards provide guidance on cybersecurity careers, advances, challenges, current and future trends, and potential collaboration opportunities.

UWF launched various cybersecurity initiatives in collaboration with various industry partners. The following are examples.

- **CyberSkills2Work**: The National Cybersecurity Workforce Development Program "unites the efforts of U.S. colleges and universities to prepare the next generation of cyber professionals. The program is dedicated to producing qualified professionals to bolster America's cyberdefense. Its mission is to provide professional development training and job-seeking support to transitioning military, first responders, veterans, government employees, and others pursuing the cybersecurity field. CyberSkills2Work aims to bridge the gap between cybersecurity workforce employers in critical infrastructure sectors and professionals trained in cyberdefense."
- **National Cybersecurity Employers Network (NCEN)**: The Center for Cybersecurity launched the NCEN to connect graduates with cybersecurity employers and job opportunities across the nation. UWF currently has over 55 industry and business partners, including critical infrastructure sectors such as defense industrial base, energy, financial services, government services, and healthcare sectors. UWF collaborates

with these partners on research and commercialization projects, workforce training using cyber range exercises, curricular feedback, career mentoring for students (e.g. resume review, mock interviews, career info sessions, etc.), and experiential learning opportunities for students.

- **Leidos Cybersecurity Infrastructure Lab:** This training lab located on the Pensacola campus is a collaboration between UWF and Leidos, a Fortune 500 company. It provides students with internship opportunities and hands-on cybersecurity education in a realistic digital environment. The lab includes a cloud based, enterprise platform that is modeled to represent an unclassified government enterprise platform. Students gain experience in areas such as digital modernization, updated data processing techniques, modeling and simulation, capability and capacity planning assessments.
- **Industry Mentorship:** Undergraduate students are partnered with industry professionals to establish connections and gain valuable insights in preparing careers beyond the campus experience. Every academic year about 40 students participate in this program.
- **Security Clearance Readiness Program:** The Florida Defense Support Commission awarded UWF $320,000 to develop a pilot program that helps students prepare for cybersecurity jobs in the state. The program provides students with guidance on applying for security clearances and preparation for the CompTIA Security+ certification. In addition, the program facilitates internships with Florida-based defense companies that require security clearances. About 50 students participated in the program.

4. Does your university plan on creating a center of distinction to support this area of expertise? If so, please explain how this center will support other faculty, students, and staff throughout the System?

UWF's Center for Cybersecurity is designated as a National Center of Academic Excellence in Cybersecurity by the National Security Agency and has earned numerous national awards and recognitions for its educational and research programs. UWF will expand its existing Center for Cybersecurity to advance education, research, and workforce development at UWF and across the SUS as follows:

- **Education**:
    - Develop and deliver multi-disciplinary certificates in Cybersecurity and AI that integrate cutting-edge skills and tools needed for

emerging work roles, including a new AI for Cybersecurity specialization.
    - Integrate industry certifications in programs to enhance job readiness and credentials.
- **Research**:
    - Expand UWF's research projects and grants to focus on interdisciplinary AI and ML for Cybersecurity and the Security of AI
    - Host an AI-Cybersecurity workshop to foster research collaborations among SUS faculty on new research projects.
- **Workforce Development:**
    - Leverage the nationally recognized National Cybersecurity Workforce Development Program led by UWF to create similar transformative programs across the SUS that provide agile, competency-focused pathways and credentials aligned with Florida's employment needs.
    - Provide faculty development workshops and resources to (a) help SUS institutions develop similar programs and (b) upskill their faculty to integrate AI and Cybersecurity into their curricula.
    - Host cyber range exercises and competitions for students from across the SUS to deliver and assess essential hands-on skills and competencies that align with employer needs.

In addition, UWF is planning a new ~50,000 sqft building that will provide state-of-the-art facilities for the Center for Cybersecurity and UWF's Institute for Advanced Analytics, a synergistic center focused on computational intelligence, and create more opportunities to strengthen UWF's cybersecurity impact. The new facilities will enable multi-disciplinary and institutional research and outreach activities that support the SUS.

5. Using Table 1, list the associated goals and metrics that will be used to quantify success in this selected area of expertise. These goals and metrics should reflect measurable outcomes and developments, not just rankings. Add rows as needed.

Table 1

University Metric	Goal/Target	What is the data source for the metric, and how will the university track progress?	Will there be any peer comparisons? If so, please describe.
Increase external funding expenditures	Increase cybersecurity external funding expenditures, including research grants and contracts, by 30% within the next 5 years	University research expenditures data; University annual reports	Peer institutions
Increase research products	Increase number of cybersecurity-related publications, presentations, and grant proposals by 30% within the next 5 years	University research data; faculty scholarly research index University annual reports	Peer institutions
Increase number of Cybersecurity degrees and certificates awarded	(1) Offer B.S. Cybersecurity program at FWB campus (Fall 2026) (2) Offer new AI undergraduate and graduate in Cybersecurity certificates (Fall 2026) (3) Offer new undergraduate AI in Cybersecurity specialization (Fall 2026)	University enrollment and graduation data; University annual reports	Peer institutions with cybersecurity programs

Expand the UWF-led National Cybersecurity Workforce Development Program	Develop and offer educational pathways for work roles needed in Florida; Train more Florida learners; Provide training for SUS and SCS institutions to offer similar programs	University and program data; University and program annual reports	Peer programs
Increase UWF's cybersecurity regional and state economic impact	Increase cybersecurity (1) job placement; (2) sector growth; (3) technology transfer and commercialization; (4) industry, academic and government collaborations	Economic and placement data; Economic and business reports	Peer regions
Increase multidisciplinary cybersecurity faculty	Successfully recruit 10 new faculty with strong teaching and research expertise in multidisciplinary cybersecurity	University HR data; University annual reports	Peer institutions
Upskill faculty across SUS and SCS to help them offer AI and ML for Cybersecurity and Secure AI courses and certificates	Provide faculty development workshops and curricular resources to SUS and SCS faculty	University and SUS data on courses and certificates; University and SUS annual reports	Peer institutions

6. Using the table below, provide a summary of anticipated university spending during the 2025-26 FY to support this area of expertise. Please list the initiative(s), the total amount budgeted for each initiative, and the associated goal for each initiative.

Table 2

University Initiative	Anticipated Funding	Associated Metric/Goal
New research building - approx. 50,000 sqft	Florida legislature already allocated ~$22M for the building; UWF submitted a Triumph proposal for an additional ~$32M, which requires a 3:1 match thus the total funding over 10 years will be $130M	– Improve research infrastructure – Increase number of research faculty in cybersecurity and related fields – Increase external funding expenditures in cybersecurity and related fields – Enhance collaboration opportunities among cybersecurity and related areas of research
Proposed Triumph Project	UWF submitted a Triumph proposal for approx. $32M that will significantly expand UWF's cybersecurity capabilities, facilities, and infrastructure	– Enable transformational impact across Northwest Florida and the State – Strengthen the region's economic and workforce development – Research: Advance the field of cybersecurity and solve real-world problems through basic and applied research – Education: Develop transformative multidisciplinary cybersecurity education and training programs – Partnerships: Foster mutually beneficial industry, government, and academic partnerships that advance

		regional and national economic and workforce development
Expenditures in Ft. Walton Beach (FWB) using the Next Gen Innovators state funding	UWF secured $2M in non-recurring capital outlay funds in the 2025 Florida budget	– Improve infrastructure in FWB to support offering cybersecurity and computer science degree programs there – Improve recruitment and retention of cybersecurity and other STEM students in FWB (increase enrollment and degrees awarded) – Improve collaboration opportunities with Northwest Florida State College and defense bases – Enhance student support services
HMCSE graduate student support	HMCSE budgeted more than $750K for graduate teaching and research assistantships during the 2025-26 academic year	– Support faculty research – Recruit and retain graduate students in cybersecurity and adjacent fields
National Cybersecurity Workforce	UWF received a $2.5M grant from the NSA to continue and expand the program	– Offer additional cybersecurity and AI educational pathways

Development Program		– Prepare veterans, transitioning military, military spouses, and first responders for cybersecurity and AI careers – Expand the National Employers Network and connect graduates with employers and job opportunities – Expand the program for additional learners, including federal and SLTT government personnel
Florida Cybersecurity Training Program	UWF received a $2M state grant to provide technical training for Florida state, local, tribal and territorial (SLTT) government personnel	– Provide upskilling and reskilling for Florida SLTT personnel – Offer industry certification prep courses to enhance skills and credentials – Offer technical training courses to prepare government personnel for evolving cybersecurity and AI work roles – Offer cyber range exercises to enhance job readiness and hands-on skills