STATE UNIVERSITY SYSTEM OF FLORIDA

# Request to Offer a New Degree Program

In accordance with Board of Governors Regulation 8.011,
Academic Degree Program Coordination and Approval

**Florida Atlantic University**
**Institution Submitting Proposal**

**Fall 2026**
**Proposed Implementation Term**

**Engineering and Computer Science**
**Name of College(s) or School(s)**

**Civil, Environmental and Geomatics**
**Name of Department(s)/Division(s)**

**Construction and Geomatics**
**Academic Specialty or Field**

**B.S. Construction and Geomatics Engineering Technology**
**Complete Name of Degree**

**15.1001**
**Proposed CIP Code (2020 CIP)**

The submission of this proposal constitutes a commitment by the university that, if the proposal is approved, the necessary financial resources and the criteria for establishing new programs have been met before the program's initiation.

**Date Approved by the University Board of Trustees**

**President's Signature** **Date**

**Board of Trustees Chair's Signature** **Date**

**Provost's Signature** **Date**

STATE UNIVERSITY SYSTEM OF FLORIDA

# I. Overview

A. Briefly describe the proposed program in the following table.

| | |
|---|---|
| **Purpose** | |
| **Degree Level(s):** | Bachelor |
| **Majors, Concentrations, Tracks, or Specializations** | Construction and Geomatics Technology |
| **Total Number of Credit Hours** | 120 |
| **Program Type** | ☒ **E&G Program**<br>☐ **Market Tuition Rate Program***<br>☐ **Self-Supporting Program***<br><br>*Refer to Board Regulation 8.002, Self Supporting and Market Tuition Rate Program and Course Offerings, for additional details. |
| **Possible Career Outcomes** | Construction managers, surveyors, Mappers, On-site construction supervisors, cartographers, construction schedulers, construction superintendents |

B. Does the proposed program qualify as a Program of Strategic Emphasis, as described in the Florida Board of Governors 2025 System Strategic Plan? Programs of Strategic Emphasis List

☐ Yes, it does qualify as a Program of Strategic Emphasis.
☒ No, it does not qualify as a Program of Strategic Emphasis.

C. Does the program fall under one of the CIP codes listed below that qualifies for the Programs of Strategic Emphasis Waiver? *(for baccalaureate programs only)*

| CIP CODE | CIP TITLE |
|---|---|
| **11.0101** | Computer and Information Sciences |
| **11.0103** | Information Technology |
| **13.1001** | Special Education and Teaching |
| **13.1202** | Elementary Education and Teaching |
| **14.0801** | Civil Engineering |
| **14.0901** | Computer Engineering |
| **14.1001** | Electrical and Electronics Engineering |
| **14.1901** | Mechanical Engineering |
| **27.0101** | Mathematics |
| **52.0301** | Accounting |
| **52.0801** | Finance |
| **52.1201** | Management Information Systems |

☐ Yes. If yes, students in the program will be eligible for the Programs of Strategic Emphasis waiver. Refer to Board Regulation 7.008 and the Programs of Strategic Emphasis Waiver Guidance.

☐ No

☒ Not Applicable

# II. Institutional and State-Level Accountability

A. Describe how the proposed program directly or indirectly supports the following.

1. The State University System's Strategic Plan goals.
2. The institution's strategic plan and goals the program will directly advance.
3. The university's mission.
4. The benefit to the university, the local community, and the state.

The proposed degree program is designed to align with the university's mission of fostering innovation, research, and economic development while supporting the strategic goals of the System, which emphasizes enhancing workforce readiness and addressing critical state needs. The degree will cultivate advanced marketing expertise, providing graduates with the skills needed to meet evolving industry demands in Florida's growing sectors, including various construction sectors: public infrastructure, commercial and retail hosing and infrastructure system maintenance and management, all with the intent of developing graduates who will look toward the future to develop and incorporate new, cost effective technologies to the industry. Locally, the program will serve as a pipeline for talent in the region's construction industry, driving economic growth for highly skilled graduates who can use technology and engineering skills to increase efficiency of the industry. Statewide, it will help address the demand for marketing professionals with expertise in digital strategies, analytics, and consumer behavior.

At present, engineering technology degree programs currently exist at UWF, UNF, FAMU and most recently at FIU (spring 2018). The degree programs at FIU, FAMU, and UNF are not designed to meet ABET accreditation requirements **whereas FAU's proposed degree program would be ABET accredited as construction and/or geomatics engineering technology**.

B. Provide the date the pre-proposal was presented to the Council of Academic Vice Presidents Academic Program Coordination (CAVP ACG). Specify any concerns raised and provide a narrative explaining how each has been addressed in this proposal or will be addressed before the proposed program is implemented.

**September 9, 2025**

## III. Student and Workforce Demand

**If the proposed program is a baccalaureate or master's degree on the Programs of Strategic Emphasis list, skip III-A.**

A. Describe the Florida and national workforce demand for the proposed program. The response should, at a minimum, include the current state workforce data from Florida's Department of Commerce and national workforce data from the U.S. Department of Labor's Bureau of Labor Statistics. Additional documentation for workforce needs may include letters of program support by employers and job postings for program graduates, as well as a description of any specific needs for research and service that the program would fulfill.

Complete the table below using data from the Search by CIP or SOC Employment Projections Data Tool in the Academic Review Tracking System.

**Labor Market Demand, CIP Code 15.1001**

| Occupations | Percent Change in Job Openings | | Annual Average Job Openings | | Total # of New Jobs | | Education Level Needed for Entry |
|---|---|---|---|---|---|---|---|
| | FL 2024-32 | U.S. 2023-32 | FL 2024-32 | U.S. 2023-32 | FL 2024-32 | U.S. 2023-32 | |
| Construction Managers | 6.58 | 9 | 27493 | 45800 | 1941 | 4.4 | BS |
| Surveyors | 8.44 | 6 | 2291 | 4000 | 314 | 8.3 | BS |

Sources:
Date Retrieved: 06/25/2025
U.S. Bureau of Labor Statistics - https://data.bls.gov/projections/occupationProj
Florida Department of Economic Opportunity - http://www.floridajobs.org/labor-market-information/data-center/statistical-programs/employment-projections

B. If the occupations do not currently appear in the most recent version of the Search by CIP or SOC Employment Projections Data Tool provided by Board staff, provide occupational linkages or jobs graduates will be qualified to perform based on the training provided to students in the proposed

program in the table below. Contact the institutional representative working with you on the degree proposal for more information about possible occupations.

RESPONSE:N/A

**Occupational Linkages for the Proposed Program**

| SOC Code (XX-XXXX) | Occupation Title | Source / Reason for Inclusion |
|---|---|---|
| n/a | | |
| | | |
| | | |

C. Describe the student demand for the proposed program. The response should, at a minimum, include the following.

1. Projected headcount for Year 1 through Year 5.

   15 in year 1, 75 by year 5

2. Data that supports student interest or demand for the proposed program. Include questions asked, results, and other communications with prospective students.

This is a program that prepares individuals to apply basic engineering principles and technical skills in support of engineers, engineering contractors and other professionals engaged in the construction of buildings and related structures. Includes instruction in basic structural engineering principles and construction techniques, building site inspection, site supervision, construction personnel supervision, plan and specification interpretation, supply logistics and procurement, applicable building codes, and report preparation.

About 1/4 of the students in the three current degree programs in the department go into the construction field. There continues to be a demand from contractors for additional students with skills in construction and geomatics technology. Engineers continue to seek geomatics students who have multi-disciplinary skills. A 2024 EAC report on career demands submitted to the Provost's office indicated that construction project management was the top need in SE Florida. While changes to the current geomatics and civil engineering programs were made to address the immediacy of the challenge, a new degree program in engineering technology that incorporates the related

geomatics and construction field needs better serves the non-engineering purpose while meeting ABET requirements (meaning students can get a license if they desire).

Within the SUS, engineering technology degree programs currently exist at UWF, UNF, FAMU and most recently at FIU (spring 2018). The UWF program is significantly different – in name (General Engineering Technology)**,** focus (3 tracks – Electrical, Construction, and Instruction) and does not utilize the 15.1001 CIP code. The degree programs at FIU, FAMU, and UNF are not designed to meet ABET accreditation requirements **whereas FAU's proposed degree program would be ABET accredited**. See table for current student.

Current PhDs In civil, environmental and geomatics engineering, or persons with a General contractor's license or professional engineer's license in Florida with at least a MS could potentially teach the construction classes.

## IV. Duplication of Existing Programs

A. If the program duplicates another degree program at a private or public state university in Florida with a substantially similar curriculum, provide evidence that the university has investigated the potential impact on the existing program, has discussed opportunities for collaboration with the affected university, and can justify the need for duplication. Additionally, summarize the outcome(s) of communication with appropriate personnel (e.g., department chairs, program coordinators, deans) at the affected institutions regarding the potential impact on enrollment and any opportunities for collaboration in the areas of instruction and research.

This degree encompasses two areas of importance to the state- construction management technology and surveying/geomatics. Our current BS in Geomatics engineering would be terminated and the program wrapped into this new engineering technology degree given much overlap between the two areas and the technology aspect that differs somewhat from our purely engineering degrees. However, the new degree program would be ABET accredited.

Within the SUS, engineering technology degree programs currently exist at UWF, UNF, FAMU and most recently at FIU (spring 2018). The UWF program is significantly different – in name (General Engineering Technology), focus (3 tracks – Electrical, Construction, and Instruction) and does not utilize the 15.1001 CIP code. The degree programs at FIU, FAMU, and UNF are not designed to meet ABET accreditation requirements whereas FAU's proposed degree program would be ABET accredited.

B. If the proposed program curriculum substantially duplicates an existing program at Florida Agricultural and Mechanical University, provide evidence that the proposed program would not affect enrollment in Florida Agricultural and Mechanical University's program.

n/a, see above

# V. Curriculum

A. If the program is a bachelor's degree, please identify if the university is seeking any of the following statuses for the program.

☐ Not Applicable

| Status | Yes | No | If yes, complete the following |
|---|---|---|---|
| Common Prerequisites | | | Appendix C |
| Exception to 120 Credits | | | Appendix D |
| Specialized Admissions | | | Appendix E |

B. Describe the admissions criteria and graduation requirements for the program.

**Freshman admission to the University**: Admission to the freshman class is competitive and the University encourages all students to apply early. Meeting minimum eligibility requirements does not guarantee admission as each applicant's academic profile will be weighed against the applicant pool in its entirety. This includes high school GPA, rigor of curriculum and test score. The fall 2025 freshman profile for the mid- 50% was as follows:

| High School GPA | ACT composite | SAT total | CLT |
|---|---|---|---|
| 3.68 - 4.31 | 22 - 27 | 1090 - 1280 | 72 - 90 |

Freshman applicants should be aware that additional requirements are necessary for some colleges and majors. The minimum University requirements are as listed below:

Required High School Units:
Additional weight is given to all courses clearly marked Honors, Advanced, Gifted, Advanced Placement, Advanced International Certificate of Education or International Baccalaureate.

The following units of study in high school are required:

| | |
|---|---|
| English (3 with substantial composition) | 4 units |
| Mathematics (Algebra 1 level and above) | 4 units |
| Natural Science (2 with lab) | 3 units |

| | |
|---|---|
| Social Science | 3 units |
| Foreign Language (of the same language) | 2 units |
| Academic Electives | 2 units |
| Total | 18 units |

The Following are the minimum test scores accepted in the program.

General Equivalency Diploma:
Persons with a General Equivalency Diploma (GED) from any state must achieve a minimum total score of 600, with no sub score lower than 150. An SAT score of 1090 with a minimum math section score of 490 and EWR score of 480 after March 2016 or an ACT score of 21 with math section minimum score of 17 and English minimum score of 19 is also required of applicants with a GED. Applicants presenting a GED must present official GED results and official transcripts or any partial high school completion.

Non-traditional/Homeschooled students applying for admission who are participating in a non-traditional high school program must present credentials equivalent to those listed above. An applicant whose high school educational program is not measured in Carnegie Units must present the following minimum section scores on each/either exam for admissions consideration:

- **490 on the EWR section of the SAT & 480 on the Math section of the SAT**
- **17 on English section of ACT & 19 on Math section of ACT**
- **An overall combined test score of 1060 on the SAT or a minimum composite score of 21 on the ACT.**
- **CLT, Classic Learning Initiatives LLC: Sum of the Verbal Reasoning and Grammar/Writing Sections: 38 Quantitative Reasoning Section: 16**

Credential Evaluation Services:
Applicants who completed their high school and/or part or all of their postsecondary (college or university) work at an institution not in the U.S. are required to have their foreign credentials evaluated by an accredited independent evaluation service.

TOEFL:
Official TOEFL results are required of all applicants whose native language is not English.

Students applying for admission into the College of Engineering and Computer Science must meet the admission criteria as follows:

**Fall 2025**: 3.6+ HS GPA, at least 22 ACT/1100 SAT/72 CLT, and 30 or 50 MPF

The minimum GPA admission criterion were established in response to the Florida Board of Governors Performance-Based Funding that was instituted a few years ago, ago-particularly Metric #4, which is 4-year graduation rates for Summer and Fall Freshmen admits.

All entering freshmen interested in engineering and computer science degrees will be directly admitted to the FAU College of Engineering and Computer Science Pre-Professional Engineering Program. To be admitted to one of the engineering or computer science degree programs students must satisfy the following requirements first:

1. Students must meet University and College admission requirements.
2. In each core course listed in the following table, students must obtain a minimum grade of “C.” Advanced placement credit scores 4 or above will be given credit for the appropriate course(s). A score of 5 is equivalent to an "A" and a score of 4 is equivalent to a "B".
3. A maximum of two attempts will be allowed for any listed courses. Failure to receive a passing grade in the second attempt (including withdrawals) is grounds for denial of admission to an engineering or computer science program.

**Pre-Professional Engineering Program Core Courses:**

| | | |
|---|---|---|
| **B.S. in Geomatics Engineering** | | |
| Calculus with Analytic Geometry 1 (1) | MAC 2311 | 4 |

| | | |
|---|---|---|
| **B.S. in Civil, Computer, Electrical, Environmental, Mechanical and Ocean Engineering** | | |
| Calculus with Analytic Geometry 1 (1) | MAC 2311 | 4 |
| General Physics for Engineers 1 (2) | PHY 2048 | 3 |

Notes:
(1) MAC 2311 and MAC 2253 are substitutes.

The entry-level mathematics requirement for the engineering programs is Calculus with Analytic Geometry 1. Students who are placed in lower-level mathematics courses and who need to maintain full-time status, may have problems finding courses that are accepted in an engineering or computer science program in future semesters. This may delay their entry into a particular engineering or computer science program.

After successfully completing the core courses, students may apply to a particular engineering program. Admission will be based on the student's performance in the core courses. The Division of Engineering Student Services and Advising is available to assist students in selection of a major field of study and can be reached at 561-297-2780 or engineering-services@fau.edu.

Students with engineering degrees from ABET-accredited institutions will be directly admitted to engineering or computer science programs of their choice.

Students may appeal denial of admission to a major through the academic petition process. For an appeal to have merit, students must explain new academic or personal

information as well as extenuating circumstances. The evidence should show a student's case is stronger than the GPA evidence suggests. The faculty coordinator for the preprofessional program will review the petition according to the established College guidelines and make a recommendation to the academic petition committee.

The College of Engineering and Computer Science fully complies with the State of Florida Common Prerequisites for Computer Science and for Engineering. Students transferring from Florida community or state colleges who meet the preprofessional program course requirements will be directly admitted to the particular engineering and computer science program of their choice.

The College of Engineering and Computer Science participates in the Southeast Florida Engineering Education Consortium, a collaborative effort among public colleges and universities in this region. Detailed advising sheets outlining the courses needed at the community or state college and at FAU are available for students transferring from Miami-Dade, Broward, Palm Beach and Indian River colleges. These sheets also provide a useful guide for students transferring from other institutions. Students should contact their community or state college advisor or the FAU department in which they intend to enroll.

There are 120 semester credit hours required for the Bachelor of Science in Construction and Geomatics Engineering Technology degree. Students must fill out an Application for Degree Form the semester they intend to graduate. They also fill out a graduation check list which lists the classes they are currently taking the semester in which they plan to graduate, any outstanding courses for which they have received an "I" grade (incomplete), any courses that are not required for the degree, and any courses that will be used toward the BS/MS program if they have been accepted. An advisor performs a Degree Audit in order to ensure students will have completed all the requirements to graduate. Once grades are posted at the end of the semester, the advisor performs a second Degree Audit to ensure that the student has passed all of his/her classes. The advisor then certifies the student for graduation.

C. If the proposed program is an AS-to-BS capstone, provide evidence that it adheres to the guidelines for such programs, as outlined in State Board of Education Rule 6A-10.024. List any prerequisites and identify the specific AS degrees that may transfer into the proposed program.

☒ Not applicable to this program because it is not an AS-to-BS Capstone.

D. Describe the curricular framework for the proposed program in the table below.

| Course Prefix & Number | Course Title | Required or Elective | Credit Hours | Course Description |
|---|---|---|---|---|
| **Gen Ed** | General education requirements set by BOG | Required | 36 | |
| MAC 2311 | Calculus for Engineers 1 | Required | 4 | |
| MAC 2312 | Calculus for Engineers 2 | Required | 4 | |

| | | | | |
|---|---|---|---|---|
| PHYS 2048 | Physics for Engineers | Required | 4 | |
| CHEM 2045 | Chemistry for engineers | Required | 4 | |
| | Science elective | Required | 4 | |
| | Science or math elective | Required | 4 | |
| | Computer Programming Elective | Required | *3* | |
| | Business elective | Required | 3 | |
| EGN 1002 | Fundamentals of Engineering | Required | 3 | Engineering survival skills: orientation, professionalism, planning, problem solving, creative thinking, software and calculator techniques, time and project management, teaming skills, engineering disciplines, report writing and technical communications. |
| CGN 2327 | Computer-Aided Design | Required | 3 | Fundamentals of graphical and spatial analysis; graphics and drafting principles; computer-aided drafting; 2D and 3D visualization, modeling, and construction; engineering applications. |
| SUR 3103 | Geomatics | Required | 3 | Theory and application of methods used in geospatial data acquisition, such as distance, direction and angle measurements, traverse computation, trigonometric leveling and height determination, topographic surveying, horizontal/vertical curves, terrestrial positioning with GPS. |
| GIS 3015C **or** CGN 4321 | GIS elective | Required | 3 | Presents a comprehensive view of spatial analysis tools with an emphasis on Geographical Information System (GIS) methodology and its application for civil engineering problems. |
| SUR 3205 | Engineering and Construction Surveying | Required | *3* | Surveying applications for engineering, construction, and transportation work. Route surveying and geometric design; topographic site surveys and mapping; earthwork computations. |
| CEG 4523 | Sustainable Construction Materials and Methods | elective | 3 | Concepts of sustainability in civil engineering construction; sustainability assessment tools and methods; recycled materials characterization; materials selection for sustainability; designing for resiliency and long-term preservation; green building, waste management, circular economy; and resource conservation. |
| CCE 4031 | RI: Construction Project Management | Required | *3* | This is a senior-level course in grading, quantity takeoff, equipment and personnel efficiency, cost estimating, crews development, advanced scheduling and claims |
| CCE4033 | Construction Management Assessment | Required | 3 | This is a senior-level course in grading, quantity takeoff, equipment and personnel efficiency, cost estimating, crews development, advanced scheduling and claims. |
| TTE 3004C or | Introduction to Transportation Engineering | elective | 3 | Introduction to transportation engineering, including planning, permitting, and environmental considerations; design calculations; capacity analysis and simulation; presentation skills necessary for the proper development of transportation improvements. |
| SUR 3141 | Automated Surveying and Mapping | Required | 3 | Use of computer-aided drafting and mapping from surveyed field data, familiarization with hardware and software available for surveying and mapping computations and drafting, data storage and output from automated devices used in surveying, use of total stations and electronic field data collection systems, field-to-finish products. |

| | | | | |
|---|---|---|---|---|
| SUR 3520 | Measurement Theory and Data Analysis | Required | *3* | Applications of mathematics in surveying; measurement theory, analysis of measurements, computation and adjustment of spatial data. Emphasis on computer applications for adjustments and analysis. |
| SUR 4403 | Cadastral Principles and Legal Aspects | Required | 3 | Cadastral systems, legal principles of property boundary retracement, land descriptions, parcel identification, rights-of-way and legal descriptions of real property. Ethical and legal aspects of practice, surveyor as expert witness, surveyor-client relationship, responsibilities to the profession. |
| SUR 4530 | Geodesy and Geodetic Positioning | Required | *3* | Concepts of geodesy, ellipsoidal geometry, geodetic coordinates, gravity, datums, satellite orbits and practical applications of GPS data collection, post-processing and adjusting networks. |
| CCE 4514C or | Introduction to Laser Mapping Technology | Required | 3 | Terrestrial laser mapping technology, current state of the technology, data collection methodologies and requirements, data processing, calibration, errors, database management, filtering techniques, product generation and applications. Lab included. |
| SUR 4331C or | Digital Photogrammetry Principles and Applications | Required | *3* | Use of aerial photographs for mapping, geometry of single photo and stereographic models, scale and relief displacement, vertical and titled photos, parallax, photo mosaics, ground control, stereoplotters, resection, orthophotos, oblique photos. This course also provides an overview of digital photogrammetric principles and its applications in low altitude and close range mapping. Lab exercises are included in the course. |
| SUR 4384 | Thermal Infrared Remote Sensing and Applications | Required | 3 | Methods and applications of thermal infrared remote sensing, temperature information with an appropriate spatial and temporal coverage at local and regional scales, use of thermal infrared thermometer and thermal camera technologies. |
| SUR 4463 | Subdivision Design | Required | *3* | Physical elements of planning subdivision layouts, including circulation, water/sewer, drainage, earthwork grading, erosion control, topography and existing land use factors, geometric analysis procedures, plan/profile views of neighborhood infrastructure, zoning restrictions, easements and setbacks. This is an Academic Service Learning (ASL) course. This is a research-intensive (RI) course. |
| CGN 4803C **or** | RI: Civil, Environmental and Geomatics | Required | 3 | Multidisciplinary design teams are formed for senior capstone design projects with multiple realistic constraints. Projects are developed with the approval of a sponsor/client. Professional practice issues are also presented and discussed. Laboratory included. This is a research-intensive (RI) course and an Academic Service Learning (ASL) course |
| ETG 4951 | RI: Engineering Technology Capstone | Required | | Design teams are formed for senior capstone design projects with multiple realistic constraints. Projects are developed with the approval of a sponsor or client. Professional practice issues are also presented and discussed. Laboratory included, This is a Research-Intensive (RI) course and an Academic Service Learning (ASL) course. |

E. Does an industry or employer advisory council exist to provide input regarding curriculum development, student assessment, and academic workforce alignment?

☒ Yes
☐ No. Describe any plans to develop one or other plans to ensure academic workforce alignment.

F. Explain how employer-driven or industry-driven competencies were identified and incorporated into the curriculum. Has a strategy been established for assessing student learning and reviewing academic workforce alignment to modify the curriculum as needed?

Employer-driven and industry-driven competencies were identified and incorporated into the curriculum via discussions with the civil engineering and geomatics engineering advisory boards along with the EAB report provided to the Provost which identified construction technology as a core competency that did not have a significant educational component on campus. While the existing programs do provide some portions of the competency, the decision was made to enhance this competency by created a new degree program focusing on construction and geomatics technology as opposed to pure engineering. This will provide our students and those who decide to change majors to move ahead in the industry with a degree that will enhance their long-term potential.

G. Does the proposed curriculum align with Section 1001.706 (5)(a), Florida Statutes?
☒ Yes
☒ No

Request was made to the Board of Governors to approve FAU offering this program. It was approved Sept. 8 2025

H. For degree programs in medicine, nursing, and/or allied health sciences, identify the courses with the competencies necessary to meet the requirements in Section 1004.08, Florida Statutes.

For teacher preparation programs, identify the courses with the competencies required in Section 1004.04, Florida Statutes.

☒ Not applicable to this program because the program is not a medicine, nursing, allied health sciences, or teacher preparation program.

I. Select the anticipated mode of delivery for the proposed program.

☒ Face-to-Face
☐ Hybrid
☐ Distance Learning

If the method(s) of delivery will require specialized services or additional financial support, describe the projected costs below.

N/A

J. Describe any potential impact on related academic programs or departments, such as an increased need for general education or common prerequisite courses or an increased need for required or elective courses outside of the proposed academic program. If the proposed program is a collaborative effort with another academic department(s), college(s), or school(s) within the institution, provide a letter(s) of support or MOU(s) from each department, college, or school in Appendix B.

N/a

K. Describe any currently available sites for internship and/or practicum experiences and any plans to seek additional sites in the next five years.

☐ Not applicable to this program because students are not expected to seek internship or practicum opportunities as a required curriculum component.

Florida Atlantic University's Career Center connects students and alumni with meaningful employment, internship, and graduate school opportunities through career readiness programming and career advising. The FAU Career Center also offers a wide variety of dynamic services, programs, and resources that will enable students to continue to plan their career and enhance career readiness skills. Information about career services can be found at the following link, www.fau.edu/career.

Internships serve as excellent opportunities to apply the knowledge that learned in the classroom and further explore chosen major(s). In addition, an internship experience will help develop skills that will prepare you for your transition into the workplace. The college actively encourages internships with the goal of every student participating. The demand for civil, construction and geomatics students in high and nearly 90% of students graduating in the past 2 years has participated in an internship in a degree related job.

Wharton-Smith, Turner Construction, Balfour Beatty and DRP are among those hiring in the construction field.

L. Identify any established or planned educational sites where the program will be offered or administered. Provide a rationale if the proposed program will only be offered or administered at a site(s) other than the main campus.

The program will be offered at the Boca Raton campus only.

M. If the institution has conducted recent program reviews, received feedback from accreditation bodies, or received input from other entities that affect the proposed program, describe the institution's progress in implementing the recommendations.

Once approved, the program will be submitted for accreditation by ABET.

If the proposed program is a doctoral-level program, include the external consultant's report and the institution's responses to the report as Appendix A.

N/A

## VI. Faculty

A. Identify existing and anticipated full-time faculty who will participate in the proposed program through Year 5, excluding visiting or adjunct faculty in the table below. Additionally, provide the curriculum vitae for each identified faculty member.

| Faculty Code* | Faculty Name or "New Hire", | Highest Degree Held | Academic Discipline | Rank | Contract Status | Initial Date for Participation in Program |
|---|---|---|---|---|---|---|
| A | S. Nagarajan | PhD | geomatics | Assoc | Tenured | Fall 2026 |
| A | Hongbo Su | PhD | Surveying/construction surveying | Assoc | Tenured | Fall 2026 |
| A | Frederick Bloetscher | PhD | Infrastructure systems. Construction, design | Full | Tenured | Fall 2026 |
| A | Khaled Sobhan | PhD | Construction Materials, geotechnical | Full | Tenured | Fall 2026 |

| *Faculty Code | Code Description | Source of Funding |
|---|---|---|
| A | Existing faculty on a regular line | Current Education & General Revenue |
| B | New faculty to be hired on a vacant line | Current Education & General Revenue |
| C | New faculty to be hired on a new line | New Education & General Revenue |
| D | Existing faculty hired on contracts/grants | Contracts/Grants |
| E | New faculty to be hired on contracts/grants | Contracts/Grants |
| F | Existing faculty on endowed lines | Philanthropy & Endowments |
| G | New faculty on endowed lines | Philanthropy & Endowments |
| H | Existing or new faculty teaching overload in addition to assigned course load | Enterprise Auxiliary Funds |

B. Provide specific evidence demonstrating that the academic unit(s) associated with the proposed program has been productive in teaching, research, and service. Such evidence may include trends over time for average course load, student headcount in major or service courses, degrees granted, external funding attracted, and other indicators of excellence (e.g., thesis, dissertation, or research supervision).

| Faculty Name | Classes taught last 5 years | Grad students graduated last 5 years | Research last 5 years as PI | Papers Last 5 years | Books |
|---|---|---|---|---|---|
| S. Nagarajan | 29 | 5 MS as chair | $400K | 23 | 0 |
| Hongbo Su | 20 | 6 MS as chair | $170 K | 19 | 0 |
| Frederick Bloetscher | 50 | 5 MS as chair | $4.7 MM | 26 | 8 |
| Khaled Sobhan | 30 | 3 MS as chair | $75K | 19 | 0 |

# VII. Estimate of Investment

A. Provide the tuition rate for the proposed program for resident and non-resident students.

| Resident/Credit Hour | Non-Resident/Credit Hour |
|---|---|
| $203.29 | $721.84 |

If the proposed program will operate as self-supporting, market tuition rate, or establish differentiated graduate-level tuition, per Board of Governors Regulation 8.002, complete Appendix F, Self-Supporting & Market Rate Tuition.

B. Complete the summary table below.

1. Provide funding sources for Years 1 and 5 of program operation.
2. Provide headcount (HC) estimates of student enrollment for Years 1 through 5.

| Implementation Timeframe | HC | E&G Funds | Contract & Grants Funds | Auxiliary/ Philanthropy Funds | Total Cost |
|---|---|---|---|---|---|
| **Year 1** | **15** | **$67,300** | | | **$** |
| **Year 2** | **25** | | | | |
| **Year 3** | **40** | | | | |
| **Year 4** | **55** | | | | |
| **Year 5** | **75** | **$213,230** | | | **213,230** |

C. Is the infrastructure in place to meet the new degree program requirements, such as hiring faculty and staff, curriculum development, facilities, and funding, before enrollment of students to the program?

☒ Yes

☐ No. If not, is there a plan to establish the infrastructure to support the program? Please describe.

STATE UNIVERSITY SYSTEM OF FLORIDA

# VIII. Institutional Resources

A. Describe any additional library resources needed to implement and/or sustain the program through Year 5.

☒ Not applicable to this program because no additional library resources are needed to implement or sustain the proposed program.

B. Describe any specialized equipment and space currently available to implement and/or sustain the proposed program through Year 5.

No added space is needed. Staff and resources are already in place. No new courses will be required. Existing Geomatics Engineering program will be discontinued in 2032

C. Describe any additional specialized equipment or space needed to implement and/or sustain the program through Year 5. Include any projected Instruction and Research (I&R) costs of additional space. Costs for new construction should be provided in response to Section VIII.D. below.

☒ Not applicable to this program because no new I&R costs are needed to implement or sustain the program through Year 5.

D. If a new capital expenditure for instructional or research space is required, indicate where this item appears on the university's fixed capital outlay priority list. If non-I&R costs, such as indirect costs affecting libraries and student services, are expected to increase due to the program, describe and estimate those expenses below. High enrollment programs, in particular, are expected to necessitate increased costs in non-I&R activities.

☒ Not applicable to this program because no new capital expenditures are needed to implement or sustain the program through Year 5.

E. Describe any additional special categories of resources needed to operate the proposed program through Year 5, such as access to proprietary research facilities, specialized services, or extended travel.

☒ Not applicable to this program because no additional special categories of resources are needed to implement or sustain the program through Year 5.

F. Describe fellowships, scholarships, and graduate assistantships to be allocated to the proposed program through Year 5.

☒ Not applicable to this program because no fellowships, scholarships, and/or graduate assistantships will be allocated to the proposed program through Year 5.

## IX. Required Appendices

Table 1 outlines the required appendices by degree level. Institutions may provide additional appendices to supplement the information provided in the proposal and list them in Table 2 below.

**Table 1. Appendices**

| | Appendix Title | Degree Level | Required for Specific Programs | Included Yes/No |
|---|---|---|---|---|
| A | Consultant's Report and Institutional Response | Doctoral or Professional | | yes |
| B | Letters of Support or MOUs from Other Academic Units | Any new program | Only for programs offered in collaboration with other academic unit(s) within the institution | n/a |
| C | Common Prerequisite Request Form | Bachelor's | | n/a |
| D | Request for Exception to the 120 Credit Hour Requirement | Bachelor's | Requesting approval to exceed the 120 credit hour requirement | n/a |
| E | Request for Specialized Admissions Status | Bachelor's | Requesting approval for specialized admissions status | n/a |
| F | Self-Supporting & Market Rate Tuition Programs | Graduate programs | Only for self-supporting or market tuition rate programs | n/a |
| G | Faculty Curriculum Vitae | Any new program | | attached |