

 <b>FLORIDA ATLANTIC UNIVERSITY</b>	<b>NEW/CHANGE PROGRAM REQUEST Undergraduate Programs</b>		UUPC Approval <u>11-03-25</u> UFS Approval _____ Banner _____ Catalog _____
<b>Department</b>  <b>College</b> College of Engineering & Computer Science			
<b>Program Name</b>  College general section	<input type="checkbox"/> <b>New Program*</b>  <input checked="" type="checkbox"/> <b>Change Program*</b>	<b>Effective Date</b> <small>(TERM &amp; YEAR)</small>  Spring 2026	
<p><b>Please explain the requested change(s) and offer rationale below or on an attachment.</b></p> <p>The catalog is changed as follows:</p> <ol style="list-style-type: none"> <li>1. Senior Design Sequence – Expanded wording to explain the content &amp; structure of the design courses, included the course numbers, gave the option of registering for credit or as an audit to be determined by the instructors of record &amp; advising.</li> <li>2. Unsuccessful Course Attempts – Added this section to explain the grading options and give context to the limitation on attempts policies</li> <li>3. Limitation on Course Attempts- a) A maximum of two attempts – Updated for “enforceability” and added wording about transfer courses; b) second attempt at more than three upper-division (3000-4000 level) courses - clarified language; c) more than 5 non-passing grades - clarified language</li> <li>4. Timely Degree Completion: a) Transfer students – Added general education requirements; b) First Time in College and Early Admission – Duplicated transfer policy for 4-year graduation; c) Any student – Added general education requirements and removed “more than 30 credits from graduation,” which would allow us to award a BGS at the 6-year mark regardless of remaining courses.</li> </ol>			
<small>*All new programs and changes to existing programs must be accompanied by a catalog entry showing the new or proposed changes.</small>			
<b>Faculty Contact/Email/Phone</b>  Fred Bloetscher fbloetsc@fau.edu		<b>Consult and list departments that may be affected by the change(s) and attach documentation</b>	
<b>Approved by</b> Department Chair _____ College Curriculum Chair <u>Galan Liu</u> College Dean _____ UUPC Chair <u>Korey Sorge</u> Undergraduate Studies Dean <u>Dan Meeroff</u> UFS President _____ Provost _____			<b>Date</b> <u>9-25-25</u> <u>9/25/25</u> <u>9/25/25</u> <u>11-03-25</u> <u>11-03-25</u> _____ _____

Email this form and attachments to [mianning@fau.edu](mailto:mianning@fau.edu) seven business days before the UUPC meeting.

# COLLEGE OF ENGINEERING AND COMPUTER SCIENCE

- [Bachelor's Program Information](#)
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## Departments

- [Biomedical Engineering](#)
- [Civil, Environmental and Geomatics Engineering](#)
- [Electrical Engineering and Computer Science](#)
- [Ocean and Mechanical Engineering](#)

[Link to Course Descriptions for the College of Engineering and Computer Science](#)

Accreditation: Baccalaureate degree programs in Civil, Computer, Electrical, Geomatics, Mechanical and Ocean Engineering are accredited by the Engineering Accreditation Commission (EAC) of ABET. The baccalaureate program in Computer Science is accredited by the Computing Accreditation Commission (CAC) of ABET.

The College of Engineering and Computer Science offers undergraduate degree programs in Civil Engineering, Computer Engineering, Computer Science, Electrical Engineering, Environmental Engineering, Geomatics Engineering, Mechanical Engineering and Ocean Engineering. Also available are minors in Computer Science and

Geomatics Engineering, certificates in Data Science and Surveying and Mapping, and a minor and certificate in Cybersecurity. The College recently launched an [Honors in the Major program](#) focusing on leadership, innovation and entrepreneurship within the engineering and computer science curriculum.

Graduate programs are offered to qualified persons who have sufficient and satisfactory undergraduate preparation. Master's degrees (with or without thesis) and Ph.D. degrees are offered in Computer Engineering, Computer Science, Electrical Engineering, Mechanical Engineering, Ocean Engineering and Transportation and Environmental Engineering. Master's degrees are also offered in Artificial Intelligence, Biomedical Engineering, Civil Engineering, Data Science and Analytics, and Information Technology and Management. Certificates in Artificial Intelligence, [Big Data Analytics](#), Biomedical Engineering, Corrosion, [Cyber Security](#), [Energy Resilience](#), [Professional Energy Resilience](#), Offshore Engineering, Transportation Engineering, and [Transportation Logistics and Supply Chain Management](#) are also available.

Combined Bachelor of Science to Master of Science degree programs are offered in all of the College's departments. Among the programs' advantages, students may count a maximum of 9 credits in approved graduate-level courses toward both the B.S. and M.S. degrees.

For highly motivated undergraduate students, the B.S. to Ph.D. program, an option in all of the College's doctoral programs, may be desirable. See admission and degree requirements later in this section. Course offerings, admission and degree requirements are given in the individual program descriptions that follow. Additional information is available from the respective departments or from the College of Engineering and Computer Science website at [www.eng.fau.edu](http://www.eng.fau.edu).

## BACHELOR'S DEGREE PROGRAM INFORMATION

### General Studies Degree Program

The University offers a Bachelor of General Studies (B.G.S.) degree program that allows students to design a plan

of study to meet their personal interests and career goals. The 120-credit program includes 15 credits of upper-division coursework in one discipline, which students select in consultation with an advisor. For more B.G.S. details and degree requirements, please refer to the [Degree Programs](#) section of this catalog.

#### Undergraduate Research Certificate

To recognize undergraduate students' excellence in undergraduate research, the Office of Undergraduate Research and Inquiry (OURI) has established the [Undergraduate Research Certificate](#). Requirements for the Research Certificate include completion of 12 credits of research exposure, skill-building and intensive courses as well as dissemination of the outcomes of students' research and inquiry through a research presentation or exhibition.

#### Math Policies and Math Boot Camp Requirement

If, during a student's first attempt at a math course, a failing grade is earned or withdrawal from the math course after the drop/add deadline occurs, enrollment in and satisfactory completion of FAU's Math Boot Camp is required before the student is permitted to enroll in a second and final attempt at the math course.

Engineering and computer science students are permitted a maximum of two attempts for a single math course, whether at FAU or another institution. If a student withdraws from and/or fails the math course on the second attempt, the student may be required to change their major and leave the College of Engineering and Computer Science.

#### Senior Design Sequence

Most undergraduate degrees in the College of Engineering & Computer Science contain a two-semester capstone senior design sequence where the students work in teams to design, build, and test selected projects. Given the nature of these courses, students must persist through both semesters with the same group; therefore, unless permitted by the faculty member teaching the course, all two-course design sequences (CGN 4803C/CGN 4804C, EGN 4950C/EGN 4952C, EML 4521C/EML 4551, EOC 4804/EOC 4804L) must be taken in consecutive semesters (excluding summer, only if not offered). If a student fails to earn a grade of "C" or higher or withdraws from the second of the two design courses, both courses must be repeated. The retake of Design 1 must be registered for credit, which carries fee liability, and will receive a recording with a final letter grade, or as an audit (au), which

will carry fee liability, but no letter grade will be recorded. Determination of which option is most appropriate is at the discretion of the instructors of record in consultation with academic advising.

#### Unsuccessful Course Attempts

All core, math, science, and elective courses required for degrees in the College of Engineering & Computer Science must be completed with grades of "C" or higher to satisfy the degree requirement. Grades of "C-" and lower, as well as withdrawal (W) grades, are considered unsuccessful attempts. While the university considers any grade above an "F" as passing, and therefore it may appear that credit has been earned for grades of "C-" and lower, our degree programs specify that a grade of "C" or higher is required. Some general education courses may be satisfied with grades below "C". Please check with your academic advisor to confirm satisfactory completion.

#### Limitation on Course Attempts

Students may not make a second attempt at more than three upper-division (3000-4000) level College of Engineering and Computer Science courses required for the major. Students who exceed the total of three upper-division course repetitions will not be permitted to continue in the major or any other major requiring the repeated course(s). No student will be permitted more than 5 non-passing grades in courses in the College of Engineering and Computer Science (excluding "W") throughout degree program. Students who reach 5 non-passing grades, will be asked to change their major outside the College of Engineering & Computer Science.

#### Timely Degree Completion

Transfer students are expected to graduate within 3 years, as established by the Florida Board of Governors. Students who have not met all requirements for their major, but who have accumulated 120 credits, including 42 upper-division credits, have met all general education requirements, and who are more than 30 credits from graduation, will automatically be granted a Bachelor of General Studies (B.G.S.) degree (no major specified\*) and have the opportunity to participate in commencement exercises. Those wishing to take additional courses after meeting degree requirements may consider a second baccalaureate degree, a graduate degree, or coursework taken as a non-degree-seeking student.

First Time in College and Early Admission students are expected to graduate within 4 years, as established by the Florida Board of Governors. Students who have not met all requirements for their major, but who have accumulated 120 credits, including 42 upper-division credits, have met all general education requirements, and who are more than 30 credits from graduation, will automatically be granted a Bachelor of General Studies (B.G.S.) degree (no major specified\*) and have the opportunity to participate in commencement exercises. Those wishing to take additional courses after meeting degree requirements may consider a second baccalaureate degree, a graduate degree, or coursework taken as a non-degree-seeking student.

Any student enrolled in any College of Engineering and Computer Science degree program for six years, who has accumulated 120 credits, including 42 upper division credits, and all general education requirements, will automatically be granted a Bachelor of General Studies (B.G.S.) degree (no major specified\*) and have the opportunity to participate in commencement exercises. Those wishing to take additional courses after meeting degree requirements may consider a second baccalaureate degree, a graduate degree, or coursework taken as a non-degree-seeking student.

#### Preprofessional Program

Entering freshmen and all transfer students in the bachelor of science programs for engineering majors will be admitted directly to the College's preprofessional program as pre-engineering students. The following are required for students to be admitted to their major of choice in the College of Engineering and Computer Science:

1. Students must meet University admission requirements.
2. In each core course listed below, students must obtain a minimum grade of "C." Advanced placement scores of 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 of the 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.

#### B.S. in Geomatics Engineering

Course Title	Course Number	Credits
Calculus with Analytic Geometry 1 (1)	MAC 2311	4

#### B.S. in Civil, Computer, Electrical, Environmental, Mechanical and Ocean Engineering

Course Title	Course Number	Credits
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.

(2) PHY 2043 and PHY 2048 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 pre-professional engineering courses, students will be transitioned automatically into their engineering concentration. [The Center for Advising & Student Engagement \(CASE\)](#) is available to assist students in the selection of a major field of study and can be reached at 561-297-2790 or [engineering-advising@fau.edu](mailto:engineering-advising@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.

#### General Curriculum Notes

The College recognizes that students may transfer from other schools or programs or may have course numbering system changes. As a result, the College will accept the following as equivalent:

1. MAP 3305, Engineering Mathematics 1 and MAP 2302, Differential Equations.
2. PHY 2044, Physics for Engineers 2 and PHY 2049, General Physics 2.

Students will follow the University catalog for the year in which they began classes at Florida Atlantic University. However, students remaining in the program for longer than ~~six (6) eight (8)~~ years will be automatically updated to the most recent catalog.

#### Advising/Student Responsibility



Experienced academic advisors are available to meet with students every term to help ensure they are taking courses in the proper sequence and at a rate consistent with their personal objectives, academic ability, and other commitments. Final responsibility for meeting degree requirements and for fulfillment of course prerequisites rests with the student. All students must meet with their advisor once per year.

#### Engineering Cooperative Education

The College of Engineering and Computer Science's Cooperative Education program enables qualified students to gain paid, professional work experience in business and industry prior to graduation. Co-op students either alternate periods of full-time work and study or work half time while pursuing their degrees.

The College encourages ~~also sponsors one-semester~~ internships ~~available~~ to students enrolled for a degree within the College. Internships provide an opportunity for students to gain career-related work experience while pursuing their degrees. ~~Internships may be either full time (35-40 hours/week) or part time (20-25 hours/week) and are repeatable.~~

Commented [JB1]: Is this accurate?

To learn more about the Cooperative Education and internship programs, students in the College of Engineering and Computer Science should contact the FAU Career Center at 561-297-3533 or refer to its [website](#). All students must be registered with the Center to participate in co-op or internship programs.

#### Engineering Student Services

The goal of [The Center for Advising & Student Engagement \(CASE\)](#) is to provide engineering and computer science students with hands-on guidance, support and encouragement to help facilitate their academic success as they work towards their degree. The CASE team is comprised of academic advisors and student service professionals who work closely with students to address their unique and specific needs through personalized advising, academic coaching, and meaningful programming to enhance their university experience. Questions related to admissions, financial aid, advising, student organizations and activities and other student-related matters may be directed to the CASE Team at 561-297-2790 or [engineering-advising@fau.edu](mailto:engineering-advising@fau.edu).

#### Financial Aid/Student Employment

Opportunities for financial aid are available to Engineering and Computer Science students. Work opportunities sometimes are available as student assistants in offices and laboratories and on externally sponsored research projects. For job opportunities, visit Handshake

#### Foreign Language Requirement

The Foreign Language Entrance Requirement (FLENT) is an admission requirement of the State University System that requires a student to have taken two years of the same language in high school. Universities may waive the FLENT requirement for students seeking admission. However, FLENT must be satisfied before any degree can be awarded. This requirement may be satisfied by providing documentation of completion of two years of the same language in high school, achieving a minimum required score on a proficiency exam (CLEP, etc.), providing an official transcript from a secondary or postsecondary institution primarily taught in a non-English language, or by completing at least the 2<sup>nd</sup> level of a foreign language course sequence (XXX 1121).

### HONORS PROGRAM IN ENGINEERING

The Honors Program provides FAU's students in the College of Engineering and Computer Science the opportunity to achieve academic excellence beyond the level of standard coursework. Students interested in pursuing the Honors designation should meet the following eligibility and admission requirements.

#### Eligibility Requirements

Engineering and Computer Science students with strong academic records and interest in improving their leadership and innovation skills are encouraged to apply for the Honors Program in Engineering program. Students must meet the following program entry requirements:

1. Junior standing (must have completed 60 credits toward an engineering or computer science major);

2. At the time of application, must have a cumulative GPA of at least 3.25 in the last 60 credits taken at FAU and any other previous institution of higher education;
3. Must not have received a grade lower than a "C" in any college course; and
4. Apply through the [Center for Advising & Student Engagement](#). ~~Division of Engineering Student Services and Advising~~ [Department](#)

#### Program Requirements

1. Preferred to maintain full-time status (excluding summer semesters); however, a one-semester grace period may be given if the student decides to study abroad or has other considerations that preclude full-time status.
2. Must maintain cumulative GPA of 3.25 or better. If a student's overall GPA falls below 3.25, a one-semester grace period may be given for improvement. If the GPA does not recover, the student's honors status will be withdrawn.
3. Must not receive any grade lower than a "C" in any college course.
4. Must not have any violation of the Code of Academic Integrity.
5. Must participate in at least one general enrichment activity (membership in a student professional organization, attend professional development seminar, other approved activity).
6. Must not receive a grade lower than a "B" in any Honors-in-the-Major course requirement (9 credits of honors-level coursework as approved in consultation with the advisor and the associate dean and capstone with honors compact).
7. Must complete Honors Directed Independent Study (EGN 5908, 3 credits), which will count as the thesis.
8. Must complete a formal Honors application.

~~Sample Flight Plan~~

~~Junior Year Fall Term~~

Course Title	Course Number	Credits
Engineering Honors Seminar	EGN 4933	0
Core Elective 1	-	1
Junior Year Spring Term		
Course Title	Course Number	Credits
Engineering Honors Seminar	EGN 4933	0
Core Elective 2	-	1
Junior Year Summer Term		
Course Title	Course Number	Credits
Engineering Honors Seminar	EGN 4933	0
Core Elective 3	-	1
Senior Year Fall Term		
Course Title	Course Number	Credits
Engineering Honors Seminar	EGN 4933	0
Engineering Capstone Design 1	-	3
Senior Year Spring Term		
Course Title	Course Number	Credits

Engineering Honors Seminar	EGN 4933	0
Engineering Capstone Design 2	-	1
-		