

 FLORIDA ATLANTIC UNIVERSITY	NEW/CHANGE PROGRAM REQUEST Undergraduate Programs	UUPC Approval _____ UFS Approval _____ Banner Posted _____ Catalog _____
	Department CEECS College CoE&CS	
Program Name Computer Science, Computer Engineering, and Electrical Engineering	<input type="checkbox"/> New Program <input checked="" type="checkbox"/> Change Program	Effective Date <i>(TERM & YEAR)</i> Fall 2020
Please explain the requested change(s) and offer rationale below or on an attachment Add a new cooperative education program		
Faculty Contact/Email/Phone Hanqi Zhuang/zhuang@fau.edu/7-3413	Consult and list departments that may be affected by the change(s) and attach documentation	
Approved by Department Chair <u>DM for Hanqi Zhuang</u> College Curriculum Chair <u>Daniel Meeroff</u> College Dean <u>Fred Bloetscher (via email confirmation)</u> UUPC Chair <u>Jerry Haky (via email confirmation)</u> Undergraduate Studies Dean <u>Edward Pratt (via email confirmation)</u> UFS President _____ Provost _____	Date <u>3-24-20</u> <u>3-27-20</u> <u>3-27-20</u> <u>3-30-20</u> <u>3-31-20</u> _____ _____	

Email this form and attachments to mjenning@fau.edu one week before the UUPC meeting so that materials may be viewed on the UUPC website prior to the meeting.

Computer & Electrical Engineering and Computer Science

Faculty: Zhuang, H., Interim Chair; Kalva, H., Associate Chair; Aalo, V.; Agarwal, A.; Alhalabi, B. A.; Asghar, W.; Assis, R.; Azarderakhsh, R.; Bagby, J.; Batalama, S.; Bullard, L. A.; Cardei, I. E.; Cardei, M.; Cooper, R. B., Emeritus; DeGiorgio, M.; Erdol, N.; Fernandez, E. B.; Furht, B.; Gazourian, M. G., Emeritus.; Ghoraani, B.; Hallstrom, J.; Hsu, S. C., Emeritus; Huang, S.; Ilyas, M.; Khoshgoftaar, T. M.; Larrondo-Petrie, M.; Liu, F. H.; Mahgoub, I.; Marcovitz, A., Emeritus; Marques, O.; Messenger, R. A., Emeritus; Neelakanta, P.; Ni, Z.; Nojournian, M.; Pados, D.; Pandya, A. S.; Pavlovic, M.; Peterson, V.; Raviv, D.; Rhodes, W., Emeritus; Roth, Z.; Shankar, R.; Solomon, M. K., Emeritus; Sorgente, T.; Taebi, S.; Tang, Y.; Ungvichian, V., Emeritus; Wang, D.; Yang, K.; Zilouchian, A.; Zhong, X.; Zhu, X.; Groff, D. D.; Sklivanitis, G.;

The Department of Computer & Electrical Engineering and Computer Science (CEECs) offers programs in Bioengineering, Computer Engineering, Computer Science and Electrical Engineering. Specifically, the department offers undergraduate programs of study leading to the degrees of Bachelor of Science (B.S.) with major in Computer Science, Bachelor of Science in Computer Engineering (B.S.C.E.), and Bachelor of Science in Electrical Engineering (B.S.E.E.). A minor in Computer Science is also available. A [Data Science certificate](#) program, designed jointly by departments of Computer and Electrical Engineering and Computer Science and Mathematical Sciences, provides an in-depth study of the methods to manage, analyze and extract knowledge from data.

In the graduate area, the department offers a Master of Science (M.S.) with major in Bioengineering, Master of Science (M.S.) with major in Artificial Intelligence with thesis, Master of Science (M.S.) with major in Artificial Intelligence without thesis, Master of Science with major in Computer Engineering with thesis, Master of Science with major in Computer Engineering without thesis, Master of Science with major in Computer Science with thesis, Master of Science with major in Computer Science without thesis, Master of Science with Major in Data Science and Analytics, and Master of Science with major in Electrical Engineering. A certificate in Bioengineering is also available.

Prospective doctoral students may choose from a Doctor of Philosophy (Ph.D.) with major in Computer Engineering, Doctor of Philosophy (Ph.D.) with major in Computer Science and Doctor of Philosophy with major in Electrical Engineering (Ph.D.).

To encourage undergraduates to pursue a graduate education, the department also offers a combined B.S.C.E. to M.S. degree program in Computer Engineering, a B.S. to M.S. degree program in Computer Science, a B.S.E.E. to M.S. degree program and a combined program leading to an M.S. in Bioengineering that is offered to B.S. candidates in any College of Engineering and Computer Science major. In addition These programs permit students to complete both a bachelor's and a master's degree within five years. For students interested in combining the broad systems orientation provided in the Bachelor of Science in Electrical Engineering (B.S.E.E.) with focus in Computer Engineering, the department offers the five-year B.S.E.E./M.S.Cp.E. (Master of Science in Computer Engineering). Program details are listed in the Electrical Engineering section under Combined Programs.

Below, the Computer Science and Computer Engineering programs are described first, followed by the Electrical Engineering program and the Bioengineering program.

[Link to Bioengineering Programs](#)

[Link to Electrical Engineering Programs](#)

[Link to Information Technology and Management Program](#)

Cooperative Education Program

Cooperative Education is a unique educational program in which students integrate classroom study with period of paid, supervised work experience related to their academic major. At FAU, Cooperative Education is a structured learning situation in which students apply concepts learned in the classroom to 'real world' work environments. The program is available on an optional basis to all students in accordance with the description shown in the [Student Services and Activities section](#) of this catalog. Students in the College of Engineering and Computer Science must meet the following requirements:

1. Students wishing to participate in cooperative education in the College of Engineering and Computer Science should contact the Division of Engineering Student Services and Advising ([DESSA](#)).
2. The College of Engineering and Computer Science Co-Op Program operates on a part-time basis, 20 hours per week, no more, no less. In this program, the work is specifically tied to your field/major and must be secured through the [FAU Career Center](#).
3. The College of Engineering and Computer Science Co-Op Program is primarily geared toward students who enter as freshmen, as opposed to transfer students. As a result, incoming freshmen cohorts will receive primacy with respect to assignments. Specific major requirements are found in the [College of Engineering and Computer Science Co-Op Program Manual](#).
4. The grade will be reported on the transcript as pass or fail.

To learn more about the Cooperative Education Programs students in the College of Engineering should contact [University Cooperative Education](#) at (561) 297-3520 in the Student Services Building, within the [Career Development Center, Room 222](#).

Computer Science and Computer Engineering

Mission Statement

The common mission of the Computer Science and Computer Engineering Programs is:

1. To produce graduates with a strong grasp of fundamentals of computer science and computer engineering, knowledge in technical specialty areas and an appreciation of the power of collaborative effort applied to problem solving.
2. To offer courses and programs that stimulate innovation and enhance the ability of graduates to achieve high levels of professional development and to succeed in a competitive marketplace.
3. To conduct research in selected areas and to integrate research results with teaching activities.
4. To provide service to the profession and community and forge strategic alliances with other professions.

[Link to Data Science Certificate](#)

[Link to Combined Programs](#)

[Link to Master's Programs](#)

Commented [DM1]: <https://www.fau.edu/academic/registrar/PREcatalog/student-services.php>

Commented [DM2]: Add link to desa.fau.edu

Commented [DM3]: Add link to fau.edu/career

Commented [DM4]: Add link to eng.fau.edu/coop website

[Link to Big Data Analytics Graduate Certificate](#)

[Link to Cyber Security Graduate Certificate](#)

[Link to Energy Resilience Certificate](#)

[Link to Doctoral Programs](#)

