New Combined Degree Program Request

FLORIDA ATLANTIC UNIVERISTY

New Combined Degree Program Request

Proposed Program: __BS CE to PhD CE_____ CIP: _____ Effective Date (Term/Year): Fall 2022 _____/_____ *(e.g. Fall/2020)*

Proposed Combined Program Information	Undergraduate	Graduate
Degree Level (e.g. B.A., B.S., M.A., M.S., etc.)	BS	PhD
Program Name (e.g. Physics, Engineering, etc.)	Computer Engineering	Computer Engineering
College	Engineering and Comp. Sci.	Engineering and Computer Science
Department	Electrical Eng. and Comp. Sci.	Electrical Eng. and Comp. Sci.
Program Description (provide a brief description of the program, including thesis or non-thesis option)	This is a combined program with BS in Computer Engineering to PhD in Computer Engineering. Up to 12 graduate credits can be counted both in the bachelor and PhD's degrees. This program does not increase the number of credits in the undergraduate degree.	

Curriculum Requirements

GPA Requirements: Departments must establish a minimum undergraduate GPA for students to be admitted to a combined program. *Note: Please attach explanation.* The minimum undergraduate GPA is 3.5.	List courses to be shared: Up to twelve (12) credit hours of graduate courses (5000 level or above course work) may be shared between the graduate and undergraduate degree for a combined program. *Note: Please attach explanation:* • *Academic justification for shared credits and catalog language* • *List the undergraduate course that will be replaced by graduate courses.*

Faculty Submitting Request	Name	Signature	Email	Date
	Dr. Hanqi Zhuang		zhuang@fau.edu	

Approved by

	Date
Department Chair: _____	1/26/2022
College Dean: _____	2/8/2022
College Curriculum Chair: _____	2/8/2022
UUPC Chair: *Ethlyn Williams*	2-28-22
Undergraduate Studies Dean: *Daniel Meeroff*	2-28-22
(Note: Forward approved form to UGPC@fau.edu)	
UGPC Chair: _____	_____
UGC Chair: _____	_____
Graduate College Dean: _____	_____
UFS President: _____	_____
Provost: _____	_____

Email this form and syllabus to mjenning@fau.edu seven business days before the UUPC meeting.

B.S. in Computer Engineering to Ph.D. in Computer Engineering Degree Program

The department of Electrical Engineering and Computer Science offers a combined B.S. in Computer Engineering to Ph.D. in Computer Engineering degree program.

Students may count up to 12 credits of graduate coursework (5000 level or higher) offered by the EECS department toward both their bachelor's and Ph.D.'s degrees. These graduate courses will replace elective and semi-core courses in the bachelor's program. The proposed program does not increase the number of credits in the undergraduate degree.

All the combined programs total a minimum of 195 credits:

1. The student has met the minimum 123 credits for the bachelor's degree; and
2. The student has taken a minimum of 72 credits in 5000 level or higher courses for the Ph.D.'s program.

This combined program provides an attractive way for students to continue their graduate work. Students complete the undergraduate program first.

Admission Requirements
The GRE requirement is waived for this combined program.

1. To be eligible to apply for the combined program, students must have a cumulative FAU GPA of 3.5 or better at the end of their junior year. Note that the cumulative FAU GPA of at least 3.5 must be maintained until the completion of the bachelor's degree.
2. Formally apply to the combined program after the junior year (90 credits or more of coursework completed). The application must include one reference letter.
3. Must be admitted into the combined program at least one semester prior to the beginning of the Ph.D. portion of the program.

Students in the combined program must maintain continuous enrollment to remain in good standing.

Degree Requirements
To be eligible for the combined bachelor to Ph.D. program, students must fulfill the following requirements:

1. Completion of the requirements for the B.S. in Computer Engineering program and other requirements stipulated by the University and College
2. Completion of all requirements for the Ph.D. in Computer Engineering degree program.

Sample four-year program of study, B.S. Computer Engineering

123 credits

Course is Required (R), Elective (E), or Semi-Core (SC)

Year One (32 credits)
Fall Semester (15 cr)
College Writing I (ENC 1101) (3) (R)
Calculus with Analytic Geometry I (MAC 2311) (4) (R)
General Physics I for Engineers with Lab (PHY 2048/L) (5) (R)
Fundamentals of Engineering (EGN 1002) (3) (R)

Spring Semester (17 cr)
College Writing II (ENC 1102) (3) (R)
Calculus with Analytic Geometry II (MAC 2312) (4) (R)
Art Appreciation (ARH 2000) (3) (E)
General Physics II with Lab (PHY 2049/L) (4) (R)
Programming I (COP 2220) (3) (R)

Year Two (31 credits)
Fall Semester (16 cr)
US History to 1877 (AMH 2010) (3) (E)
Calculus with Analytic Geometry III (MAC 2313) (4) (R)
Macroeconomic Principles (ECO 2013) (3) (E)
Intro to Music Education (MUE 2040) (3) (E)
Fundamentals of Computing (COT 2000) (3) (R)

Spring Semester (15 cr)
World Geography (GEA 2000) (3) (E)
Interpretation of Fiction (LIT 2010) (3) (E)
Circuits I (EEL 3111) (3) (R)
Computer Logic Design (CDA 3201C) (3)(R)
Programming II (COP 3014) (3) (R)

Year Three (30 credits)
Fall Semester (15 cr)
Design of Digital Systems and Lab (CDA 4240C) (3) (R)
Electronics I (EEE 3300) (3 (R)
Electronics I Lab (EEL 3118L) (3) (R)
Engineering Mathematics 1 (MAP 3305) (3) (R)
Data Structure and Algorithm Analysis (COP 3530) (3) (R)

Spring Semester (15 cr)
Stochastic Models for Computer Science (STA 4821) (3) (R)
Signals and Digital Filter Design (EEE 3502) (3) (R)
Intro to Data Science and Analysis (CAP 4773) (3) (R)

Computer Architecture (CDA 4102) (EGN 4410C) (3) (R)
Principles of Software Engineering (CEN 4010) (3) (R)

Year Four (30 credits)
Fall Semester (15 cr)
Engineering Design I (EGN 4410C) (3) (R)
Intro to Embedded System Design (CDA 4630) (3)(R)
Computer Operating Systems (COP 4610) (3) (SC)
Graduate Course 1 (3) (E)
Graduate Course 2 (3) (E)

Spring Semester (15 cr)
Engineering Design II (EGN 4411C) (3) (R)
Computer Networks (CNT 4007) (3) (R)
Intro to VLSI Design (CDA 4210) (3) (SC)
Graduate Course 3 (3) (E)
Graduate Course 4 (3) (E)