



## New Combined Degree Program Request

UUPC Approval 12-7-20  
 UGPC Approval \_\_\_\_\_  
 UFS Approval \_\_\_\_\_  
 Banner Posted \_\_\_\_\_  
 Catalog \_\_\_\_\_

### New Combined Degree Program Request

BS in Nursing/MS in Bioengineering

Proposed Program: \_\_\_\_\_ CIP: \_\_\_\_\_ Effective Date (Term/Year): Fall / 2021 (e.g. Fall/2020)

Proposed Combined Program Information	Undergraduate	Graduate
Degree Level (e.g. B.A., B.S., M.A., M.S., etc.)	B.S.	M.S.
Program Name (e.g. Physics, Engineering, etc.)	Nursing	Bioengineering
College	Christine E. Lynn College of Nursing	Engineering and Computer Science
Department		Computer and Electrical engineering and Computer Science
Program Description (provide a brief description of the program, including thesis or non-thesis option)	This is a combined program with B.S. in Nursing to MS in Bioengineering. Students complete the prerequisite courses while pursuing the bachelor's degree. Up to 9 graduate credits can be double-counted in the bachelor and MS .	

### Curriculum Requirements

**GPA Requirements:** Departments must establish a minimum undergraduate GPA for students to be admitted to a combined program. *Note: Please attach explanation.*

Cumulative GPA of at least 3.25 at the end of the junior year.

**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	Hanqi Zhuang <small>Digitally signed by Hanqi Zhuang Date: 2020.10.21 13:20:19 -0400</small>	zhuang@fau.edu	10/21/2020

**Approved by** Hanqi Zhuang Digitally signed by Hanqi Zhuang  
Date: 2020.10.21 13:20:19 -0400

Department Chair: \_\_\_\_\_

College Dean: M. Carder Digitally signed by Michaela Carder  
DN: cn=Michaela Carder, ou=Florida Atlantic University, ou=Faculty, email=mcarder@fau.edu, c=US  
Date: 2020.10.21 14:42:00 -0400

College Curriculum Chair: Francisco Presuel-Moreno Digitally signed by Francisco Presuel-Moreno  
DN: cn=Francisco Presuel-Moreno, ou=Faculty, email=fpresuel@fau.edu, c=US  
Date: 2020.10.21 14:49:00 -0400

UUPC Chair: Jerry Haky

Undergraduate Studies Dean: Edward Pratt  
*(Note: Forward approved form to [UGPC@fau.edu](mailto:UGPC@fau.edu))*

UGPC Chair: Christyann Beetle

UGC Chair: Paul Peluso Digitally signed by Paul Peluso  
Date: 2021.02.08 14:34 EST

Graduate College Dean: Paul W. Smith

UFS President: \_\_\_\_\_

Provost: \_\_\_\_\_

**Date**

11-23-20

11/30/2020

11-23-20

12-7-20

12-7-20

Feb 5, 2021

Feb 8, 2021

Feb 8, 2021

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

## Academic Justification

The Christine E. Lynn College of Nursing and the College of Engineering and Computer Science (COECS) propose a new combined program, where students will complete the BS in Nursing (B.S.N.) degree in College of Nursing and then continue with an MS degree in Bioengineering in the COECS. The program requires at least 120 credits in the bachelor's degree and at least 30 credits in the MS degree. The students will take the prerequisite courses while pursuing the bachelor's degree, ensuring a smooth transition into the MS in Bioengineering program.

The combined program preserves and enhances the quality of both degrees. Students in the College of Nursing applying to this program will have to take prerequisite courses from Table 1 which are offered by the department of Computer and Electrical Engineering and Computer Science (CEECS). This combined program is open to talented students who have a cumulative FAU GPA of 3.25 or better. Students can apply to the MS program at the end of their junior year (e.g. after completing at least 90 credits). Bachelor students who take graduate courses (5000 – level or higher) in CEECS department may count up to 9 credits of approved graduate coursework (5000 level or higher) toward both their bachelor's and master's degrees as long as the combined program totals a minimum of 150 credits.

**Table 1. Prerequisite courses to be completed during the bachelor's degree**

Prerequisite Courses
MAC 2233 Methods of Calculus
PCB 3063 Genetics
COP 2034 Introduction to Programming in Python OR COP 2220 Introduction to Programming in C

## CATALOG SPECIFICATIONS

### **B.S. in Nursing to M.S. in Bioengineering Degree Program**

The Christine E. Lynn College of Nursing and the College of Engineering and Computer Science (COECS) offer a combined Bachelor of Science in Nursing to Master of Science in Bioengineering degree program. The Bachelor of Science in Nursing degree will be completed and received from the Christine E. Lynn College of Nursing. Students will do the Master of Science in Bioengineering in the Department of Computer and Electrical Engineering and Computer Science at FAU and will receive the master's degree from the COECS.

Students may count up to 9 credits of approved graduate coursework (5000 level or higher) toward both their bachelor's and master's degrees as long as the combined program totals a minimum of 150 credits and:

1. The student has met the minimum 120 credits for the bachelor's degree; and
2. The student has taken a minimum of 30 credits in 5000 level or higher courses for the master's program.

Students must complete the prerequisite coursework for the master's degree while pursuing the bachelor's degree at the College of Nursing. This combined program provides an attractive way for students to continue their graduate work. Students complete the undergraduate program first. The combined program can be completed in approximately five years.

### **Admission Requirements**

The GRE requirement is waived for this combined program. To be eligible for the combined program, the bachelor's students in the College of Nursing should:

1. Have a cumulative FAU GPA of 3.25 or better at the end of their junior year. Note that the cumulative FAU GPA of at least 3.25 must be maintained until the completion of the bachelor's degree in the College of Nursing.

2. Formally apply to the combined program, completing the admissions process at least one semester prior to the beginning of the M.S. portion of their program.

Students in the combined program must maintain continuous enrollment to remain in good standing. Students must also meet all the degree requirements of the graduate program they have chosen, including prerequisite courses.

### Degree Requirements

To be eligible for the combined B.S. in Nursing to M.S. in Bioengineering Degree Program, students must fulfill the following requirements:

1. Completion of the requirements for the B.S. in Nursing in the Christine E. Lynn College of Nursing, and other requirements stipulated by the University and College
2. Completion of all requirements for the M.S. in Bioengineering program in the CEECS department, on either the thesis or non-thesis option
3. The following courses will be taken during the B.S. in Nursing program:

Methods of Calculus	MAC 2233	3
Genetics	PCB 3063	3
Introduction to Programming in Python OR Introduction to Programming in C	COP 2034 COP 2220	3 3

### Plan of Study for the B.S. in Nursing to M.S. in Bioengineering Degree Program

(Minimum of 120 credits required)

<b>Fall 1</b>		
Anatomy and Physiology 1	BSC 2085	3
Anatomy and Physiology 1 Lab	BSC 2085L	1
College Writing 1	ENC 1101	3
Methods of Calculus	MAC 2233	3
Learning Strategies and Human Development	SLS 1503	2
Foundations of Caring in Nursing Situations	NUR 3115	3
<b>Total</b>		<b>15</b>
<b>Spring 1</b>		
Anatomy and Physiology 2	BSC 2086	3
Anatomy and Physiology 2 Lab	BSC 2086L	1
College Writing 2	ENC 1102	3
Professional Development in Nursing 1: Ethical and Legal Perspectives of Caring	NUR 4824	1
Introductory Statistics	STA 2023	3
General Psychology	PSY 1012	3
<b>Total</b>		<b>14</b>

<b>Summer 1</b>		
IFP course chosen with advisor		3
Microbiology for Health Services	MCB 2004	3
Microbiology for Health Services Lab	MCB 2004L	1
Sociological Perspectives	SYG 1000	3
<b>Total</b>		<b>10</b>
<b>Fall 2</b>		
General Chemistry for Health Sciences	CHM 2032	3
General Chemistry for Health Sciences Lab	CHM 2032L	1
Psychology of Human Development	DEP 3053	3
Health Assessment in Nursing Situations	NUR 3065	2
Health Assessment in Nursing Situations Lab	NUR 3065L	1
General Pathophysiology	NUR 4125	3
<b>Total</b>		<b>13</b>
<b>Spring 2</b>		
IFP course chosen with advisor		3
Foundations of Nursing Practice	NUR 3119C	2
Pharmacotherapeutics	NUR 3145	3
Food, Nutrition and Health	NUR 3183	3
Nursing Research	NUR 4165	3
<b>Total</b>		<b>14</b>
<b>Summer 2</b>		
IFP course chosen with advisor		3
<b>Total</b>		<b>3</b>
<b>Fall 3</b>		
Chronic Care in Nursing Situations for Adults and Aging Populations	NUR 3262	3
Chronic Care in Nursing Situations for Adults and Aging Populations in Practice	NUR 3262L	2
Population Health: Nursing Situations	NUR 4638	3
Professional Development in Nursing 2: Designer of Caring Environments	NUR 4833	1
Professional Development in Nursing 3: Leader/Coordinator of Caring Environments	NUR 4860	1
Genetics	PCB 3063	3
<b>Total</b>		<b>13</b>
<b>Spring 3</b>		
IFP course chosen with advisor		3
The Developing Family: Nursing Situations	NUR 3465	4

The Developing Family: Nursing Situations in Practice	NUR 3465L	2
Introduction to Programming in Python	COP 2034	3 or
Introduction to Programming in C	COP 2220	3
<b>Total</b>		<b>12</b>
<b><i>Apply to M.S. in Bioengineering Program</i></b>		
<b><i>Fall 4</i></b>		
Psychiatric and Mental Health: Nursing Situations Across the Lifespan	NUR 4525	3
Psychiatric and Mental Health: Nursing Situations Across the Lifespan in Practice	NUR 4525L	2
Acute Care in Nursing Situations with Adults and Aging Populations	NUR 4716	4
Acute Care in Nursing Situations with Adults and Aging Populations in Practice	NUR 4716L	2
RI: Scholarship for Evidence-Based Nursing Practice (research-intensive course)	NUR 4937	3
<b>Total</b>		<b>14</b>
<b><i>Spring 4</i></b>		
Creating Healing Environments	NUR 3171	3
Complex Care in Nursing Situations with Adults and Aging Populations	NUR 4764	3
Complex Care in Nursing Situations with Adults and Aging Populations in Practice	NUR 4764L	1
Nursing Practice Immersion	NUR 4829L	4
Professional Development in Nursing 4: Member of a Caring Profession	NUR 4861	1
<b>Total</b>		<b>12</b>