



## New Combined Degree Program Request

UUPC Approval \_\_\_\_\_  
 UGPC Approval \_\_\_\_\_  
 UFS Approval \_\_\_\_\_  
 Banner Posted \_\_\_\_\_  
 Catalog \_\_\_\_\_

### New Combined Degree Program Request

Proposed Program: BA or BS, concentration in Math with MS in Math CIP: \_\_\_\_\_ Effective Date (Term/Year): Fall /2020 (e.g. Fall/2020)

Proposed Combined Program Information	Undergraduate	Graduate
Degree Level (e.g. B.A., B.S., M.A., M.S., etc.)	B.A. or B.S.	M.S.
Program Name (e.g. Physics, Engineering, etc.)	Liberal Arts and Sciences Biological and Physical Sciences	Mathematics
College	Wilkes Honors College	Schmidt College of Science
Department	NA	Mathematical Sciences
Program Description (provide a brief description of the program, including thesis or non-thesis option)	The combined program is offered in partnership with the Wilkes Honors College. The B.A. or the B.S. degree is completed at the Wilkes Honors College, the MS degree is completed in the Department of Mathematical Sciences, Schmidt College of Science. For the Master's degree, both thesis and non-thesis options are available.	

#### Curriculum Requirements

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

GPA of 3.0 in upper-division and graduate courses

**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
	Yuan Wang	<i>Yuan Wang</i>	ywang@fau.edu	2/18/2020

#### Approved by

Department Chair: *[Signature]*  
 College Dean: William David Kabie  
 College Curriculum Chair: *Christopher Beetle* 2020.03.06 11:38:07 -05'00'  
 UUPC Chair: \_\_\_\_\_  
 Undergraduate Studies Dean: \_\_\_\_\_  
*(Note: Forward approved form to [UGPC@fau.edu](mailto:UGPC@fau.edu))*  
 UGPC Chair: \_\_\_\_\_  
 UGC Chair: \_\_\_\_\_  
 Graduate College Dean: \_\_\_\_\_  
 UFS President: \_\_\_\_\_  
 Provost: \_\_\_\_\_

#### Date

2/25/20  
March 9, 2020

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

GRADUATE COLLEGE

For questions, contact the Graduate College at [ugpc@fau.edu](mailto:ugpc@fau.edu)

Updated: 01/31/2020

MAR 09 2020

## **Academic Justification**

The Wilkes Honors College (WHC) and the Department of Mathematical Sciences propose a combined program, where the BA degree in Liberal Arts and Sciences; or the BA or BS in Biological and Physical Sciences; is completed at the Wilkes Honors College, and the MS degree in Mathematics is completed in the Department of Mathematical Sciences, Schmidt College of Science.

### *Background information:*

- The degree programs listed in this proposal are all offered currently.
- Neither new courses nor additional resources are required.

### *Justification:*

The combined program is expected to help retain the best and brightest of our own students, as well as recruit talented students to the bachelor's programs. There have been bright and ambitious students who took graduate courses in mathematics while completing their bachelor's degrees. The combined program will entice such students to complete the MS degree at FAU. Some students may also be persuaded to continue towards a doctoral education in a STEM field.

The MS program in mathematics, which is more theoretical in nature, will be suitable for students who want to continue to doctoral study in mathematics and to pursue academic careers in mathematics.

### *Admission requirements:*

Students should complete their BA or BS degrees with Concentration in Mathematical Sciences or Mathematics. In addition, students are required to have completed MAS 4107 Linear Algebra 2 and STA 4442 Probability and Statistics 1. The GPA requirement is 3.0 for upper division and graduate courses.

### *Courses to be shared by the BS and MS programs:*

The four graduate courses to be shared by the BS and MS programs will be part of the MS curriculum. Covering higher level material, the graduate courses are also suitable substitutions for upper-division electives and required courses for the undergraduate curriculum.

## Catalog Description

### **Bachelor of Arts with Major in Liberal Arts and Sciences, with Concentration in Mathematical Sciences; or Bachelor of Arts or Bachelor of Science with Major in Biological and Physical Sciences, with Concentration in Mathematics; to Master of Science Degree with Major in Mathematics**

The combined program is offered in partnership with the Wilkes Honors College (WHC). The B.A. or the B.S. degree is completed at the Wilkes Honors College, the MS degree is completed in the Department of Mathematical Sciences, Schmidt College of Science.

The combined degree program is 150 credits: 120 credits for the undergraduate degree and 30 for the master's degree, with a maximum of 12 credits of graduate coursework used to satisfy both degrees. Once admitted into the program, students shall follow the suggested course sequence. The baccalaureate degree will be conferred before the master's degree.

Students must maintain a GPA of 3.0 in upper-division and graduate courses. Students interested in this program should consult with the undergraduate and graduate advisors before taking upper-division mathematics coursework to ensure that their coursework will apply toward the combined degree. Students must take the GRE and apply for admission to candidacy by the end of their junior year.

All courses not approved by the Florida Statewide Course Numbering System that will be used to satisfy requirements will be evaluated individually on the basis of content and will require a catalog course description and a copy of the syllabus for assessment.

#### **The Bachelor's Curriculum:**

Students must complete the requirements of the B.A. or the B.S. degree with concentration in Mathematical Sciences or Mathematics from the Wilkes Honors College. In addition, students must complete MAS 4107 Linear Algebra 2 and STA 4442 Probability and Statistics 1.

Twelve graduate credits from the Department of Mathematical Sciences can be counted toward both the Bachelor's degree and the MS degree.

#### **Four Graduate courses to be shared between the Bachelor's degree and the M.S. degree (12 credits):**

Take at least two of the core courses:		
Introductory Analysis 1	MAA 5228	3
Introductory Analysis 2	MAA 5229	3
Introductory Abstract Algebra 1	MAS 5311	3
Introductory Abstract Algebra 2	MAS 5312	3
Take two more courses at the 5000 or 6000 from the Mathematical Sciences Department approved by the departmental graduate committee.		

The 12 graduate credits can either be counted as upper-division math electives or as a substitute for a required course as follows:

GRADUATE COLLEGE

MAR 09 2020

MAA 5228 can be used to substitute for MAA 4200  
MAS 5312 can be used to substitute for MAS 4301  
MAS 5145 can be used to substitute for MAS 4107

**MS Curriculum:**

Students complete all requirements of the MS degree with major in Mathematics.

**4 YEAR FLIGHT PLAN:**  
**BA or BS in Liberal Arts and Sciences or in Biological and Physical Sciences with a  
Concentration in Mathematics or Mathematical Sciences doing the  
Combined BS/MS in Mathematics or Applied Mathematics and Statistics  
For students entering Fall 2020 and later**

FAU is committed to your success as a student. One way we define student success is efficient and effective progression through your degree program.

This Flight Plan is a tool to assist you in planning the courses you should complete and the milestones you should reach during your undergraduate studies so you may graduate on time. It is our intention that you complete this planning tool in *collaboration with your academic advisor* to ensure good understanding of:

- Which graduation requirements you have satisfied
- Which Honors College Core and elective courses will best help you explore your interests and future goals or develop new interests
- How to balance coursework with your other responsibilities and activities (e.g., employment, mentored research, study abroad, student organizations)
- How to get the most from your academic experience at FAU

Your academic advisor will help you customize and maintain your final Flight Plan during the next four years so that you stay on track for success at FAU's Honors College. In order to graduate on time, you will need to:

- Complete an average of 30 credit hours per year, less any college credit you enter FAU with
- Earn 120 credit hours, at least 45 in the upper division (3000 or 4000 level)
- Earn at least 9 credit hours in summer coursework (or equivalent)

The Honors College provides individual advising from faculty and so this Flight Plan is meant only to be a general guide. The Faculty advisor is assigned initially during Orientation but students are free to change their faculty advisor by completing a change of advisor form, [available online](#). Students should not feel bound by this generic plan if they and their faculty advisor have developed a different plan that better suits their particular needs. Your advisor will help you identify what additional milestones apply to you, as well as help prepare you for a graduate program if that is your goal. In addition, students should use MyFAU to run a DARS audit of their coursework to confirm what requirements they still need to meet. If you have any questions at all about your FAU Flight Plan, feel free to contact any of the following individuals for assistance. They are here to help!

**Your Academic Advising Professionals**

<b><i>Faculty Advisor</i></b>	
<b>Office Location:</b>	
<b>Email Address/Phone:</b>	
<b><i>Academic Support Services</i></b>	<b>Mr. David Flanigan</b>
<b>Office Location:</b>	<b>HC 132</b>
<b>Email Address/Phone:</b>	<b>flanigan@fau.edu/799-8622</b>
<b><i>Associate Dean</i></b>	
<b>Office Location:</b>	
<b>HC 133</b>	
<b>Email Address/Phone:</b>	<b>thoim@fau.edu/799-8673</b>
<b>Additional Info:</b>	<b><a href="http://www.fau.edu/honors/academics.php">http://www.fau.edu/honors/academics.php</a></b>

*This unofficial guide is to be used in conjunction with regular academic advising appointments. Not all University and State degree requirements are listed. For a full degree audit, see the Director of Academic Support Services in HC 132.*

**Flight Plan: in Liberal Arts and Sciences or BA or BS in Biological and Physical Sciences  
with a Concentration in Mathematics or Mathematical Sciences  
doing the Combined BS/MS in Mathematics or Applied Mathematics and Statistics**

**IMPORTANT NOTES**

- 1.** Honors College students are required to maintain an FAU cumulative GPA of at least **3.0** to remain eligible for their Honors College scholarships. You must maintain a minimum **2.0** GPA each semester to be in good academic standing.
- 2.** To receive your Honors College scholarship you must be full-time (**minimum 12 credits/semester**) in the Honors College. You should have your advisor's prior approval when taking courses outside the Honors College.
- 3.** Students with an out-of-state tuition waiver must maintain a **3.3** FAU Cumulative GPA to retain the waiver.

Abbreviated Version of 4-year plan

<b>Year One:</b>	
IDS 1022 Forum	1
MAC 2311	4
MAC 2312	4
ENC 1101, ENC 1102	6
COP 2220	3
AMH 2010	3
POS 1041	3
STA 2023	3
Natural Science with lab	3-4
<b>Year Two:</b>	
ANT 2410	3
SPN 1120	4
Social Science Distribution Group A	3
MAD 2104	3
1 intermediate Math Group A	4
1 Intermediate Math Group A	3
SPN 1121	4
PHI 2010	3
Natural Science	3
<b>Year Three:</b>	
MAA 4200	3
2 Team-taught courses	2
1 intermediate Math Group A	3
MAS 4301	3
2 upper division Math Electives	6
Humanities Distribution Group B	3
Social Science Distribution Group B	3
Global Citizenship Elective	3

*This unofficial guide is to be used in conjunction with regular academic advising appointments. Not all University and State degree requirements are listed. For a full degree audit, see the Director of Academic Support Services in HC 132.*

Ethics elective	3
Internship (summer)	3
<b>Year 4</b>	
MAS 4107	3
Math Honors Thesis	6
Team-taught course	3
One upper division Math elective	3
STA 4442	3
Addl Humanities Distribution	3
Addl Social Science Distribution	3
5000-level math course	3
	120

*This unofficial guide is to be used in conjunction with regular academic advising appointments. Not all University and State degree requirements are listed. For a full degree audit, see the Director of Academic Support Services in HC 132.*

## More Information

**Honors College Academic Information**  
<http://www.fau.edu/honors/academics.php>

**Student Policies, Services, and Resources (Handbook):**  
<http://www.fau.edu/handbook/>

**Registration, Transcripts, Forms, Student Records:**  
<http://www.fau.edu/registrar/>

**Academic Support (Center for Teaching and Learning, Writing Center, Undergraduate Research):**  
<http://www.fau.edu/ctl/>

**Student Financial Aid, Other Financial Services:**  
<http://www.fau.edu/finaid/>

**Students with Disabilities:**  
<http://osd.fau.edu/>

**Student Life (Housing, Events & Organizations, Wellness, Counseling, Leadership, Military Affairs, etc.):**  
<http://www.fau.edu/student/SADepts.php>

**Career Development Center:**  
<https://www.fau.edu/cdc/students/undergraduate/student.php>

## Tips for Success

- Meet with your faculty advisor at least once a semester.
- Monitor your progress in your courses; “check-in” with your instructors regularly!
- Check your degree audit every semester.
- Stay aware of important deadlines.
- Take advantage of resources FAU and the Honors College has made available to you to help you succeed on your flight, such as tutoring, office hour visits, and the writing center.

Last updated 02/20/20

*This unofficial guide is to be used in conjunction with regular academic advising appointments. Not all University and State degree requirements are listed. For a full degree audit, see the Director of Academic Support Services in HC 132.*