

# FLORIDA ATLANTIC UNIVERSITY™

## Graduate Programs—PROGRAM CHANGE REQUEST

UGPC APPROVAL \_\_\_\_\_

UFS APPROVAL \_\_\_\_\_

CATALOG \_\_\_\_\_

 DEPARTMENT:  
MATHEMATICAL SCIENCES

 COLLEGE:  
SCIENCE

 PROGRAM NAME:  
Combined Bachelor of Science/Master of Science with Major in Mathematics

**EFFECTIVE DATE**

(PROVIDE TERM/YEAR)

\_\_\_\_\_ SPRING, 2016 \_\_\_\_\_

PLEASE EXPLAIN THE REQUESTED CHANGE(S) AND OFFER RATIONALE BELOW AND/OR ATTACHED:

TO REDUCE THE NUMBER OF CREDITS DOUBLE COUNTED TOWARD THE BS DEGREE AND THE MS DEGREE FROM 15 TO 12, PER THE NEW SACS RULE. THE CHANGE ALSO REFLECTS THE CHANGE OF THE MS PROGRAM IN MATHEMATICS ON THE NUMBER OF REQUIRED CREDITS (FROM 36 TO 30).

Faculty contact, email and complete phone number:

 Yuan Wang, [ywang@fau.edu](mailto:ywang@fau.edu)  
(561) 297 3317

Consult and list departments that might be affected by the change and attach comments.

N/A

**Approved by:**

 Department Chair: 

 College Curriculum Chair: 

 College Dean: 

UGPC Chair: \_\_\_\_\_

Graduate College Dean: \_\_\_\_\_

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

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

**Date:**
10/13/15
11/15/15
11/15/15

\_\_\_\_\_

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Email this form and syllabus to [UGPC@fau.edu](mailto:UGPC@fau.edu) one week before the University Graduate Programs Committee meeting so that materials may be viewed on the UGPC website prior to the meeting.

### Combined B.S./M.S. in Mathematics

This accelerated, five-year program leads to both a Bachelor of Science (B.S.) and a Master of Science (M.S.) degree.

#### Degree Requirements:

The combined degree program is 150 credits, 120 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.

Students must maintain a GPA of 3.0 in upper-division and graduate courses. Students interested in the combined B.S./M.S. should consult with the graduate advisor before taking upper division mathematics coursework to insure that their coursework will apply toward the combined degree. They must take the GRE and apply for admission to candidacy by the end of their junior year.

#### Prerequisite Coursework for Transfer Students

Students transferring to Florida Atlantic University must complete both lower-division requirements (including the requirements of the Intellectual Foundations Program) and requirements for the college and major. Lower-division requirements may be completed through the A.A. degree from any Florida public college, university or community college or through equivalent coursework at another regionally accredited institution. Before transferring and to ensure timely progress toward the baccalaureate degree, students must also complete the prerequisite courses for their major as outlined in the *Transfer Student Manual*.

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.

In addition to the University and Charles E. Schmidt College of Science requirements, students seeking a B.S./M.S. degree in Mathematics must complete the following courses:

Courses	Credits
MAC 2311 Calculus 1	4
MAC 2312 Calculus 2	4
MAC 2313 Calculus 3	4
MAS 2103 Matrix Theory	3
MAD 2104 Discrete Mathematics	3
MAD 2502 Introduction to Computational Math	3
MAT 4937 Mathematical Problem Solving	3
MAS 4107 Linear Algebra 2	3

STA 4442 Probability & Statistics 1	3
MAA 4402 Introductory Complex Analysis	3
3 upper-division undergraduate electives (3000-4000 level) *	9
<b>Total Undergraduate Math Credits:</b>	<b>42</b>
MAA 5228 Introductory Analysis 1	3
MAA 5229 Introductory Analysis 2	3
MAS 5311 Introductory Abstract Algebra 1	3
MAS 5312 Introductory Abstract Algebra 2	3
6 graduate electives (at least 5 at the 6000 level)	18
<b>Total Graduate Credits</b>	<b>30</b>

#### Notes

1. Upper-division mathematics electives: These electives must be chosen from courses offered by the Department of Mathematical Sciences and numbered 3000 or higher. The following courses may not be used as upper-division mathematics electives: STA 3163, STA 3173, STA 3949, MAT 3949, MAP 4945, or STA 4821.
2. Because of overlap in course content, Mathematics majors may receive credit for at most one course in each of the following pairs: (MAP 2302, MAP 3305), (MAP 4303, MAP 4306), (MAD3400, MAD 4401), (STA 4443, STA 4032).
3. Students may opt to take up to 6 master's thesis credits as elective courses, but the student must successfully complete a master's thesis for these credits to be counted toward the degree requirements.
4. The 12 credits from the graduate courses: MAA 5228, MAA 5229, MAS 5311, and MAS 5312 will be counted toward both degrees.