

MEMORANDUM

TO: James Mower, Senate Chair
FROM: Havidán Rodríguez, President
DATE: April 9, 2019
SUBJECT: Senate Bill Approval

I am pleased to approve the following Senate Bill, which was recommended following approval by the University Senate at its meeting of March 25, 2018:

Senate Bill 1819-09: PROPOSAL TO ESTABLISH A COMBINED BS MATH/MS DATA SCIENCE PROGRAM

Approved: _____

Havidán Rodríguez, President

UNIVERSITY SENATE

UNIVERSITY AT ALBANY
STATE UNIVERSITY OF NEW YORK

Introduced by: Graduate Academic Council
Undergraduate Academic Council
University Policy and Planning Council

Date: March 25, 2019

Proposal to Establish a Combined BS Math/MS Data Science Program

IT IS HEREBY PROPOSED THAT THE FOLLOWING BE ADOPTED:

1. That the University Senate approves the attached program proposal as submitted by the Department of Mathematics and Statistics and approved by GAC, UAC, and UPPC
2. That this takes effect for the Fall 2019 semester.
3. That this proposal be forwarded to President Havidán Rodríguez for approval.

University at Albany – State University of New York			
College of Arts and Sciences		Course and Program Action Form	
		Proposal No. 18-147	
Please check one: <input type="checkbox"/> Course Proposal <input checked="" type="checkbox"/> Program Proposal			
Please mark all that apply:			
<input type="checkbox"/> New Course	Revision of:	<input type="checkbox"/> Number	<input type="checkbox"/> Description
<input type="checkbox"/> Cross-Listing		<input type="checkbox"/> Title	<input type="checkbox"/> Prerequisites
<input type="checkbox"/> Shared-Resources Course		<input type="checkbox"/> Credits	
<input type="checkbox"/> Deactivate/Activate Course (boldface & underline as)		<input checked="" type="checkbox"/> Other (specify):	New BS/MS program
Department: <u>Mathematics and Statistics</u>		Effective Semester, Year: <u>Spring 2019</u>	
Course Number Current:	_____	New:	_____ Credits: _____
Course Title: _____			
Course Description to appear in Bulletin:			
Prerequisites statement to be appended to description in Bulletin:			
If S/U is to be designated as the only grading system in the course, check <input type="checkbox"/>			
This course is (will be) cross listed with (i.e., CAS ###): _____			
This course is (will be) a shared-resources course with (i.e., CAS ###): _____			
Explanation of proposal:			
<i>(Undergraduate Course/Program proposals: please address the effect on the department's General Education competency plan)</i>			
The purpose and rationale for these separately registered programs is to attract strong undergraduate students to the data Science program by (1) encouraging them to enroll in graduate classes when in advance standing in their major and (2) making the Data Science MS option attractive by providing the option of paying fees at the undergraduate level for up to 12 graduate credits. The proposed program is meant to be essentially a clone of the existing combined BS/MA program (HEGIS code 1701). The only difference between the proposed and the existing programs is that the Data Science degree has 36 minimal credit requirement, however we propose to limit the number of graduate credits a student can take as an undergraduate to be the same number 12 as the existing combined degree program.			
Other departments or schools which offer similar or related courses and which have certified that this proposal does not overlap their offering:			
N/A			
<i>If this proposal is for an interdisciplinary program, please indicate the Department where the major/minor will be</i>			
Chair of Proposing Department (TYPE NAME)		Administrative Manager or Department Secretary (TYPE NAME) Date	
Michael Stessin		Joan Mainwaring 9/25/18	
Approved by Chair(s) of Departments having cross-listed course(s) [Copy of e-mail approval(s) on following page.] Date		Dean of College Date	
		Kathleen Gersowitz 11/15/18	
Chair of Academic Programs Committee Date		Dean of Undergraduate or Graduate Studies Date	
Oliver Ellison Timm 10/25/18			

Proposed Multi-Award, Single-institution Combined Programs: (1) BA in Mathematics/MS in Data Science and (2) BS in Mathematics/MS in Data Science

Relationship between the proposed MATBA/DATMS and MATBS/DATMS degrees and the existing programs

Both of the proposed programs will be housed exclusively in the Department of Mathematics and Statistics. All of the coursework required for completion of each program is offered by the single department. Therefore there is no impact on other units of the University and no additional resources are required.

The Department of Mathematics and Statistics already has similar combined programs MATBA/MATMA and MATBS/MATMA. The proposed programs will follow closely the structure of the existing combined programs.

The purpose and rationale for these separately registered programs is to attract strong undergraduate students to the data Science program by (1) encouraging them to enroll in graduate classes when in advance standing in their major and (2) making the Data Science MS option attractive by providing the option of paying fees at the undergraduate level for up to 12 graduate credits.

Program completion requirements

Students must meet all of the requirements for the undergraduate BA or BS major in Mathematics and all requirements for the MS in Data Science degree.

A maximum of 12 (twelve) graduate credit hours may count toward the credit hours of both the BA or BS and the MS. These must be courses that are required for completion of the DATMS program, that is 4 (four) of the following AMAT courses: 502, 524, 590, 591, 592, 593, 583, 584, 585, 554, 560, 565, or 581.

With departmental approval, 500 level courses from the DATMS program may be substituted for upper division undergraduate courses (at the levels 300 and 400) in the sequence options as part of the BS program.

The quality of both graduate and undergraduate programs is assured because at the graduate levels the requirements are identical to ones in the stand-alone DATMS program while at the undergraduate level more advanced graduate level work is substituted for undergraduate coursework.

Program admission requirements and procedures

Students may be admitted to these combined programs at the beginning of their junior year,

or after the successful completion of 56 credits. A grade point average of 3.20 or higher and 3 (three) supportive letters of recommendation from faculty are required. Students are considered undergraduates until they have accumulated 120 credits, satisfied all degree requirements and been awarded the baccalaureate degree.

In order to be considered for admission to a combined program, the student has to apply to the DATMS program and check, when asked, whether he/she wishes to be considered for the combined program. The decision is reached by the Graduate Committee in the Department of Mathematics and Statistics as part of the rolling admission work on applications to DATMS.

Note: the new program will have a different standard related to the number of recommendation letters required from the applicants, compared to the applicants to DATMS with baccalaureate degrees. The minimal number of letters required for DATMS applications is 1 (one).

Expected completion timetable

The entire DATMS program requires 36 credits and can be completed in 4 semesters of full-time study. A combined program student who completes 12 credits of required graduate DATMS coursework before reaching the graduate standing will be able to complete the graduate degree in 3 semesters of full-time study.



When submitting a program proposal please submit this form to indicate the resource implications of the proposal.

Proposal Title: BS/MS Data Science

College or School: CAS **Department:** Mathematics and Statistics

Program Director or Sponsor: Boris Goldfarb **Email:** bgoldfarb@albany.ed7

Action Category: Program Proposal Does this proposal include any space resource implications? Approx. sq. ft. needed: 0 Yes
 Other (describe) No

Action Type: New Does the Office of Financial Aid identify this as a **Gainful Employment Program (GEP)**? Yes
 Revision No
 Deactivation
 Other (describe)

Brief Description of Proposal: *(attach additional pages if necessary)*

The proposed program is meant to be essentially a clone of the existing combined BS/MA program (HEGIS code 1701). The only difference between the proposed and the existing programs is that the Data Science degree has 36 minimal credit requirement, however we propose to limit the number of graduate credits a student can take as an undergraduate to be the same number 12 as the existing combined degree program. Please see the attached documentation.



Is there an impact on other service units? Please attach documentation that you have consulted with each unit listed below:

Yes	No	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	ITS
<input type="checkbox"/>	<input checked="" type="checkbox"/>	University Library
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Scientific Core Facilities
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other services (i.e., parking, facilities, security), please list:

Is there an impact on other academic programs? Please list all academic departments consulted regarding impact and attach documentation.

No impact

Faculty and Staff (attach additional pages *if necessary*)

(a) Describe new faculty hiring needed during the next 3 years

(b) Explain how program will be administered for the purposes of admissions, advising, course offerings, etc. Discuss the available support staff.

N/A



Program Expenses

List all resources that will be engaged specifically as a result of the proposed program (e.g., a new faculty position or additional library resources). If they represent a continuing cost, new resources for a given year should be included in the subsequent year(s), with adjustments for inflation or negotiated compensation.

Program Expense Categories	Expenses (in dollars)					
	Prior to Implementation	Academic Year 1:	Academic Year 2:	Academic Year 3:	Academic Year 4:	Academic Year 5:
<i>(a) Personnel (including faculty and all others)</i>	\$ 0.00					
<i>(b) Library</i>						
<i>(c) Equipment</i>						
<i>(d) Laboratories</i>						
<i>(e) Supplies</i>						
<i>(f) Capital Expenses</i>						
<i>(g) Student stipends or scholarships</i>						
<i>(h) Other (specify):</i>						
Sum of Rows Above	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Explanatory Notes (add additional pages as needed):



APPROVALS

Department Chair	Michael Stessin	8/17/18
	Department Chair	Date
Dean	Kathleen Gersowitz	11/15/18
	Dean	Date
UPPC Chair		
	UPPC Chair	Date

- It is the sponsoring department's responsibility to request and attach all required documentation and to obtain all required signatures (with the exception of the chair of UPPC's) **before** presenting the documentation.

- Completed forms should be sent to the **Office of Undergraduate Education**, the **Office of Graduate Education**, or **both** as appropriate.

- When the Chair of UPPC has received the proposal from the appropriate office(s), s/he will notify you that it has been placed on the UPPC agenda and invite you to attend the meeting.