



# Program Approval Form

For approval of new programs and deletions or modifications to an existing program.

### Action Requested:

Create New (SCHEV approval required except for minors)  
 Inactivate Existing  
 Modify Existing (check **ALL** that apply)  
 Title (SCHEV approval required except for minors)  
 Concentration (Choose one):  Add  Delete  Modify  
 Degree Requirements  
 Admission Standards/ Application Requirements  
 Other Changes: Accelerated Options Requirement

### Type (Check one):

B.A.  B.S.  Minor  
 Master's  
 Ph.D.  
 Undergraduate Certificate\*  
 Graduate Certificate\*  
 Bachelor's/Accelerated Master's  Other:

**College/School:** VSE **Department:** SEOR  
**Submitted by:** Rajesh Ganesan **Ext:** 3-1693 **Email:** rganesan@gmu.edu

**Effective Term:** Fall 2018 **Please note:** For students to be admitted to a new degree, minor, certificate or concentration, the program must be fully approved, entered into Banner, and published in the University Catalog.

### Justification: (attach separate document if necessary)

Provide flexibility in course selections for UG students who wish to take the accelerated MS degree program (changes are underlined)

### Program Title: (Required)

Title must identify subject matter. Do not include name of college/school/dept.

### Concentration(s):

### Admissions Standards / Application Requirements: (Required only if different from those listed in the University Catalog)

### Degree Requirements:

Consult University Catalog for models, attach separate document if necessary using track changes for modifications

Existing	New/Modified
BS (selected)/Data Analytics Engineering, Accelerated MS	<u>Systems Engineering</u> , BS / Data Analytics Engineering, Accelerated MS
Admission Requirements  While no specific undergraduate degree is required, Mason undergraduate students majoring in systems engineering or any other engineering, business, computer science, statistics, mathematics, or information technology may apply to this option if they have earned 90 undergraduate credits with an overall GPA of at least 3.30.  For the predictive analytics concentration, students must submit evidence of: <ul style="list-style-type: none"> <li>Satisfactory completion of courses in calculus, applied probability and statistics, and a scientific programming language.</li> <li>Familiarity with analytical modeling software, such as spreadsheets or math packages.</li> </ul>	Admission Requirements  Mason undergraduate students majoring in systems engineering may apply to this option if they have earned 90 undergraduate credits with an overall GPA of at least 3.30.  For the predictive analytics concentration, students must submit evidence of: <ul style="list-style-type: none"> <li>Satisfactory completion of courses in calculus, applied probability and statistics, and a scientific programming language.</li> <li>Familiarity with analytical modeling software, such as spreadsheets or math packages.</li> </ul>
Accelerated Options Requirement  Students must complete all credits that satisfy requirements for the BS and MS programs, with six credits overlap chosen from the courses in the following table. For BS candidates, these graduate courses replace the corresponding undergraduate courses listed. The undergraduate version of these courses may not be applied toward the MS degree.	Accelerated Options Requirement  Students must complete all credits that satisfy requirements for the BS and MS programs, with six credits overlap chosen from the courses in the following table. For BS candidates, these graduate courses replace the corresponding undergraduate courses listed. The undergraduate version of these courses may not be applied toward the MS degree.
Accelerated Requirements  Undergraduate Graduate  SYST 473 SYST 573 Credit may not be received for both courses. OR 441 OR 541 Credit may not be received for both courses.	Accelerated Requirements  Undergraduate Graduate  SYST 473 SYST 573 Credit may not be received for both courses. OR 441 OR 541 Credit may not be received for both courses.

<p>For the predictive analytics concentration, any other 500-level course may be applied to both the undergraduate and graduate degrees with approval of the advisor and SEOR department chair.</p> <p>OR 541 Operations Research: Deterministic Models will substitute for the OR 531 Analytics and Decision Analysis core requirement in the MS DAE program.</p>	<p><u>SYST 438<sup>1</sup> SYST 538 Credit may not be received for both courses.</u>  <u>SYST 468<sup>1</sup> SYST 568 Credit may not be received for both courses.</u>  <u>SYST 488<sup>1</sup> SYST 588 Credit may not be received for both courses.</u></p> <p><u><sup>1</sup>These courses apply only to certain concentrations in the graduate program.</u></p> <p>For the predictive analytics <u>and financial engineering concentration</u>, any other 500-level course may be applied to both the undergraduate and graduate degrees with approval of the advisor and SEOR department chair.</p> <p>OR 541 Operations Research: Deterministic Models will substitute for the OR 531 Analytics and Decision Analysis core requirement in the MS DAE program. Students are not permitted to take OR 531.</p>
<p>Courses offered via distance: (if applicable)</p>	
<p>TOTAL CREDITS REQUIRED:</p>	<p>30</p>

Courses offered via distance:  
(if applicable)

TOTAL CREDITS REQUIRED:

\*For Certificates Only: Indicate whether students are able to pursue on a  Full-time basis  Part-time basis

**Approval Signatures**

G. Rajar 11/28/2017 [Signature] 1/9/18  
 Department Date College/School Date

If this program may impact another unit or is in collaboration with another unit at Mason, the originating department must circulate this proposal for review by those units and obtain the necessary signatures prior to submission. Failure to do so will delay action on this proposal.

Unit Name	Unit Approval Name	Unit Approver's Signature	Date
SEOR – Graduate coordinator	Dr. Chun-Hung Chen	<u>[Signature]</u>	11/28/2017
MSDAEN - Graduate coordinator	Dr. Robert Osgood	<u>[Signature]</u>	12/12/2017

**For Undergraduate Programs only**

Undergraduate Council Member \_\_\_\_\_ Provost Office \_\_\_\_\_ Undergraduate Council Approval Date \_\_\_\_\_

**For Graduate Programs Only**

Graduate Council Member \_\_\_\_\_ Provost Office \_\_\_\_\_ Graduate Council Approval Date \_\_\_\_\_

**For Registrar Office's Use Only:** Received \_\_\_\_\_ Banner \_\_\_\_\_ Catalog \_\_\_\_\_ revised 9/2/2016