Program Change Request

Date Submitted: 09/17/20 3:03 pm

Viewing: : Mechanical Engineering,

BS/Computational Science, Accelerated MS

Last approved: 09/26/19 2:47 pm

Last edit: 12/07/20 11:55 am

Changes proposed by: creagle

Catalog Pages Using this Program Mechanical Engineering, BS Computational Science, MS

Are you completing	<mark>g th</mark> is	form	on	someone	else's	behalf?
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No

Effective Catalog: 2021-2022

Program Level: Undergraduate & Graduate (BAMs)

Program Type: Bachelor's/Accelerated Master's

Title:

Mechanical Engineering, BS/Computational Science, Accelerated MS

Registrar's Office Use Only – Program Start Term	Fall 2019
Registrar/OAPI Use Only – SACSCOC Status	
Concentration(s):	
College/School:	College of Science
Department / Academic Unit:	Computational & Data Sciences
Jointly Owned Program?	Yes

In Workflow

- 1. Registrar-Programs:Workflow Review
- 2. CDS Chair
- 3. ME Chair-Undergraduate

4. SC Curriculum Committee

- 5. SC Associate Dean
- VS Undergraduate Studies Committee Chair
- 7. VS Associate Dean-Undergraduate
- 8. Assoc Provost-Undergraduate
- 9. Assoc Provost-Graduate
- 10. Registrar-Programs

Approval Path

- 09/17/20 3:42 pm
 Tory Sarro (vsarro):
 Approved for
 Registrar Programs:Workflow
 Review
- 2. 12/07/20 2:06 pm Jason Kinser (jkinser): Approved for CDS Chair
- 3. 12/07/20 2:26 pm Colin Reagle (creagle): Approved

12/9/2020

Participating Colleges		for ME Chair-
	College	
1	Volgenau School of Engineering	History
Participating Departments		1. Feb 7, 2019 by Jennifer Bazaz
	Department	Gettys (jbazaz)
1	Mechanical Engineering	2. Sep 26, 2019 by
Justification		Ross (jskorzawski
Update UG de	ed language to take advantage of new BAM policies. Correction t gree	o total # of credits for

Catalog Published Information

Accelerated Description/Dual Degree Description:

Mechanical Engineering, BS/Computational Science,

Accelerated MS

Overview

This option enables enthusiastic, highly qualified, undergraduates to obtain the <u>Mechanical Engineering, BS</u> and the <u>Computational Science, MS</u> within the accelerated time frame of five years. The program requires **139** 145 credits total, allowing students to undertake graduate coursework during their final year in the bachelor's degree. Upon completion of this **139** 145 <u>145</u> credit BS/MS combined program, students are exceptionally well prepared for undertaking doctoral studies or entering the professional workforce.

For more detailed information, see <u>AP.6.7 Bachelor's/Accelerated Master's Degrees</u>. For policies governing all graduate degrees, see <u>AP.6 Graduate Policies</u>.

Application Requirements

Applicants to all graduate programs at George Mason University must meet the admission standards and application requirements for graduate study as specified in the <u>Graduate Admission Policies</u> section of this catalog1. Application information for this Accelerated Master's program can be found on the <u>Department of Computational</u> <u>and Data Sciences</u> website. Applicants must have an overall undergraduate GPA of at least 3.00 and have completed

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at least **60** 90 credits. Additionally, applicants will have completed the following courses with a GPA of 3.00 or better:

<u>CS 112</u>	Introduction to Computer Programming	4
<u>ME 212</u>	Solid Mechanics	3
<u>ME 231</u>	Dynamics	3
<u>ME 313</u>	Material Science	3
<u>ME 322</u>	Fluid Mechanics	3
<u>ME 323</u>	Heat Transfer	3
<u>ME 351</u>	Analytical Methods in Engineering	3
Total Credits		22

Students must maintain an overall GPA of 3.00 or higher in graduate coursework and should consult with their faculty advisor to coordinate their academic goals within the modeling and simulation or data science emphases of the <u>Computational Science, MS</u>.

Students who are accepted into the BAM Pathway will be allowed to register for graduate level courses after successful completion of a minimum of 75 undergraduate credits and course-specific pre-requisites

1GRE-general scores are waived for graduates of BS degrees from any program in the College of Science or the Volgenau School of Engineering at George Mason University.

Reserve Graduate Credit

While in undergraduate status, a student may take a maximum of six graduate credits as reserve graduate credits and apply those credits to a master's program. Reserve graduate credits are not counted toward the **121** 120 credits required in the undergraduate degree.

Program Outcomes



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Mechanical Engineering, BS/Computational Science, Accelerated MS

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Code	Title	Credits
<u>CS 112</u>	Introduction to Computer Programming	4
<u>ME 212</u>	Solid Mechanics	3
<u>ME 231</u>	Dynamics	3
<u>ME 313</u>	Material Science	3

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