Program Approval Form

GEORGE MASON UNIVERSITY

Action Requested:

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

Type (Check one):

- [ ] B.A. [X] B.S. [ ] Minor
- [ ] Master's
- [ ] Ph.D.
- [ ] Undergraduate Certificate*
- [ ] Graduate Certificate*
- [ ] Bachelor's/Accelerated Master's [ ] Other:

College/School:	Volgenau School of Engineering
Submitted by:	Laurence Bray

Department:	Department of Bioengineering
Ext: 2218	**Email:** Lbray2@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)

These changes are for the BMPH concentration under the BS degree in Bioengineering

	Existing	New/Modified
Program Title: (Required) Title must identify subject matter. Do not include name of college/school/dept.	Bioengineering, BS	
Concentration(s):	Bioengineering Prehealth	
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
Bioengineering Core	**Bioengineering Core**
BENG 492 Senior Advanced Design Project I (Mason Core) 2	BENG 492 (Mason Core) Senior Advanced Design Project I 3
BENG 493 RS: Senior Advanced Design Project II (Mason Core) 2	BENG 493 (Mason Core) RS: Senior Advanced Design Project II 3
Technical Electives	**Technical Electives**
Select 6 credits from the following: 6	Select 6 credits from the following: 6
	BENG 327 Cellular, Neurophysiological, and Pharmacological Neuroscience 3
BENG 341 Introduction to Biomaterials 3	BENG 341 Introduction to Biomaterials 3
BENG 390 Engineering Design and Fabrication 3	BENG 390 Engineering Design and Fabrication 3
BENG 392 Engineering Design Studio 1	BENG 392 Engineering Design Studio 1
BENG 395 RS: Mentored Research in Bioengineering 1-3	BENG 395 RS: Mentored Research in Bioengineering 1-3
BENG 406 Introduction to Biomechanics 3	BENG 406 Introduction to Biomechanics 3
BENG 421 Introduction to Tissue Engineering 3	BENG 417 Bioengineering World Health 3
BENG 437 Medical Image Processing 3	BENG 421 Introduction to Tissue Engineering 3
	BENG 429 Mason-Inova Applied Technologies 3

BENG 441 3	Nanotechnology in Health	BENG 437	Medical Image Processing 3

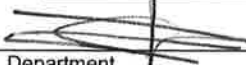
BENG 441 Nanotechnology in Health 3	BENG 437 Medical Image Processing 3
BENG 451 Translation and Entrepreneurship in Bioengineering 3	BENG 441 Nanotechnology in Health 3
BENG 499 Special Topics in Bioengineering 4	BENG 451 Translation and Entrepreneurship in Bioengineering 3
BENG 525 Neural Engineering 3	BENG 499 Special Topics in Bioengineering 4
BENG 538 Medical Imaging 3	BENG 525 Neural Engineering 3
BENG 541 Biomaterials 3	BENG 538 Medical Imaging 3
BENG 550 Advanced Biomechanics 3	BENG 541 Biomaterials 3
~~ECE 305 Electromagnetic Theory 3~~	BENG 550 Advanced Biomechanics 3
~~ECE 350 Embedded Systems and Hardware Interfaces 3~~	
~~ECE 370 Robot Design 3~~	
~~ECE 410 Applications of Discrete-Time Signal Processing 3~~	
~~ECE 421 Classical Systems and Control Theory 3~~	
~~ECE 450 Introduction to Robotics 3~~	
~~ME 313 Material Science 3~~	
~~3~~	

Courses offered via distance: (if applicable)

TOTAL CREDITS REQUIRED:	134-135	136-137

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

Approval Signatures

[signature]   1/29/18   _[signature]_ 1/30/18 _[signature]_ 1/30/18

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

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