



# 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 and certificates)
- Delete Existing
- Modify Existing (check all that apply)
  - Title (SCHEV approval required except for minors, certificates)
  - Concentration** (Choose one):  Add  Delete  Modify
  - Degree Requirements
  - Admission Standards
  - Application Requirements
  - Other Changes: \_\_\_\_\_

### Type (Check one):

- B.A.  B.S.  Minor
- Undergraduate Certificate
- M.A.  M.S.  M.Ed.
- Ph.D.  Graduate Certificate
- Other: \_\_\_\_\_

<b>College/School:</b>	College of Science	<b>Department:</b>	Physics, Astronomy, and Computational Sciences
<b>Submitted by:</b>	Paul So	<b>Ext:</b>	3-4377
		<b>Email:</b>	paso@gmu.edu

**Effective Term:** Spring  **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)

See attached sheet

**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

**Courses offered via distance:**  
(if applicable)

**TOTAL CREDITS REQUIRED:**

Existing	New/Modified
Applied and Engineering Physics	
See attached sheet	See attached sheet

## Approval Signatures

Department	Date	College/School	Date	Provost's Office <i>Interdisciplinary Council Use Only</i>	Date
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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 Graduate Programs Only

Graduate Council Member	Provost Office	Graduate Council Approval Date
<i>For Registrar Office's Use Only:</i> Received _____ Banner _____ Catalog _____		

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## Modification:

Due to the recent prefix number change for the Planetary Sciences (703 → 603), it was missed from the previous modification to the PHAE MS Standard Emphasis list. We ask to rectify this mistake by adding back ASTR 603 into the current PHAE MS Standard Emphasis List (addition highlighted in yellow):

### 15 credits in one of three emphases:

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#### Standard emphasis

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Students should take:

- [PHYS 705 – Classical Mechanics](#) Credits: 3
- [PHYS 711 – Statistical Mechanics](#) Credits: 3

#### plus any 9 credits from this list:

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- [PHYS 510 - Computational Physics I](#) Credits: 3
- [PHYS 512 - Solid State Physics and Applications](#) Credits: 3
- [PHYS 533 - Modern Instrumentation](#) Credits: 3
- [PHYS 540 - Nuclear and Particle Physics](#) Credits: 3
- [PHYS 575 - Atmospheric Physics I](#) Credits: 3
- [PHYS 611 - Electro-optics](#) Credits: 3
- [PHYS 612 - Physics of Modern Imaging](#) Credits: 3
- [PHYS 613 - Computational Physics II](#) Credits: 3
- [PHYS 614 - Thermodynamics and Kinetics of Materials](#) Credits: 3
- [PHYS 615 - Fundamentals of Materials Science](#) Credits: 3
- [PHYS 620 - Continuum Mechanics](#) Credits: 3
- [PHYS 630 - Introduction to Biophysics](#) Credits: 3
- [PHYS 660 - Space Weather](#) Credits: 3
- [PHYS 676 - Atmospheric Physics](#) Credits: 3
- [PHYS 684 - Quantum Mechanics I](#) Credits: 3
- [PHYS 685 - Classical Electrodynamics I](#) Credits: 3
- [PHYS 701 - Theoretical Physics](#) Credits: 3
- [PHYS 728 - Simulation of Large-Scale Physical Systems](#) Credits: 3
- [PHYS 736 - Computational Quantum Mechanics](#) Credits: 3
- [PHYS 760 - Space Plasma Physics](#) Credits: 3
- [PHYS 780 - Advanced Selected Topics in Physics](#) Credits: 3
- [PHYS 784 - Quantum Mechanics II](#) Credits: 3
- [PHYS 785 - Classical Electrodynamics II](#) Credits: 3
  
- [ASTR 532 – Phys Interplanetary Med](#) Credits: 3
- [ASTR 602 - Methods of Observational Astronomy](#) Credits: 3
- [ASTR 603 – Planetary Sciences](#) Credits: 3
- [ASTR 604 - Galaxies and Cosmology](#) Credits: 3
- [ASTR 628 - Relativity](#) Credits: 3
- [ASTR 660 - Plasma Physics for Space and Astrophysics](#) Credits: 3
- [ASTR 680 - Physics of Interstellar Media](#) Credits: 3
- [ASTR 730 - Stellar Astrophysics](#) Credits: 3
- [ASTR 761 - N-Body Methods and Particle Simulations](#) Credits: 3
- [ASTR 764 - Computational Astrophysics](#) Credits: 3
- [ASTR 765 - High-Energy and Accretion Astrophysics](#) Credits: 3
  
- [CSI 720 - Fluid Mechanics](#) Credits: 3
- [CSI 721 - Computational Fluid Dynamics I](#) Credits: 3
- [CSI 722 - Computational Fluid Dynamics II](#) Credits: 3
- [CSI 786 – Molecular Dynamics Modeling](#) Credits: 3
- [CSI 787 – Computational Materials Science](#) Credits: 3

**Total: 15 credits**