

GEORGE MASON UNIVERSITY
COLLEGE OF SCIENCE
B.S. DEGREE IN PHYSICS
Concentration in Astrophysics
(203 Planetary Hall, 703-993-3815)
<https://www.physics.gmu.edu/bs-physics/>
2018 - 2019 CATALOG

	<u>Department(s) & Course #(s)</u>	<u>Completed/ Grade(s)</u>	<u>Needed</u>
<u>MASON CORE REQUIREMENTS (*30)</u>			
a. Written Communication: ENGH 101 (100), ENGH 302 (C or better) (3,3)		_____	_____
b. Oral Communication: COMM 100 or 101 (circle choice) (3)		_____	_____
c. Quantitative Reasoning (satisfied by MATH 113)			
d. Literature (3)		_____	_____
e. Arts (3)		_____	_____
f. Western Civilization (3)		_____	_____
g. Social & Behavioral Science (3)		_____	_____
h. Natural Science (PHYS 160/161 and 260/261)		_____	_____
i. Global Understanding (3)		_____	_____
j. Information Technology (3)		_____	_____
k. PHYS 407 or ASTR 402		_____	_____

Go to: <http://catalog.gmu.edu/mason-core/> to link to information on Mason Core requirements.

MAJOR REQUIREMENTS (74-78 total credits)

Physics Core and Capstone (33 credits)

a. PHYS 160, PHYS 161 (3,1)		a. _____		_____
b. PHYS 260, PHYS 261 (3,1)		b. _____		_____
c. PHYS 251, PHYS 301 (3,3)		c. _____		_____
d. PHYS 303, PHYS 305 (3,3)		d. _____		_____
e. PHYS 307, PHYS 308 (3,3)		e. _____		_____
f. PHYS 402, PHYS 416 (3,1)		f. _____		_____
g. ASTR 402 or PHYS 407 (writing intensive course) (4)		g. _____		_____

Mathematics Course Requirements (11 credits)

1. MATH 113, MATH 114 (4,4)		1. _____		_____
2. MATH 213		2. _____		_____

Astrophysics Concentration Requirements (28-34 credits)

h. One of the following: ASTR 401 (3), PHYS 410 (3), MATH 214 (3)		h. _____		_____
i. PHYS 311, 312 (3, 3)		i. _____		_____
j. One of the following: ASTR 405, 406, 408, 409, PHYS 326, 405, 406, 408, 409		j. _____		_____

Physics and Astronomy Theory:

Students who are **NOT** completing a second major **MUST** complete the following 18 credits:

1. ASTR 210, ASTR 328 (3, 3)
2. ASTR 403, ASTR 404 (3, 3)
3. PHYS 306, PHYS 428 (3, 3)

Students who are completing a second major must complete the following 12 credits:

1. ASTR 210, ASTR 328 (3,3)
2. One of the following: ASTR 403, ASTR 404 (3)
3. One of the following: PHYS 306, PHYS 428 (3)

A GPA of 2.0 or better is required in all major course work.

GENERAL ELECTIVES: Maximum 2 credits of PHED, PRLS, and RECR coursework toward a COS degree. Only MLSC 400 and MLSC 402 may be used for credit towards a COS degree. (List courses)

		_____	_____
		_____	_____
		_____	_____
		_____	_____

MINIMUM 120 HOURS (including Minimum 45 UPPER DIVISION HOURS) to GRADUATE

This planning form is intended to be used in consultation with your academic advisor and reflects the requirements for the 2018 - 2019 Catalog; the University Catalog is the official reference for program requirements.

FALL YEAR 1	CREDITS	SPRING YEAR 1	CREDITS	NOTES
MATH 113	4	MATH 114	4	*students who do
PHYS 122/123	2	ASTR 124	1	not place into
ENGH 101	3	PHYS 160	3	Calculus I can
Mason Core	3	PHYS 161	1	visit the physics
Mason Core	3	Mason Core	3	website for an
UNIV 100	1	Mason Core	3	alternative
Total:	16 credits	Total:	15 credits	schedule.

FALL YEAR 2	CREDITS	SPRING YEAR 2	CREDITS	NOTES
MATH 213	3	MATH 214	3	
PHYS 260	3	PHYS 307	3	
PHYS 261	1	PHYS 308	3	
PHYS 251	3	ASTR 210	3	
Mason Core	3	Elective	3	
Mason Core	3			
Total:	16 credits	Total:	15 credits	

FALL YEAR 3	CREDITS	SPRING YEAR 3	CREDITS	NOTES
PHYS 301	3	PHYS 306	3	
PHYS 303	3	PHYS 312	3	
PHYS 305	3	PHYS 402	3	
PHYS 311	3	Elective	3	
ENGH 302	3	Elective	3	
Total:	15 credits	Total:	15 credits	

FALL YEAR 4	CREDITS	SPRING YEAR 4	CREDITS	NOTES
PHYS 403	3	PHYS 412	3	
PHYS 407	4	PHYS 428	3	
PHYS 408 OR 409	3	Elective	3	
PHYS 410	3	Elective	3	
PHYS 416	1	Elective	3	
Total:	14 credits	Total:	15 credits	

*Students must earn 120 credits for graduation; 45 credits must be upper-level (courses 300+).

*Schedule will vary depending on if student began in an odd or even year; details can be found at physics.gmu.edu.