

College of Science - Astronomy, BS				
Catalog Year: 2019 - 2020			Grades	
Mason Core Requirements (27 credits)	Course Information	Credits	Earned	Needed
Written Communication:	ENGH 101 (100)	3		
Oral Communication:		3		
*Quantitative Reasoning	*Satisfied by Major Requirements			
Information Technology		3		
Arts		3		
Global Understanding		3		
Literature		3		
*Natural Science	*Satisfied by Major Requirements			
Social & Behavioral Sciences		3		
Western Civilization/World History		3		
Written Communication:	ENGH 302	3		
*Synthesis/Capstone	*Met by ASTR 402			
Major Requirements (69 credits) Students must complete a total of 55 credits in physics and astronomy and 14 credits in mathematics with a minimum GPA of 2.00				
Major Core Courses (10 credits)		Credits	Earned	Needed
ASTR 210	Introduction to Astrophysics	3		
ASTR 328	Stars	3		
ASTR 402	RS: Methods of Observational Astronomy	4		
Additional Astronomy Courses (Choose two of the following):		6		
ASTR 403	Planetary Science			
ASTR 404	Galaxies and Cosmology			
ASTR 480	The Interstellar Medium			
*Astronomy and Physics Courses (15 credits from the following - at least 12 of which must be 300/400 level courses). If ASTR 403, 404 or 480 are not taken as part of the additional astronomy course requirement above, they may be used here. ASTR 301, ASTR 408, PHYS 306, PHYS 307, PHYS 402, ASTR 403 or 404 or PHYS 428 or ASTR 480. Or other ASTR/PHYS courses with permission of the department				
Additional ASTR/PHYS Course #1:				
Additional ASTR/PHYS Course #2:				
Additional ASTR/PHYS Course #3:				
Additional ASTR/PHYS Course #4:				
Additional ASTR/PHYS Course #5:				
Required Physics Courses (24 credits)		Credits	Earned	Needed
PHYS 160/161	University Physics I with lab	4		
PHYS 260/261	University Physics II with lab	4		
PHYS 251	Intro to Computer Techniques in Physics	3		
PHYS 301	Analytical Methods of Physics	3		
PHYS 303	Classical Mechanics	3		
PHYS 305	Electromagnetic Theory	3		
PHYS 308	Modern Physics	3		
PHYS 416	Special Topics in Undergraduate Physics	1		
Required Math Courses (14 credits)				
MATH 113	Analytic Geometry and Calculus I (Mason Core)	4		
MATH 114	Analytic Geometry and Calculus II	4		
MATH 213	Analytic Geometry and Calculus III	3		
MATH 214	Elementary Differential Equations	3		
Degree Notes				
Approx. 24 remaining credits may be completed with elective courses to bring the degree total to 120 with 45 of these credits at the 300/400 level				
Advisor Note:				

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 1 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 308	3	
PHYS 261	1	ASTR 210	3	
PHYS 251	3	Mason Core	3	
Mason Core	3	Elective	3	
Elective	3			
Total:	16 credits	Total:	15 credits	

FALL YEAR 3	CREDITS	SPRING YEAR 3	CREDITS	NOTES
ASTR 328	3	ASTR 404	3	
PHYS 301	3	PHYS 306	3	
PHYS 303	3	PHYS 402	3	
PHYS 305	3	Elective	3	
ENGH 302	3	Elective	3	
Total:	15 credits	Total:	15 credits	

FALL YEAR 4	CREDITS	SPRING YEAR 4	CREDITS	NOTES
ASTR 401	3	PHYS 428	3	
ASTR 402	4	ASTR 420 OR 428	3	
ASTR 403	3	Elective	3	
ASTR 408	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.