

GEORGE MASON UNIVERSITY
COLLEGE OF SCIENCE
B.S. DEGREE IN ASTRONOMY (317 Planetary Hall, 703-993-4596)
<http://cos.gmu.edu/academics/undergraduate/majors/astronomy>
2012-2013 CATALOG

	<u>Department(s) & Course #(s)</u>	<u>Completed/ Grade(s)</u>	<u>Needed</u>
<u>GENERAL EDUCATION REQUIREMENTS (*30)</u>			
a. Written Communication: ENGH 101 (100), ENGH 302 (C or better) (3,3)		___ ___	___ ___
b. Oral Communication: COMM 100 or 101 (please circle choice) (3)		___ ___	___ ___
c. Quantitative Reasoning (Satisfied by completions of major requirements)			
d. Literature (3)	_____	___ ___	___ ___
e. Arts (3)	_____	___ ___	___ ___
f. Western Civilization (3)	_____	___ ___	___ ___
g. Social & Behavioral Science (3)	_____	___ ___	___ ___
h. Natural Science (Satisfied by completions of major requirements)			
i. Global Understanding (3)	_____	___ ___	___ ___
j. Information Technology (3)	_____	___ ___	___ ___
k. Synthesis (3)	_____	___ ___	___ ___

Go to: <http://chss.gmu.edu/general-education/all-requirements> to link to information on general education requirements.

MAJOR REQUIREMENTS (65)

a. ASTR 103 or ASTR 113 (3)			
b. ASTR 328 (3)		a. _____	_____
c. ASTR 402 (writing intensive course) (3)		b. _____	_____
d. Two of the following: ASTR 403, 404, 428 (circle choices) (3, 3)		c. _____	_____
e. PHYS 160(3)		d. _____	_____
f. PHYS 161(1)		e. _____	_____
g. PHYS 260 (3)		f. _____	_____
h. PHYS 261(1)		g. _____	_____
i. PHYS 262(3)		h. _____	_____
j. PHYS 263 (1)		i. _____	_____
k. PHYS 303 (3)		j. _____	_____
l. PHYS 305 (3)		k. _____	_____
m. PHYS 308 (3)		l. _____	_____
n. Seventeen hours of Mathematics as follows:(14)		m. _____	_____
1. MATH 113, 114 (4,4)		1. _____	_____
2. MATH 213, 214 (3,3)		2. _____	_____
o. Fifteen hours from the following (at least twelve hours must be in upper-level courses): ASTR 301, 408, PHYS 306, 307, 402, (ASTR 403, 404, or 428, if not picked for d. above), any other ASTR or PHYS course with the permission of the department (list courses) (12)			
1. _____		1. _____	_____
2. _____		2. _____	_____
3. _____		3. _____	_____
4. _____		4. _____	_____
5. _____		4. _____	_____

In meeting the above requirements, students may choose an area of emphasis. Students who wish to complete an emphasis should plan a program of study in consultation with their advisors. Some emphases require more than twelve credits in the last category above. Areas of emphasis: Astrobiology and Computational Astronomy.

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

GENERAL ELECTIVES (List courses)

_____		___ ___	___ ___
_____		___ ___	___ ___
_____		___ ___	___ ___
_____		___ ___	___ ___

MINIMUM HOURS TO GRADUATE: 120

UPPER DIVISION HOURS (minimum 45):

COURSE LISTS (ASTRONOMY, BS)

University General Education Requirements

Written Communication: ENGH 101 (or 100) and ENGH 302

Oral Communication: COMM 100 or COMM 101

Quantitative Reasoning: **MATH 113**. The Math Placement Test is required to take a MATH course. See this web site for more information: http://cos.gmu.edu/academics/undergraduate/math_placement_testing)

Literature: ARAB 325; CHIN 310, 311, 325, 328; CLAS 250, 260, 340, 350, 360, 380; ENGH 201, 202, 203, 204; FREN 325, 329; FRLN 330; GERM 325; ITAL 325; PHIL 253; RELI 235; RUSS 325, 326, 327; SPAN 325

Arts: ARTH 101, 102, 103, 200, 201, 203, 204, 321, 322, 324, 333, 334, 335, 340, 341, 342, 344, 345, 360, 362, 372, 373, 376; AVT 103, 104, 215, 222, 232, 243, 252, 253, 262, 272; DANC 101, 119, 125, 131, 145, 161, 225, 231, 245, 301, 390, 391; ENGH 370, 372, 396; FAVS 225; GAME 101; MUSI 100, 101, 102, 107, 301, 302, 380, 381, 382, 383, 384, 385, 387, 389, 485; PHIL 156; THR 101, 150, 151, 210, 230, 395, 411, 412.

Western Civilization: HIST 100 or 125; transfer students may substitute the following courses for HIST 100 or 125: HIST 101, 102, 202, 301, 302, 304, 305, 306, 308, 309, 314, 322, 387, 388, 435, 436, 480.

Social and Behavioral Sciences: AFAM 200; ANTH 114, 120, 135, 396; CONF 101; CONS 410; CRIM 100; ECON 100, 103, 104, 105, 110, 111 (110 and 111 must be taken together); EDUC 372; GGS 103; GOVT 101, 103, 367; HEAL 230; HIST 121, 122; LING 306; PSYC 100, 211, 231; SOCI 101; SOM 100; TOUR 311; WMST 200

Natural Sciences: **PHYS 160/161, 260/261**

Global Understanding: ANTH 302, 304, 306, 307, 308, 309, 311, 312, 313, 316, 331, 332, 385; ARTH 319, 320, 380, 382, 383, 384, 385, 386; CEIE 100; COMM 305, 456; CRIM 405; DANC 118, 318, 418; ECON 360, 361, 362, 380, 390; ENGH 362, 366; GCH 205; GGS 101; GLOA 101; GOVT 132, 133; HIST 130, 251, 252, 261, 262, 271, 272, 281, 282, 328, 329, 356, 358, 360, 364, 365, 387, 460, 462; JAPA 310; MSOM 305; MUSI 103, 431; PHIL 243; PSYC 379; RELI 100, 211, 212, 313, 315, 341, 374; RUSS 354; SOCI 120, 320, 332; SPAN 322; SYST 100; THR 359, TOUR 210; WMST 100

Information Technology: **One of these courses**: ANTH 395, CDS 130, CHEM 350, CEIE 117, GOVT 300, HIST 390, IT 103, MUSI 415 **or Course(s) from a) and one course from b): a)** AVT 180; CS 112; PHYS 251; PSYC 300, 301, & 372 (all three must be taken and in sequence); SOCI 410 **b)** CDS 151, CEIE 409, CS 105, ENGR 107, IT 304, PHIL 112

Synthesis: ANTH 400; ARTH 394; AVT 497, 498; BINF 354; BIOL 301; BIS 490; CEIE 490; COMM 326, 362, 454; CONF 490; CONS 490; CRIM 495; CS 306; DANC 490; ECE 447, 492, 493; ECON 309; EDCI 490; ENGH 305; EVPP 335; FAVS 352; FRLN 385; GEOL 420; GGS 303, 304; GOVT 490, 491; HAP 465; HIST 300, 499; IT 492; LAS 499; MATH 400; MUSI 490; NCLC 308; NURS 265; PHIL 309, 343, 377, 378; PSYC 405, 406; RELI 490; RUSS 353; SOCI 377, 483; SOCW 323, SOM 498; SPAN 388; SYST 495; THR 440, 496; PROV 342; UNIV 442