

**GEORGE MASON UNIVERSITY  
COLLEGE OF SCIENCE  
B.A. DEGREE IN MATHEMATICS  
B.A. DEGREE IN MATHEMATICS (4400 Exploratory Hall, 703-993-1461)  
<http://math.gmu.edu/degree-programs.php>  
2017-2018 CATALOG**

	<u>Department(s) &amp; Course #(s)</u>	<u>Completed/ Grade(s)</u>	<u>Needed</u>
<b><u>MASON CORE REQUIREMENTS (*38)</u></b>			
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 completion of major requirements)			
d. Literature (3)	_____	___ ___	___ ___
e. Arts (3)	_____	___ ___	___ ___
f. Western Civilization (3)	_____	___ ___	___ ___
g. Social & Behavioral Science (3) <b>(may be satisfied by EDUC 372)</b>	_____	___ ___	___ ___
h. Natural Science (4,4)	_____, _____	___ ___	___ ___
i. Global Understanding (3)	_____	___ ___	___ ___
j. Information Technology (3)	_____	___ ___	___ ___
k. Synthesis (3) <b>(may be satisfied by MATH 400 or EDCI 490)</b>	_____	___ ___	___ ___
Go to: <a href="http://catalog.gmu.edu/mason-core/">http://catalog.gmu.edu/mason-core/</a> to link to information on Mason Core requirements.			

**COLLEGE REQUIREMENTS (\*18)**

- a. Foreign Language: Intermediate level in a single foreign language.
- b. Philosophy or Religious Studies (3) (not PHIL 323 or 324) \_\_\_\_\_
- c. Three credits in social & behavioral sciences in addition to the university-wide requirement in social & behavioral science for a total of 6 credits. The two courses used to fulfill the combined college and university requirements must be from different disciplines. This requirement may be fulfilled by completing any course in ANTH, CRIM, ECON, GOVT, HIST (except 100 or 125), LING, PSYC, or SOCI & these courses in GGS: 101, 103, 110, 301, 303, 304, 305, 306, 315, 316, 320, 325, 330, 357, 380
- d. Non-Western Culture (3) \_\_\_\_\_

\*The number of hours needed to fulfill Mason Core requirements may vary; see the University Catalog for information. The two courses used to fulfill the college and university requirements for social & behavioral sciences must be from different disciplines.

**MAJOR REQUIREMENTS (38 hours required)**

(Major Core Coursework (26 hours))

- |  |            |         |
|--|------------|---------|
| a. MATH 113, MATH114 (4,4)                             | a. ___ ___ | ___ ___ |
| b. MATH 125, MATH 203 (3,3)                            | b. ___ ___ | ___ ___ |
| c. MATH 213 or MATH 215 (circle choice) (3)            | c. _____   | ___ ___ |
| d. MATH 214 or MATH 216 (circle choice) (3)            | d. _____   | ___ ___ |
| e. MATH 290 (writing intensive course), MATH 322 (3,3) | e. ___ ___ | ___ ___ |

**WITHOUT CONCENTRATION (12 credits)**

Twelve additional hours above MATH 300 (excluding 400) (list course #) (12)

- |               |               |         |         |
|---------------|---------------|---------|---------|
| 1. MATH _____ | 2. MATH _____ |         |         |
| 3. MATH _____ | 4. MATH _____ |         |         |
|               |               | ___ ___ | ___ ___ |
|               |               | ___ ___ | ___ ___ |

**CONCENTRATION IN EDUCATION (Optional: 33 credits)**

Students selecting the education concentration take the following coursework in place of the twelve credits of MATH electives listed above. A grade of C or better is required for all licensure coursework.

- |   |            |         |
|---|------------|---------|
| a. MATH 302, MATH 315 (3,3)   | a. ___ ___ | ___ ___ |
| b. MATH 321, MATH 351 (3,3)   | b. ___ ___ | ___ ___ |
| c. EDCI 372, EDCI 472 (3,3)   | c. _____   | ___ ___ |
| d. EDCI 490 (satisfies Synthesis), EDUC 372 (satisfies social/behavioral science) (6,3) | d. ___ ___ | ___ ___ |
| e. EDUC 422, EDRD 419 (3,3)   | e. ___ ___ | ___ ___ |

**(A maximum of six hours of grades of C- or D are permitted in major courses.)**

**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) (12-23 credits)

**MINIMUM 120 HOURS (including Minimum 45 UPPER DIVISION HOURS) to** This planning form is intended to be used in consultation with your academic advisor and reflects the requirements for the 2017-2018 Catalog; the University Catalog is the official reference for program requirements.

# COURSE LISTS (MATHEMATICS, BA)

## Mason Core 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 MATH 108, 113, 115, 123, and 125. See this web site for more information: [http://math.gmu.edu/placement\\_test.php](http://math.gmu.edu/placement_test.php)

**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 320, 325; JAPA 340; KORE 311; PHIL 253; RELI 235, 333; RUSS 325, 326, 327; SPAN 325

**Arts:** ARTH 101, 102, 103, 200, 201, 203, 204, 206, 321, 322, 324, 333, 334, 335, 340, 341, 342, 344, 345, 360, 362, 370, 372, 373, 376; AVT 103, 104, 215, 222, 232, 243, 252, 253, 262, 272, 385; DANC 101, 119, 125, 131, 145, 161, 225, 231, 245, 301, 325, 331, 345, 425, 445, 390, 391; ENGH 370, 371, 372, 396; FAVS 225; GAME 101; MUSI 100, 101, 102, 107, 280, 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: HIST 101, 102, 301, 302, 304, 305, 306, 308, 309, 312, 314, 322, 388, 436, 480; and the following courses for HIST 125: HIST 202, 387.

**Social and Behavioral Sciences:** AFAM 200; ANTH 114, 120, 135, 363, 372, 396; BUS 100; CONF 101; CONS 410; CRIM 100; ECON 100, 103, 104, 105, 367; EDUC 203, 372; GCH 325; GGS 103; GOVT 101, 103, 367; HEAL 230; HIST 121, 122; LING 306; PSYC 100, 211, 231; SOCI 101, 352, 355; TOUR 311; WMST 200

**Natural Sciences:** ASTR 111/112, 113/114, 115; BIOL 103, 104; BIOL 213; CDS 101/102; CHEM 103,104,155,156; CHEM 211/213, 212/214, 251; CLIM 102, 111/112; EVPP 110,111; GEOL 101,102; GGS 121; PHYS 103,104; PHYS 111/112; PHYS 243/244, 245/246; PHYS 160/161, 260/261; 262/263

**Global Understanding:** ANTH 302, 306, 307, 308, 309, 312, 313, 316, 331, 332, 382; ARTH 319, 320, 382, 383, 384, 385, 386; BUS 200; CEIE 100; COMM 305, 456; CRIM 405; DANC 118, 318, 418; ECON 360, 361, 362, 380, 390; ENGH 362, 366; FAVS 300; FRLN 331; GCH 205; GGS 101; GLOA 101; GOVT 132, 133; HIST 251, 252, 261, 262, 271, 272, 281, 282, 328, 329, 356, 357, 358, 360, 364, 365, 387, 460, 462; JAPA 310; MBUS 305; MUSI 103, 431; PHIL 243; PROV 105; PSYC 379; RELI 100, 211, 212, 313, 315, 320, 322, 341, 374; RUSS 354; SOCI 120, 320, 332; SPAN 322, 466; SYST 202; THR 359, TOUR 210; WMST 100

**Information Technology: One of these courses:** ANTH 395, CDS 130, CS 100, GOVT 300, HIST 390, IT 104, MIS 303, MUSI 259 **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/Capstone:** ANTH 400; ARAB 351, 440; ARTH 394; ASTR 402; ATEP 441; AVT 385, 497, 498; BAS 491; BENG 492, 493; BINF 354; BIOL 301, 379; BIS 490; BUS 498; CEIE 490; CHIN 318, 355, 475; COMM 326, 362, 454; CONF 490; CONS 490, 491; CRIM 495; CS 306; CYSE 493; DANC 490; ECE 492, 493; ECON 309; EDCI 490; ENGH 401, 417, 458, 470, 484, 486, 495; EVPP 378, 480; FAVS 352, 496, 497, 499; FRLN 385; GAME 490; GCH 465; GEOL 420; GLOA 400; GGS 303, 304; GOVT 490, 491; HAP 465, 489, 498; HDFS 400; HIST 300, 499; INTS 308; IT 492, 493; KINE 490; LAS 499; **MATH 400;** ME 444; MUSI 324, 424, 490, 491, 495; NURS 465; PHED 415; PHIL 309, 343, 377, 378, 379, 421, 422; PHYS 346, 407; PRLS 490; PROV 342; PSYC 405, 406, 427; RELI 490; RHBS 499; RUSS 353; SOCI 377, 483, 485; SOCW 375, 472; SPAN 388; SPMT 490; STAT 490; SYST 495; THR 440, 496; TOUR 490

## Additional Requirements

**Foreign Language:** Demonstrated intermediate-level proficiency in one foreign language. See this web site for more information: <http://chss.gmu.edu/general-education/foreign-language-requirement> (EDSE 115, 116, and 219—ASL--may also be used)

**Philosophy or Religious Studies:** This can be fulfilled by any course in philosophy or religious studies except for PHIL 323, 324, 327, 393, 460. (PHIL 253 and RELI 235 cannot be used to fulfill both the philosophy/religious studies requirement and the Mason Core literature requirement.)

**Social Sciences:** This can be fulfilled by any course in ANTH; CRIM; ECON; GOVT; HIST (except 100 or 125); LING; PSYC; SOC; or GGS 101, 103, 110, 301, 303, 304, 305, 306, 315, 316, 320, 325, 330, 357, 380.

**Non-western Culture:** ANTH 114, 300, 301, 302, 303, 306, 307, 308, 309, 313, 314, 316, 323, 330, 332, 381, 383, 396; ARAB 360, 420, 440; ARTH 203, 204, 206, 319, 320, 382, 383, 384, 385, 386, 482; CHIN 318, 320, 325; DANC 118; ECON 361, 362; FREN 451, 454; GGS 101, 316, 325, 330, 399; GOVT 328, 332, 333, 340, 341, 345, 432, 433; HIST 251, 252, 261, 262, 271, 272, 281, 282, 326,

327, 328, 329, 353, 354, 356, 357, 358, 360, 364, 365, 366, 367, 387, 426, 460, 461, 462, 465; JAPA 310, 340; KORE 320; MUSI 103; **RELI 211, 212, 240, 272, 313, 314, 315, 337, 365, 374, 375, 379, 387, 490**; RUSS 353, 354.

**Note: Students do not have to meet each requirement with a separate course; i.e. it is possible that a single course may be used to fulfill more than one college requirement; a single course may fulfill a Mason Core requirement and a college requirement; a course may fulfill a Mason Core requirement and/or a college requirement and a requirement for the major.**