

GEORGE MASON UNIVERSITY
COLLEGE OF SCIENCE
B.A. DEGREE IN CHEMISTRY WITH CONCENTRATION IN BIOCHEMISTRY
(303 Planetary Hall, 993-1071)
<https://cos.gmu.edu/chemistry/undergraduate-programs/>
2017-2018 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 (please 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)		_____	_____
h. Natural Science (satisfied by completion of major requirements)			
i. Global Understanding (3)		_____	_____
j. Information Technology (3)		_____	_____
k. Synthesis (3)		_____	_____

Go to: <http://catalog.gmu.edu/mason-core/> 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 (62 hours required)

a. CHEM 211/213, CHEM 212/214 (3/1,3/1)	a.	_____	_____
b. CHEM 313, CHEM 314 (3,3)	b.	_____	_____
c. CHEM 315, CHEM 318 (2,2)	c.	_____	_____
d. CHEM 321 (4)	d.	_____	_____
e. CHEM 331, CHEM 336 (3,2)	e.	_____	_____
f. CHEM 446, CHEM 463 (3,4)	f.	_____	_____
g. CHEM 464, CHEM 465 (writing intensive course) (3,2)	g.	_____	_____
h. MATH 113, MATH 114 (4,4)	h.	_____	_____
i. STAT 250 (3)	i.	_____	_____
j. PHYS 243, 244; PHYS 245, 246 (3,1,3,1)	j.	_____	_____
k. BIOL 213 (4)	k.	_____	_____

Students majoring in chemistry must complete the chemistry program requirements with a minimum GPA of 2.30 and present no more than two courses with a grade of D (1.00) in CHEM coursework at graduation.

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 2017-2018 Catalog; the University Catalog is the official reference for program requirements.

COURSE LISTS (CHEMISTRY, BA) Mason Core Requirements

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

Oral Communication: COMM 100 or COMM 101

Quantitative Reasoning: MATH 106, 108, 110, 111, 113, 115, 123 and 124, 125; SOCI 313; STAT 250. 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

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: CHEM 211/213, 212/214

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; HDF5 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.