

**GEORGE MASON UNIVERSITY
COLLEGE OF SCIENCE**

B.S. DEGREE IN COMPUTATIONAL AND DATA SCIENCES (Research Hall, 703-993-5836)

<https://cos.gmu.edu/cds/bs-in-computational-and-data-sciences-2/>

2017-2018 CATALOG

	<u>Department(s) & Course #(s)</u>	<u>Completed/ Grade(s)</u>	<u>Needed</u>
MASON CORE REQUIREMENTS (*34)			
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 (4,3)	_____, _____	___ ___	___ ___
i. Global Understanding (3)	_____	_____	_____
j. Information Technology (satisfied by completion of major requirements)			
k. Synthesis (3)	_____	_____	_____

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

MAJOR REQUIREMENTS (56-57 hours required)

Core Required Courses (16 credits)

a. CDS 130, CDS 151 (3,1)	a. ___ ___	___ ___
b. CDS 230, CDS 301 (3,3)	b. ___ ___	___ ___
c. CDS 302 (writing intensive course), CDS 303 (3,3)	c. ___ ___	___ ___

Extended Core Courses (18 credits)

Choose from the following courses (circle choices) (18):

CDS 101 (3) and CDS 102 (1), CDS 2021 (3), CDS 205 (3), CDS 251 (3), CDS 290 (1-4), CDS 292 (3), CDS 411 (3), CDS 486 (3), CDS 500 (3), CDS 501 (3)

Mathematics Courses (10-11)

Choose from the following courses (circle choices) (10-11):

MATH 113 (4), MATH 114 (4), MATH 125 (3), MATH 203 (3), MATH 446 (3)

Statistics Courses (6)

Choose from the following courses (circle choices) (6):

STAT 250 (3), STAT 350 (3), STAT 344 (3), STAT 346 (3)

Science and Engineering Courses (list courses) (6)

Choose to either:

Build upon the courses chosen to fulfill the [Mason Core](#) requirements by choosing additional [Mason Core: Natural Science](#) or [Mason Core: Information Technology](#) courses.

Or

Complete any course offered by the [College of Science](#) or the [Volgenau School of Engineering](#). Courses can be found in the [Courses](#) section of this catalog.

GENERAL ELECTIVES 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) Elective course suggestions: CDS 410 or MATH 447, CDS 421, CDS 461, CDS 487, CDS 490, CDS 491.

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

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 (COMPUTATIONAL AND DATA SCIENCES)

COURSE LISTS 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

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, 106/107, 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

Non-lab: ANTH 135; ASTR 103, 302; BIOL 140; CHEM 101, 102, 201, 202; CLIM 101; EVPP 201; GEOL 134; GGS 102; NUTR 295; PHYS 106; PROV 301

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: CDS 130

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