B.S. MATHEMATICS - COMPUTER SCIENCE

COLLEGE of ARTS & SCIENCES
Language Requirement

All students who major in the College of Arts & Sciences are required to demonstrate competence in a second language. For complete details see:
http://www.gonzaga.edu/Academics/Colleges-and-Schools/College-of-Arts- and-Sciences/Majors-Programs/language-requirement-

	Credits	Sem/Yr

UNIVERSITY CORE REQUIREMENTS:
▶ FUNDAMENTAL CORE COURSES
Year 1: Understanding & Creating

Writing

	Credits	Sem/Yr
ENGL 101 Writing (fulfills 3 credits Writing Enriched)*	3	

Reasoning

PHIL 101 Reasoning	3	

First Year Seminar

193	3	

Communication & Speech

COMM 100 Communication & Speech	3	

Math

MATH _____ (must be above Math 100)	3	

Scientific Inquiry (2cr + 1cr lab)

BIOL or CHEM or PHYS 104/104L (taken year 1 or 2)	3	

Year 2: Being & Becoming

Christianity & Catholic Traditions

	Credits	Sem/Yr
RELI _____ (see approved list)**	3	

Philosophy of Human Nature

PHIL 201 Philosophy of Human Nature	3	

Year 3: Caring & Doing

World/Comparative Religion

	Credits	Sem/Yr
RELI _____ (see approved list)** (fulfills 3cr Global Studies)*	3	

Ethics

PHIL 301 Ethics *or* RELI 330 Principals-Christian Morality	3	

Year 4: Imagining the Possible

Core Integration Seminar

	Credits	Sem/Yr
492	3	

> NOTE: some courses have pre-requisites, check the catalogue carefully!

▶ BROADENING COURSES - *see approved list***

Social & Behavioral Science

	Credits	Sem/Yr
	3	

Literature

	3	

History

	3	

Fine Arts & Design

	3	

▶ REQUIRED COURSE DESIGNATIONS - *see approved list***

	Credits	Sem/Yr
*Writing Enriched	9 total	
Social Justice	3 total	
*Global Studies	6 total	

**for list of approved RELI, Broadening & Designated courses, see :
http://www.gonzaga.edu/Academics/Undergraduate/General-Degree-Requirements-and-Procedures/University-Core/Default.asp

B.S. MATHEMATICS-COMPUTER SCIENCE: 49 CREDITS

LOWER DIVISION   27 Credits

Course	Course Title	Credits	Grade
CPSC 121	Computer Science I	3	
CPSC 122	Computer Science II	3	
CPSC 223	Algorithms & Abstract Data Structures	3	
CPSC 224	Object-Oriented & Even Driven Programming	3	
MATH 157	Calculus & Analytic Geometry I	4	
MATH 231	Discrete Structures	3	
MATH 258	Calculus & Analytic Geometry II	4	
MATH 259	Calculus & Analytic Geometry III	4	

UPPER DIVISION   22 Credits

Course	Course Title	Credits	Grade
MATH 301	Fundamentals of Mathematics	3	
MATH 339	Linear Algebra	3	
MATH 499	Senior Comprehensive	1	

Computer Science Courses: 6 Credits
CPSC 300-level or above, except CSPC 497

Course	Course Title	Credits	Grade
CPSC		3	
CPSC		3	

Any 400-Level Mathematics course: 3 Credits

		Credits	Grade
MATH		3	

Mathematics Electives*:   6 Credits

Course	Course Title	Credits	Grade
MATH		3	
MATH		3	

Minimum of 6 credits from the following:

MATH 321 Statistics for Experimentalists
MATH 328 Operations Research
MATH 341 Modern Geometry
MATH 350 Elementary Numerical Analysis
MATH 351 Combinatorics & Graph Theory
MATH 360-363 Selected Topics
MATH 413 Real Analysis I
MATH 414 Real Analysis II
MATH 417 Complex Variables
MATH 421 Probability Theory
MATH 422 Mathematical Statistics
MATH 437 Abstract Algebra I
MATH 438 Abstract Algebra II
MATH 450-453 Selected Topics
MATH 454 Partial Differential Equations
MATH 457 Number Theory & Cryptography
MATH 459 Topology
MATH 490 Directed Reading
MATH 497 Mathematics Internship

*No course may be counted as meeting more than one of the requirements above.