

College of Arts and Sciences 2024-2025 Degree Worksheet

B.S. MATHEMATICS with STATISTICS CONCENTRATION

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:

<https://www.gonzaga.edu/college-of-arts-sciences/about/information-for-students/language-requirement-information>

Credits Sem/Yr

	Credits	Sem/Yr

UNIVERSITY CORE REQUIREMENTS:

▶ FUNDAMENTAL CORE COURSES

Year 1: Understanding & Creating

	Credits	Sem/Yr
Writing		
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

	Credits	Sem/Yr
Christianity & Catholic Traditions		
RELI (see approved list)**	3	
Philosophy of Human Nature		
PHIL 201 Philosophy of Human Nature	3	

Year 3: Caring & Doing

	Credits	Sem/Yr
World/Comparative Religion		
RELI (see approved list)** (fulfills 3cr Global Studies)*	3	
Ethics		
PHIL 301 Ethics or RELI 330 Principles-Christian Morality	3	

Year 4: Imagining the Possible

	Credits	Sem/Yr
Core Integration Seminar		
492	3	

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

▶ BROADENING COURSES - see approved list**

	Credits	Sem/Yr
Social & Behavioral Science		
	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 :**

<https://my.gonzaga.edu/academics/undergraduate-programs/general-degree-requirements-procedures/university-core>

B.S. MATHEMATICS:

49 CREDITS

with STATISTICS CONCENTRATION

LOWER DIVISION

12 Credits

Course	Course Title		Credits	Grade
MATH 157	Calculus & Analytic Geometry I		4	
MATH 258	Calculus & Analytic Geometry II		4	
MATH 259	Calculus & Analytic Geometry III		4	

UPPER DIVISION

13 Credits

MATH 301	Fundamentals of Mathematics		3	
MATH 339	Linear Algebra		3	
MATH 413	Real Analysis I		3	
MATH 437	Abstract Algebra I		3	
MATH 499	Comprehensive-Math*		1	

*Majors take fall semester of their final year

Select one of the following five (5) courses:

3 Credits

MATH 414	Real Analysis II			
MATH 417	Complex Variables			
MATH 438	Abstract Algebra II			
MATH 457	Number Theory & Cryptography			
MATH 459	Topology			

Select one 300-400 level MATH elective:

3 Credits

	Credits	Grade
(these may also come from the 5 listed above)		
MATH	3	

Cannot double-count with a course used above

Select one 400-level MATH elective:

3 Credits

MATH	3	
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STATISTICS CONCENTRATION

15 Credits

MATH 421	Probability Theory		3	
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Select one of the following two courses:

3 Credits

MATH 321	Statistics for Experimentalists			
MATH 422	Mathematical Statistics			

Select one of the following two courses:

3 Credits

MATH 425	Applied Statistical Models			
MATH 426	Experimental Design			

Two Statistics Electives:

6 Credits

Cannot double-count with courses used elsewhere
At least one course must be MATH.

Statistics Elective options: MATH 422, 423, 426, PHYS 323, ECON 355, 451, 452, CPSC 322, 323, 324, PSYC 450.

Some of these courses may have pre-requisites that are not part of this concentration.

MATH Electives:

MATH 260 may be used as one 300-400 level elective.
MATH 335, 432, and 496 cannot be used for MATH electives.
A maximum of three (3) credits from the following courses may be counted toward Math electives: MATH 365 (may be taken for credit only once), MATH 390, 490, 497.