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

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		
Dept. 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		
Dept. 432	**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. APPLIED MATHEMATICS: 61 CREDITS
Economics Concentration

APPLIED MATHEMATICS   34 Credits
LOWER DIVISION — *18 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	
MATH 260	Ordinary Differential Equations	3	
CPSC 121	Computer Science I	3	

UPPER DIVISION — *16 Credits*

Course	Course Title	Credits	Grade
MATH 301	Fundamentals of Mathematics	3	
MATH 339	Linear Algebra	3	
MATH 350	Elementary Numerical Analysis	3	
MATH 413	Real Analysis I	3	
MATH 422	Mathematical Statistics	3	
MATH 496	Comprehensive - Applied Math	1	

ECONOMICS CONCENTRATION   27 Credits

		3 Credits	
MATH 421	Probability Theory	3	

One of the following three courses: — *3 Credits*

MATH 440	Foundations of Applied Math	3	
MATH 454	Partial Differential Equations	3	
MATH 462	Nonlinear Systems & Chaos	3	

Mathematics 300-400 Level Electives: — *6 Credits*

MATH		3	
MATH		3	

A minimum of 3 credits must be from the MATH electives list; cannot double-count with another requirement.

MATH 328	Operations Research	
MATH 341	Modern Geometry	
MATH 351	Combinatorics & Graph Theory	
MATH 360-363	Selected Topics	
MATH 414	Real Analysis II	
MATH 417	Complex Variables	
MATH 423	Stochastic Processes	
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 462	Nonlinear Systems & Chaos	
MATH 498A/498B	Thesis I/II	

		9 Credits	
ECON 201	Microeconomics	3	
ECON 202	Macroeconomics	3	
ECON 303	Game Theory-Economic Applications	3	

One of the following two courses: — *3 credits*

ECON 301	Intermediate Microeconomics	3	
ECON 302	Intermediate Macroeconomics	3	

Economics 300-400 Level Elective:		*3 Credits*
ECON	3	

ECON 301 Intermediate Microeconomics
ECON 311 Global Economic Issues
ECON 320 Economics of Sports
ECON 321 International Economics
ECON 322/SOSJ 320 Work, Wages, and Inequality
ECON 324 Economics of Environmental Protection
ECON 325 Public Finance
ECON 330 Antitrust Policy & Regulation
ECON 333 Health Economics
ECON 334 Behavioral Economics
ECON 351 Managerial Economics
ECON 352 Money & Banking
ECON 404 Economic Integrated European Community
ECON 451 Econometrics
  (ECON 321 and 451 are the recommended elective choices)

Check for pre-requisites when selecting electives!