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: 64-65 CREDITS
with 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

			10 Credits	
MATH	301	Fundamentals of Mathematics	3	
MATH	350	Numerical Methods	3	
MATH	413	Real Analysis I	3	
MATH	496	Comprehensive - Applied Math	1	

(Majors take MATH 496 fall semester of their final year)

Select one of the following two courses:		*3 Credits*	
MATH 321	Statistics for Experimentalists	3	
MATH 422	Mathematical Statistics	3	

If MATH 422 is chosen, then one MATH 400 level elective may be replaced by a MATH 300 level elective.

Select one of the following two courses:		*3 Credits*	
MATH 335	Applied Linear Algebra	3	
MATH 339	Linear Algebra	3	

ECONOMICS CONCENTRATION		**30-31 Credits**

			3 credits	
MATH	421	Probability Theory	3	

			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 351	Managerial Economics	3	

* *ECON 301 pre-requisite ECON 201, requires a minimum grade of B-*

Select two of the following five courses:		*6 Credits*	
MATH 423	Stochastic Processes	3	
MATH 425	Applied Statistical Models	3	
MATH 426	Experimental Design	3	
MATH 440	Foundations of Applied Math	3	
MATH 454	Partial Differential Equations	3	

Options for ECON 300-400 Level Elective:

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 352/352L Money & Banking + Lab
ECON 355 Regression Analysis
*ECON 451 Econometrics
*ECON 452 Time Series Analysis
(*recommended elective choices)

Check for pre-requisites when selecting electives.

One ECON 300-400 level elective:	*3-4 credits*	
ECON	3	

One 300-400 level Math elective:	*3 Credits*	
MATH	3	

One 400-level Math elective:	*3 Credits*	
MATH	3	

MATH 300-level and 400-level Electives:

Cannot double-count electives with another requirement.

Cannot use MATH 335, 339, 432, or 499 as MATH electives.

A maximum of three (3) total credits from the following may be counted toward Math electives: MATH 365 (may be taken for credit only once), MATH 390, MATH 490, MATH 497.