

College of Arts and Sciences 2024-2025 Degree Worksheet

B.S. APPLIED MATHEMATICS with Actuarial Science 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

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UNIVERSITY CORE REQUIREMENTS:

► FUNDAMENTAL CORE COURSES

Year 1: Understanding & Creating

		Credits Sem/Yr
<i>Writing</i>		
ENGL 101 Writing (fulfills 3 credits Writing Enriched)*	3	<input type="text"/>
<i>Reasoning</i>		
PHIL 101 Reasoning	3	<input type="text"/>
<i>First Year Seminar</i>		
Dept. 193	3	<input type="text"/>
<i>Communication & Speech</i>		
COMM 100 Communication & Speech	3	<input type="text"/>
<i>Math</i>		
MATH (must be above Math 100)	3	<input type="text"/>
<i>Scientific Inquiry (2cr + 1cr lab)</i>		
BIOL or CHEM or PHYS 104/104L (taken year 1 or 2)	3	<input type="text"/>

Year 2: Being & Becoming

		Credits Sem/Yr
<i>Christianity & Catholic Traditions</i>		
RELI (see approved list)**	3	<input type="text"/>
<i>Philosophy of Human Nature</i>		
PHIL 201 Philosophy of Human Nature	3	<input type="text"/>

Year 3: Caring & Doing

		Credits Sem/Yr
<i>World/Comparative Religion</i>		
RELI (see approved list)** (fulfills 3cr Global Studies)*	3	<input type="text"/>
<i>Ethics</i>		
PHIL 301 Ethics or RELI 330 Principles-Christian Morality	3	<input type="text"/>

Year 4: Imagining the Possible

		Credits Sem/Yr
<i>Core Integration Seminar</i>		
Dept. 432	3	<input type="text"/>

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

► BROADENING COURSES - see approved list**

		Credits Sem/Yr
Social & Behavioral Science	3	<input type="text"/>
Literature	3	<input type="text"/>
History	3	<input type="text"/>
Fine Arts & Design	3	<input type="text"/>

► REQUIRED COURSE DESIGNATIONS - see approved list**

		Credits Sem/Yr
*Writing Enriched	9 total	<input type="text"/>
Social Justice	3 total	<input type="text"/>
*Global Studies	6 total	<input type="text"/>

**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: 69 CREDITS with Actuarial Science Concentration

APPLIED MATHEMATICS

34 Credits

LOWER DIVISION

18 Credits

	Course Title		Credits	Grade
MATH 157	Calculus & Analytic Geometry I	4	<input type="text"/>	
MATH 258	Calculus & Analytic Geometry II	4	<input type="text"/>	
MATH 259	Calculus & Analytic Geometry III	4	<input type="text"/>	
MATH 260	Ordinary Differential Equations	3	<input type="text"/>	
CPSC 121	Computer Science I	3	<input type="text"/>	

UPPER DIVISION

13 Credits

MATH 301	Fundamentals of Mathematics	3	<input type="text"/>	
MATH 413	Real Analysis I	3	<input type="text"/>	
MATH 422	Mathematical Statistics	3	<input type="text"/>	
MATH 423	Stochastic Processes	3	<input type="text"/>	
MATH 496	Comprehensive-Applied Math	1	<input type="text"/>	

Select one of the following two options:

3 Credits

MATH 335	Applied Linear Algebra	3	<input type="text"/>	
MATH 339	Linear Algebra	3	<input type="text"/>	

ACTUARIAL SCIENCE CONCENTRATION

35 Credits

			Credits	Grade
MATH 421	Probability Theory	3	<input type="text"/>	
MATH 494	Topics in Actuarial Science	1	<input type="text"/>	
ACCT 263	Accounting Analysis	3	<input type="text"/>	
ECON 201	Microeconomics (min grade B-)	3	<input type="text"/>	
ECON 202	Macroeconomics	3	<input type="text"/>	
ECON 301	Intermediate Microeconomics	3	<input type="text"/>	
ECON 352/352L	Money and Banking+Lab	4	<input type="text"/>	
ECON 355	Regression Analysis	3	<input type="text"/>	
ECON 451	Econometrics	3	<input type="text"/>	

Applied Math Electives:

Select one of the following two options:

3 Credits

MATH 400-level elective	3	<input type="text"/>	
ECON 452	Time Series Analysis	3	<input type="text"/>

Select two 300-400 level Math electives:

6 Credits

MATH	3	<input type="text"/>	
MATH	3	<input type="text"/>	

Cannot double-count with a required course.

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.

