



Mathematics/Applied Math/Statistics

Major Preparation Sheet 2016-2017

Mathematics/Applied Math/Statistics – What is it?

Mathematics is the study of structure, form and the relationship among numerical, geometric and logical constructs. While mathematics is a field that serves science, it also stands on its own as a discipline worthy of independent study. Applied mathematics focuses on the application of math to other fields.

Areas of study in Mathematics/Applied Math/Statistics: Arithmetic, Algebra, Trigonometry, Discrete Mathematics, Probability and Statistics, Calculus, Analytic Geometry, Differential Equations, Linear Algebra, Multivariable Calculus, Mathematical Modeling, and Mathematics Applications to Business, Economics, Engineering and Technology.

Where does my path start?

You will complete an Associate of Arts – Direct Transfer Agreement (AA-DTA) at Shoreline.

Use the AA -DTA **Degree Planning Guide** to understand the requirements for graduation.

Once you complete your Shoreline degree, you can transfer to a four-year school to earn a Bachelor of Arts or Science degree in Mathematics or Applied Mathematics or Statistics. Mathematics is an excellent choice for further graduate studies in Math, Statistics, Education, Medicine and Law.

Where can I go for help?

Program Faculty Advisors

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General Academic Advising

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206-546-4559
advising@shoreline.edu
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International Student Academic Advising

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206-546-4697
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www.shoreline.edu/international/advising/

Career Planning

www.shoreline.edu/job-career-services/

For course information and entry codes, contact:

mathadvising@shoreline.edu

Where can I transfer?

The AA-DTA makes it possible for students to transfer to a number of public and private colleges and universities in the U.S. with junior standing. Washington State institutions are listed below with Mathematics/Applied Math/Statistics majors, which may require specific courses for admission. Contact the Mathematics/Applied Math/Statistics department at your chosen four-year school(s) for more information.

[Central Washington University](#)
[Eastern Washington University](#)
[Gonzaga University](#)
[Heritage University](#)
[Northwest University](#)
[Pacific Lutheran University](#)

[Saint Martin's University](#)
[Seattle Pacific University](#)
[Seattle University](#)
[The Evergreen State College](#)
[University of Puget Sound](#)
[University of Washington – Bothell](#)

[University of Washington – Seattle](#)
[Walla Walla University](#)
[Washington State University](#)
[Western Washington University](#)
[Whitworth University](#)
[Whitman College](#)

What can I do with a Bachelor's Degree in Mathematics?

Mathematicians develop critical thinking, analytical reasoning and problem solving skills that apply to multiple career fields, such as research and development, testing, design, operations, statistical analysis, risk management, computer programming, data processing, networking, investment, sales and teaching.

Potential employers include: Business, manufacturing firms, market research firms, government agencies, consulting firms, insurance agencies, computer companies, banks and financial organizations, public and private schools. For more, please visit <http://www.shoreline.edu/counseling-services/career-counseling.aspx>.

What courses should I take?*

Below are recommendations for fulfilling the AA-DTA requirements if you are planning to pursue a four-year degree in Mathematics/Applied Math/Statistics.

Strongly Recommended

These are commonly **required** for admission. Check with your chosen four-year program(s) to confirm.

Other Recommendations

These courses are well-matched with this major, but are not commonly required for admission.

I. GENERAL EDUCATION REQUIREMENTS

Quantitative and Symbolic Reasoning	MATH &151
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II. DISTRIBUTION REQUIREMENTS

Humanities		World Language if required for university admission or graduation.
Natural Sciences	MATH &152	PHYS &114, 115, &221, & 222 CHEM 171/181, 172/182, 173/183
Social Sciences		ECON &201, &202, PSYC &101

III. GENERAL ELECTIVES

	MATH &163, 207, 208, 211, &264	ACCT &201, &202, BUS &201, CS &141, PHYS &116, &223
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What does my chosen four-year school require?

Before choosing classes, become familiar with the four-year program where you want to apply: visit the website, email the department, and/or speak with a Shoreline advisor. Below are examples from Washington schools with different admissions and graduation requirements.

School	Degrees	Requirements
Central Washington University	B.S. in Mathematics or with Actuarial Science specialization and B.A. in Mathematics with Secondary or Middle Level Teaching Option	http://www.cwu.edu/math/
Seattle University	B.A. in Mathematics with teaching option and B.S. in Mathematics with specialization in Applied Math and Pure Math	Additional course requirements – 18 credits from Computer Science, Economics, Natural Sciences and a Computer Application or Programming course as approved by Seattle U advisor
University of Washington – Seattle	B.A. in Mathematics - Standard, Philosophy or Teaching Options B.S. in Mathematics - Comprehensive or Standard Options B.S. in Applied and Computational Mathematical Sciences (ACMS) B.S. in Statistics	Admission requirements: MATH &151, &152, &163 Additional admission requirements for Statistics major: (https://www.stat.washington.edu/undergraduate/major/)
University of Washington – Bothell	B.S. in Mathematics B.S. in Mathematical Thinking and Visualization	http://www.bothell.washington.edu/admissions/apply/transfer/transfer-reg/morethan40credits/planning-tools
Washington State University	B.S. in Actuarial Science, Applied Mathematics, Theoretical Mathematics, Secondary Mathematics, Teaching with Certification, Secondary Mathematics Teaching without Certification.	http://www.math.wsu.edu/academics/undergraduatestudies.php
Western Washington University	B.A. in Mathematics with options in Economics and Education; B.S. in Mathematics with options in Applied Mathematics, Computer Science, and Biology	

**** This unofficial guide is intended to support you as you prepare for your major. Please consult with an advisor and your chosen four-year school(s), as program and admissions requirements vary and may change without notice.**