

# The Department of Finance

## Applied Quantitative Finance (AQF) Concentration

Chair: Shelly Howton, PhD.  
Associate Chair: Amy Kratchman  
Associate Chair: Caitlin Dannhauser, PhD.  
Office: 2019 Bartley Hall  
Telephone: 610-519-7395  
[Website](#)

### About

Students intending to major in Finance, may apply to pursue the Applied Quantitative Finance (AQF) concentration. All interested students should apply to the AQF program director, Stephen Padovano ([stephen.padovano@villanova.edu](mailto:stephen.padovano@villanova.edu)) by July 15 prior to the start of sophomore year. A second application opportunity will occur for any remaining spots following the Fall semester. The application deadline for the second opportunity is before January 5.

### Math Requirements (8 Credits)

If students receive AP credits for MAT 1505, they must take MAT 3100 (Applied Linear Algebra) or MAT 3400 (Linear Algebra) as the replacement course.

<b>Course</b>	<b>Title</b>	<b>Credits</b>
MAT 1505	Calculus II	4
MAT 2705	Diff Equation with Linear Alg	4

### Statistics Requirements (6 Credits)

FIN 2360 does not fulfill a FIN EL requirement.

<b>Course</b>	<b>Title</b>	<b>Credits</b>
STAT 4315	Applied Statistical Models	3
FIN 2360	Applied Financial Statistics	3

## Computer Science/Analytics (7 Credits)

<b>Course</b>	<b>Title</b>	<b>Credits</b>
FIN 2121	Special Topics in Finance	1
MIS 2020	Prog for Adaptive Prob Solving	3
MIS 3080	Applied Machine Learning	3

## Economics Requirement (3 Credits)

<b>Course</b>	<b>Title</b>	<b>Credits</b>
ECO 3137	Intro to Econometrics	3

## Specific FIN Electives for Quant Finance Concentration (9 Credits)

**Note:** FIN 2360, FIN 3350, FIN 3360, and FIN 3470 (6 cr.) do not count toward Finance elective courses.

<b>Course</b>	<b>Title</b>	<b>Credits</b>
FIN 2325	Introduction to Derivatives	3
FIN 2345	Quantitative Asset Mgmt	3
	3 cr. FIN Elective	3

**Also note:**

1. Students pursuing the Applied Quantitative Finance concentration may not also minor in AIML minor due to similarity of coursework.
2. MIS 2020 is the only course that can be shared between MIS major and Applied Quantitative Finance concentration.
3. Math minors may substitute FIN 2360 with STAT 5700.