



**East Stroudsburg University of Pennsylvania
Department of Mathematics**

**B.S. in Mathematics with
Concentration in Applied Financial Mathematics**

For Students Who Entered September 2016 or Later

University Requirements:

- 120 credits
- 2.0 or higher Quality Point Average
- 30 or more credits of 300 level or higher courses; last 32 credits at ESU
- Pass basic mathematics competency
- 42 credits in advanced course work

I. General Education Requirements.....45 credits

Required Courses: (9 credits)

- ENGL 103 (3) *Must be completed within first 45 credits at ESU* _____
- FYE (3) *Must be completed within first year of study at ESU* _____
- Health (3) *Must be completed within first 60 credits at ESU* _____

Breadth Requirement: (36 credits)

Group A – Arts and Letters (12)

Must include at least 4 of the following :

- English Language and Literature _____
- Fine Arts – Art, Communication Studies, Dance, Music, Theatre _____
- Modern Languages _____
- Performing Arts – Communication Studies, Dance, Music, Theatre _____
- Philosophy _____

Group B – Science (12)

Must include at least 4 of the following:*

- Biology _____
- Chemistry _____
- Computer Science _____
- Mathematics _____
- Physics _____
- Psychology _____

* One of the four must have completion of the Math Competency as a prerequisite

Group C – Social Science (12)

Must include at least 4 of the following:

- Economics _____
- Geography _____
- History _____
- Political Science _____
- Sociology _____

Additional (Overlay) Requirements:

The following requirements will be embedded into courses across the University, including GE Breadth courses, courses within the major programs, and elective courses, and should not require that a student complete additional credits for graduation.

- (W2) Level II Writing requirement (W3) Level III Writing requirement _____
- (G) Global Diversity and Citizenship (SLO I) requirement _____
- (C) Communication (SLO III) requirement _____
- (I) Information Literacy/Technology (SLO IV) requirement _____
- (A) Artistic Expression (SLO VI) requirement _____

II. Mathematics Course Requirements.....36 Credits					
_____MATH 140	Calculus I	(4)	_____MATH 320	Linear Algebra	(3)
_____MATH 141	Calculus II	(4)	_____MATH 425	Math Modeling	(3)
_____MATH 220	Discrete Math Structures	(3)	_____MATH ELECTIVE	(300 or higher)	(3)
_____MATH 240	Multivariate Calculus	(4)	_____MATH ELECTIVE	(300 or higher)	(3)
_____MATH 280	Math Finance (Option Course)	(3)	_____MATH ELECTIVE	(300 or higher)	(3)
_____MATH 311	Statistics I	(3)	(MATH 351, 430, 431, 499 excluded)		

Note: Three credits of MATH 486 – Internship in Applied Mathematics may be used as one MATH ELECTIVE

III. Co-requisites.....12 Credits					
_____CPSC 101	Comp & Use in Science	(3)	_____CMST 111	Speech Communication	(3)
_____CPSC 130	Intro Comp Programming	(3)	_____ENGL 204	Technical Writing	(3)

IV. Finance Requirements.....12 Credits					
_____ECON 111	Principles of Macroeconomics	(3)	_____ECON 332	Forecasting Methods	(3)
_____ECON 112	Principles of Microeconomics	(3)	_____ECON 300 or Higher	(Or Other Approved)	(3)

V. A grade of C or better must be earned in all required courses (math, co-requisites and options courses)

VI. Free Electives.....15 Credits			
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