

**EAST CENTRAL UNIVERSITY  
MATHEMATICS - B.S.  
APPLIED MATHEMATICS/PRE-ACTUARY CONCENTRATION  
0294/UG14-UG15**

Advisor \_\_\_\_\_

Student's Name \_\_\_\_\_ ID No. \_\_\_\_\_

**DEGREE CHECK INCLUDES CURRENT ENROLLMENT**

Checked by _____ Date _____ Required: 124 total hours _____ completed 30 hrs @ ECU _____ completed (15 of last 30 must be at ECU) _____ 60 hrs @ Sr College _____ completed 40 hrs upper level _____ completed HS Curricular Req _____ met _____ not met	Work in progress _____ 2.0 minimum required in the following areas: ECU Avg _____ Rtn Avg _____ Major Overall Avg _____ Major ECU Avg _____ Minor Overall Avg _____ Minor ECU Avg _____	Work lacking: Major _____ (inc A/C and Related Work) Minor _____ (incl Rel Wk) Prof Educ _____ General Educ _____ Comp Prof _____ met _____ not met Serv Lrng _____ met _____ not met
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<u>REQUIREMENTS</u>	<u>HOURS</u>	<u>REQUIREMENTS</u>	<u>HOURS</u>
<b>I. General Education (45 HOURS)</b>		<b>B. Required Related Work</b>	21
12 hours (COMM 1113 or 2253, CMPSC 1113, ECON 2003, and MATH 1513) counted in the Major		___ ACCT 2103 Financial Accounting	
Other hours needed	<b>33</b>	___ ECON 2013 Principles of Microeconomics	
		___ ENG 3183 Technical and Professional Writing	
		___ FIN 3113 Financial Management	
		___ FIN 3913 Principles of Insurance and Risk Mgmt	
		___ MIS 1903 Computer Business Application	
		___ MIS 3433 Management Information Systems	
<b>II. Concentration in Applied Math/Pre-Actuary</b>	<b>46-52</b>	<b>IV. Minor (Not Required)</b>	
<b>A. Required General Education</b>	0-3	<b>V. Electives</b>	<b>9-15</b>
___ MATH 1513 College Algebra		<b>VI. Total Hours Required</b>	<b>124</b>
<b>B. Required Concentration</b>	31-34	<b>VII. Special Requirements</b>	
___ MATH 1713 Trigonometry		MATH 1413, "teachers" or "methods" courses will not be counted in the major.	
___ MATH 2213 Intro to Probability and Statistics		With departmental approval, students may omit MATH 1513 and MATH 1713 and begin with MATH 2825.	
___ MATH 2825 Calculus and Analytic Geometry I		Actuaries must pass a series of exams administered by the Society of Actuaries (SOA) in order to achieve professional status as an actuary. The first exam, Exam P, covers probability and supporting calculus topics. Pre-actuary students should take this exam after completing MATH 3513 Mathematical Statistics. The second exam, Exam FM, covers interest theory and financial economics. This exam should be taken after FIN 3113 Financial Management. Other SOA exams cover subjects such as risk and risk management.	
___ MATH 3025 Calculus and Analytic Geometry II		The OSRHE computer proficiency graduation requirement will be met through completion of CMPSC 1113 (including equated or substituted courses), or testing out of the challenge exam for this course. <u>OR</u> successful completion of an associate of arts or associate of science degree at an Oklahoma two-year college in which the computer skills requirement was met. Satisfaction of this requirement may not reduce or remove any program requirements.	
___ MATH 3033 Calculus and Analytic Geometry III		Students beginning at East Central University in the fall 2007 semester or later who have earned less than sixty-four semester hours are required to take two classes with designated service-learning component. Students transferring to ECU for the first time in the fall 2007 semester or later with sixty-four or more semester hours will be required to take one class with a service-learning component.	
___ MATH 3513 Mathematical Statistics			
___ MATH 3583 Applied Statistics			
___ MATH 3713 Linear Algebra			
___ MATH 4113 Differential Equations			
___ MATH 4923 Perspectives in Mathematics			
<b>C. Required Electives</b>	15		
Two of the following:			
___ CPSMA 3913 Discrete Mathematics			
___ CPSMA 3933 Operations Research			
___ CPSMA 4413 Numerical Methods			
Nine hours approved courses from MATH, CMPSC, MIS, MGMT, MKTG, BUSLW, or FIN (3000-4000)			
___ _____			
___ _____			
___ _____			
<b>III. Related Work</b>	<b>30</b>		
<b>A. Required General Education</b>	9		
___ CMPSC 1113 Computer Programming I <b>OR</b>			
other computer programming course in a high level language (logical, functional, or procedural, including Mathematica).			
___ COMM 1113 Fundamentals of Human Comm <b>OR</b>			
___ COMM 2253 Communication in the Workplace			
___ ECON 2003 Principles of Macroeconomics			
___ _____			
___ _____			
___ _____			