

**EAST CENTRAL UNIVERSITY  
MATHEMATICS - B.S.  
APPLIED MATHEMATICS/PRE-ACTUARY CONCENTRATION  
0294/UG17**

Advisor \_\_\_\_\_

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

**DEGREE CHECK INCLUDES CURRENT ENROLLMENT**

Checked by _____ Date _____	Work in progress _____	
Required: 124 total hours _____ completed	2.0 minimum required in the following areas:	Work lacking:
30 hrs @ ECU _____ completed	ECU Avg _____ Rtn Avg _____	Major _____ (inc A/C and Related Work)
(15 of last 30 must be at ECU) _____	Major Overall Avg _____	Minor _____ (incl Rel Wk)
60 hrs @ Sr College _____ completed	Major ECU Avg _____	Prof Educ _____
40 hrs upper level _____ completed	Minor Overall Avg _____	General Educ _____
HS Curricular Req ___ met ___ not met		Comp Prof ___ met ___ not met

<u>REQUIREMENTS</u>	<u>HOURS</u>	<u>REQUIREMENTS</u>	<u>HOURS</u>
<b>I. General Education (44 HOURS)</b>		<b>III. Related Work</b>	<b>30</b>
12 hours (COMM 1113 or 2253, CMPSC 1113, ECON 2003, and MATH 1513) counted in the Major		<b>A. Required General Education</b>	<b>9</b>
Other hours needed <span style="float: right;"><b>32</b></span>		___ CMPSC 1113 Computer Programming I <b>OR</b>	
		___ other computer programming course in a high level language (logical, functional, or procedural, including Mathematica).	
<b>II. Concentration in Applied Math/Pre-Actuary</b>	<b>46-52</b>	___ COMM 1113 Fundamentals of Human Comm <b>OR</b>	
<b>A. Required General Education</b>	0-3	___ COMM 2253 Communication in the Workplace	
___ MATH 1513 College Algebra		___ ECON 2003 Principles of Macroeconomics	
<b>B. Required in the Mathematics Core</b>	22-25	<b>B. Required Related Work</b>	21
___ MATH 1713 Trigonometry		___ ACCT 2103 Financial Accounting	
___ MATH 2213 Intro to Probability and Statistics		___ ECON 2013 Principles of Microeconomics	
___ MATH 2825 Calculus and Analytic Geometry I		___ ENG 3183 Technical and Professional Writing	
___ MATH 3025 Calculus and Analytic Geometry II		___ FIN 3113 Financial Management	
___ MATH 3033 Calculus and Analytic Geometry III		___ FIN 3913 Principles of Insurance and Risk Mgmt	
___ MATH 3713 Linear Algebra		___ MIS 1903 Computer Business Application	
___ MATH 4923 Perspectives in Mathematics		___ MIS 3433 Management Information Systems	
<b>C. Required for Concentration in Applied Mathematics/Pre-Actuary</b>	9	<b>IV. Minor (Not Required)</b>	
___ MATH 3513 Mathematical Statistics		<b>V. Electives</b>	<b>10-16</b>
___ MATH 3583 Applied Statistics		<b>VI. Total Hours Required</b>	<b>124</b>
___ MATH 4113 Differential Equations		<b>VII. Special Requirements</b>	
<b>D. Required Electives</b>	15	MATH 1413, "teachers" or "methods" courses will not be counted in the major.	
Two of the following:		With departmental approval, students may omit MATH 1513 and MATH 1713 and begin with MATH 2825.	
___ CPSMA 3913 Discrete Mathematics		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.	
___ CPSMA 3933 Operations Research		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, <b>OR</b> 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.	
___ CPSMA 4413 Numerical Methods			
Nine hours approved courses from MATH, CMPSC, MIS, MGMT, MKTG, BUSLW, or FIN (3000-4000)			
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