

**EAST CENTRAL UNIVERSITY
MATHEMATICS - B.S.
APPLIED MATHEMATICS/PRE-ACTUARY CONCENTRATION
0294/UG22**

Name _____

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>
I. General Education (44 HOURS)		III. Related Work	30
12 hours (COMM 1113 or 2253, CMPSC 1113, ECON 2003, and MATH 1513) counted in the Major		A. Required General Education	9
Other hours needed	32	___ CMPSC 1113 Computer Programming I OR	
		other computer programming course in a high level language (logical, functional, or procedural, including Mathematica).	
II. Concentration in Applied Math/Pre-Actuary	46-52	___ COMM 1113 Fundamentals of Human Comm OR	
A. Required General Education	0-3	___ COMM 2253 Communication in the Workplace	
___ MATH 1513 College Algebra		___ ECON 2003 Principles of Macroeconomics	
B. Required in the Mathematics Core	22-25	B. Required Related Work	21
___ MATH 1223 Intro to Probability and Statistics		___ ACCT 2103 Financial Accounting	
___ MATH 1713 Trigonometry		___ 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 Insurance Planning and Risk Mgmt	
___ MATH 3713 Linear Algebra		___ MIS 1903 Computer Business Application	
___ MATH 4923 Perspectives in Mathematics		___ MIS 3433 Management Information Systems	
C. Required for Concentration in Applied Mathematics/Pre-Actuary	9	IV. Minor (Not Required)	
___ MATH 3513 Mathematical Statistics		V. Electives	10-16
___ MATH 3583 Applied Statistics		VI. Total Hours Required	124
___ MATH 4113 Differential Equations		VII. Special Requirements	
D. Required Electives	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, OR 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)			

