Name

EAST CENTRAL UNIVERSITY
MATHEMATICS - B.S.
APPLIED MATHEMATICS/PRE-ACTUARY CONCENTRATION
0294/UG21

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 _____

Work lacking:
Major ____ **(inc A/C and Related Work)**
Minor ____ **(incl Rel Wk)**
Prof Educ _____
General Educ ____
Comp Prof ___ **met** ___ **not met**

REQUIREMENTS	HOURS
I. General Education (44 HOURS)	
12 hours (COMM 1113 or 2253, CMPSC 1113, ECON 2003, and MATH 1513) counted in the Major	
Other hours needed	**32**
II. Concentration in Applied Math/Pre-Actuary	**46-52**
A. Required General Education	0-3
__ MATH 1513 College Algebra	
B. Required in the Mathematics Core	22-25
__ MATH 1223 Intro to Probability and Statistics	
__ MATH 1713 Trigonometry	
__ MATH 2825 Calculus and Analytic Geometry I	
__ MATH 3025 Calculus and Analytic Geometry II	
__ MATH 3033 Calculus and Analytic Geometry III	
__ MATH 3713 Linear Algebra	
__ MATH 4923 Perspectives in Mathematics	
C. Required for Concentration in Applied Mathematics/Pre-Actuary	9
__ MATH 3513 Mathematical Statistics	
__ MATH 3583 Applied Statistics	
__ MATH 4113 Differential Equations	
D. Required Electives	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)	
__ _____	
__ _____	
__ _____	

REQUIREMENTS	HOURS
III. Related Work	**30**
A. **Required General Education**	**9**
__ CMPSC 1113 Computer Programming I **OR** other computer programming course in a high level language (logical, functional, or procedural, including Mathematica).	
__ COMM 1113 Fundamentals of Human Comm **OR**	
__ COMM 2253 Communication in the Workplace	
__ ECON 2003 Principles of Macroeconomics	
B. Required Related Work	21
__ ACCT 2103 Financial Accounting	
__ ECON 2013 Principles of Microeconomics	
__ ENG 3183 Technical and Professional Writing	
__ FIN 3113 Financial Management	
__ FIN 3913 Insurance Planning and Risk Mgmt	
__ MIS 1903 Computer Business Application	
__ MIS 3433 Management Information Systems	
IV. Minor (Not Required)	
V. Electives	**10-16**
VI. Total Hours Required	**124**

VII. Special Requirements

MATH 1413, "teachers" or "methods" courses will not be counted in the major.

With departmental approval, students may omit MATH 1513 and MATH 1713 and begin with MATH 2825.

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.

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.