



PREREQUISITE WORKSHEET FOR MASTERS IN APPLIED STATISTICS

Please indicate on the line beneath each course the course or courses from your transcript that you feel are equivalent to each prerequisite. You need not have satisfied all requirements in order to be admitted conditionally as a graduate student. If conditionally admitted, you may clear up one course deficiency (specifically STAT 381) by taking the necessary course at CSULB; this course will not count as part of the 30 units required for the M.S. degree. If you have to take more than 1 prerequisite course, you can take them through what is called Open University at CSULB (or another campus) and then apply when you are ready. Fill out the form below and email it to graduate advisor listed on [Applied Statistics Graduate Program](#).

1. MATH 122, 123, 224. Calculus 1, 2, and 3

Calc 1 Course: _____ Where taken: _____ Year: _____ Grade: _____

Calc 2 Course: _____ Where taken: _____ Year: _____ Grade: _____

Calc 3 Course: _____ Where taken: _____ Year: _____ Grade: _____

2. MATH 247. Introduction to Linear Algebra

Prerequisite or corequisite: MATH 224 (Calculus 3). Matrix algebra, solution of systems of equations, determinants, vector spaces including function spaces, inner product spaces, linear transformations, eigenvalues, eigenvectors, quadratic forms and applications. Emphasis on computational methods.

Course: _____ Where taken: _____ Year: _____ Grade: _____

IF YOU HAVE NOTE TAKEN CALCULUS, THEN YOU HAVE NOT TAKEN THE COURSES BELOW.

3. MATH/STAT 380. Probability and Statistics (calculus based)

Prerequisites: MATH 222 or 224. Frequency interpretation of probability. Axioms of probability theory. Discrete probability and combinatorics. Random variables. Distribution and density functions. Moment generating functions and moments. Sampling theory and limit theorems.

Course: _____ Where taken: _____ Year: _____ Grade: _____

Link to Catalog Description: _____

4. STAT 381. Mathematical Statistics (calculus based)

Prerequisites: MATH 247 and 380. Estimation and hypothesis testing. Maximum likelihood and method of moments estimation. Efficiency, unbiasedness, and asymptotic distribution of estimators. Neyman-Pearson Lemma. Goodness-of-fit tests. Correlation, and regression. Experimental design and analysis of variance. Nonparametric methods.

Course: _____ Where taken: _____ Year: _____ Grade: _____

Link to Catalog Description: _____

If you do not have a link to course descriptions for courses 3 and 4, please attach syllabi, or provide instructor's email address.

5. Your Name: _____ E-Mail: _____