

Application for MS Statistics/Biostatistics

ADMISSION TO THE PROGRAM

Here is a step-by-step explanation of the admission process. This section explains some procedures *required* by the Department of Statistics and Biostatistics, but not included in the *Catalog*. They are intended to ensure that your application for admission receives the most prompt and favorable consideration possible.

Step A: Verify Course and Degree Requirements For Admission

The following information is provided so that you can assess whether you are eligible for admission to the Statistics MS Program. Admission is a **two-stage** process:

- (1) Admission to the University as a graduate student, and
- (2) Acceptance into the Statistics MS Program.

The only way to know for sure whether you are qualified for admission is for the University and the Department to evaluate your transcripts, letters of recommendation, and other evidence listed below in Steps B and C. However, *for applicants who meet the criteria below, the acceptance rate has been very high*. Currently, there is no set maximum number of students admitted each year.

Departmental Calculus Requirement.

The Department absolutely requires a background in mathematics through lower-division calculus. At CSU East Bay, the equivalent courses are [MATH 130](#), and [MATH 131](#). Simplified courses, such as those intended for majors in biology and business, are *not* adequate.

About calculus. A solid background in calculus is essential to success in the program. First-year statistics and probability courses in the program regularly use ideas of calculus. If your calculus background is weak (grades below B or taken long ago): (1) review on your own topics you once understood well, but now remember only fuzzily, (2) re-take a course equivalent to our MATH 131, or (3) re-take the entire lower division sequence of “math major” calculus. Depending on the degree of your deficiency and your personal schedule, you may be able to handle some of this review during your first year of the program.

University Degree and GPA Requirements. University requirements for admission to graduate programs can be found [here](#).

Additional Helpful Background. Students who have some of the following additional background may be at an advantage for admission to the program and for progress towards the degree after acceptance.

- Basic statistics and probability courses, especially those requiring calculus as a prerequisite. (Examples: Courses equivalent to STAT 320, 330, or beyond.)
- Some basic programming skills in any language or experience with statistical software.

About previous background in statistics and programming. During the first semester in the program almost all students take beginning statistics and probability courses taught at the graduate level. In addition to theory, these courses contain applied and computational concepts not often found in undergraduate courses.

We do not formally require a background in statistics or programming. Of course, students with some previous knowledge of statistics or programming generally have an easier time in these courses and gain a better initial understanding of the deeper concepts.

Step B: Online Application for Graduate Admission to the University

Applications have to be submitted online at [Cal State APPLY](#).

Deadlines. Students are usually admitted to the Statistics MS Program starting in Fall semester (beginning mid-August). We do accept some students who have a previous background in statistics to start in Spring semester (late January).

Your application and transcripts should be submitted online before the application deadline date for the semester in which you intend to enter the program. Please check the '[Graduate Admissions and Documents Deadlines](#)' on the university website. For general instructions on how to apply for Graduate admission, please click [here](#).

If you miss a deadline, do not assume that applications are closed without asking.

Step C: Information on Qualification for MS in Statistics or Biostatistics (also done through Cal State Apply)

If you have any questions regarding the following materials, please contact our office at statistics@csueastbay.edu —not the Admissions Office. Please make sure you include your legal name and the program you are applying for in all your correspondences and email files in pdf format.

INFORMATION FROM YOUR APPLICATION:

- 1) **COVER LETTER** - please include the following information:
 - a. your desired starting semester,
 - b. your contact information (postal address, telephone, email address),
 - c. your academic history

- 2) **UNOFFICIAL COPIES OF TRANSCRIPTS** - please send original or readable photocopies of transcripts. (This is *in addition* to the official transcripts you order sent to the Admissions Office.) Some universities make it possible for you to access your courses and grades online; a clear printout of such an online list is acceptable provided it is accurate and up to date. If a transcript from an institution you attended does not show your grade point average (GPA) in the US system (A = 4.0, B = 3.0, and so on), then provide this GPA information as an attachment. If you do not know the equivalent GPA, explain the grading system briefly. (For example: What is the lowest passing grade in a course? The average grade necessary for graduation? The average grade necessary for honors?)

- 3) **COURSE LIST** - Separate from your transcripts, please make an organized chronological list of your previous work in mathematics, statistics, and related quantitative courses.
 - a. **Calculus-prerequisite courses (no exceptions).** Provide a clear statement of how and where your basic calculus prerequisite was met. Give course names, dates, grades (converted to the US grade system, if necessary), institutions, and brief course

descriptions. This information must be precise so that we can verify on your transcript(s) that our calculus requirement has been met.

- b. **List of other relevant courses.** If you have taken any post-calculus courses in statistics, mathematics, or related fields, please give us a list with dates, grades (in the US system: A, B, C, etc.), and, if known, instructors and textbook authors.

- 4) **STATEMENT OF PURPOSE** - Please include in your package a straightforward statement of about 1.5 pages in length discussing your background (especially academic), career objectives (to the extent known), and reasons for seeking an MS Degree in Statistics.
If you believe that your transcripts or past grades do not accurately represent your current ability to perform to a high standard in the Statistics MS Program, please provide an explanation. Especially if your GPA is below 3.0, you need to convince us that you can succeed in a program in which you will be expected to get *no* grades lower than B. This Statement of Purpose must be provided directly to the Department of Statistics and Biostatistics—*not* included in your online application.

- 5) **LETTERS OR RECOMMENDATION** - Normally, we require **at least two, preferably three**, letters of recommendation from people who are familiar with your academic background in mathematics, statistics, or other quantitative courses, and who can provide informative assessments of your aptitude for graduate work.
For tips on letters of recommendation, please click [here](#).
In case you are not able to provide letters of references, then you are required to provide GRE scores.

- 6) **GRADUATE RECORD EXAM (GRE) SCORES.** We do not require GRE scores of all applicants. However, *in any of the following circumstances, we ordinarily require scores for the General GRE* (Verbal, Quantitative, Writing):
 - If you cannot supply at least two academic letters of recommendation as explained in Section 5 above.
 - If your average GPA in *any* of the following categories is below B (3.0): (a) All of your undergraduate work, (b) All of our courses in the mathematical sciences (including statistics and computer science) at the undergraduate level, (c) All of your post-baccalaureate work at any one institution.

III. DEGREE REQUIREMENTS

Here we give brief, informal summaries of the degree requirements. **For official information on specific requirements, consult the [University Catalog](#).** (Make sure to choose the academic year of your admission, or most recent re-admission, to the program.)

Requirement A: University Writing Skills Requirement (UWSR)

(Currently suspended due to COVID-19**)**

The Writing Skills Requirement is intended to make sure students can express themselves effectively in written English both during their degree work and after graduation. It is satisfied by taking the Writing Skills Test (WST) administered by the University *during the first semester of residence in the program* and, if necessary, by taking one or two designated English composition courses. In order to continue in the program, you must complete this requirement, and your status in the program will be “unclassified” until you do so.

Sufficiently high scores on certain standardized tests may be used in place of the WST. See <https://www.csueastbay.edu/testing/uwsr/index.html> for information. If you have already satisfied the Writing Skills Requirement as a graduate or undergraduate student at *any* California State University, you need not do so again.

Requirement B: Unit and Grade Requirements

The *minimal* unit and grade requirements are as follows:

- The MS program consists of at least 32 semester units of approved upper-division and graduate coursework. Of these, some minimum number of approved graduate (6000 level) courses must be included. (This number varies by Option.)
- All work applied toward the 32 units must be at an average grade of B (3.0) or higher, and no *required* graduate-level course may be at a grade below B– (2.7).
- However, depending on mathematics and statistics background before entry into the program and career objectives upon graduation from the program, many students will need or want to take more than 32 units to finish the program.

Requirement C: Course Requirements

This is a general and abbreviated statement of course requirements. All courses to be submitted towards the Statistics MS *must be approved by a graduate advisor in advance of registration*.

Each student may select one Option within the degree. If you decide to select an Option, you may do this upon admission, but most students select Options about halfway through the program. Each Option has specific course requirements. (See the online [Catalog](#) for details)

Requirement D: Comprehensive Examination

The MS Comprehensive Exam tests for general knowledge of the fields of statistics and probability and an understanding of methods of application to “real world” situations—including the use of statistical software. General information about the courses and material covered is provided in advance of each offering of the MS Comprehensive Exam Review course STAT 692.