

CALIFORNIA STATE UNIVERSITY, LONG BEACH

Department of Mathematics and Statistics

BACHELOR OF SCIENCE IN MATHEMATICS

OPTION IN APPLIED MATHEMATICS (Code MATHBS02)

SUBOPTION II: Area of Application in Economics and Management

This suboption prepares students for careers as mathematicians who apply their skills to solve mathematical problems arising in economics or business management and/or for graduate study in Applied Mathematics, Economics, or Management.

The requirements are listed below. Some of the required or optional courses are taught only once a year. In the requirements list the letter (*F*) indicates Fall semester only and (*S*) indicates Spring semester only.

1. Lower Division:

MATH 122, 123, 224, 247; CECS 174; ENGL 101 or 317;
ECON 100 *and* 101 *or* ECON 300.

2. Upper Division:

MATH 323, 361A, 361B, 364A, 380, 485 (*F*), STAT 381, 482 (*F*).

A minimum of 6 units from the following courses:

MATH 364B (*S*), 423 (*S*), 463 (*F*), 470 (*F*), 479(*S*), STAT 410.

A minimum of 15 units from one of the following two groups:

A. ECON 310, 311 required; and 9 units selected from ECON 333, 410H (*F*), 411H (*S*), 420, 485 (*F*), 486 (*S*). *See notes 1 and 2 on the back.*

B. ECON 333, MGMT 410 required; and 9 units selected from MGMT 411, 412 (*S*), 413, 414, 426 *See notes 1 and 3 on the back.*

3. A total of 120 units.

4. Fulfill General Education requirements. Note that you may use Math 122 or 123 to satisfy General Education requirement B.2.

5. Attain at least a 2.0 GPA in all courses taken, all courses taken at CSULB, all courses in the major, and all upper division courses in the major taken at CSULB.

6. Pass the Graduate Writing Assessment Requirement (GWAR). (You must attempt the Writing Proficiency Exam (WPE) by the end of the semester during which you earn 65 or more units and before filing for a Grad Check. See the *CSULB Catalog* for more information.
7. Have degree objective/major code MATHBS02, with the Econ/Mgmt subplan specified. (If you wish to change your code, see an advisor. It may be possible for Dr. Merryfield to do this electronically.)
8. File a "Program Planner", which has been signed by your Applied Mathematics advisor. This must be done before filing for a Grad Check. See your advisor to obtain this.
9. File for a Grad Check. This should be done by the preceding **October 15** if graduating at the end of the Spring semester or Summer session, and by the preceding **March 15** if graduating at the end of the Fall semester.

Applied Mathematics Advisor: Dr Melvin Lax. (Office: FO3-209. Phone: (562) 985-4325.)

CR/NC: No upper division course used to satisfy major requirements, except ENGL 317, and no course in the Department of Mathematics and Statistics may be taken CR/NC.

Checking your status: It is a good idea to check with your Mathematics Advisor each semester before enrolling for the next. Your advisor can review your progress, make suggestions, and help you estimate how long it will take you to finish your degree.

1. Some prerequisites for the application electives are satisfied by other required courses in this option. For example, students who have had MATH 380 and STAT 381 have covered the necessary probability and statistics indicated by an ECON 380 prerequisite. If any questions arise concerning prerequisites, consult your applied math advisor.
2. Students who take the five Economics courses of in group A will be within one course of completing a double major in Mathematics and Economics (Option in Mathematical Economics and Economic Theory). Consult the undergraduate advisor in the Department of Economics for details.
3. Consult Dr. Lax before taking any MGMT course for additional information about prerequisites and scheduling.