

Articulation Agreement by Major  
Effective during the 13-14 Academic Year

To: **CSU East Bay**| From: **Los Medanos College**

13-14 General Catalog

Quarter | 13-14 General Catalog

Semester

====Mathematics B.S. - Applied Mathematics Option====

The Mathematics B.S. degree requires a total of 180 quarter units; the major consists of 72 quarter units including both lower and upper division coursework. The following courses are the required lower division (freshman-sophomore) major requirements:

MATH 1304	& Calculus I	(4)	MATH 50	& Calculus and Analytic Geometry I	(4)
MATH 1305	& Calculus II	(4)	MATH 60	& Calculus and Analytic Geometry II	(4)
MATH 2304	& Calculus III	(4)	MATH 70	Calculus and Analytic Geometry III	(4)
MATH 2305	Calculus IV	(4)			

MATH 2101	Elements of Linear Algebra	(4)	MATH 75	Linear Algebra	(3)
-----------	-------------------------------	-----	---------	----------------	-----

MATH 2150	Discrete Structures	(4)	MATH 160	Discrete Math	(4)
-----------	---------------------	-----	----------	---------------	-----

(Mathematics majors may substitute MATH 3151 or MATH 4151 for MATH 2150.)

CS 1160	Introduction to Computer Science I	(4)	COMSC 44	Introduction to C++ Programming Part I	(3)
			<u>OR</u>		
			ENGIN 20	Programming with C++ for Engineers and Scientists	(4)
			<u>OR</u>		
			COMSC 132	Programming and Methodologies II	(3)

Questions regarding the major requirements listed above may be directed to the Mathematics and Computer Science Department at (510) 885-3414. For upper division (junior-senior) major and option requirements, please see the CSU East Bay catalog or visit the department web site.

Students should meet with a community college counselor for up-to-date information on degree requirements and other transfer-related services.

To: CSU East Bay, From: Los Medanos College, 13-14

=====

**Mathematics B.S. - Applied Mathematics Option (continued)**

**OTHER DEGREE REQUIREMENTS that can be completed prior to transfer:**

All transfer students must earn at least 60 transferable semester units. Within these 60 semester (90 quarter) units, students are strongly encouraged to complete the following:

**Lower Division Major Course** requirements shown above. Complete as many of the lower division courses required for the major as possible. Many of these courses may be double counted as part of the lower division CSU GE-Breadth or lower division IGETC requirements.

**General Education** requirements: Complete all of the lower division CSU GE-Breadth or the lower division IGETC requirements at the community college. The approved courses for each area can be found at [www.ASSIST.org](http://www.ASSIST.org) under the link "CSU GE-Breadth Certificate Courses" or "IGETC for UC and CSU" for your college. Many of these courses can be double counted to meet the major requirements shown above. See your community college counselor for more information.

**Second Composition** requirement can be satisfied by: 1) a course articulated with CSU East Bay ENGL 1002; 2) an IGETC Area IB Critical Thinking course; or 3) a second, if listed, certified for CSU GE Area A2 (IGETC Area 1A). This course may meet a GE area requirement as well as the second composition requirement.

**American Institution** requirement (US 1, US 2 and US 3): This requirement is normally completed with two courses and can be taken as part of your CSU GE-Breadth 39 semester unit requirements (GE Area D and sometimes Area C) or IGETC (GE Area 3 or 4). The approved courses can be found at [www.ASSIST.org](http://www.ASSIST.org) under the link "CSU US History, Constitution, and American Ideals Courses" for your college. See your community college counselor for more information.

**Cultural Groups/Women** requirement: A course that meets this requirement should recognize the contributions to U.S. history or culture made by African Americans, Asian Americans, Hispanic Americans, Native Americans, women, or gays/lesbians. The course must focus wholly, not partially, on the contributions of the groups named above. This course may meet a GE area requirement as well as the cultural groups/women requirement.

**Performing Arts/Activities** requirement: Courses in this area provide an opportunity to develop an appreciation of the visual and performing arts and physical activities through direct experience. At least 40% of the class time in these courses must be activity or performance. It is possible that this course may meet a GE area requirement as well as the performing arts/activities.

For information on transfer admission requirements or to apply to CSU East Bay go to CSUMentor and complete the online CSU application for admission.

-----

11/22/2013

www.assist.org

Page 3

To: CSU East Bay, From: Los Medanos College, 13-14

=====  
**Mathematics B.S. - Applied Mathematics Option (continued)**  
**END OF MAJOR**

Students should meet with a community college counselor for up-to-date information on degree requirements and other transfer-related services.