

## Associate Degree Graduation Requirements

(1) Complete all department requirements with a “C” or better or “P” in each course (at least 20% of the department requirements must be completed through SBCC); (2) Complete one of the following three General Education options: **OPTION 1:** SBCC General Education Requirements ([Areas A-D](#)) and Institutional Requirements ([Area E](#)) and Information Competency Requirement ([Area F](#)) OR **OPTION 2:** [IGETC Pattern](#) OR **OPTION 3:** [CSU GE Breadth Pattern](#); (3) Complete a total of 60 degree-applicable units (SBCC courses numbered 100 and higher); (4) Maintain a cumulative GPA of 2.0 or better in all units attempted at SBCC; (5) Maintain a cumulative GPA of 2.0 or better in all college units attempted; and (6) Complete 15 units through SBCC.

### Department Requirements (Total Department Units: 35-36)

<i>Current Course No.</i>	<i>Previous Course No.</i>	<i>Title</i> <small>applies to SBCC GE areas</small>	<i>Units</i>	<i>Institution &amp; Course No.</i>	<i>Grade</i>	<i>Units (s/q)</i>	<i>Term</i>
• CIS 209 .....	(none) .....	Visual Basic .NET Programming <b>OR</b> .....	4.0	_____			
CS 105 .....	(105/COMSC 135/35)	Theory and Practice I <b>OR</b> .....	3.0	_____			
CS 107 .....	(131/COMSC 131/31)	Computer Architecture and Organiz. <b>OR</b> ....	3.0	_____			
CS 137 .....	(COMSC 137/37) .....	C Programming <b>OR</b> .....	3.0	_____			
CS 140 .....	(COMSC 140) .....	Object-Oriented Prog, Using C++ .....	4.0	_____			
• MATH 150 .....	(25) .....	Calculus with Analytic Geometry I <sup>D2</sup> .....	5.0	_____			
• MATH 160 .....	(26) .....	Calculus with Analytic Geometry II <sup>D2</sup> .....	5.0	_____			
• MATH 200* .....	(27) .....	Multivariable Calculus <sup>D2</sup> .....	4.0	_____			
• MATH 210* .....	(29) .....	Linear Algebra <sup>D2</sup> .....	4.0	_____			
• MATH 220* .....	(28) .....	Differential Equations <sup>D2</sup> .....	4.0	_____			
• PHYS 121 .....	(21) .....	Mechanics of Solids and Fluids <sup>A</sup> .....	5.0	_____			
• PHYS 122 .....	(22) .....	Electricity and Magnetism <b>OR</b> .....	5.0	_____			
PHYS 123 .....	(23) .....	Heat, Light and Modern Physics .....	5.0	_____			

\*MATH 250/260 will also satisfy these requirements.

Note: For a Math A.A. degree at least one of the courses MATH 200, 210, 220 must be taken at SBCC.

### Additional Program Information

For further information, contact the Counseling Center, 965-0581, Ext. 2285, or Jamie Campbell, Department Chair, 965-0581, Ext. 2340.

**SBCC AA/AS Degree Graduation Requirements Worksheet (Must complete IA or IB or IC, and II, and III and IV below)**



Santa Barbara City College

# Mathematics

## 2017-18

### Associate in Arts Degree in Mathematics

The Mathematics Department at Santa Barbara City College offers a broad curriculum to meet the needs of students with a variety of goals. In all of the department's course offerings, there is a strong commitment to training the student in analytical skills and logical thinking as part of a problem solving attitude which can be transferred outside the formal classroom setting.

Standard college level sequence of courses in single and multivariable calculus, analytic geometry, linear algebra and ordinary differential equations is offered for students transferring to four-year schools as preparation for a mathematics major or a math-based major.

### Careers in Mathematics

The list of careers a mathematics major can lead to is probably longer than you may think. Environmental scientist, actuary, computer programmer, efficiency expert, financial analyst and patent lawyer are just a few of the possibilities. A more complete list can be found in the Career Center at SBCC.

***SBCC: Your Open Door to Educational Excellence***

**IA. IGETC (<http://articulation.sbcc.edu/IGETC/IGETC.pdf>)**

	Course #	Grade	Units (s/q)	Term
1A. English Composition				
1B. Critical Thinking-English Composition				
1C. Oral Communication (CSU only)				
2A. Mathematics				
3A. Arts				
3B. Humanities				
4. Social Sciences				
5A/5C. Physical Sciences				
5B/5C. Biological Sciences				
6A. Language Other Than English (UC only)				

**IB. CSU GE Breadth Pattern (<http://articulation.sbcc.edu/CSU/CSUGE.pdf>)**

	Course #	Grade	Units (s/q)	Term
A1. Oral Communication				
A2. Written Communication				
A3. Critical Thinking				
B1/B3. Physical Science				
B2/B3. Life Science				
B4. Mathematics				
C1. Arts				
C2. Humanities				
D. Social Sciences				
E. Lifelong Learning and Self-Development				

**IC. SBCC GE, Institutional & Info Competency (<http://www.sbccc.edu/apply/files/pereg.pdf>)**

	Course #	Grade	Units (s/q)	Term
A. Natural Sciences with Lab				
B. Social and Behavioral Science				
C. Humanities				
D-1. English Composition				
D-2. Communication and Analytical Thinking				
E-1. Mathematics - <i>Plus complete 3 out of the 4 areas listed below (E-2 through E-5)</i>				
E-2. American Institutions				
E-3. Physical Education/Health Education				
E-4. Oral Communication				
E-5. Multicultural/Gender Studies				
F. Information Competency				

**II. Unit and Grade Point Average Requirements:** Refer to Graduation Requirements on the other side of this document.

	Total Semester Units Attempted	Total Semester Units Completed	Grade Points	GPA
SBCC				
Transfer				
Total				

**III. Residency Requirements:** 15 units completed through SBCC & 20% of Department Requirements completed through SBCC?  Yes  No

**IV. Department Requirements:** Refer to the other side of this document for a list of department required courses.  Yes  No