

Science, Technology, Engineering, and Mathematics **Career and Academic Pathways (CAPs)** Program Map: Associate in Arts Degree for Mathematics (Trigonometry and **Precalculus Ready)**

Total number of	Total number of units: 61-65 units		Тор	Code/Academic Plan: 1701.00	Updated on April 14, 2022
Semester 1	Course Code	Course	Units	Notes	Advising Notes
Program/GE Course	MATH 241S	Trigonometry with Vectors	4	Prerequisites: MATH 125 (or 125S or 134). May be waived by the Math department dependent on high school coursework. Advisory: take MATH 125 (or 125S or 134) the summer prior to term 1 for review and/ or preparation.	Main campus; all day options.
Program/GE Course	MATH 260	Precalculus	5		Main campus; all day options. This course may have sections that include a low cost (LCT) or no cost textbook (ZTC). Check the current catalog for the section number(s). You can search for classes in the ELAC and LACCD Schedule of Classes under "Class Search Type" as "Zero Textbook Cost" or "Low- Cost Textbook Classes."
GE Course	LACCD: Area B1		3	HISTORY 011 or 012 recommended, but LACCD GE: Area B1 courses vary based upon transfer goals and subsequent GE Pattern being used (in addition to the LACCD GE pattern). Advised to connect with Counselor to make GE Pattern comparison. HISTORY 011 or 012 has sections that are part of the Honors Program. Check the current catalog for the section number(s). To apply for admission to the Honors Program, please visit the ELAC Counseling Center. For additional information about the Honors Program, please visit the ELAC Honors Program website or contact Dr. Bermudez at <u>bermudn@elac.edu</u> .	HISTORY 011 or 012 may have sections that include a low cost (LCT) or no cost textbook (ZTC). Check the current catalog for the section number(s). You can search for classes in the ELAC and LACCD Schedule of Classes under "Class Search Type" as "Zero Textbook Cost" or "Low- Cost Textbook Classes."

Total Units 12

Intersession	Course Code	Course	Units	Notes	Advising Notes
GE Course	LACCD: Area B1		3	GE courses vary based upon transfer goals and subsequent GE Pattern being used (in addition to the LACCD GE pattern). Advised to connect with Counselor to make GE Pattern comparison.	
		Total Units	3		

Semester 2	Course Code	Course	Units	Notes	Advising Notes
Program/GE Course	MATH 261	Calculus I	5		Main campus; all day options.
Program/GE Course	MATH 173	Object Oriented Programming and Design	4		Main campus.
Elective			1	If needed, add at least 1 unit here, in order to meet total 60 units; check in with a counselor to verify.	

Semester 2	Course Code	Course	Units	Notes	Advising Notes
GE Course	ENGLISH 101	College Reading and Composition I	3	ENGLISH 101 Recommended, as it meets a graduation requirement. LACCD GE: Area D1 courses vary based upon transfer goals and subsequent GE Pattern being used (in addition to the LACCD GE pattern). Advised to connect with Counselor to make GE Pattern comparison. This course has sections that are part of the Honors Program. Check the current catalog for the section number(s). To apply for admission to the Honors Program, please visit the ELAC Counseling Center. For additional information about the Honors Program website or contact Dr. Bermudez at bermudn@elac.edu.	This course may have sections that include a low cost (LCT) or no cost textbook (ZTC). Check the current catalog for the section number(s). You can search for classes in the ELAC and LACCD Schedule of Classes under "Class Search Type" as "Zero Textbook Cost" or "Low- Cost Textbook Classes."

Total Units 13

College level English and Math should be completed within the first year of study. Follow placement guidance in the application process or meet with a counselor to find the right course level.

Intersession	Course Code	Course	Units	Notes	Advising Notes
GE Course	LACCD GE: Area A		3 to 5	PHYSICS 011 Recommended for Math majors planning to transfer. LACCD GE: Area A courses vary based upon transfer goals and subsequent GE Pattern being used (in addition to the LACCD GE pattern). Advised to connect with Counselor to make GE Pattern comparison.	PHYSICS 011 has sections that are part of the Honors Program. Check the current catalog for the section number(s). To apply for admission to the Honors Program, please visit the ELAC Counseling Center. For additional information about the Honors Program, please visit the <u>ELAC Honors Program website</u> or contact Dr. Bermudez at bermudn@elac.edu.

Total Units 3 to 5

Semester 3	Course Code	Course	Units	Notes	Advising Notes
Program/GE Course	MATH 262	Calculus II	5		Main campus; all day options.
Program/GE Course	MATH 273 or MATH 227/227S	Introduction to Data Structures & Algorithms or Statistics	4 - 5	MATH 227 has sections that are part of the Honors Program. Check the current catalog for the section number(s). To apply for admission to the Honors Program, please visit the ELAC Counseling Center. For additional information about the Honors Program, please visit the ELAC Honors Program website or contact Dr. Bermudez at bermudn@elac.edu.	MATH 273 Main campus MATH 227/227S Main or South Gate, all day options.
GE Course	LACCD GE: Area E1/E2		4 - 5	HEALTH 002 Recommended as it meets both Area E1 and E2. LACCD GE: Area E1/E2 courses vary based upon transfer goals and subsequent GE Pattern being used (in addition to the LACCD GE pattern). Advised to connect with Counselor to make GE Pattern comparison.	

Total Units 13 to 15

Intersession	Course Code	Course	Units	Notes	Advising Notes
GE Course	LACCD GE: Area C		3	LACCD GE: Area C courses can vary based upon transfer goals and subsequent GE Pattern being used. Advised to connect with Counselor to make GE Pattern comparison.	

Total Units

3

Semester 4	Course Code	Course	Units	Notes	Advising Notes
Program/GE Course	MATH 263	Calculus III	5		Main campus; all day options.
Program/GE Course	MATH 270	Linear Algebra	3		Main campus; AM or PM.
Elective			3	In order to meet total 60 units; check in with a counselor to make best choice as needed.	

Semester 4	Course Code	Course	Units	Notes	Advising Notes
Elective			3	In order to meet total 60 units; check in with a counselor to make best choice as needed.	
		Total Units	14		

Degree Path and Requirements:

This is not a CSU Transfer degree, there may be additional general education coursework needed. This map is a suggested term-by-term sequence of courses to complete the program in a recommended time frame. This is an efficient and recommended plan, but actual plans may vary by individual student need. This map cannot replace a meeting with <u>counselors</u>.

Department Advising Notes:

This map was created using the LACCD GE requirements. Students should consult a counselor for specific information about transfer, IGETC, and CSU GE requirements.

Program Description

The program is designed to award the Associate in Arts degree to those students who have completed a specialization in mathematics. This degree program is intended to meet the needs of mathematics students who do not require a science component for their degree. The requirements were chosen to optimize student preparation for upper division coursework at a four-year institution leading to a minor in mathematics or a Bachelor's degree in a field related to mathematics.

Career and Transfer Opportunities

The degree program offers training in both pure and applied mathematics leading to careers in research, business, industry, and government. In addition, many areas, such as accounting, actuarial science, finance, management, and operations research depend upon the use of mathematics in developing solutions to practical problems. Visit the <u>Transfer Center</u> for transfer and guaranteed transfer information, which varies based on transfer college. Make <u>an appointment with a counselor</u> for transfer information. Students can visit <u>Career and Job Services</u> for career counseling and further exploration. Check out these <u>Math careers</u>.

Youtube Videos

Mathmatician Career Video Statistician Career Video

Program Map

A suggested sequence of classes to complete a degree, certificate, or program of study. Students should consult an academic counselor for variations to this plan based on part-time or full-time status, transfer plans, pre-requisites needed, etc.

Prerequisite Course

A specific course that must be completed before advancing to the next course.

Check the online catalog at elac.edu for the latest and most accurate information.

Contact

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