ASSOCIATE OF SCIENCE IN MATHEMATICS FOR TRANSFER

The associate of science in mathematics for transfer degree is offered for those students desiring a major in mathematics and recognition of their completed CSU or IGETC general education requirements. The following Allan Hancock College graduation requirements **will not be** required: Health and Wellness, Multicultural Gender Studies and Allan Hancock College general education.

The graduate of the AS-T in Mathematics will:
- Interpret and draw inferences from mathematical models such as formulas, graphs, tables and schematics.
- Utilize a variety of problem-solving techniques and strategies to identify, analyze, and solve problems from arithmatetic through calculus
- Employ quantitative methods from arithmetic, algebra, geometry, or statistics to solve problems.
- Estimate and check mathematical results for reasonableness.
- Create and analyze mathematical models of real world and/or theoretical situations, including the implications and limitations of those models.
- Use appropriate technologies to analyze and solve mathematical problems, and verify the appropriateness and reasonableness of the solution(s).

1. GENERAL EDUCATION: Complete one of the following:
    - A. California State University General Education Pattern   39
    - B. Intersegmental General Education Transfer Curriculum   37

    Total GE Units: 37-39

2. MAJOR CORE COURSES: A major of 23-25 units is required for the associate in arts degree.

COURSE NUMBER	TITLE	UNITS
Required core courses (20 units):		
MATH 181	Calculus 1	5
MATH 182	Calculus 2	5
MATH 183	Multivariable Calculus	5
MATH 184	Differential Equations with Linear Algebra	5
Select any course from the following (3-5 units):		
CS 111	Fundamentals of Programming 1 (CPSLO, CSUB, CSUDH, CSUEB, CSUF, CSUFull, CSUS, CSUSB, CSUSM, HSU, SFSU, SJSU & SSU)	4
CS 161	Discrete Structures (CSULA, CSUMB & SJSU)	3
MATH 123	Elementary Statistics (CSUB, CSULA & CSUSM)	4
PHYS 161	Engineering Physics 1 (CPSLO, CSUDH, CSUF, CSULB, CSULA, CSUN, CSUSB, SJSU)	5

3. **DOUBLE COUNTING:** 3 units may be double counted for the major and CSUGE B4 or IGETC 2 for only one of the following: MATH 123, 181, 182, 183 or 184. An additional 3 units may also be double counted for the major and CSU GE B1 or IGETC 5A for PHYS 161.

Total CSU GE and AS-T in Math Units: 58-60
Total IGETC and AS-T in Math Units: 56-58

4. Select additional courses, if needed, to achieve the 60 units required for the Associate in Science Transfer Degree.