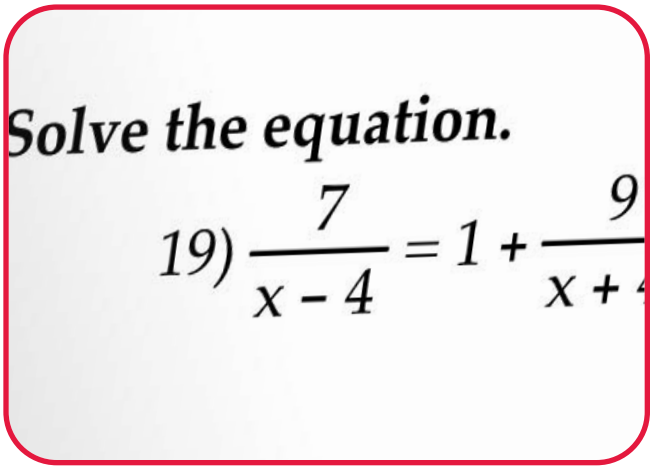
MATHEMATICS

DEGREES, CERTIFICATES AND AWARDS

Associate in Science Degree (A.S.)



DESCRIPTION

The study of Mathematics concerns the nature and manipulation of numbers. The IVC mathematics program is designed to provide students with an appreciation of the nature, scope and power of mathematics, as well as an understanding of how mathematics is applied to business, engineering, science and daily life. The program consists of a clear sequence of courses which prepares students for transfer, a variety of fields of study, and career opportunities.

ASSOCIATE DEGREE AND CERTIFICATE OF ACHIEVEMENT PROGRAMS

The Associate in Arts (AA) or the Associate in Science (AS) Degree involves satisfactory completion of a minimum of 60 semester units with a C average or higher, including grades of C in all courses required for the major, and fulfillment of all IVC district requirements for the associate's degree along with all general education requirements. The degree provides a sound basis for transfer to upper division institutions for additional degrees or for higher vocational preparation. To be eligible to receive an Associate Degree the student must complete the requirements for the major, the District requirements for an Associate Degree, and the General Education requirements. In addition students must maintain a minimum grade point average and meet the minimum grade requirements of their program. Detailed information is available in the college catalog.

CAREER OPPORTUNITIES

Virtually all two-year career programs in business or technology fields also require a solid foundation in mathematics. Many BA/BS level careers require extensive background in Mathematics.

- Auditor
- Actuary
- Appraiser
- Assessor
- Biology/Agriculture
- Budget Analyst
- Business/Economics
- Casualty Rater
- Chemistry
- Controller
- Education
- Engineer
- Engineering Analyst
- Finance Director
- Financial Analyst
- Industry
- Investment Analyst
- Loan Officer
- Marketing/Advertising
- Mathematician
- Mathematics
- Numerical Analyst
- Operations Analyst
- Opinion Polling
- Physical Science
- Public Health
- Sociology
- Statistician
- Systems Analyst
- Tax Collector
- Teacher
- Technical Writer

Gainful Employment: Federal regulations require institutions to provide students with Gainful Employment information for specific certificate programs offered at IVC. Please click on our Programs of Study link to view the information for each certificate program: **http://www.imperial.edu/courses-and-programs/programs-of-study/**

TRANSFER PREPARATION

Courses that fulfill major requirements for an associate degree at Imperial Valley College may not be the same as those required for completing the major at a transfer institution offering a bachelor's degree. Students who plan to transfer to a four-year college or university should schedule an appointment with an IVC Counselor to develop a student education plan (SEP) before beginning their program.

Transfer Resources:

www.ASSIST.org – CSU and UC Articulation Agreements and Majors Search Engine

www.CSUMentor.org – CSU System Information

www.universityofcalifornia.edu/admissions/index.html - UC System Information

www.aiccu.edu – California Independent Colleges and Universities, Association of

http://wiche.edu/wue - Western Undergraduate Exchange Programs

FINANCIAL AID

Paying for the cost of a college education requires a partnership among parents, students and the college. As the cost of higher education continues to rise we want you to know that IVC offers a full array of financial aid programs – grants, work study, scholarships, and fee waivers (we do not participate in the federal loan programs). These programs are available to both full and part time students who are seeking a degree or certificate. For those who qualify, financial aid is available to help with tuition, fees, books and supplies, food, housing, transportation, and childcare. Please log onto our website for additional information: **www.imperial.edu/students/financial-aid-and-scholarships/**

MATHEMATICS

ASSOCIATE DEGREE PROGRAM

MATHEMATICS MAJOR – A.S. DEGREE
Twenty-seven (27.0) units required for the major.

ALL COURSES FOR THIS MAJOR MUST BE COMPLETED WITH A MINIMUM GRADE OF "C" OR BETTER.

I Required courses for the major (27.0 units)

A. Fifteen (15.0) units required:

MATH	192	Calculus I	5.0
MATH	194	Calculus II	5.0
MATH	210	Calculus II	5.0

B. Three (3.0) units selected from:

MATH	220*	Elem Differential Equations (3.0)
MATH	230*	Introduction to Linear Algebra with Applications (3.0)

C. Nine (9.0) units selected from:

CIS	210	Programming in C++ (3.0)
CS	220	Introduction to Object Oriented Programming Using Java (4.0)
MATH	119	Elementary Statistics (4.0)
MATH	220*	Elementary Differential Equations (3.0)
MATH	230*	Introduction to Linear Algebra with Applications (3.0)
MATH	240	Discrete Mathematics (3.0)
MATH	241	Mathematics Software Matlab (1.0)
PHYS	200	Principles of Physics I (5.0)
PHYS	202	Principles of Physics II (5.0)
PHYS	204	Principles of Physics III (5.0)

** Courses designated with an asterisk may be counted in one area only.*

Total Major Units	27.0
IVC Graduation Requirements and GE Pattern:	30.0
Electives (as needed to reach 60 degree applicable units)	____
Total Maximum Units:	**60.0**