Faculty	Office	Telephone
Robert Rubalcaba	MS-331	619-388-3639
Nick Slinglend	MS-335	619-388-3178
Manfred C. Smith	MS-335	619-388-3352
Paul Young	MS-338	619-388-3251
Mathematics Center	L-208	619-388-3580

Academic Programs

The associate degree in Mathematics requires completion of the courses listed below. Additional general education and graduation requirements for the associate degree are listed in the catalog. The associate degree requires a minimum of 60 units.

Associate of Arts Degree: Mathematics

Courses Required for the Major:		Units
MATH 150	Calculus with Analytic Geometry I	5
MATH 151	Calculus with Analytic Geometry II	4
MATH 245	Discrete Mathematics	3
MATH 252	Calculus with Analytic Geometry III	4
MATH 254	Introduction to Linear Algebra	3
Select 3–4 units from:		
MATH 107	Introduction to Scientific Programming	3
	and	
MATH 107L	Introduction to Scientific Programming Lab	1
MATH 119	Elementary Statistics	3
MATH 255	Differential Equations	3
PHIL 101	Symbolic Logic	3
	Total Units = 22–23	

Recommended electives: Mathematics 104, 116, 118, 121, 122, 141, 150L, 210A, 210B, 255.

Associate of Arts Degree: Applied Mathematics

Courses Required for the Major:		Units
MATH 107	Introduction to Scientific Programming	3
MATH 107L	Introduction to Scientific Programming Lab	1
MATH 150	Calculus & Analytical Geometry I	5
MATH 151	Calculus & Analytical Geometry II	4
MATH 245	Discrete Mathematics	3
MATH 252	Calculus & Analytical Geometry III	4
MATH 254	Introduction to Linear Algebra	3
	Total Units = 23	

Recommended electives: Mathematics 104, 116, 118, 119, 121, 122, 141, 150L, 210A, 210B, 255.

Associate in Science in Mathematics for Transfer Degree:

Program Description:
The Associate in Science in Mathematics for Transfer Degree is intended for students who plan to complete a bachelor's degree in Mathematics or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree and transfer requirements.

It is strongly recommended that students consult with a counselor to determine which general education option is most appropriate for their individual educational goals.

Note: It is recommended that students intending to transfer to San Diego State University (SDSU) Mathematics, Emphasis in Science major should complete the courses marked with a "#". Students intending to transfer into this major at other CSUs should consult a counselor and visit www.assist.org for guidance on appropriate coursework.

*Course also fulfills general education requirements for the CSU GE or IGETC pattern.

** Both courses must be completed prior to completing the degree to receive credit for SDSU.

This course fulfills SDSU's lower division preparation for the major in Mathematics under the TMC.

General Education: In addition to the courses listed above, students must complete one of the following general education options:

- The IGETC pattern (page 126) is accepted by all CSU campuses and most UC campuses and majors. It is also accepted by some private/independent or out of state universities.
- The CSU GE pattern (page 134) is accepted by all CSU campuses and some private/independent or

out of state universities. It is not accepted by the UC system.

Electives as needed to meet maximum of 60 CSU-transferable units required for the degree.

Career Options:
Careers related to this field typically require education beyond the associate degree level and some may require a graduate degree.

Courses Required for the Major:		Units
MATH 150	Calculus with Analytic Geometry I #*	5
MATH 151	Calculus with Analytic Geometry II #*	4
MATH 252	Calculus with Analytic Geometry III #*	4

Select one of the following courses:

MATH 254	Introduction to Linear Algebra #*	3
MATH 255	Differential Equations *	3

Select one of the following courses if not selected above: *(It is recommended that students select courses that meet lower division major preparation requirements for their transfer university.)*

MATH 107	Introduction to Scientific Programming **	3
	and	
MATH 107L	Introduction to Scientific Programming Lab **	1
MATH 119	Elementary Statistics #* **or**	
PSYC 258	Behavioral Science Statistics *#	3
MATH 245	Discrete Mathematics *#	3
MATH 254 [1]	Introduction to Linear Algebra *** or**	
MATH 255 [1]	Differential Equations *	3
CISC 186	Visual Basic Programming	4
CISC 190	Java Programming	4
CISC 192	C/C++ Programming	4
PHYS 195	Mechanics *	5

[1]MATH 254 or MATH 255 if not used in category A above.

Total Units = 19–21

Course Requirements for Transfer Students
Students who plan to transfer to a four year college or university and earn a bachelor's degree in this discipline should consult with a counselor or visit the Transfer/Career Center to determine the appropriate major preparation courses for their specific transfer institution and major. Transfer students may also earn an Associate of Arts degree in Liberal Arts and Sciences with an emphasis. This degree may be individually tailored to each student's specific transfer requirements in order to provide the most efficient path to transfer. More information on transfer programs and procedures is available in the Transfer Programs section of the catalog.

Music – Commercial

Award Type	Units
Certificate of Achievement:	
Audio Production Technology	18
Associate of Science Degree:	
Music Production Technology	31*

* and courses to meet graduation requirements, general education and electives as needed to meet the minimum of 60 units required for the degree.

The Music major at San Diego City College is one of six programs in the Visual and Performing Arts. The Commercial Music program is designed to provide students with the practical career-oriented skills required to enter the commercial music industry. Students receive hands-on experience in professional music production, audio software and hardware development using current music industry technologies.

This program is ideal for students seeking to be trained in a field different from their previous work experience, and offers an affordable alternative to more costly private college and university programs in this field of study. In addition to new employment and career opportunities, the study and practice of writing, producing, recording, editing, marketing, promoting, and performing music and audio for a variety of media encourages students to be more fully engaged in public affairs and to participate as citizens in local and global communities.

San Diego City College is a certified Avid Learning Partner with Avid Technology, Inc. Students will gain hands-on experience with Avid products that are now used in the television and video industry. Under the guidance of certified Avid Instructors (ACI), students will benefit from courses that specialize in audio products and solutions such as Pro Tools digital audio software and workstation solutions. These products help to facilitate the audio production process, including music and sound creation, recording, editing, signal processing, integrated surround mixing and mastering, and reference video playback; and a range of complementary control surfaces and consoles, including the System 5 and System 6 modular consoles, as well as Sibelius-branded notation software. San Diego City College plans to incorporate the VENUE live-sound systems as part of the students' academics in the near future. Students