

The following information was inadvertently omitted from the Catalog 2017-2018. Please attach this addendum to your current catalog.

### [Program Additions, Modifications, Technical Corrections]

## COMPUTER SCIENCE FOR TRANSFER

**STUDENT TRANSFER  
ACHIEVEMENT REFORM (STAR)  
ACT (SB1440)**



**ASSOCIATE IN SCIENCE DEGREE  
TRANSFER PREPARATION \* (MAJOR CODE: 01185)**

Most careers in computer science require a bachelor's degree, and some require a graduate-level degree. The coursework for this associate degree prepares students who plan to transfer and major in computer science with the lower-division computer programming and mathematics coursework required by most colleges and universities. The program of study listed below is for students interested in the programming or software aspect of computer science. It is designed to provide a strong foundation in mathematics, programming methodology and skills, and computer organization.

#### REQUIRED CORE:

MATH 130	Introduction to Computer Programming	4	3
MATH 140	Data Structures and Algorithms	4	3
MATH 230	Computer Organization and Architecture	4	3
<del>MATH 260</del>	<del>Discrete Mathematics</del>	<del>3</del>	
<b>MATH 265</b>	<b>Discrete Structures</b>	<b>3</b>	
MATH 250	Analytic Geometry and Calculus I	5	
MATH 251	Analytic Geometry and Calculus II	4	
PHYS 270	Principles of Physics I	3	
PHYS 271	Principles of Physics Laboratory I	1	
PHYS 272	Principles of Physics II	3	
PHYS 273	Principles of Physics Laboratory II	1	
<b>Total units</b>		<del>32</del>	<b>29</b>

\* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center.

## ASSOCIATE IN ARTS IN ECONOMICS FOR TRANSFER

**STUDENT TRANSFER  
ACHIEVEMENT REFORM (STAR)  
ACT (SB1440)**



**ASSOCIATE IN ARTS DEGREE  
TRANSFER PREPARATION \* (MAJOR CODE: 01195)**

The Associate in Arts in Economics for Transfer degree is designed to prepare students for a seamless transfer into the California State University system to complete a baccalaureate degree in Economics or a similar major. Economics is a social science that examines the functions of various markets, the determination of prices, the distribution of income, the rates of unemployment, income, and inflation. The study of economics deals with social problems and issues such as racism, sexism, war, and poverty. The focus of learning is on principles of economic analysis, fiscal and monetary policy, macro and micro theories, consumer protection, international trade, American economic history, monetary systems, and governmental regulations.

#### REQUIRED CORE:

ECON 101	Principles of Economics I	3
ECON 102	Principles of Economics II	3
MATH 119	Elementary Statistics	4
MATH 120	Calculus for Business Analysis	4
<b>OR</b>		
MATH 250	Analytic Geometry and Calculus I	5

#### LIST A: Select one course of the following (3-4 units):

ACCT 101	Principles of Accounting I	4
ACCT 102	Principles of Accounting II---Managerial	4
BUS 212	Business Communication	3
CIS 101	Introduction to Computers and Information Processing	4
MATH 251	Analytic Geometry and Calculus II	4

#### LIST B: Select one course of the following (3-4 units):

MATH 252	Analytic Geometry and Calculus III	4
<b>OR</b>		
MATH 254	Introduction to Linear Algebra	3
<b>OR</b>		
Any course from LIST A not already used		3 - 4
<b>Total units</b>		<b>20-23</b>

\* Students planning to transfer to a four-year college or university should complete courses specific to the transfer institution of choice. University requirements vary from institution to institution and are subject to change. Therefore, it is important to verify transfer major preparation and general education requirements through consultation with a counselor in either the Counseling Center or Transfer Center.

# ASSOCIATE IN SCIENCE IN MATHEMATICS STUDIES FOR TRANSFER

STUDENT TRANSFER  
ACHIEVEMENT REFORM (STAR)  
ACT (SB1440)



Associate Degree  
for Transfer  
*A Degree with a Guarantee.*

ASSOCIATE IN SCIENCE DEGREE  
TRANSFER PREPARATION \* (MAJOR CODE: 01585)

Mathematics has become essential and pervasive in the workplace. Projections indicate that its use will expand as will the need for more workers with knowledge of college-level mathematics. In today's highly technological society, the study of mathematics has become increasingly important, particularly to computer science.

Mathematics is a study that provides a foundation for problem solving and logical reasoning skills. It includes arithmetic, algebra, geometry, trigonometry, calculus, statistics, and computer programming, etc. Mathematics is the science of numbers and their operations, interrelations, combinations, generalizations, and abstractions.

In addition to college-level mathematics courses (numbered 100 or above) that will meet the lower-division needs of college transfer students, Southwestern College offers developmental courses consisting of arithmetic through intermediate algebra.

## Required Core Courses

MATH 250 *Analytic Geometry and Calculus I* 5

AND

MATH 251 *Analytic Geometry and Calculus II* 4

AND

MATH 252 *Analytic Geometry and Calculus III* 4

**From below, choose a minimum of 6 units with at least 3 units from Group A.**

**(While 3 units are required from Group A, no units are required from Group B. That is, all 6 units can come from Group A)**

## Group A - Provides Depth of Understanding in Subject Major

MATH 253 *Introduction to Differential Equations* 3

OR

MATH 254 *Introduction to Linear Algebra* 3

## Group B - Expands application of discipline

MATH 119 *Elementary Statistics* 4

OR

MATH 130 *Introduction to Computer Programming* 3

OR

PHYS 270 *Principles of Physics I* 3

AND

PHYS 271 *Principles of Physics Laboratory I* 1

**Total units 19-20**

Note: ~~Math 253 does not transfer to SDSU.~~ Math 253 does not articulate with the Differential Equations courses at some

CSUs. The Mathematics Department recommends that Math 119 be taken as an elective if it is not chosen from Group B.

## [Course Additions, Modifications, Technical Corrections]

## ASIAN-AMERICAN STUDIES COURSES

### ASIA 112. ASIAN-AMERICAN HISTORY I 3 UNITS

#### Recommended Preparation:

**RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent**

**Lecture: 3 hours**

**Offered: Fall, Spring**

Covers the history of Asian Americans in the social, political, economic, and cultural development of the United States from the colonial era to the annexation of California in 1848. Emphasizes the Filipino, Japanese, Chinese, Korean, Asian-Indian, and Southeast Asian experiences. Includes study of the United States Constitution. ~~(Partially fulfills American Institutions requirement at CSU.)~~ (Same as HIST 112.) [D; CSU; UC]

## FILM, TELEVISION, MEDIA ARTS COURSES

### FTMA 121 RECORDING TECHNIQUES FOR MOTION PICTURE 3 UNITS

#### Grading Basis:

Pass/No Pass or Grade is allowed

#### Prerequisite:

FTMA 111 or MUS 151 or RA&T 120 or equivalent

**Lecture: 2 hours, Laboratory: 3 hours**

**Offered: ALL**

Focuses on advanced audio recording with an emphasis on current recording techniques, equipment, and practices in the film industry. Focuses on Post Sound including Foley and ADR-Automatic Dialog Replacement. [D; CSU]

### FTMA 113 TELEVISION STUDIO PRODUCTION I 3 UNITS

#### Grading Basis: Pass/No Pass or Grade is Allowed

**Prerequisite: FTMA 104 and FTMA 101 or equivalent.**

**Lecture: 2 hours, laboratory: 4 hours**

**Offered: ALL**

Introduces multi-camera studio production through theory and practice of camera and lighting for a multi-camera setup with live switching. Covers the practical experience in the use of control room, studio,

audio mixing, and auxiliary equipment in the production of live and recorded programs. [D; CSU] (Same as: TELE 183)

## BIOLOGY COURSES

### BIOL 151 INTRODUCTION TO FERMENTATION 3 UNITS

**Grading Basis:** Pass/No Pass or Grade is allowed  
**Recommended Preparation:** MATH 45 or MATH 48 or the equivalent skill level as determined by the Southwestern College Mathematics Assessment or equivalent; RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent.

**Lecture:** 3 hours  
**Offered:** ALL

Surveys the fundamental processes of biology and chemistry applied to the science of fermentation. Introduces organic and biological chemistry. Focuses on cellular functions and metabolism for understanding fermentation. Includes an overview of the societal impacts of fermentation geared towards the local craft brewing industry. Not intended for chemistry or biology majors. [D] (Same as: CHEM 151)

## HISTORY COURSES

### HIST 112. ASIAN-AMERICAN HISTORY I 3 UNITS

**Recommended Preparation:**  
 RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture:** 3 hours  
**Offered:** Fall, Spring

Covers the history of Asian Americans in the social, political, economic, and cultural development of the United States from the colonial era to the annexation of California in 1848. Emphasizes the Filipino, Japanese, Chinese, Korean, Asian-Indian, and Southeast Asian experiences. Includes study of the United States Constitution. ~~(Partially fulfills American Institutions requirement at CSU.)~~ (Same as HIST 112.) [D; CSU; UC]

## POLITICAL SCIENCE COURSES

### PS 101. INTRODUCTION TO POLITICAL SCIENCE 3 UNITS

**Recommended Preparation:**  
 RDG 158 or the equivalent skill level as determined by the Southwestern College Reading Assessment or equivalent

**Lecture:** 3 hours  
**Offered:** Fall, Spring, Summer

Surveys the major political philosophers, ideologies, and significant issues/events of Western civilization and their impact on the world with emphasis on the governmental processes and institutions of the United States, the U.S. Constitution, California, and local government. **(Partially fulfills American Institutions requirement at CSU)** [D; CSU; UC]

[External Exams Credit]

## ADVANCED PLACEMENT (AP)

Examinator Score	SWC (Semester Units)	Southwest College Courses	CSU-GE Certification (Semester Units)*	CSU Semester Units Toward Transfer**	IGETC Certification (Semester Units)	UC Units Towards Transfer	
#English Literature and Composition	3, 4, 5	7 units	<del>ENGL 114</del> , ENGL 115, ENGL 220, or ENGL 270	6 units and C2	6 units	3 units Area 1A or 3B	#8 quarter/5.3 semester units
Statistics	3, 4, 5	<del>3 units</del> 4 units	MATH 119	3 units Area B4	3 units	3 units Area 2A	4 quarter/2.7 semester units