

# PROGRAM OF STUDY

## Advanced Computer Programming Certificate of Achievement

Be a competent programmer. Write efficient programs that uses well defined programming techniques. This certificate teaches you many useful algorithms and design patterns. Advance your career as a programmer by learning importance concepts in software modeling and program design.

### Career Opportunities in

Computer Programmer, Software Developer, Web Programmer

#### Required Courses

CIS 006	Introduction to Computer Programming	5
CIS 023	C# Programming	4
CIS 027	Data Structures and Algorithms	4
CIS 036A	Java Programming Language I	4
CIS 036B	Java Programming Language II	4
CIS 081	Systems Analysis with UML	3
CIS 082	Design Patterns	4
CIS 083B	Computer Programming Capstone Project	3
BUS 019	Business Communications	3

---

**Total Units**

**34**

PID 608

# PROGRAM OF STUDY

## Advanced Computer Programming A.S. Degree

Be a competent programmer. Write efficient programs that use well defined programming techniques. This degree teaches you many useful algorithms and design patterns. Advance your career as a programmer by learning important concepts in software modeling and program design.

### Career Opportunities in

Computer Programmer, Software Developer, Web Programmer

#### Required Courses

		<b>Units</b>
CIS 006	Introduction to Computer Programming	5
CIS 023	C# Programming	4
CIS 027	Data Structures and Algorithms	4
CIS 036A	Java Programming Language I	4
CIS 036B	Java Programming Language II	4
CIS 081	Systems Analysis with UML	3
CIS 082	Design Patterns	4
CIS 083B	Computer Programming Capstone Project	3
BUS 019	Business Communications	3
Major Requirements		34
General Education and Electives		26

---

#### **Total Units**

**60**

PID 628

## PROGRAM OF STUDY

### Advanced Windows Desktop Certificate of Achievement

Advance your career in IT Desktop Administration and be a technical resource at work. Develop a deeper understanding of computers and programming. Master Microsoft Windows operating systems, networking concepts, and security and learn many useful techniques that will make your computers safe, reliable, and function efficiently at work and home.

### Career Opportunities in

IT Specialist/Coordinator, Senior Support Technician, Network Administrator/Coordinator, Systems Administrator I

#### Required Courses

CIS 005	Introduction to Computer Science	5
CIS 006	Introduction to Computer Programming	5
CIS 086	Windows Operating Systems	4
CIS 087	Window Server Administration Fundamentals	4
CIS 089	Networking Fundamentals	4
CIS 090	Security Fundamentals	4
CIS 091	Configuring and Supporting a Windows Enterprise System	4
CIS 092	Fundamentals of Linux	4

---

**Total Units**

**34**

PID 604

# PROGRAM OF STUDY

## Applied Computer Information Systems Certificate of Achievement

Whether you are a beginning or an advanced computer student, the courses in the Computer Information Systems/Applied Microcomputer Information Systems Program will improve your computer and software knowledge and skills. Understand how computers work and be a proficient user of computers. Learn Microsoft Office applications and integrate the different software to create professional reports and presentations.

### Career Opportunities in

The Certificate of Achievement Program qualifies you for entry-level employment in occupational settings that utilize computers and various software applications.

#### Required Courses

CIS 001	Introduction to Computer Information Systems	4
CIS 042A	Spreadsheet Applications I	2
CIS 042B	Spreadsheet Applications II	2
CIS 086	Windows Operating Systems	4
CIS 105	Basic Mechanics of Web Page Design	1
CIS 231A	Advanced Laboratory Projects in Word	1
CIS 245A	Introduction to Microsoft Access I	2
CIS 245B	Introduction to Microsoft Access II	2
CIS 246	Introduction to Powerpoint	1.5
CIS 231B	Advanced Laboratory Projects in Outlook	1

#### Choose 16 units from the following Electives:

		Units
CIS 005	Introduction to Computer Science	5
CIS 006	Introduction to Computer Programming	5
CIS 087	Window Server Administration Fundamentals	4
CIS 089	Networking Fundamentals	4
CIS 090	Security Fundamentals	4
CIS 091	Configuring and Supporting a Windows Enterprise System	4
CIS 092	Fundamentals of Linux	4
CIS 104	Survey of Programming Languages for the Web	3
CIS 231C	Advanced Laboratory Projects in SharePoint	1
CIS 231D	Advanced Laboratory Projects in OneNote	1
BUS 019	Business Communications	3
MMART 131A	Photoshop I	2
MMART 131LA	Photoshop I Lab	1
MMART 132A	Illustrator I	2
MMART 132LA	Illustrator I Lab	1

---

**Total Units**

**36.5**

PID 597

## PROGRAM OF STUDY

### Applied Computer Information Systems A.S. Degree

Whether you are a beginning or an advanced computer student, the courses in the Computer Information Systems/Applied Computer Information Systems Program provides courses to improve your computer and software knowledge and skills. Understand how computers work and be an advanced user of computers. The CIS Associate in Science degree enables you to develop and/or upgrade your skills for career advancement.

### Career Opportunities in

The AS degree provides the computer skills needed for various entry-level office support and mid-level office management jobs that use computers in their daily work.

#### Required Courses

		<b>Units</b>
CIS 001	Introduction to Computer Information Systems	4
CIS 042A	Spreadsheet Applications I	2
CIS 042B	Spreadsheet Applications II	2
CIS 086	Windows Operating Systems	4
CIS 105	Basic Mechanics of Web Page Design	1
CIS 231A	Advanced Laboratory Projects in Word	1
CIS 245A	Introduction to Microsoft Access I	2
CIS 245B	Introduction to Microsoft Access II	2
CIS 246	Introduction to Powerpoint	1.5
CIS 231B	Advanced Laboratory Projects in Outlook	1

#### Choose 16 units from the following Electives:

		<b>Units</b>
CIS 005	Introduction to Computer Science	5
CIS 006	Introduction to Computer Programming	5
CIS 087	Window Server Administration Fundamentals	4
CIS 089	Networking Fundamentals	4
CIS 090	Security Fundamentals	4
CIS 091	Configuring and Supporting a Windows Enterprise System	4
CIS 092	Fundamentals of Linux	4
CIS 104	Survey of Programming Languages for the Web	3
CIS 231C	Advanced Laboratory Projects in SharePoint	1
CIS 231D	Advanced Laboratory Projects in OneNote	1
BUS 019	Business Communications	3
MMART 131A	Photoshop I	2
MMART 131LA	Photoshop I Lab	1
MMART 132A	Illustrator I	2
MMART 132LA	Illustrator I Lab	1
Major Requirements		34.5
General Education and Electives		25.5

---

#### **Total Units**

**60**

PID 598

# PROGRAM OF STUDY

## Computer Applications Certificate of Proficiency

Develop in-demand computer skills that lead to jobs or increase your productivity and efficiency and prepare for career advancement. Understand computer hardware and software and use computers effectively at work and home. This certificate teaches you the skills you need to be a proficient user of computers and get the most out of commonly used computer applications.

### Career Opportunities in

Entry-level office jobs

#### Required Courses

CIS 001	Introduction to Computer Information Systems	4
CIS 042A	Spreadsheet Applications I	2
CIS 042B	Spreadsheet Applications II	2
CIS 231A	Advanced Laboratory Projects in Word	1
CIS 245A	Introduction to Microsoft Access I	2
CIS 246	Introduction to Powerpoint	1.5

#### Additional required courses

CIS 231B	Advanced Laboratory Projects in Outlook	1
	<b>and</b>	
CIS 245B	Introduction to Microsoft Access II	2

<b>OR</b>		<b>Units</b>
MMART 131A	Photoshop I	2
	<b>and</b>	
MMART 131LA	Photoshop I Lab	1

<b>OR</b>		<b>Units</b>
MMART 132A	Illustrator I	2
	<b>and</b>	
MMART 132LA	Illustrator I Lab	1

---

<b>Total Units</b>		<b>15.5</b>
--------------------	--	-------------

# PROGRAM OF STUDY

## Computer Programming Certificate of Proficiency

Start your career in computer programming. Learn how to write object-oriented programs using Java and C# programming languages. The course cover the necessary skills for all computer programming career opportunities. This Certificate of Proficiency prepares you for the Certificate of Achievement in Web Programming.

### Career Opportunities in

Entry-level computer programmer, web developer

#### Required Courses

CIS 006	Introduction to Computer Programming	5
CIS 023	C# Programming	4
CIS 036A	Java Programming Language I	4
CIS 036B	Java Programming Language II	4

---

#### Total Units

**17**

PID 611

# PROGRAM OF STUDY

## Windows Desktop Certificate of Proficiency

Start your career in IT Desktop Administration and be a technical resource at work. This certificate provides the skills you need to master Microsoft Windows operating systems and networking concepts. In this constantly changing field, keep your skills updated to meet the new technology. Whether you are a beginner or long-time user of Windows operating systems, you will learn many useful techniques that will make your computers safe, reliable, and function efficiently.

### Career Opportunities in

Desktop Support Technician, Help Desk Technician, Entry-Level IT Assistant, Computer Support Specialist, Technical Support Level I

#### Required Courses

CIS 086	Windows Operating Systems	4
CIS 087	Window Server Administration Fundamentals	4
CIS 089	Networking Fundamentals	4
CIS 090	Security Fundamentals	4

---

#### Total Units

**16**

PID 603

# PROGRAM OF STUDY

## Web Programming A.S. Degree

Learn client-side and server-side web programming technologies. This program will prepare you for a career in programming for the Internet and the World Wide Web. Understand Internet communications and protocols and related technologies. Learn the latest versions of HTML, CSS, JavaScript, Java, and Databases and integrate them to create dynamic interactive web pages. You should have a solid computer literacy background as evidenced by course work such as CIS 1, CIS 5, or CIS 42A/B or the equivalents.

### Career Opportunities in

web programmer, programmer/analyst, software developer, and information technology professional

#### Required Courses

		<b>Units</b>
CIS 006	Introduction to Computer Programming	5
CIS 023	C# Programming	4
CIS 036A	Java Programming Language I	4
CIS 036B	Java Programming Language II	4
CIS 081	Systems Analysis with UML	3
CIS 083A	Web Programming Capstone Project	3
CIS 084	Database Programming for the Web	4
CIS 085	JSP and Servlets	4
CIS 103	Survey of Program/Languages for the Web--Continuation	4
CIS 104	Survey of Programming Languages for the Web	3
BUS 019	Business Communications	3
MMART 130	Survey of Digital Imaging	2
MMART 130L	Survey of Digital Imaging Lab	1
Major Requirements		44
General Education and Electives		16

---

#### **Total Units**

**60**

PID 404

# PROGRAM OF STUDY

## Web Programming Certificate of Achievement

Learn client-side and server-side web programming technologies. This program will prepare you for a career in programming for the Internet and the World Wide Web. Understand Internet communications and protocols and related technologies. Learn the latest versions of HTML, CSS, JavaScript, Java, and Databases and integrate them to create dynamic interactive web pages. You should have a solid computer literacy background as evidenced by course work such as CIS 1, CIS 5, or CIS 42A/B or the equivalents.

### Career Opportunities in

web programmer, programmer/analyst, software developer, and information technology professional

#### Required Courses

CIS 006	Introduction to Computer Programming	5
CIS 023	C# Programming	4
CIS 036A	Java Programming Language I	4
CIS 036B	Java Programming Language II	4
CIS 081	Systems Analysis with UML	3
CIS 083A	Web Programming Capstone Project	3
CIS 084	Database Programming for the Web	4
CIS 085	JSP and Servlets	4
CIS 103	Survey of Program/Languages for the Web--Continuation	4
CIS 104	Survey of Programming Languages for the Web	3
BUS 019	Business Communications	3
MMART 130	Survey of Digital Imaging	2
MMART 130L	Survey of Digital Imaging Lab	1

---

**Total Units**

**44**

PID 609

# PROGRAM OF STUDY

## Web Scripting Certificate of Proficiency

Make your web pages interactive and dynamic. Learn the client-side scripting languages and programming skills needed to be a Web Developer or Software Programmer for the web. This Certificate of Proficiency prepares you for the Certificate of Achievement in Web Programming. You should have a solid computer literacy background as evidenced by course work such as CIS 1, CIS 5, or CIS 42A/B or the equivalents.

### Career Opportunities in

Web-Developer, Front-End Developer, HTML Developer

#### Required Courses

CIS 006	Introduction to Computer Programming	5
CIS 084	Database Programming for the Web	4
CIS 103	Survey of Program/Languages for the Web--Continuation	4
CIS 104	Survey of Programming Languages for the Web	3

---

#### Total Units

**16**

PID 610

# PROGRAM OF STUDY

## Teacher's Aide Certificate of Achievement

This certificate combines some of the core courses in the Education AA-T with fieldwork in the schools, as well as additional courses in working with learning differences and in the teaching of reading. Students who complete this program will be well qualified to serve as teachers' aides in classrooms from kindergarten to high school and adult education.

### Career Opportunities in

This program is designed to prepare students to work as teachers' aides in K-12 and adult education programs.

#### Required courses:

EDUC 001	Introduction to the Field of Education	3
EDUC 097	Field Studies in Education	2 - 4
EDUC 098	Pedagogy of Reading	3
EDUC 099	Introduction to Special Needs Pedagogy	3
COMM 045	Public Speaking	3
ENGL 001A	Composition and Reading	4
MATH 018	Real Number Systems	3

#### Choose one of the following:

CHDEV 051	Child Growth and Development	3
	<b>or</b>	
PSYCH 021	Lifespan Human Development	3

---

### Total Units

**24 - 26**

PID 606

## PROGRAM OF STUDY

### Teacher's Aide (Bilingual) Certificate of Achievement

This certificate comes some of the core courses in the Education AA-T with fieldwork in the schools, as well as additional coursework in working with learning differences, in the teaching of reading, and in bilingual education. Students who complete this program will be well qualified to serve as teachers' aides in bilingual classrooms from kindergarten to high school and adult education.

### Career Opportunities in

This program is designed to prepare students to work as teachers' aides in bilingual classrooms in K-12 and adult education programs.

#### Required courses:

EDUC 001	Introduction to the Field of Education	3
EDUC 097	Field Studies in Education	2 - 4
EDUC 098	Pedagogy of Reading	3
EDUC 099	Introduction to Special Needs Pedagogy	3
COMM 045	Public Speaking	3
ENGL 001A	Composition and Reading	4
MATH 018	Real Number Systems	3
SPAN 101	Basic Spanish for the Education Profession	3

#### Choose one of the following:

CHDEV 051	Child Growth and Development	3
	<b>or</b>	
PSYCH 021	Lifespan Human Development	3

---

**Total Units****27 - 29**

PID 612

## PROGRAM OF STUDY

### Teacher's Aide (STEM) Certificate of Achievement

This certificate combines some of the core courses in the Education AA-T with fieldwork in the schools, as well as additional courses in working with learning differences and the teaching of reading. Students who complete this program qualify to serve as teachers' aides in classrooms from kindergarten to high school and adult education.

### Career Opportunities in

This program is designed to prepare students to work as teachers' aides within science classrooms in K-12 and adult education programs.

#### Required courses:

EDUC 001	Introduction to the Field of Education	3
EDUC 097	Field Studies in Education	2 - 4
EDUC 098	Pedagogy of Reading	3
EDUC 099	Introduction to Special Needs Pedagogy	3
COMM 045	Public Speaking	3
ENGL 001A	Composition and Reading	4
MATH 018	Real Number Systems	3

#### Choose one of the following:

CHDEV 051	Child Growth and Development	3
	<b>or</b>	
PSYCH 021	Lifespan Human Development	3

#### Choose two of the following:

CHEM 030A	Introductory General Chemistry	4
	<b>or</b>	
GEOL 10L	Introduction to Geology Laboratory	1
	<b>and</b>	
GEOL 010	Introduction to Geology	3
	<b>or</b>	
BIOL 010	Introduction to Biology	4
	<b>or</b>	
PHYS 010	Introduction to Physics	4

---

**Total Units**

' & - ' (

PID 613

## PROGRAM OF STUDY

### Carpentry A.A. Degree

The program is designed to instruct students in the principles of carpentry and provide participation in all phases of the building process including new technologies, building performance and sustainability. Carpentry students build a new house and/or remodel existing structures in partnership with the City of Oakland.

### Career Opportunities in

jobs as journey level carpenters, home remodelers and general contractors.

<b>Required</b>		<b>Units</b>
CARP 203	Construction Safety	1
CARP 207	Math for Construction Trades	3
CARP 210	Foundation and Forms Construction	3.5
CARP 211	Beginning Carpentry	3.5
CARP 220	Rough Framing	3.5
CARP 221	Finish Carpentry	3.5
CARP 230	Stair Building and Framing	2
CARP 231	Roof Framing	3
CARP 232	Residential Plumbing for Carpenters	1.5
CARP 233	Residential Electrical For Carpenters	1.5
CARP 240A	Construction Rehabilitation / Kitchens	2
CARP 240B	Construction Rehabilitation / Bathrooms	2
CONMT 011	Construction Estimating I - Residential Projects	3
CONMT 210	Residential Building Codes for Carpenters	3
MATH 220A	Technical Mathematics with Algebra - Part 1 (Lab)	0.5
MATH 220B	Technical Mathematics with Algebra - Part 2 (Lab)	0.5
MATH 220C	Technical Mathematics with Algebra - Part 3 (Lab)	0.5
MATH 220D	Technical Mathematics with Algebra - Part 4 (Lab)	0.5
MATH 220E	Technical Mathematics with Geometry - Part 1 (Lab)	0.5
MATH 220F	Technical Mathematics with Geometry - Part 2 (Lab)	0.5
	<b>or</b>	
MATH 221 *	Technical Mathematics	4
CARP 204	The Sustainable Built Environment	3
	<b>or</b>	
CARP 206	Energy Efficiency and Weatherization	3.5
 <b>First Semester</b>		 <b>Units</b>
CARP 203	Construction Safety	1
CARP 207	Math for Construction Trades	3
CARP 220	Rough Framing	3.5
CARP 211	Beginning Carpentry	3.5
 Second Semester		
 <b>Second Semester</b>		 <b>Units</b>
CARP 210	Foundation and Forms Construction	3.5
CARP 232	Residential Plumbing for Carpenters	1.5
	<b>or</b>	
CARP 233	Residential Electrical For Carpenters	1.5

CARP 204	The Sustainable Built Environment	3
	or	
CARP 206	Energy Efficiency and Weatherization	3.5
CONMT 210	Residential Building Codes for Carpenters	3
MATH 221	Technical Mathematics	4
<b>Third Semester</b>		<b>Units</b>
CARP 221	Finish Carpentry	3.5
CARP 240B	Construction Rehabilitation / Bathrooms	2
CARP 232	Residential Plumbing for Carpenters	1.5
	or	
CARP 233	Residential Electrical For Carpenters	1.5
CARP 230	Stair Building and Framing	2
	or	
CARP 231	Roof Framing	3
CARP 206	Energy Efficiency and Weatherization	3.5
	or	
CARP 204	The Sustainable Built Environment	3
<b>Fourth Semester</b>		<b>Units</b>
CARP 230	Stair Building and Framing	2
	or	
CARP 231	Roof Framing	3
CONMT 011	Construction Estimating I - Residential Projects	3
<b>Total Units</b>		<b>41.5 - 42</b>

\*\* Math 221 can be taken in place of 220 Series. For Associates Degree GE Education Requirements see 2013-2014 catalog pg 125

# PROGRAM OF STUDY

## MUSIC A.A. Degree

Courses in the Music Department are designed to fulfill the needs of music majors, professional musicians, and those whose interest is vocational. Students are encouraged to contact the department chairperson for specific guidance when planning to transfer to a four-year institution in this major. For the latest information, visit: <http://www.laney.edu/wp/music/>

## Career Opportunities in

Academic and Performing Careers in Music and Music Related Fields such as: Arts Administration, Music Journalism, Recording Industry, Musical Instrument Sales and Repair, Private Instruction etc.

Degree Major Requirements:

### **GROUP 1: Music Theory - All of the following (18 units):**

		<b>Units</b>
MUSIC 101	Music Theory I	3
MUSIC 102	Music Theory II	3
MUSIC 103	Music Theory III	3
MUSIC 104	Music Theory IV	3
MUSIC 003A	Harmony	3
MUSIC 003B	Harmony	3

### **GROUP 2: Musicianship - All of the following (4 units):**

		<b>Units</b>
MUSIC 121	Musicianship I	1
MUSIC 122	Musicianship II	1
MUSIC 123	Musicianship III	1
MUSIC 124	Musicianship IV	1

### **GROUP 3: Music History - Selection a minimum of two from the following (6 units):**

		<b>Units</b>
MUSIC 008A	Music History: Antiquity Through the Renaissance	3
MUSIC 008B	Music History: The Baroque and Classical Eras	3
MUSIC 008C	Music History: The Romantic Era	3
MUSIC 008D	Music History: The Twentieth Century Through the Present	3

### **GROUP 4: Performance and Applied Music - Select a minimum of 4 units from the following:**

		<b>Units</b>
MUSIC 016	Choral Repertoire	1
MUSIC 018	Jazz Orchestra Repertoire	1
MUSIC 021	Instrumental Ensemble	1
MUSIC 031	String Ensemble	1
MUSIC 105	Classic Guitar I	1
MUSIC 106	Classic Guitar II	1
MUSIC 107	Classic Guitar III	1
MUSIC 108	Classic Guitar IV	1
MUSIC 109	Beginning Winds I	1
MUSIC 110	Beginning Winds II	1
MUSIC 111	Beginning Winds III	1
MUSIC 112	Beginning Winds IV	1
MUSIC 113	Beginning Percussion I	1
MUSIC 114	Beginning Percussion II	1
MUSIC 115	Beginning Percussion III	1
MUSIC 116	Beginning Percussion IV	1
MUSIC 117	Voice I	1

MUSIC 118	Voice II	1
MUSIC 119	Voice III	1
MUSIC 120	Voice IV	1
MUSIC 125	Chorus	1
MUSIC 126	Jazz Orchestra	1
MUSIC 127	Jazz Combos	1
MUSIC 130	Elementary Piano Method I	1
MUSIC 131	Elementary Piano Method II	1
MUSIC 132	Elementary Piano Method III	1
MUSIC 133	Elementary Piano Method IV	1
MUSIC 134	Intermediate Piano Literature I	1
MUSIC 135	Intermediate Piano Literature II	1
MUSIC 136	Intermediate Piano Literature III	1
MUSIC 137	Intermediate Piano Literature IV	1
MUSIC 138	Jazz Piano I	1
MUSIC 139	Jazz Piano II	1
MUSIC 140	Jazz Piano III	1
MUSIC 141	Jazz Piano IV	1

---

**Total Units**

**22 - 38**

PID 559

## PROGRAM OF STUDY

### Associate or Arts Degree for Transfer in Music AA-T Degree

The Associate in Arts Degree in Music for Transfer is designed to prepare students for a seamless transfer with junior status and priority admission to their local CSU campus to a program or major in Music or similar major for completion of a baccalaureate degree. Students are required to complete: ? a minimum of 27 semester units in the major with a grade of C or better while maintaining a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework. ? 60 semester CSU-transferable units using the California State University-General Education-Breadth pattern (CSU-GE Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern. ? No more than 60 semester units are required. The Associate in Arts Degree in Music for Transfer will also assist Music major students to transfer to a U.C. or other baccalaureate institutions. Students are advised to consult with a counselor to verify transfer requirements.

### Career Opportunities in

Academic and Performing Careers in Music and Music Related Fields such as: Arts Administration, Music Journalism, Recording Industry, Musical Instrument Sales and Repair, Private Instruction etc.

Degree Major Requirements:

<b>GROUP 1: Music Theory - All of the following (12 units):</b>		<b>Units</b>
MUSIC 101	Music Theory I	3
MUSIC 102	Music Theory II	3
MUSIC 103	Music Theory III	3
MUSIC 104	Music Theory IV	3
<b>GROUP 2: Musicianship - All of the following (4 units):</b>		<b>Units</b>
MUSIC 121	Musicianship I	1
MUSIC 122	Musicianship II	1
MUSIC 123	Musicianship III	1
MUSIC 124	Musicianship IV	1
<b>GROUP 3: Performance Ensemble - Select a minimum of 4 units from the following:</b>		<b>Units</b>
MUSIC 016	Choral Repertoire	1
MUSIC 018	Jazz Orchestra Repertoire	1
MUSIC 021	Instrumental Ensemble	1
MUSIC 031	String Ensemble	1
MUSIC 125	Chorus	1
MUSIC 126	Jazz Orchestra	1
MUSIC 127	Jazz Combos	1
<b>GROUP 4: Applied Music - Select a minimum of 4 units from the following:</b>		<b>Units</b>
MUSIC 105	Classic Guitar I	1
MUSIC 106	Classic Guitar II	1
MUSIC 107	Classic Guitar III	1
MUSIC 108	Classic Guitar IV	1
MUSIC 109	Beginning Winds I	1
MUSIC 110	Beginning Winds II	1
MUSIC 111	Beginning Winds III	1
MUSIC 112	Beginning Winds IV	1
MUSIC 113	Beginning Percussion I	1
MUSIC 114	Beginning Percussion II	1
MUSIC 115	Beginning Percussion III	1
MUSIC 116	Beginning Percussion IV	1

MUSIC 117	Voice I	1
MUSIC 118	Voice II	1
MUSIC 119	Voice III	1
MUSIC 120	Voice IV	1
MUSIC 134	Intermediate Piano Literature I	1
MUSIC 135	Intermediate Piano Literature II	1
MUSIC 136	Intermediate Piano Literature III	1
MUSIC 137	Intermediate Piano Literature IV	1
MUSIC 138	Jazz Piano I	1
MUSIC 139	Jazz Piano II	1
MUSIC 140	Jazz Piano III	1
MUSIC 141	Jazz Piano IV	1

**IGETC or CSU GE-Breadth Education pattern(37-39 units)** **Units**

---

**Total Units** **48 - 60**

PID 596

## PROGRAM OF STUDY

### Homeland Security Certificate of Achievement

The Homeland Security Certificate provides foundational knowledge of local, national, and international security. The program examines threats against national security, examines national and international terrorist threats, and explores the roles and responsibilities of local and national security agencies when preparing for emergencies. The program is designed to prepare students for employment in entry-level and advanced positions in the public and private sectors of security.

#### Career Opportunities in

Possible careers include (but not limited to): • Security Guard • Port Security • School Security • Bank Guard • Company Guard • Hospital Guard • Store Security • Mall Security • TSA officer • Law Enforcement \*Some positions, such as law enforcement, may require additional qualifications.

ADJUS 021	Introduction to Administration of Justice	3
ADJUS 70	Introduction to Homeland Security	3
ADJUS 71	Intelligence Analysis and Security Management	3
ADJUS 72	Introduction to Terrorism/WMD	3
ADJUS 115	Transportation and Border Security	3
ADJUS 116	Security Guard	1

---

**Total Units**

**13 - 16**

PID 602

# PROGRAM OF STUDY

## Histotechnology Certificate of Achievement

The Merritt College Histotechnology program provides on-campus and on-site technical training in the field of histotechnology, focusing on routine tissue sample preparation, special stains and techniques such as immunohistochemistry, in situ hybridization, fluorescence microscopy and genomics. Training on campus will utilize samples routinely prepared in both clinical and research facilities. As part of their formal training, students of histotechnology will work through study guides provided by the American Society of Clinical Pathologists (ASCP) for its certification examination. Partnerships with local facilities will allow for work experience and internship sites, required for certification of histotechnology graduates, and will provide further training for those interested in research and/or careers in the private sector. Completion of this Program qualifies students for HT or HTL certification through ASCP.

### Career Opportunities in

Histotechnician positions in the following: Hospital and clinical diagnostic labs. Biotech histotechnology labs. Academic research labs. Agricultural and plant pathology labs. Veterinarian labs.

BIOSC 002	Theory and Practice of Optical Microscopy	5
BIOSC 005	Good Laboratory Practices	1
	<b>and</b>	
BIOSC 006	Survey of Biotech Industry	1
	<b>and</b>	
BIOSC 007	Practical Mammalian Cell Culture	1
	<b>and</b>	
BIOSC 008	Immunohistochemistry	1
	<b>and</b>	
BIOSC 009	General Histology	5
BIOSC 010	Fluorescence Microscopy Laboratory	3 - 6
BIOSC 011	Lab Safety and Ethics	0.5
	<b>and</b>	
BIOSC 030	Genomics Theory	4
BIOSC 055	Beginning Histotechniques	4
	<b>and</b>	
BIOSC 056	Advanced Histotechniques	4
	<b>and</b>	
BIOSC 057	Advanced Immunohistochemistry	2
COPED 476G	Occupational Work Experience in Histotechnology	1 - 4
BIOL 002	Human Anatomy	5
BIOL 004	Human Physiology	5
	<b>or</b>	
BIOL 020A	Human Anatomy and Physiology	5
BIOL 020B	Human Anatomy and Physiology	5
CHEM 001A	General Chemistry	5
	<b>or</b>	
CHEM 030A	Introductory General Chemistry	4

**Total Units**

**38.5 - 52.5**

PID 583

## PROGRAM OF STUDY

### Psychology Transfer Model Curriculum (TMC) AA-T Degree

The Associate in Arts in Psychology for Transfer Degree is designed for students planning to transfer into the psychology major. A study of psychology is built upon the scientific study of human behavior and mental processes. Students pursuing the AA for transfer into the psychology major will study the nature of consciousness and the development of the person, basic processes of human perception, learning, cognition and motivation; the relationship of behavior to physiology; and the nature of psychological disorders and how psychologists use their knowledge to help improve the quality of people's lives. Successful completion of the program with a minimum G.P.A. of 2.0 affords students specific guarantees for transfer to the CSU system such as admission to a CSU with junior status, priority admission to their local CSU campus and to a program or major in psychology or similar major. The Associate transfer degrees (AA-T) require the completion and certification of the California State University General Education (CSU GE) or the Intersegmental General Education Transfer Curriculum (IGETC) pattern, as well as the specific Associate for transfer (AA-T) major degree requirements. The AA-T does not require any additional college specific General Education requirements. Students interested in the AA for transfer degree in psychology should consult with the Social Sciences Department Chair and a counselor. The Psychology Associate Degree prepares students for an entry-level position in the field of psychology. Job opportunities could include mental health case worker, counselor's aide, crisis intervention, family support positions, working with the elderly, and helping people with developmental disabilities. In addition, the associate degree provides a foundation for further career advancement if you continue on to complete your bachelor's degree.

Required courses (all three of the following)

PSYCH 028	Introduction to Research Methods in Psychology	3
MATH 013	Introduction to Statistics	4
PSYCH 001A	Introduction to General Psychology	3

Required, one of the following:

**Required, one of the following:**

BIOL 010	Introduction to Biology	4
BIOL 025	Human Biology	3

**Choose one of the courses below:**

AFRAM 012	Psychology of African-Americans	3
ASAME 032	Asian-American Psychology	3
PSYCH 31	Latino Psychology	3

**Choose one of the courses below:**

PSYCH 006	Social Psychology	3
PSYCH 012	Human Sexuality	3
PSYCH 010	Psychology and Life: Basic Principles	3
PSYCH 024	Abnormal Psychology	3

---

**Total Units**

**29 - 38**

PID 497