

# **PVCC ACADEMIC CERTIFICATE PROGRAMS, ASSOCIATE IN APPLIED SCIENCES DEGREES & CERTIFICATES OF COMPLETION**

## **ACADEMIC CERTIFICATE PROGRAMS**

- Aesthetic Applications, AC
- Aesthetic Fundamentals, AC
- Fine & Performing Arts Basics, AC
- Fine & Performing Arts Principles, AC
- International Studies: Asia, AC
- International Studies: Latin America, AC

## **ASSOCIATE IN APPLIED SCIENCES DEGREES**

- Administration of Justice, AAS
- Administrative Office Professional, AAS
- Advanced Emergency Medical Technology (Paramedic), AAS
- Audio Production Technologies, AAS
- Computer Information Systems, AAS
- Dietetic Technology, AAS
- Early Childhood Education, AAS
- Emergency Management, AAS
- Fire Science, AAS
- Fire Science Technology, AAS
- General Business, AAS
- Microsoft Applications Development, AAS
- Microsoft Networking Technology, AAS
- Music Business, AAS
- Nursing, AAS
- Programming & System Analysis, AAS
- Retail Management, AAS
- Strength, Nutrition & Personal Training, AAS

## **CERTIFICATES OF COMPLETION**

- Accounting Specialized Paraprofessional, CCL
- Administrative Office Professional, CCL
- Advanced Emergency Medical Technology (Paramedic), CCL
- Audio Production Technologies, CCL

- Basic Emergency Medical Technology, CCL
- Basic Firefighter, CCL
- Computer Information Systems, CCL
- Computer Networking Technology, CCL
- Computer Systems Maintenance, CCL
- Customer Service Information Professional, CCL
- Early Childhood Education, CCL
- Emergency Management, CCL
- Fire Science, CCL
- General Business, CCL
- Import/Export Trade, CCL
- International Business, CCL
- Journalism, CCL
- Linux Professional, CCL
- Media Arts: Computer Art Illustrator, CCL
- Microcomputer Accounting, CCL
- Microsoft Applications Development, CCL
- Microsoft Desktop Support Technology, CCL
- Microsoft Office Specialist, CCL
- Microsoft Product Specialist, CCL
- Microsoft Systems Administration, CCL
- Microsoft Systems Engineer, CCL
- Middle Management, CCL
- Music Business, CCL
- Nurse Assisting, CCL
- Organizational Leadership, CCL
- Practical Nursing, CCL
- Programming & System Analysis, CCL
- Retail Management, CCL
- Strength & Conditioning Personal Training, CCL
- Teaching Healing Meditation & Stress Management, CCL
- Web Design, CCL
- Web Developer, CCL

# PVCC DEGREE & CERTIFICATE PROGRAMS - LISTED BY CATEGOR

## ACCOUNTING

- Accounting Specialized Paraprofessional, CCL
- Microcomputer Accounting, CCL

## ADMINISTRATION OF JUSTICE

- Administration of Justice, AAS

## ADMINISTRATIVE OFFICE PROFESSIONAL

- Administrative Office Professional, AAS, CCL
- Customer Service Information Professional, CCL
- Microsoft Office Specialist, CCL

## ART / COMPUTER RELATED

- Media Arts: Computer Art Illustrator, CCL

## BUSINESS RELATED

- General Business, AAS, CCL
- Middle Management, CCL
- Retail Management, AAS, CCL

## COMPUTER RELATED

- Computer Information Systems, AAS, CCL
- Computer Networking Technology, CCL
- Computer Systems Maintenance, CCL
- Linux Professional, CCL
- Microsoft Applications Development, AAS, CCL
- Microsoft Desktop Support Technology, CCL
- Microsoft Networking Technology, AAS
- Microsoft Office Specialist, CCL
- Microsoft Product Specialist, CCL
- Microsoft Systems Administration, CCL
- Microsoft Systems Engineer, CCL
- Programming & System Analysis, AAS, CCL
- Web Design, CCL
- Web Developer, CCL

## EARLY CHILDHOOD EDUCATION

- Early Childhood Education, AAS, CCL

## EMERGENCY MEDICAL TECHNOLOGY

- Advanced Emergency Medical Technology (Paramedic), AAS, CCL
- Basic Emergency Medical Technology, CCL
- Emergency Management, AAS, CCL

## FINE & PERFORMING ARTS

- Aesthetic Applications, AC
- Aesthetic Fundamentals, AC
- Fine & Performing Arts Basics, AC
- Fine & Performing Arts Principles, AC

## FIRE SCIENCE TECHNOLOGY

- Basic Firefighter, CCL
- Fire Science, AAS, CCL
- Fire Science Technology, AAS

## INTERNATIONAL BUSINESS & STUDIES

- Import/Export Trade, CCL
- International Business, CCL
- International Studies: Asia, AC
- International Studies: Latin America, AC

## JOURNALISM

- Journalism, CCL

## MICROSOFT RELATED

- Microsoft Applications Development, AAS, CCL
- Microsoft Desktop Support Technology, CCL
- Microsoft Networking Technology, AAS
- Microsoft Office Specialist, CCL
- Microsoft Product Specialist, CCL
- Microsoft Systems Administration, CCL
- Microsoft Systems Engineer, CCL

## MUSIC / COMMERCIAL

- Audio Production Technologies, AAS, CCL
- Music Business, AAS, CCL

## NURSING

- Nurse Assisting, CCL
- Nursing, AAS
- Practical Nursing, CCL

## NUTRITION

- Dietetic Technology, AAS

## WELLNESS

- Strength & Conditioning Personal Training, AAS, CCL
- Teaching Healing Meditation & Stress Management, CCL

# FINE & PERFORMING ARTS ACADEMIC CERTIFICATE PROGRAMS

## ACADEMIC CERTIFICATES

The Maricopa Community College District Academic Certificate is a defined and coherent program of study that is recommended for students who wish to gain additional expertise in an academic area. While this program of study can result in proficiency in specified skills and competencies, as well as mastery of knowledge, it is not designed to prepare someone for employment in a specific occupation.

Academic Certificates:

- \* require a cumulative GPA of 2.0 or better for completion.
- \* follow the graduation policies within the general catalog.
- \* Fine & Performing Arts Academic Certificates are unique to Paradise Valley Community College.

For more information regarding Paradise Valley Community College's Fine & Performing Arts Academic Certificates, please contact Dr. Lois Roma-Deeley at (602) 787-6577 or Academic Advising at (602) 787-7060.

The Academic Certificates in Fine & Performing Arts Basics and Aesthetics Fundamentals are to be completed before the other Academic Certificates.

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FINE & PERFORMING ARTS  
ACADEMIC CERTIFICATE: 6201  
**AESTHETIC APPLICATIONS**  
16-18 credits

**DESCRIPTION:** The Academic Certificate in Aesthetic Applications is not designed to prepare students for employment in specific occupations. The Academic Certificate in Aesthetic Applications is designed to provide students with a foundation in the key concepts of aesthetics for the purpose of enhancing students' individual artistic endeavors. This certificate is designed for students who are planning an avocation in the Fine & Performing Arts (theatre, creative writing, visual arts, music, dance, and cinema).

**PROGRAM NOTES:** Students must earn a grade of "C" or better in each course in the Academic Core and the Academic Specialization areas. "+" indicates prerequisite. "++" indicates any module. Courses used to complete requirements for one Fine & Performing Arts Academic Certificate may not be used to fulfill requirements for another Fine & Performing Arts Academic Certificate (with the exception of ENG210 which may be repeated for credit).

**PROGRAM PREREQUISITE:** Successful completion of Fine & Performing Arts Basics Academic Certificate and the Aesthetics Fundamentals Academic Certificate.

**ACADEMIC CORE:** Credits: 9  
Students must complete a total of 9 credits from the following list of courses (no more than 3 credits from a single discipline as indicated by prefix).

Visual Arts Discipline:

- ARH 101 Prehistoric Through Gothic Arts (3) OR
- ARH 102 Renaissance Through Contemporary Art (3) OR
- + ART 113 Color (3) OR
- + ART 132 Photography II (3) OR
- + ART 162 Ceramics II (3) OR

Dance Discipline:

- DAN 131 Ballet I (1) AND
- DAN 132 Modern Dance I (1) AND
- DAN 133 Modern Jazz Dance I (1) OR
- DAN 210 Dance Production (3) OR

Creative Writing Discipline:

- + ENG 210 Creative Writing (3) OR
- (Note: ENG102 is required prerequisite to ENG210)

Humanities Discipline:

- + HUM 250 Ideas & Values in the Humanities (3) OR
- (Note: ENG101 is required prerequisite to HUM251)

Music Discipline:

- MHL 143 Music in World Cultures (3) OR

Theatre Discipline:

- + THE 220 Modern Drama (3) OR

Academic Specialization:

Credits: 6

- ARH 109 History of American Art 3
- + ARH 115 History of Photography 3
- ARH 201 Art of Asia 3
- ARH 217 Mexican Art History 3
- ART 100 Intro to Computer Graphic Art 1
- ART/ADA 115 Three-Dimensional Design 3
- + ART 116 Life Drawing I 3
- ART 131 Introduction to Photography 3
- + ART 261 Ceramics III 3
- COM 110 Interpersonal Communication 3
- + COM 225 Public Speaking 3
- + COM 241 Performance of Literature 3
- + DAH 201 World Dance Perspectives 3
- + DAN 134 Ballet II 1
- + DAN 135 Modern Dance II 1
- + DAN 136 Modern Jazz Dance II 1
- + DAN 231 Ballet III 1
- + DAN 232 Modern Dance III 1
- + DAN 233 Modern Jazz Dance III 1
- + DAN 265 Dance Choreography II 3
- + ENG 200 Reading & Writing About Literature 3
- + ENG 211 Screenwriting 3
- + ENG 213 Introduction to the Study of Languages 3
- ENG 235 Magazine Article Writing 3
- ENG 260 Film Analysis 3
- ENH 204 Intro to Contemporary Literature 3
- ENH 285 Contemporary Women Writers 3
- + ENH 289 Literature from Nobel Laureates 3
- GBS 151 Introduction to Business 3
- HUM 110 Folklore of the Southwest 3
- HUM 209 Women and Films 3
- HUM 211AA Foreign Films: Classics 3
- HUM 211AB Foreign Films: Japanese 3
- HUM 211AD Foreign Film: Third World 3
- HUM 212 Documentary Film 3
- HUM 213 Hispanic Film 3

# FINE & PERFORMING ARTS ACADEMIC CERTIFICATE PROGRAMS

HUM 260	Intercultural Perspectives	3
HUM 261	Asian Ideas and Values	3
MGT 253	Owning and Operating a Small Business	3
MKT 271	Principles of Marketing	3
MHL 143	Music in World Cultures	3
MHL 145	American Jazz and Popular Music	3
MHL 146	Survey of Broadway Musicals	3
MHL 153	Rock Music and Culture	3
+ MTC 240	Composition	3
MUC 109	Music Business: Merchandising & Law	3
MUP 150	Community Chorus	1
MUP 159	Community Orchestra	1
MUP 160	Orchestra	2
MUP 161	Community Band	1
MUP 162	Band	2
MUP 163	Jazz Ensemble	1
MUP 181	Chamber Music Ensembles	1
MUP 182	Chamber Singers	1
PHI 101	Introduction to Philosophy	3
THE 118	Playwriting	3
THP 115	Theatre Makeup (3) OR	
THP 201AA	Theatre Production I (1) AND	
THP 201AB	Theatre Production II (2)	
THP 213	Introduction to Technical Theatre	3
THP 243	Interpreters Theatre	3
THP 271	Voice and Diction	3

**RESTRICTED ELECTIVES:** Credits: 1-3  
 Students may select and complete 1-3 credits from any of the following prefixes or, with prior approval from the program director or designee, 1-3 credits may be substituted from the Academic Specialization area.

BPC+++++	Any BPC course (1-3) OR	1-3
CIS+++++	Any CIS course (1-3) OR	
CPD+++++	Any CPD course (1-3) OR	
CWE+++++	Any CWE course (1-3) OR	

## FINE & PERFORMING ARTS ACADEMIC CERTIFICATE: 6202

### AESTHETIC FUNDAMENTALS 16-18 credits

**DESCRIPTION:** The Academic Certificate in Aesthetic Fundamentals is not designed to prepare students for employment in specific occupations. The Academic Certificate in Aesthetic Fundamentals is designed to provide students with a variety of enriched cultural experiences beneficial to students' individual artistic endeavors. This certificate will provide students with an overview of the influence of aesthetics in one or more disciplines in the Fine & Performing Arts (theatre, creative writing, visual arts, music, dance, and cinema).

**PROGRAM NOTES:** Students must earn a grade of "C" or better in each course in the Academic Core and the Academic Specialization areas. "+" indicates prerequisite. "++" indicates any module. Courses used to complete requirements for one Fine & Performing Arts or Aesthetics Academic Certificate may not be used to fulfill requirements for another Fine & Performing Arts or Aesthetics Academic Certificate.

**PROGRAM PREREQUISITES:** None

**ACADEMIC CORE:** Credits: 15  
 Students must complete a total of 9 credits from the following list of courses. No more than 3 credits from a single discipline as indicated by prefix.

**Visual Arts Discipline:** Credits: 9

+ ART111	Drawing I (3) OR
+ ART112	Two-Dimensional Design (3) OR
+ ADA112	Two-Dimensional Design (3) OR

**Dance Discipline:**

DAH100	Introduction to Dance (3) OR
DAN131	Ballet I (1) AND
DAN132	Modern Dance I (1) AND
DAN133	Modern Jazz Dance I (1) OR

**Creative Writing Discipline:**

+ ENG217	Personal & Exploratory Writing (3) OR
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**Cinema Discipline:**

HUM210	Contemporary Cinema (3) OR
THE210	Contemporary Cinema (3) OR

**Music Discipline:**

MTC103	Introduction to Aural Perception (2) AND
MUP150	Community Chorus (1) OR
MUP159	Community Orchestra (1) OR
MUP161	Community Band (1) OR
MUP163	Jazz Ensemble (1) OR
MUP181	Chamber Music Ensembles (1) OR
MUP182	Chamber Singers (1) OR

**Theatre Discipline:**

THE111	Modern Drama (3) OR
THP112	Acting I (3) OR
+ THP212	Acting II (3)

# FINE & PERFORMING ARTS ACADEMIC CERTIFICATE PROGRAMS

**ACADEMIC SPECIALIZATION:** Credits: 6  
 Students must select 6 credits from the following list of Academic Specialization. Consult with program director or designee for other related course options.

ARH109	History of American Art	3
+ ARH115	History of Photography	3
ARH201	Art of Asia	3
ARH217	Mexican Art History	3
ART100	Introduction to Computer Graphic Art	1
ART/ADA115	Three-Dimensional Design	3
+ ART116	Life Drawing I	3
ART131	Introduction to Photography	3
+ ART261	Ceramics III	3
COM110	Interpersonal Communication	3
+ COM225	Public Speaking	3
+ COM241	Performance of Literature	3
+ DAH201	World Dance Perspectives	3
+ DAN134	Ballet II	1
+ DAN135	Modern Dance II	1
+ DAN136	Modern Jazz Dance II	1
+ DAN231	Ballet III	1
+ DAN232	Modern Dance III	1
+ DAN233	Modern Jazz Dance III	1
+ DAN265	Dance Choreography II	3
+ ENG200	Reading and Writing About Literature	3
+ ENG211	Screenwriting	3
+ ENG213	Introduction to the Study of Languages	3
ENG235	Magazine Article Writing	3
ENG260	Film Analysis	3
ENH204	Introduction to Contemporary Literature	3
ENH285	Contemporary Women Writers	3
+ ENH289	Literature from Nobel Laureates	3
GBS151	Introduction to Business	3
HUM110	Folklore of the Southwest	3
HUM209	Women and Films	3
HUM211AA	Foreign Films: Classics	3
HUM211AB	Foreign Films: Japanese	3
HUM211AD	Foreign Film: Third World	3
HUM212	Documentary Film	3
HUM213	Hispanic Film	3
HUM260	Intercultural Perspectives	3
HUM261	Asian Ideas and Values	3
MGT253	Owning and Operating a Small Business	3
MKT271	Principles of Marketing	3
MHL143	Music in World Cultures	3
MHL145	American Jazz and Popular Music	3
MHL146	Survey of Broadway Musicals	3
MHL153	Rock Music and Culture	3
+ MTC240	Composition	3

MUC109	Music Business: Merchandising & Law	3
MUP150	Community Chorus	1
MUP159	Community Orchestra	1
MUP160	Orchestra	2
MUP161	Community Band	1
MUP162	Band	2
MUP163	Jazz Ensemble	1
MUP181	Chamber Music Ensembles	1
MUP182	Chamber Singers	1

PHI101	Introduction to Philosophy	3
THE118	Playwriting	3
THP115	Theatre Makeup (3) OR	
THP201AA	Theatre Production I (1) AND	
THP201AB	Theatre Production II (2)	3
THP213	Introduction to Technical Theatre	3
THP243	Interpreters Theatre	3
THP271	Voice and Diction	3

**RESTRICTED ELECTIVES:** Credits: 1-3  
 BPC+++++ Note: Any BPC course (1-3) OR  
 CIS+++++ Note: Any CIS course (1-3) OR  
 CPD+++++ Note: Any CPD course (1-3) OR  
 CWE+++++ Note: Any CWE course (1-3)

## FINE & PERFORMING ARTS

ACADEMIC CERTIFICATE: 6203

## FINE & PERFORMING ARTS BASICS

16-19 credits

**DESCRIPTION:** The Academic Certificate in Fine & Performing Arts Basics is not designed to prepare students for employment in specific occupations. The Academic Certificate in Fine & Performing Arts Basics is designed to teach students basic principles and techniques of fine and performing arts.

**PROGRAM NOTES:** Students must earn a grade of "C" or better in each course in the Academic Core and the Academic Specialization areas. "+" indicates prerequisite. "++" indicates any module. Courses used to complete requirements for one Fine & Performing Arts Academic Certificate may not be used to fulfill requirements for another Fine & Performing Arts Academic Certificate (with the exception of ENG210 which may be repeated for credit).

**PROGRAM PREREQUISITES:** None.

**ACADEMIC CORE:** Credits: 9-10  
 Students must complete a total of 9-10 credits from the following list of courses (no more than 3-4 credits from a single discipline as indicated by prefix).

**Visual Arts Discipline:**

ART 111	Drawing I (3) OR
ART 131	Photography I (3) OR
ART 161	Ceramics I (3) OR

# FINE & PERFORMING ARTS ACADEMIC CERTIFICATE PROGRAMS

## Dance Discipline:

- DAH 100 Introduction to Dance (3) OR
- DAN 131 Ballet I (1) AND
- DAN 132 Modern Dance I (1) AND
- DAN 133 Modern Jazz Dance I (1) OR

## Creative Writing Discipline:

- + ENG 210 Creative Writing (3) OR

## Cinema Discipline:

- HUM 205 Introduction to Cinema (3) OR
- THE 205 Introduction to Cinema (3) OR

## Music Discipline:

- MTC 101 Introduction to Music Theory (3) OR
- MTC 105 Music Theory I (3) AND
- MTC 106 Aural Perception I (1) OR

## Theatre Discipline:

- THE 111 Introduction to Theatre (3) OR
- THP 112 Acting I (3) OR

**ACADEMIC SPECIALIZATION:** Credits: 6  
 Students must select 6 credits from the following list of Academic Specialization. (Note: Consult with program director or designee for other related course options.)

- ARH 109 History of American Art 3
- + ARH 115 History of Photography 3
- ARH 201 Art of Asia 3
- ARH 217 Mexican Art History 3
- ART 100 Introduction to Computer Graphic Art 1
- + ART/ADA 115 Three-Dimensional Design 3
- + ART 116 Life Drawing I 3
- ART 131 Introduction to Photography 3
- + ART 261 Ceramics III 3
- COM 110 Interpersonal Communication 3
- + COM 225 Public Speaking 3
- + COM 241 Performance of Literature 3
- + DAH 201 World Dance Perspectives 3
- + DAN 134 Ballet II 1
- + DAN 135 Modern Dance II 1
- + DAN 136 Modern Jazz Dance II 1
- + DAN 231 Ballet III 1
- + DAN 232 Modern Dance III 1
- + DAN 233 Modern Jazz Dance III 1
- + DAN 265 Dance Choreography II 3
- + ENG 200 Reading and Writing About Literature 3
- + ENG 211 Screenwriting 3
- + ENG 213 Introduction to the Study of Languages 3
- ENG 235 Magazine Article Writing 3
- ENG 260 Film Analysis 3
- ENH 204 Introduction to Contemporary Literature 3
- ENH 285 Contemporary Women Writers 3
- + ENH 289 Literature from Nobel Laureates 3
- GBS 151 Introduction to Business 3
- HUM 110 Folklore of the Southwest 3
- HUM 209 Women and Films 3

- HUM 211AA Foreign Films: Classics 3
- HUM 211AB Foreign Films: Japanese 3
- HUM 211AD Foreign Film: Third World 3
- HUM 212 Documentary Film 3
- HUM 213 Hispanic Film 3
- HUM 260 Intercultural Perspectives 3
- HUM 261 Asian Ideas and Values 3
- MGT 253 Owning and Operating a Small Business 3
- MKT 271 Principles of Marketing 3
- MHL 143 Music in World Cultures 3
- MHL 145 American Jazz and Popular Music 3
- MHL 146 Survey of Broadway Musicals 3
- MHL 153 Rock Music and Culture 3
- + MTC 240 Composition 3
- MUC 109 Music Business: Merchandising & Law 3
- MUP 150 Community Chorus 1
- MUP 159 Community Orchestra 1
- MUP 160 Orchestra 2
- MUP 161 Community Band 1
- MUP 162 Band 2
- MUP 163 Jazz Ensemble 1
- MUP 181 Chamber Music Ensembles 1
- MUP 182 Chamber Singers 1
- PHI 101 Introduction to Philosophy 3
- THE 118 Playwriting 3
- THP 115 Theatre Makeup (3) OR
- THP 201AA Theatre Production I (1) AND
- THP 201AB Theatre Production II (2)
- THP 213 Introduction to Technical Theatre 3
- THP 243 Interpreters Theatre 3
- THP 271 Voice and Diction 3

**RESTRICTED ELECTIVES:** Credits: 1-3  
 Students must select and complete 1-3 credits from any of the following prefixes:

- BPC+++++ Any BPC course (1-3) OR
- CIS+++++ Any CIS course (1-3) OR
- CPD+++++ Any CPD course (1-3) OR
- CWE+++++ Any CWE course (1-3) OR

# FINE & PERFORMING ARTS ACADEMIC CERTIFICATE PROGRAMS

FINE & PERFORMING ARTS  
ACADEMIC CERTIFICATE: 6204  
**FINE & PERFORMING ARTS  
PRINCIPLES**  
16-18 credits

**DESCRIPTION:** The Academic Certificate in Fine & Performing Arts Principles is not designed to prepare students for employment in specific occupations. The Academic Certificate in Fine & Performing Arts Principles is designed to provide students with an opportunity to examine components of various artistic principles which, in turn, will enhance students' individual artistic endeavors in the Fine & Performing Arts (theatre, creative writing, visual arts, music, dance, and cinema).

**PROGRAM NOTES:** Students must earn a grade of "C" or better in each course in the Academic Core and the Academic Specialization areas. "+" indicates prerequisite. "++" indicates any module. Courses used to complete requirements for one Fine & Performing Arts Academic Certificate may not be used to fulfill requirements for another Fine & Performing Arts Academic Certificate.

**PROGRAM PREREQUISITE:** Successful completion of Fine & Performing Arts Basics Academic Certificate and the Aesthetics Fundamentals Academic Certificate.

**ACADEMIC CORE:** Credits: 9  
Students must complete a total of 9 credits from the following list of courses (no more than 3 credits from a single discipline as indicated by prefix).

**Visual Arts Discipline:**

- ARH 101 Prehistoric Through Gothic Art (3) OR
- ARH 102 Renaissance Through Contemporary Art (3) OR
- ART 165 Watercolor Painting I (3) OR
- ART 167 Painting I (3) OR

**Dance Discipline:**

- DAN 264 Dance Choreography I (3) OR

**Creative Writing Discipline:**

- ENG 205 Nature of Poetry (3) OR

**Humanities Discipline:**

- + HUM 251 Ideas and Values in the Humanities (3) OR  
(Note: ENG101 required as prerequisite to HUM251.)

**Music Discipline:**

- MHL 140 Survey of Music History (3) OR

**Theatre Discipline:**

- THE 211 Creative Drama (3) OR

**ACADEMIC SPECIALIZATION:** Credits: 6  
Students must select 6 credits from the following list of Academic Specialization courses with a minimum of 3 credits from the listed COM, GBS, MGT or MKT prefixes. (Note: Consult with program director or designee for other related course options.)

- ARH 109 History of American Art 3
- + ARH 115 History of Photography 3
- ARH 201 Art of Asia 3

- ARH 217 Mexican Art History 3
- ART 100 Introduction to Computer Graphic Art 1
- ART/ADA 115 Three-Dimensional Design 3
- ART 116 Life Drawing I 3
- ART 131 Introduction to Photography 3
- ART 261 Ceramics III 3
- COM 110 Interpersonal Communication 3
- + COM 225 Public Speaking 3
- + COM 241 Performance of Literature 3
- + DAH 201 World Dance Perspectives 3
- + DAN 134 Ballet II 1
- + DAN 135 Modern Dance II 1
- + DAN 136 Modern Jazz Dance II 1
- + DAN 231 Ballet III 1
- + DAN 232 Modern Dance III 1
- + DAN 233 Modern Jazz Dance III 1
- + DAN 265 Dance Choreography II 3
- + ENG 200 Reading and Writing About Literature 3
- + ENG 211 Screenwriting 3
- + ENG 213 Introduction to the Study of Languages 3
- ENG 235 Magazine Article Writing 3
- ENG 260 Film Analysis 3
- ENH 204 Introduction to Contemporary Literature 3
- ENH 285 Contemporary Women Writers 3
- + ENH 289 Literature from Nobel Laureates 3
- GBS 151 Introduction to Business 3
- HUM 110 Folklore of the Southwest 3
- HUM 209 Women and Films 3
- HUM 211AA Foreign Films: Classics 3
- HUM 211AB Foreign Films: Japanese 3
- HUM 211AD Foreign Film: Third World 3
- HUM 212 Documentary Film 3
- HUM 213 Hispanic Film 3
- HUM 260 Intercultural Perspectives 3
- HUM 261 Asian Ideas and Values 3
- MGT 253 Owning and Operating a Small Business 3
- MKT 271 Principles of Marketing 3
- MHL 143 Music in World Cultures 3
- MHL 145 American Jazz and Popular Music 3
- MHL 146 Survey of Broadway Musicals 3
- MHL 153 Rock Music and Culture 3
- + MTC 240 Composition 3
- MUC 109 Music Business: Merchandising & Law 3
- MUP 150 Community Chorus 1
- MUP 159 Community Orchestra 1
- MUP 160 Orchestra 2
- MUP 161 Community Band 1
- MUP 162 Band 2
- MUP 163 Jazz Ensemble 1
- MUP 181 Chamber Music Ensembles 1
- MUP 182 Chamber Singers 1
- PHI 101 Introduction to Philosophy 3
- THE 118 Playwriting 3

# INTERNATIONAL STUDIES ACADEMIC CERTIFICATE PROGRAMS

THP 115	Theatre Makeup (3) OR	
THP 201AA	Theatre Production I (1) AND	
THP 201AB	Theatre Production II (2)	
THP 213	Introduction to Technical Theatre	3
THP 243	Interpreters Theatre	3
THP 271	Voice and Diction	3

**RESTRICTED ELECTIVES:** Credits: 1-3  
Students may select and complete 1-3 credits from any of the following prefixes or, with prior approval from the program director or designee, 1-3 credits may be substituted from the Academic Specialization area.

BPC+++++	Any BPC course (1-3) OR
CIS+++++	Any CIS course (1-3) OR
CPD+++++	Any CPD course (1-3) OR
CWE+++++	Any CWE course (1-3) OR

ACADEMIC CERTIFICATE: 6210

## INTERNATIONAL STUDIES: ASIA 41 credits

**DESCRIPTION:** The Academic Certificate in International Studies: Asia is designed to provide 1) a foundation in general education courses relevant to international studies; 2) a specialization in international education for teaching faculty; 3) a foundation in Asian studies courses for people in government agencies or in local businesses and industries with international interests in Asia; and 4) a wide offering of Asian studies courses for more meaningful experiences for international travelers.

**PROGRAM PREREQUISITES:** Credits: 3  
+ ENG101 First Year Composition 3

**ACADEMIC CORE:** Credits: 15  
Note: Students must complete the following courses

**Humanities and Fine Arts:** Credits: 6  
**Humanities:**  
+ HUM250 Ideas and Values in the Humanities—  
to the Renaissance 3

**History/Philosophy/Religion:**  
HIS243 World Religions (3) OR  
PHI243 World Religions (3) OR  
REL243 World Religions (3) 3

**Social & Behavioral Sciences:** Credits: 9

**Anthropology:**  
ASB102 Intro. to Cultural and Social Anthropology 3

**Geography:**  
GCU121 World Regional Geography Eastern Hemisphere 3  
GCU122 World Regional Geography Western Hemisphere 3

**ACADEMIC SPECIALIZATION:** Credits: 20  
Note: Students must select and complete a total of 20 credits from the following list of courses with no more than 6 credits from a single discipline as indicated by prefix. Students may select a maximum of 10 language credits from either CHI or a maximum of 10 language credits from JPN.

**Anthropology:**  
ASB222 Buried Cities and Lost Tribes: Old World (3)

**Art History:**  
ARH118 Introduction to Chinese Art (3)  
ARH201 Art of Asia (3)

**Chinese:**  
Note: Students may select a maximum of 10 credits from the following CHI courses listed.

CHI credits may not be combined with JPN credits.)  
CHI101 Elementary Chinese (Mandarin) I (5)  
+ CHI102 Elementary Chinese (Mandarin) II (5)  
+ CHI201 Intermediate Chinese I (5)  
+ CHI202 Intermediate Chinese II (5)

**History:**  
HIS113 History of Eastern Civilizations to 1850 (3)  
HIS114 History of Eastern Civilizations 1850 to Present (3)  
HIS271 History of the Far East to 1900 (3)  
HIS272 History of the Far East 1900 to Present (3)  
HIS273 US Experience in Viet Nam (3)

**Humanities:**  
HUM211AA Foreign Films: Classics (3)  
HUM211AB Foreign Films: Japanese (3)  
HUM261 Asian Ideas and Values (3)

**Japanese:**  
Note: Students may select a maximum of 10 credits from the following JPN courses.

JPN credits may not be combined with CHI credits.)  
JPN101 Elementary Japanese I (5)  
+ JPN102 Elementary Japanese II (5)  
+ JPN201 Intermediate Japanese I (5)  
+ JPN202 Intermediate Japanese II (5)

**Philosophy:**  
PHI245 Introduction to Eastern Philosophy (3)

**Religion:**  
REL202 Classics of Asian Religions (3)

**RESTRICTED ELECTIVES:** Credits: 6  
Note: Students must select and complete 6 credits from any of the following prefixes or, with prior approval from the program director or designee, 6 credits may be substituted from the Academic Specialization area.

**Anthropology**  
ASB211 Women in Other Cultures (3)  
ASB214 Magic, Witchcraft, and Healing:  
An Introduction to Comparative Religion (3)  
ASB276 Nature of Language (3)  
ASM104 Introduction to Biological Anthropology (4)



# INTERNATIONAL STUDIES ACADEMIC CERTIFICATE PROGRAMS

- Art History:**  
 ARH101 Pre-historic through Gothic Art (3)  
 ARH102 Renaissance through Contemporary Art (3)
- Communication:**  
 COM263 Intercultural Communication (3)
- Economics:**  
 ECN212 The World Economy (3)  
 ECN250 World Economic Systems (3)
- English Humanities:**  
 ENH201 World Literature through the Renaissance (3)  
 ENH202 World Literature after the Renaissance (3)
- Geography:**  
 GCU102 Introduction to Human Geography (3)  
 GPH111 Introduction to Physical Geography (4)
- History:**  
 HIS110 World History to 1500 (3)  
 HIS111 World History 1500 to the Present (3)
- Humanities:**  
 HUM205 Introduction to Cinema (3)  
 HUM211AD Foreign Films: Third World (3)  
 + HUM251 Ideas and Values in the Humanities—Renaissance to the Modern Era (3)
- Music Humanities & Literature:**  
 MHL143 Music in World Cultures (3)
- Philosophy:**  
 PHI104 World Philosophy (3)
- Political Science:**  
 POS120 World Politics (3)  
 POS125 Issues in World Politics (3)  
 POS140 Comparative Government (3)  
 POS180 United Nations Studies (3)
- Psychology:**  
 PSY132 Psychology and Culture (3)
- Sociology:**  
 SOC101 Introduction to Sociology (3)  
 + SOC250 Comparative Human Institutions (3)

ACADEMIC CERTIFICATE: 6211  
**INTERNATIONAL STUDIES:  
 LATIN AMERICA**  
 41 credits

**DESCRIPTION:** The Academic Certificate in International Studies: Latin America is designed to provide 1) a foundation in general education courses relevant to international studies; 2) a specialization in international education for teaching faculty; 3) a foundation in Latin American studies courses for people in government agencies or in local businesses and industries with international interests in Latin America; and 4) a wide offering of Latin American studies courses for more meaningful experiences for international travelers.

**PROGRAM PREREQUISITES:** Credits: 3  
 + ENG101 First Year Composition 3

**ACADEMIC CORE:** Credits: 15  
 Note: Students must complete the following courses

**Humanities and Fine Arts:** Credits: 6

**Humanities:**  
 + HUM250 Ideas and Values in the Humanities— to the Renaissance 3

**History/Philosophy/Religion:**  
 HIS243 World Religions (3) OR  
 PHI243 World Religions (3) OR  
 REL243 World Religions (3) 3

**Social & Behavioral Sciences:** Credits: 9

**Anthropology:**  
 ASB102 Intro. to Cultural and Social Anthropology 3

**Geography:**  
 GCU121 World Regional Geography Eastern Hemisphere 3  
 GCU122 World Regional Geography Western Hemisphere 3

**ACADEMIC SPECIALIZATION:** Credits: 20  
 Note: Students must select and complete a total of 20 credits from the following list of courses with no more than 6 credits from a single discipline as indicated by prefix. Students may select a maximum of 10 language credits from either POR or a maximum of 10 language credits from SPA.

**Anthropology:**  
 ASB 223 Buried Cities and Lost Tribes: New World (3)

**Art History:**  
 ARH 216 Pre-Columbian Art (3)  
 ARH 217 Mexican Art History (3)

**History:**  
 HIS 145 History of Mexico (3)  
 HIS 241 Latin American Civilization in Colonial Period (3)  
 HIS 242 Latin American Civ. in Post-Colonial Period (3)

**Humanities:**  
 HUM211AA Foreign Films: Classics (3)  
 HUM213 Hispanic Film (3)  
 HUM281 Hispanic Ideas and Values (3)

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

## Portuguese:

Note: Students may select a maximum of 10 credits from the following POR courses listed. POR credits cannot be combined with SPA credits.

POR101	Elementary Portuguese I (5)
POR102	Elementary Portuguese II (5)
POR201	Intermediate Portuguese I (5)
POR202	Intermediate Portuguese II (5)

## Sociology:

SOC243	Sociology of Contemporary Mexican Society (3)
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## Spanish:

Note: Students may select a maximum of 10 credits from the following SPA courses listed. SPA credits cannot be combined with POR credits.

SPA101	Elementary Spanish I (4)
+ SPA102	Elementary Spanish II (4)
+ SPA201	Intermediate Spanish I (4)
+ SPA202	Intermediate Spanish II (4)

## Spanish Humanities:

SPH150	Peninsular Spanish Literature in Translation (3)
SPH151	Latin American Literature in Translation (3)

## RESTRICTED ELECTIVES:

Credits: 6

Note: Students must select and complete 6 credits from any of the following prefixes or, with prior approval from the program director or designee, 6 credits may be substituted from the Academic Specialization area.

## Anthropology:

ASB211	Women in Other Cultures (3)
ASB214	Magic, Witchcraft, and Healing: An Intro. to Comparative Religion (3)
ASB276	Nature of Language (3)
ASM104	Introduction to Biological Anthropology (4)

## Art History:

ARH101	Prehistoric through Gothic Art (3)
ARH102	Renaissance through Contemporary Art (3)

## Communication:

COM263	Intercultural Communication (3)
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## Economics:

ECN212	The World Economy (3)
ECN250	World Economic Systems (3)

## English Humanities:

ENH201	World Literature through the Renaissance (3)
ENH202	World Literature after the Renaissance (3)

## Geography:

GCU102	Introduction to Human Geography (3)
GPH111	Introduction to Physical Geography (4)

## History:

HIS110	World History to 1500 (3)
HIS111	World History 1500 to the Present (3)

## Humanities:

HUM205	Introduction to Cinema (3)
HUM251	Ideas and Values in the Humanities— Renaissance to the Modern era (3)

## Music Humanities & Literature:

MHL143	Music in World Cultures (3)
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## Philosophy:

PHI104	World Philosophy (3)
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## Political Science:

POS120	World Politics (3)
POS125	Issues in World Politics (3)
POS140	Comparative Government (3)
POS180	United Nations Studies (3)

## Psychology:

PSY132	Psychology and Culture (3)
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## Religion:

REL201	Classics of Western Religions (3)
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## Sociology:

SOC101	Introduction to Sociology (3)
+ SOC250	Comparative Human Institutions (3)

## ACCOUNTING

CERTIFICATE OF COMPLETION: 5156

### ACCOUNTING SPECIALIZED PARA-PROFESSIONAL PROGRAM 35-37 credits

**DESCRIPTION:** program prepares the student for entry into the accounting field as an accounting clerk, or a junior accountant who performs a variety of routine calculating and verification tasks; summarizes and posts data in designated books; performs a variety of other duties such as making invoices or monthly statements, preparing payrolls, verifying bank accounts, keeping record files, making periodic reports of business activities, and listing and checking details as instructed. He or she may devise, install and supervise the operation of general accounting, budget, and cost systems either manually or by computer. Computer application skills are important.

**PROGRAM NOTES:** Students must earn a grade of "C" or better in each course in the Required Courses area. "+" indicates prerequisite. "++" indicates any module.

## REQUIRED COURSES:

Credits: 35-37

ACC 111	Accounting Principles I	3
+ ACC 112	Accounting Principles II	3
+ ACC 115	Computerized Accounting	2
+ ACC 212	Managerial Accounting	3
+ ACC 219	Intermediate Accounting I	3
+ ACC 221	Tax Accounting	3
+ ACC 222	Payroll Accounting	3

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

BPC 117DM	Microsoft Access: DB Management (3) OR	
BPC 117AM	DB Mgt: Microsoft Access Level I (1) AND	
BPC 117BM	DB Mgt: Microsoft Access Level II (1) AND	
BPC 117CM	DB Mgt: Microsoft Access Level III (1)	3
BPC 110	Computer Usage and Applications (3) OR	
CIS 105	Survey of Comp. Information Systems (3)	3
GBS 151	Introduction to Business	3
+ GBS 233	Business Communication	3
+ MAT 120	Intermediate Algebra (5) OR	
+ MAT 122	Intermediate Algebra (3) OR	
	Satisfactory completion of a higher level math course.	3-5

CERTIFICATE OF COMPLETION: 5175

## MICROCOMPUTER ACCOUNTING

35-37 credits

**DESCRIPTION:** The Certificate of Completion in Microcomputer Accounting will provide graduates with a background in accounting and microcomputer-oriented data processing courses. The program will train people for accounting occupations requiring sophisticated use of the microcomputer as a tool.

**PROGRAM NOTES:** Students must earn a grade of "C" or better in each course in the Required Courses area. "+" indicates prerequisite. "++" indicates any module.

**REQUIRED COURSES:** Credits: 35-37

ACC 111	Accounting Principles I	3
+ ACC 112	Accounting Principles II	3
+ ACC 115	Computerized Accounting	2
+ ACC 212	Managerial Accounting	3
+ ACC 222	Payroll Accounting	3
BPC 117++	Micro-Database Management (any module)	3
BPC 110	Computer Usage and Applications (3) OR	
CIS 105	Survey of Computer Information Systems (3)	3
CIS 133DA	Internet/Web Development Level I	3
+ CIS 159	Visual Basic Programming I (3) OR	
+ CIS 162AC	Visual C++: Level I (3) OR	
+ CIS 163AA	Java Programming: Level I (3)	3
GBS 151	Introduction to Business	3
+ GBS 233	Business Communication	3
+ MAT 120	Intermediate Algebra (5) OR	
+ MAT 122	Intermediate Algebra (3) OR	
	Satisfactory completion of a higher level math course.	3-5

## ADMINISTRATION OF JUSTICE

ASSOCIATE OF APPLIED SCIENCE: 3057  
ADMINISTRATION OF JUSTICE  
64-69 credits

**DESCRIPTION:** The Administration of Justice curriculum is interdisciplinary in nature and provides the student, including practitioners, with a broad based knowledge of the criminal justice field. It prepares the student/practitioner for Administration of Justice careers in, but not limited to: law enforcement, security, evidence technology, adult and juvenile corrections/detentions, probation/parole, victim advocacy and social services/community based agencies/organizations.

**PROGRAM NOTES:** "++" indicates any module.

**ADMISSION CRITERIA:** None

**PROGRAM PREREQUISITES:** None

**REQUIRED COURSES:** Credits: 30

Students must earn a grade of "C" or better in each course in the Required Courses area.

AJS101	Introduction to Criminal Justice	3
AJS109	Substantive Criminal Law	3
AJS200	Current Issues in Criminal Justice	3
AJS205	Criminal Justice Report Writing	3
AJS212	Juvenile Justice Procedures	3
AJS225	Criminology	3
AJS230	The Police Function	3
AJS240	The Correction Function	3
AJS258	Victimology and Crisis Management	3
AJS260	Procedural Criminal Law	3

**RESTRICTED ELECTIVES:** Credits: 9-12

AJS++++	Any AJS prefix courses not listed under Required Courses area	6
HES201	Substance Abuse and Behavior	3
CWE198++	Any CWE Career/Work Experience (any suffixed course)	1-3

**GENERAL EDUCATION REQUIREMENTS:** Credits: 25-27

**CORE:** Credits: 15-17

First-Year Composition	6
Any approved General Education course in the First-Year Composition Area	
Oral Communication	3
Any approved General Education course in the Oral Communication Area	
Critical Reading	3
Any approved General Education course in the Critical Reading Area or equivalent as indicated by assessment	

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

Mathematics	3-5
Any approved General Education course from the Mathematics Area or equivalent as indicated by assessment	
DISTRIBUTION: Credits: 10	
Humanities and Fine Arts	3
Any approved General Education course in the Humanities and Fine Arts Area except AJS123 if taken as a Restricted Elective	
Social and Behavioral Sciences	3
PSY101	Introduction to Psychology (3) OR
SOC101	Introduction to Sociology (3) OR
SOC140	Racial & Ethnic Minorities (3)
Natural Sciences	4
Any approved General Education course from the Natural Sciences Area	

BPC117AM	DBase Mgt: Microsoft Access Level I (1) AND	
+ BPC117BM	DBase Mgt: MS Access Level II (1) AND	
+ BPC117CM	DBase Mgt: MS Access Level III (1) OR	
+ BPC117DM	Microsoft Access: DBase Management (3)	3
+ BPC118AB	Powerpoint: Level I (1) AND	-
+ BPC118BB	Powerpoint: Level II (1) AND	-
+ BPC118CB	Powerpoint: Level III (1) OR	-
+ BPC118DB	Desktop Presentation: Powerpoint (3)	3
+ BPC135DK	Word: Level I	2
+ BPC235DK	Word: Level II	2
GBS131	Business Calculations	3
GBS233	Business Communication	3
OAS101	Computer Type I: Keyboarding/Format	3
+ OAS102	Computer Type II: Document Production	3
OAS108	Business English	3
OAS125	Introduction to the Professional Office	3

## ADMINISTRATIVE OFFICE PROFESSIONAL

DESCRIPTION: The Associate in Applied Science in Administrative Office Professional, a two-year career program, is designed to prepare students for positions as administrative assistants and executive secretaries.

Students who have completed courses in the skill areas prior to enrollment in the program may begin at a more advanced level in typing and word processing may substitute business electives after consulting with an advisor in the Administrative Office Professional.

Students currently employed should consult with an advisor about the advantages of Cooperative Education work programs.

The Certificate of Completion in Administrative Office Professional is composed of three semesters of course work, with emphasis on microcomputer operations using a variety of applications, and learning to function as a professional in the office of today.

CERTIFICATE OF COMPLETION: 5234

## ADMINISTRATIVE OFFICE PROFESSIONAL 40-42 CREDITS

DESCRIPTION: The Certificate of Completion in Administrative Office Professional is composed of three semesters of course work, with emphasis on computer and functioning as an administrative office professional.

PROGRAM NOTES: Students must earn a grade of "C" or better in each course in the Required Courses area. "+" indicates prerequisite. "++" indicates any module. Overall GPA requirement: 2.0

REQUIRED COURSES: Credits: 32	
BPC114AE	Excel: Level I (1) AND
+ BPC114BE	Excel: Level II (1) AND
+ BPC114CE	Excel: Level III (1) OR
+ BPC114DE	Excel Spreadsheet (3)
	3

RESTRICTED ELECTIVES: Credits: 8  
Select a minimum of 8 credits from the following courses in consultation with a department advisor.

ACC107	Bookkeeping Theory and Practice (4) OR	
ACC111	Accounting Principles I (3)	3-4
BPC110	Computer Usage and Applications (3) OR	
CIS105	Survey of Computer Info. Systems (3)	3
BPC125	Microcomputer Setup and Maintenance	1
BPC/CIS133AA	Internet/Web Development Level I (1) AND	
+ BPC/CIS133BA	Internet/Web Development Level II (1) AND	
+ BPC/CIS133CA	Internet/Web Development Level III (1) OR	
+ BPC/CIS133DA	Internet/Web Development Level I (3)	3
CIS109AM	Networking Technology I (2) OR	
CIS190	Introduction to Local Area Networks (3)	2-3
+ CIS233++	Internet/Web (any module) (1) OR	
+ CIS233DA	Internet/Web Development Level II (3)	1-3
GBS151	Introduction to Business	3
IBS101	Introduction to International Business	3
MGT175	Business Organization and Management	3
MGT251	Human Relations in Business	3
+ OAS118	10-key By Touch	1
+ OAS201	Typing III: Adv. Document Production	3
OAS296++	Cooperative Education (1-3) OR	
CWE198++	Career/Work Experience (1-3)	1-3

ASSOCIATE IN APPLIED SCIENCE: 3238

## ADMINISTRATIVE OFFICE PROFESSIONAL 61-64 CREDITS

DESCRIPTION: The Associate in Applied Science in Administrative Office Professional, a two-year career program, is designed to prepare students for positions as administrative assistants and executive secretaries. Students who have completed courses in the skill areas prior to enrollment in the program may begin at a more advanced

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

level and may substitute credit hours from restricted electives after consulting with an advisor. Students currently employed should consult with an advisor about the advantages of Cooperative Education work programs.

**PROGRAM NOTES:** Students must earn a grade of "C" or better in each course in the Required Courses area. "+" indicates prerequisite. "++" indicates any module.

**REQUIRED COURSES:** Credits: 29

CIS121AE	Windows Operating System: Level I	1
BPC114AE	Excel: Level I (1) AND	
+ BPC114BE	Excel: Level II (1) AND	
+ BPC114CE	Excel: Level III (1) OR	
+ BPC114DE	Excel Spreadsheet (3)	3
BPC117AM	DBase Mgt: Microsoft Access Level I (1) AND	
+ BPC117BM	DBase Mgt: Microsoft Access Level II (1) AND	
+ BPC117CM	DBase Mgt: MS Access Level III (1) OR	
+ BPC117DM	Microsoft Access: DBase Mgt: (3)	3
+ BPC118AB	Powerpoint: Level I (1) AND	
+ BPC118BB	Powerpoint: Level II (1) AND	
+ BPC118CB	Powerpoint: Level III (1) OR	
+ BPC118DB	Desktop Presentation: Powerpoint (3)	3
+ BPC135DK	Word: Level I	2
+ BPC235DK	Word: Level II	2
GBS233	Business Communication	3
OAS101	Computer Type I: Keyboarding/Format	3
+ OAS102	Computer Type II: Document Production	3
OAS108	Business English	3
OAS125	Introduction to the Professional Office	3

**RESTRICTED ELECTIVES:** Credits: 8

ACC107	Bookkeeping Theory and Practice (4) OR	
ACC111	Accounting Principles I (3)	3-4
BPC110	Computer Usage and Applications (3) OR	
CIS105	Survey of Computer Info. Systems (3)	3
BPC125	Microcomputer Setup and Maintenance	1
BPC/CIS133AA	Internet/Web Development Level I (1) AND	
+ BPC/CIS133BA	Internet/Web Development Level II (1) AND	
+ BPC/CIS133CA	Internet/Web Development Level III (1) OR	
+ BPC/CIS133DA	Internet/Web Development Level I (3)	3
CIS109AM	Networking Technology I (2) OR	
CIS190	Introduction to Local Area Networks (3)	2-3
+ CIS233++	Internet/Web (any module) (1) OR	
+ CIS233DA	Internet/Web Development Level II (3)	1-3
GBS151	Introduction to Business	3
IBS101	Introduction to International Business	3
MGT175	Business Organization and Management	3
MGT251	Human Relations in Business	3
+ OAS118	10-key By Touch	1
+ OAS201	Typing III: Advanced Document Production	3

OAS296++	Cooperative Education (1-3) OR	
CWE198++	Career/Work Experience (1-3)	1-3

**GENERAL EDUCATION REQUIREMENTS** Credits: 24-27

**CORE:** Credits: 15-17

First Year Composition	6
+ Any approved general education course in the First-Year Composition area.	
Oral Communication	3
+ Any approved general education course in the Oral Communication area.	
Critical Reading	3
+ Any approved general education course in the Critical Reading area.	
Mathematics	3-5
+ Any approved general education course in the Mathematics area.	
<b>DISTRIBUTION:</b>	Credits: 9-10
Humanities & Fine Arts	2-3
Any approved general education course in the Humanities & Fine Arts area.	
Social & Behavioral Sciences	3
Any approved general education course in the Social & Behavioral Sciences area. (recommend PSY101)	
Natural Sciences	4
Any approved general education course in Natural Sciences area.	

CERTIFICATE OF COMPLETION: 5236

## CUSTOMER SERVICE / INFORMATION PROFESSIONAL

35-37 CREDITS

**DESCRIPTION:** This program provides a sound background in computer applications as well as customer service. The program will prepare students for front-line employment in fields such as customer service representative, account specialist or information analyst.

**PROGRAM NOTES:** Students must earn a grade of "C" or better in each course in the Required Courses area. "+" indicates prerequisite. "++" indicates any module.

**REQUIRED COURSES:** Credits: 28

+ BPC114AE	Excel: Level I (1) AND	
+ BPC114BE	Excel: Level II (1) AND	
+ BPC114CE	Excel: Level III (1) OR	
+ BPC114DE	Excel Spreadsheet (3)	3
BPC117AM	DB Managemt: MS Access-Level I (1) AND	
+ BPC117BM	DB Managemt: MS Access-Level II (1) AND	
+ BPC117CM	DB Managemt: MS Access - Level III (1) OR	
+ BPC117DM	Microsoft Access: Database Management (3)	3
+ BPC118AB	Powerpoint: Level I	1
+ BPC135DK	Word: Level I	2
CIS121AE	Windows Operating System: Level I	1

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

GBS131	Business Calculations	3
GBS233	Business Communication	3
MGT126	Customer Service Skills and Strategies	3
MGT251	Human Relations in Business	3
OAS101	Computer Type I: Keyboarding/Format	3
OAS108	Business English	3
RESTRICTED ELECTIVES: Credits: 7		
ACC107	Bookkeeping Theory and Practice (4) OR	
ACC111	Accounting Principles I (3)	3-4
BPC101AA	Intro to Microcomputers I: IBM	1
+ BPC101BA	Intro to Microcomputers II: IBM	1
+ BPC101CA	Intro to Microcomputers III: IBM	1
BPC110	Computer Usage & Applications (3) OR	
CIS105	Survey of Computer Info. Systems (3)	3
+ BPC125	Microcomputer Setup & Maintenance	1
BPC133AA	Internet/Web Developmt Level I (1) AND	
+ BPC133BA	Internet/Web Developmt Level II (1) AND	
+ BPC133CA	Internet/Web Developmt Level III (1) OR	
+ BPC133DA	Internet/Web Development Level I (3)	3
+ BPC217AM	Advanced MS Access: Database Mgt	3
CIS109AM	Networking Technology I (2) OR	
CIS190	Introduction to Local Area Networks (3)	2-3
+ CIS233++	Internet/Web Dev/Publishing (Note: any module) (1) OR	
+ CIS233DA	Internet/Web Development Level II (3)	1-3
GBS151	Introduction to Business	3
IBS101	Introduction to International Business	3
MGT175	Business Organization and Management	3
MGT229	Management and Leadership I	3
MKT101	Introduction to Public Relations	3
MKT271	Principles of Marketing	3
+ OAS118	10-key By Touch	1
OAS296++	Coop. Education ( any module) (1-3) OR	
CWE198++	Career/Work Exp. (any module) (1-3)	1-3

CERTIFICATE OF COMPLETION: 5222  
**MICROSOFT OFFICE SPECIALIST**  
 23 CREDITS

DESCRIPTION: The Microsoft Office Specialist certificate program seeks to prepare individuals to assume productive positions in the dramatically expanding field of office computer support. Integrated concepts of modern office systems are included in the program.

PROGRAM NOTES: Students must earn a grade of "C" or better in each course in the Required Courses area. "+" indicates prerequisite.

REQUIRED COURSES:		Credits: 17
BPC/CIS121AE	Windows Operating System: Level I	1
BPC114AE	Excel: Level I (1) AND	
+ BPC114BE	Excel: Level II (1) AND	
+ BPC114CE	Excel: Level III (1) OR	
BPC114DE	Excel Spreadsheet (3)	3
BPC117AM	DBase Mgt: Microsoft Access Level I (1) AND	
+ BPC117BM	DBase Mgt: Microsoft Access Level II (1)AND	
+ BPC117CM	DBase Mgt: Microsoft Access Level III (1) OR	
BPC117DM	Microsoft Access: Database Management (3)	3
+ BPC118AB	Powerpoint: Level I (1) AND	
+ BPC118BB	Powerpoint: Level II (1) AND	-
+ BPC118CB	Powerpoint: Level III (1) OR	-
BPC118DB	Desktop Presentation: Powerpoint (3)	3
+ BPC135DK	Word: Level I	2
+ BPC235DK	Word: Level II	2
OAS101	Computer Type I: Keyboarding/Format	3

RESTRICTED ELECTIVES:		Credits: 6
Select a minimum of 6 credits from the following:		
BPC101AA	Intro to Microcomputers I: IBM	1
BPC101BA	Intro to Microcomputers II: IBM	1
BPC101CA	Intro to Microcomputers III: IBM	1
BPC106AH	MS Outlook: Level I	0.5
BPC106BH	MS Outlook: Level II	0.5
BPC110	Computer Usage and Applications (3) OR	
CIS105	Survey of Computer Information Systems (3)	3
+ BPC217AM	Adv. Microsoft Access: DBase Management	3
BPC224	Project Management MS Project/Windows	3
+ OAS102	Computer Type II: Document Production	3
+ OAS201	Computer Type III: Adv. Doc. Production	3
OAS296++	Cooperative Education (1-3) OR	
CWE198++	Career/Work Experience (1-3)	1-3

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

## AUDIO PRODUCTION TECHNOLOGIES

CERTIFICATE OF COMPLETION: 5334

### AUDIO PRODUCTION TECHNOLOGIES

37-38 CREDITS

**DESCRIPTION:** The CCL (Certification of Completion) in Audio Production Technologies certificate and degree program offers students an opportunity to receive training on industry-standard equipment by instructors with real-world experience and professional resumes. Students learn the concepts and theory associated with recording arts technologies while applying them in lab settings appropriate to their skill levels. Students completing the Audio Production program will gain the knowledge base, competency, and confidence they need to enter the commercial music marketplace.

**PROGRAM REQUIREMENTS:** Note: + indicates course has prerequisites and/or corequisites. Note: Students must earn a grade of "C" or better in all courses within the program.

**PROGRAM PREREQUISITES:** None

**REQUIRED COURSES:** Credits: 37-38

MTC101	Introduction to Music Theory (3) OR	
MTC103	Introduction to Aural Perception (2)	2-3
MTC180	Computer Literacy for Musicians (3) OR	
+ MUC295	Studio Music Recording III (3)	3
MTC191	Electronic Music I	3
+ MTC192	Electronic Music II	3
MUC109	Music Business: Merchandising and the Law	3
MUC110	Music Business: Recording and Mass Media	3
+ MUC111	Digital Audio Workstation I (DAW I)	3
+ MUC112	Digital Audio Workstation II (DAW II)	3
MUC195	Studio Music Recording I	3
+ MUC196	Studio Music Recording II	3
MUC197	Live Sound Reinforcement I	3
+ MUC198	Live Sound Reinforcement II	3
+ MUC297AB	Music Internship	2

ASSOCIATE OF APPLIED SCIENCE: 3024

### AUDIO PRODUCTION TECHNOLOGIES

65 CREDITS

**DESCRIPTION:** The AAS (Associate in Applied Science) in Audio Production Technologies certificate and degree program offers students an opportunity to receive training on industry-standard equipment by instructors with real-world experience and professional resumes. Students learn the concepts and theory associated with recording arts technologies while applying them in lab settings appropriate to their skill levels. Students completing the degree in Audio Production Technologies will gain the knowledge base, competency, and confidence they need to enter the commercial music marketplace.

**PROGRAM REQUIREMENTS:** Note: + indicates course has prerequisites and/or corequisites. Note: Students must earn a grade of "C" or better in all courses within the program.

**REQUIRED COURSES:** Credits: 37-38

MTC101	Introduction to Music Theory (3) OR	
MTC103	Introduction to Aural Perception (2)	2-3
MTC180	Computer Literacy for Musicians (3) OR	
+ MUC295	Studio Music Recording III (3)	3
MTC191	Electronic Music I	3
+ MTC192	Electronic Music II	3
MUC109	Music Business: Merchandising and the Law	3
MUC110	Music Business: Recording and Mass Media	3
+ MUC111	Digital Audio Workstation I (DAW I)	3
+ MUC112	Digital Audio Workstation II (DAW II)	3
MUC195	Studio Music Recording I	3
+ MUC196	Studio Music Recording II	3
MUC197	Live Sound Reinforcement I	3
+ MUC198	Live Sound Reinforcement II	3
+ MUC297AB	Music Internship	2

**GENERAL EDUCATION REQUIREMENTS:** Credits: 28

**CORE** Credits: 15

First-Year Composition 6

Any approved general education course in the First Year Composition Area

Oral Communication 3

Any approved general education course in the Oral Communication Area

Critical Reading 3

+ CRE101 Critical and Evaluative Reading I (3) OR  
(Note: Equivalent as indicated by assessment)

Mathematics 3

Any approved general education course in Mathematics Area

**DISTRIBUTION** Credits: 13

Humanities & Fine Arts 6

Any approved general education course in the Humanities and Fine Arts Area

(Note: (MHL140 or MHL145 or MHL153 recommended)

Social and Behavioral Sciences 3

Any approved general education course in the Social and Behavioral Sciences Area

Natural Sciences 4

Any approved general education course in the Natural Sciences Area

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

## COMPUTER INFORMATION SYSTEMS

**PROGRAM:** Associate in Applied Science (AAS) in Computer Information Systems. Certificates of Completion are also offered in: Computer Information Systems, Computer Networking Technology and Computer Systems Maintenance.

**JOB DESCRIPTIONS:** This degree can lead to a promising career as a systems analyst, network engineer, database administrator, computer consultant, programmer, or systems administrator. Industry, government, not-for-profit organizations, and consulting firms hire graduates for these computer fields.

**JOB OPPORTUNITIES:** Information technology jobs are on the increase. Businesses are in need of qualified staff to support and use computer systems. The average annual salary of graduates with a four year degree responding to a recent survey was \$43,353. Some of the corporations employing graduates are Microage, Dept. of Economic Security, American Express, Intel, Honeywell Inc., and Motorola.

CERTIFICATE OF COMPLETION: 5865

### COMPUTER INFORMATION SYSTEMS

23 CREDITS

**DESCRIPTION:** This certificate is designed to prepare students for various entry-level positions in computer systems. Career opportunities include Network Administrator, Computer Programmer, Computer Operator, Web Publisher, Help Desk Technician, Database Administrator and Systems Analyst.

**PROGRAM NOTES:** Students must earn a grade of "C" or better in all Required Courses. "+" indicates prerequisite. "++" indicates any module.

**PROGRAM PREREQUISITES:** Credits: 3

- + ENG 101 First Year Composition (3) OR
- + ENG107 First Year Composition for ESL (3) OR  
Permission of Division

**REQUIRED COURSES:** Credits: 23

- |              |  |   |
|--------------|--|---|
| ACC111       | Accounting Principles I                    | 3 |
| BPC125       | Microcomp. Set Up & Maintenance            | 1 |
| BPC/CIS117DM | Microsoft Access: DB Management            | 3 |
| BPC/CIS121AE | Windows Operating System: Level I          | 1 |
| BPC/CIS224   | Project Management MS Project for Windows  | 3 |
| CIS105       | Survey Computer Information Systems        | 3 |
| + CIS150     | Programming Fundamentals                   | 3 |
| + CIS 190    | Introduction to Local Area Networks (3) OR |   |
| MST 140      | Microsoft Networking Essentials (3)        | 3 |
| + GBS 233    | Business Communication                     | 3 |

ASSOCIATE IN APPLIED SCIENCE: 3786

## COMPUTER INFORMATION SYSTEMS

63-66 CREDITS

**DESCRIPTION:** The AAS Computer Information Systems degree program is designed to prepare students for various entry-level positions in computer systems. Career opportunities include Network Administrator, Computer Programmer, Computer Operator, Web Publisher, Help Desk Technician, Database Administrator, and Systems Analyst.

**REQUIRED COURSES:** Credits: 23

- |              |  |   |
|--------------|--|---|
| ACC111       | Accounting Principles I                    | 3 |
| BPC125       | Microcomputer Set Up and Maintenance       | 1 |
| BPC/CIS117DM | Microsoft Access: Database Mgt (3) OR      |   |
| BPC/CIS117AM | Database Mgt: MS Access Level I (1) AND    |   |
| BPC/CIS117AM | Database Mgt: MS Access Level II (1) AND   |   |
| BPC/CIS117AM | Database Mgt: MS Access Level III (1)      | 3 |
| BPC/CIS121AE | Windows Operating System: Level I          | 1 |
| CIS105       | Survey Computer Information Systems        | 3 |
| + CIS150     | Programming Fundamentals                   | 3 |
| + CIS190     | Introduction to Local Area Networks (3) OR |   |
| MST140       | Microsoft Networking Essentials (3)        | 3 |
| BPC/CIS224   | Project Management MS Project for Windows  | 3 |
| + GBS233     | Business Communication                     | 3 |

**RESTRICTED ELECTIVES:** Credits: 15-16

Students must choose one of the following specialized areas: Computer Systems Maintenance, Networking, Programming, Web Development, or Information Technology, and successfully complete all courses designated in that area.

**Computer Systems Maintenance:** Credits: 15

- |              |   |   |
|--------------|---|---|
| + BPC170     | Microcomputer Maintenance I                                     | 3 |
| CIS102       | Interpersonal & Customer Service Skills<br>for IT Professionals | 1 |
| CIS/BPC121AB | Microsoft Command Line Operations                               | 1 |
| CIS126AL     | Linux Operating System I  | 1 |
| + CIS270     | Essentials/Network & Information Security                       | 3 |
| MST150++     | Microsoft Windows Professional (any module)                     | 3 |
| CWE198AC     | Career/Work Experience (3) OR                                   |   |
| + CIS296WC   | Cooperative Education (3) OR                                    |   |
| + CIS298AC   | Special Projects (3)  |   |

**Computer Networking:** Credits: 16

- |            |   |   |
|------------|---|---|
| + MST150++ | Microsoft Windows Professional (any module) | 3 |
| + MST152++ | Microsoft Windows Server (any module)       | 4 |
| + MST155   | Implementing Windows Network Infrastructure | 3 |
| + CIS270   | Essentials/Network & Information Security   | 3 |

*Students must choose and successfully complete one of the following:* 3

- |          |  |  |
|----------|--|--|
| + CIS240 | Local Area Network Planning and Design (3) |  |
| + MST244 | Microsoft SQL Server Administration (3)    |  |



# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

- CWE198AC Career/Work Experience (3) OR  
 + CIS296WC Cooperative Education (3) OR  
 + CIS298AC Special Projects (3)

**Programming:** **Credits: 15**  
 + CIS225++ Business Systems Analysis and Design 3

*Students must choose and successfully complete one of the following course sequences to complete this specialized area:*

- + CIS151 Computer Game Development: Level I (3) AND  
 + CIS251 Computer Game Development: Level II (3) 6
- + CIS159 Visual Basic Programming I (3) AND  
 + CIS259 Visual Basic Programming II (3) 6
- + CIS162AC Visual C++: Level I (3) AND  
 + CIS262AC Visual C++: Level II (3) 6
- + CIS162AD C#: Level I (3) AND  
 + CIS262AD C#: Level II (3) 6
- + CIS163AA Java Programming I (3) AND  
 + CIS263AA Java Programming II (3) 6

**Web Development:** **Credits: 15**

- CIS/BPC120DF Microcomp Graphics: Adobe Photoshop (3) OR  
 CIS/BPC120AF Comp Graphics: Adobe Photoshop Lev I (1) AND  
 + CIS/BPC120BF Comp Graph: Adobe Photoshop Lev II (1) AND  
 + CIS/BPC120CF Comp Graph: Adobe Photoshop Lev III (1) 3
- CIS/BPC133DA Internet/Web Development Level I 3  
 + CIS233DA Internet/Web Development Level II 3  
 + CIS234 XML Application Development 3

*Students must choose and successfully complete one of the following courses to complete this specialized area:*

- CIS120DC Computer Graphics: Macromedia Flash (3) OR  
 + CIS235 e-Commerce (3) OR  
 + CIS166++ Web Scripting (any module) (3) OR  
 CWE198AC Career/Work Experience (3) OR  
 + CIS296WC Cooperative Education (3) OR  
 + CIS298AC Special Projects (3) 3

**Information Technology:** **Credits: 15**

*Students must complete a combination of 15 credits from any of the specialized areas listed above: Computer Systems Maintenance, Networking, Programming, and Web Design.*

GENERAL EDUCATION REQUIREMENTS: Credits: 25-27

CORE Credits: 15-17

- First-Year Composition  
 + ENG101 First-Year Composition (3) AND  
 + ENG102 First-Year Composition (3) OR  
 + ENG107 First-Year Composition for ESL (3) AND  
 + ENG108 First-Year Composition for ESL (3) 6

- Oral Communication 3  
 Any approved general education course from the Oral Communication area.

- Critical Reading  
 + CRE101 Critical and Evaluative Reading I (3) OR  
 + CRE111 Critical Reading for Business and Industry (3) 3

- Mathematics  
 + MAT120 Intermediate Algebra (5) OR  
 + MAT121 Intermediate Algebra (4) OR  
 + MAT122 Intermediate Algebra (3) OR 3-5  
*Satisfaction of a higher-level Mathematics course*

DISTRIBUTION Credits: 10

- Humanities and Fine Arts 3  
 Any approved general education course from the Humanities and Fine Arts area.

- Social and Behavioral Sciences  
 ECN111 Macroeconomic Principles (3) OR  
 ECN112 Microeconomic Principles (3) 3

- Natural Sciences 4  
 Any approved general education course from the Natural Sciences area.

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CERTIFICATE OF COMPLETION: 5869

## COMPUTER NETWORKING TECHNOLOGY

17 CREDITS

DESCRIPTION: This certificate will equip students with marketable skills associated with managing and maintaining computer networks. This certificate can help prepare students for the professional certification as a Microsoft Certified Product Specialist.

PROGRAM NOTES: Students must earn a grade of "C" or better in the program. "+" indicates course has prerequisite and/or coreq.

REQUIRED COURSES: Credits: 17

- CIS105 Survey of Computer Information Systems 3  
 CIS/BPC121AB Microsoft Command Line Operations 1  
 + CIS270 Essentials of Network and Information Security 3
- + CIS190 Introduction to Local Area Networks (3) OR  
 MST140 Microsoft Networking Essentials (3) 3
- MST150++ Microsoft Windows Professions (any module) 3  
 + MST152++ Microsoft Windows Professions (any module) 4

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

CERTIFICATE OF COMPLETION: 5867  
**COMPUTER SYSTEMS  
 MAINTENANCE**  
 16 CREDITS

DESCRIPTION: This certificate has been developed to train students to compete in the field of computer systems maintenance. It is designed to provide students with basic computer, diagnostic and customer relations skills essential for a successful computer service technician. This certificate can help prepare students for an industry-recognized professional A+ exam.

PROGRAM NOTES: Students must earn a grade of "C" or better in all Required Courses. "+" indicates prerequisite.

REQUIRED COURSES:	Credits: 16
+ BPC170 Computer Maintenance I: A+ Prep	3
CIS102 Interpersonal & Customer Service Skills for IT Professionals	1
CIS105 Survey of Computer Information Systems	3
CIS/BPC121AB MS-DOS Operating System	1
CIS126AL Linux Operating System	1
CIS/BPC121AE Windows Operating System: Level I	1
+ CIS190 Introduction to Local Area Networks (3) OR	
MST140 Microsoft Networking Essentials (3)	3
MST150++ Microsoft Windows Professional (any module)	3

CERTIFICATE OF COMPLETION: 5204  
**LINUX PROFESSIONAL**  
 12 CREDITS

DESCRIPTION: This program will help to prepare students for a variety of industry-recognized Linux certification exams as well as provide practical hands-on skills for the work place. The program includes a core of Linux classes including Linux operating system basics, System Administration, Network Administration and Network Security. These classes will ensure a student's knowledge and skill level in preparation for employment or for improving current professional skills. Objectives for a variety of industry certifications are encompassed within course and program objectives.

PROGRAM NOTES: Students must earn a grade of "C" or better for all courses required within the program. Note: +indicates course has prerequisites and/or corequisites

REQUIRED COURSES:	Credits: 6
CIS126DL Linux Operating System (3) OR	
CIS126AL Linux Operating System I (1) AND	
+ CIS126BL Linux Operating System II (1) AND	
+ CIS126CL Linux Operating System III (1)	3
+ CIS238DL Linux System Administration	3
RESTRICTED ELECTIVES:	Credits: 6
BPC/CIS121AB MS DOS Operating System	1
+ BPC170 Computer Maintenance I: A+ Prep	3
+ BPC273 Advanced Server Computer Maintenance: Server+ Prep	3

CIS105 Survey of Computer Information Systems	3
+ CIS190 Introduction to Local Area Networks	3
+ CIS240DL Linux Network Administration	3
+ CIS270 Essentials of Network & Information Security	3
+ CIS271DL Linux Security	3
CNT140 Cisco Networking Fundamentals (4) OR	
MST140 Microsoft Networking Essentials (3)	3-4
+ CNT150 Cisco Networking Router Technologies	3
MST150++ Microsoft Windows Professional	3

Note: Any module.

CERTIFICATE OF COMPLETION: 5159

**WEB DESIGN**  
 18 CREDITS

DESCRIPTION: The certificate in Web Design is intended for those interested in designing and maintaining web pages for personal or small business use.

PROGRAM NOTES: Students must earn a grade of "C" or better in each course in the Required Courses area. "+" indicates course has prerequisite(s) and/or corequisite(s).

REQUIRED COURSES:	Credits: 18
CIS 120DC Computer Graphics: Macromedia Flash	3
BPC/CIS120DF Comp. Graph: Adobe Photoshop (3) OR	
BPC/CIS120AF Comp. Graph: Adobe Photoshop I (1) AND	
BPC/CIS120BF Comp. Graph: Adobe Photoshop II (1) AND	
BPC/CIS120CF Comp. Graph: Adobe Photoshop III (1)	3
BPC/CIS133DA Internet/Web Development Level I	3
+ CIS166++ any module	3
+ CIS233DA Internet/Web Development Level II	3
+ CIS235 e-Commerce	3

CERTIFICATE OF COMPLETION: 5051

**WEB DEVELOPER**  
 30 CREDITS

DESCRIPTION: The Web Developer Certificate of Completion prepares a software developer to properly create and maintain web applications. In addition to web page development, this certificate prepares software developers to fully manage and develop corporate web systems using interactive applications. Developers will be able to write programs to manage corporate database via the web.

PROGRAM NOTES: Students must earn a grade of "C" or better in all Required Courses. "+" indicates prerequisite. "++" indicates any module.

REQUIRED COURSES:	Credits: 30
CIS 105 Survey Computer Info Systems	3
CIS/BPC 117DM Microsoft Access: Database Management	3
CIS 120DC Computer Graphics: Macromedia Flash	3
CIS/BPC 120DF Computer Graphics: Adobe Photoshop (3) OR	
CIS/BPC 120AF Comp. Graphics: Adobe Photoshop I (1) AND	
+ CIS/BPC 120BF Comp. Graph: Adobe Photoshop II (1) AND	
+ CIS/BPC 120CF Comp. Graph: Adobe Photoshop III (1)	3

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

CIS 126AA	UNIX Operating System: Level I	1
CIS/BPC 133DA	Internet/Web Development Level I	3
+ CIS 166++	any module	3
+ CIS 233DA	Internet/Web Development Level II	3
+ CIS 234	XML Application Development	3
+ CIS 235	e-Commerce	3
+ CIS 290AB	Comp. Information Systems Internship (2) OR	
+ CIS 296WB	Cooperative Education (2) OR	
CIS 298AB	Special Projects (2)	2

## DIETETIC TECHNOLOGY

**DESCRIPTION:** The Dietetic Technology program is an Associate in Applied Science degree emphasizing medical nutrition therapy and food service management. Students acquire the knowledge and skills foundation to work in dietetics through the integration of classroom learning and 466 hours of supervised practice. Emphasis is placed on the development of communication and human relations techniques that prepare the graduate for professional success. The AAS degree program in Dietetic Technology is a Consortium Program with Chandler-Gilbert Community College.

Upon successful completion of the program, the graduate will be eligible to take the Dietetic Technician Registration Examination of the Commission on Dietetic Registration (CDR).

**JOB DESCRIPTION & OPPORTUNITIES:** The Dietetic Technician, Registered is prepared to play a key role in providing quality, cost-effective client care and food service management in a variety of employment settings. Job responsibilities may include patient counseling and education in basic and therapeutic nutrition, medical record documentation, health promotion and disease prevention, menu development, and supervisory and administrative skills related to nutrition services and institutional food production.

Dietetic Technicians are an integral part of health care and food service management teams. They work independently or in partnership with Registered Dietitians in a variety of settings: Clinical, Hospitals, clinics, nursing homes, retirement centers, home health care programs, and research facilities; food service; schools, daycare centers, correctional facilities, restaurants, hospitals, and long-term care facilities; Community and Public Health; WIC programs; wellness; health clubs, and weight management clinics; business; food companies, food venders, and food distributors.

ASSOCIATE IN APPLIED SCIENCE: 3840

## DIETETIC TECHNOLOGY

65-71 CREDITS

**PROGRAM NOTES:** Students must earn a grade of "C" or better for all courses required within the program. "+" indicates course has prerequisites and/or corequisites. Overall GPA: 2.0

**PROGRAM PREREQUISITES:** Credits: 4  
Area Note: Students selecting BIO201 in the Required Courses area must complete BIO156 or BIO181 in consultation with a program advisor.

BIO 156	Human Biology for Allied Health (4) OR	
BIO 181	General Biology (Majors) I (4)	4

**PROGRAM COREQUISITE:** CPR Certification for Health Care Providers through the American Red Cross or the American Heart Association.

**REQUIRED COURSES:** Credits: 40-44  
Area Note: Students selecting BIO201 in the Required Courses area must complete BIO156 or BIO181 in the Program Prerequisites area.

BIO 160	Intro. to Human Anatomy & Physiology (4) OR	
+ BIO 201	Human Anatomy & Physiology I (4) AND	
+ BIO 202	Human Anatomy & Physiology II (4)	4-8
BPC 110	Computer Usage and Applications (3) OR	
BPC 101AA	Introduction to Microcomputers I: IBM (1) AND	
+ BPC 101BA	Introduction to Microcomputers II: IBM (1) AND	
+ BPC 101CA	Introduction to Microcomputers III: IBM (1) OR	
BPC/CIS114++	Spreadsheet Level I (any module) (1) AND	
BPC/CIS117++	Database Mgt Level I (any module) (1) AND	
+ BPC/OAS130++	Personal Word Processing (any module) (1)	3
FON 104	Cert. in Food Service Safety & Sanitation	1
FON 125	Intro. to Profession Nutrition & Dietetics	1
FON 142AB	Applied Food Principles	3
+ FON 207	Intro. to Nutrition Services Management	3
+ FON 225	Research in Complementary & Alternative Nutrition Therapy	3
+ FON 241	Principles of Human Nutrition	3
+ FON 242	Introduction to Planning Therapeutic Diets	3
+ FON 244AA	Practicum I: Food Service Management	2
+ FON244AB	Practicum I: Food Service Management-Lab	3
+ FON 245AA	Practicum II: Medical Nutrition Therapy	2
+ FON 245AB	Practicum II: Medical Nutrition Therapy-Lab	2
+ FON 246AA	Practicum III: Community Nutrition	2
+ FON 246AB	Practicum III: Community Nutrition-Lab	2
+ HCC145AA	Med. Terminology for Health Care Workers I	1
PED 115	Lifetime Fitness	2

**GENERAL EDUCATION REQUIREMENTS:** Credits: 25-27

**CORE:** Credits: 15-17

First-Year Composition		6
+ ENG101	First-Year Composition (3) OR	
+ ENG107	First-Year Composition for ESL (3) AND	
+ ENG102	First-Year Composition (3) OR	
+ ENG108	First-Year Composition for ESL (3) OR	
+ ENG111	Technical Writing (3)	
Oral Communication		3
COM 100	Introduction to Human Communication (3) OR	
COM 110	Interpersonal Communication (3) OR	
+ COM 225	Public Speaking (3) OR	
+ COM 230	Small Group Communication (3)	
Critical Reading		3
+ CRE 101	Critical and Evaluative Reading I (3) OR	
+ CRE 111	Critical Reading for Business/Industry (3) OR	
	Equivalent as indicated by assessment	

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

Mathematics	3-5
+ MAT 120 Intermediate Algebra (5) OR	
+ MAT 121 Intermediate Algebra (4) OR	
+ MAT 122 Intermediate Algebra (3) OR	
Equivalent as indicated by assessment OR	
Satisfactory completion of a higher-level mathematics course	
<b>DISTRIBUTION:</b>	<b>Credits: 10</b>
Humanities and Fine Arts	3
Any approved general education course in the	
Humanities & Fine Arts area	
Social and Behavioral Sciences	3
PSY 101 Introduction to Psychology (3) OR	
SOC 101 Introduction to Sociology (3)	
Natural Sciences	4
+ CHM 130 Fundamental Chemistry (3) AND	
+ CHM 130LL Fundamental Chemistry Laboratory (1) OR	
+ CHM 151 General Chemistry I (3) AND	
+ CHM 151LL General Chemistry I Laboratory (1)	

## EARLY CHILDHOOD EDUCATION

CERTIFICATE OF COMPLETION: 5016

### EARLY CHILDHOOD EDUCATION

36 CREDITS

**DESCRIPTION:** The Early Childhood Education certificate is designed to prepare students for employment as early childhood teachers in a variety of educational programs. Students learn effective teaching skills as they apply developmentally appropriate early childhood educational theory to the classroom setting. Courses have been selected with a focus on developing an educational career ladder.

**OVERALL G.P.A.:** 2.0

**PROGRAM NOTES:** Students must earn a grade of "C" or better in all courses required within the program. "+" indicates prerequisite required.

<b>REQUIRED COURSES:</b>	<b>Credits: 30</b>
CFS 101AH Art Activities for the Young Child	1
CFS 123 Health in Early Childhood Settings	1
CFS 125 Safety in Early Childhood Settings	1
CFS/ECH 176 Child Development	3
CFS 177 Parent-Child Interaction	3
+ CFS/ECH 269 Child Care Seminar	1
CFS 282 Mainstreaming the Young Child with a Disability	1
+ CFS 285AA Family-School Interaction: Preschool	1
ECH 214 Preschool Education	3
ECH 270 Observing Young Children	1
ECH 271 Arranging the Environment	1
ECH 272 Science for the Young Child	1

ECH 273 Math for the Young Child	1
ECH 275 Literacy Development and the Young Child	1
ECH 279 Early Childhood Curriculum Development	1
ECH 281 Movement/Music for the Young Child	1
ECH 282 Discipline/Guidance of Child Groups	1
+ ECH 284AB Early Childhood Teaching Internship	3
ECH 287 Prof. Developmt in Early Childhd Education	1
EDU 230 Cultural Diversity in Education	3

**RESTRICTED ELECTIVES:** Credits: 6  
Area Notes: Select a minimum of 6 credits from the following courses. "+" indicates prerequisite is required.

CFS +++	any Child & Family Studies course
ECH+++	any Early Childhood Education course
EDU+++	any Education course
EED+++	any Early Education course
ITD+++	any Infant/Toddler Development course

ASSOCIATE IN APPLIED SCIENCE: 3836

## EARLY CHILDHOOD EDUCATION

64 CREDITS

**DESCRIPTION:** The Early Childhood Education Degree is designed to prepare students for employment as early childhood teachers in a variety of educational programs. Students learn effective teaching skills as they apply developmentally appropriate early childhood educational theory to the classroom setting. Courses have been selected with a focus on developing an educational career ladder. The AAS program includes additional early childhood electives and general studies classes to broaden the students' base of knowledge.

**OVERALL G.P.A.:** 2.0

**PROGRAM NOTES:** Students must earn a grade of "C" or better in all courses required within the program. "+" indicates prerequisite required.

<b>REQUIRED COURSES:</b>	<b>Credits: 30</b>
CFS 101AH Art Activities for the Young Child	1
CFS 123 Health in Early Childhood Settings	1
CFS 125 Safety in Early Childhood Settings	1
CFS/ECH 176 Child Development	3
CFS 177 Parent-Child Interaction	3
+ CFS/ECH 269 Child Care Seminar	1
CFS 282 Mainstreaming the Young Child w/Disabltly	1
+ CFS 285AA Family-School Interaction: Preschool	1
ECH 214 Preschool Education	3
ECH 270 Observing Young Children	1
ECH 271 Arranging the Environment	1
ECH 272 Science for the Young Child	1
ECH 273 Math for the Young Child	1
ECH 275 Literacy Development and the Young Child	1
ECH 279 Early Childhood Curriculum Development	1
ECH 281 Movement/Music for the Young Child	1
ECH 282 Discipline/Guidance of Child Groups	1
+ ECH 284AB Early Childhood Teaching Internship	3
ECH 287 Prof. Development in Early Childhd Educ.	1
EDU 230 Cultural Diversity in Education	3

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

RESTRICTED ELECTIVES: Credits: 9  
 Area Notes: Select a minimum of 9 credits from the following courses.  
 "+" indicates prerequisite is required.

- CFS +++ any Child & Family Studies course
- ECH+++ any Early Childhood Education course
- EDU+++ any Education course
- EED+++ any Early Education course
- ITD+++ any Infant/Toddler Development course

GENERAL STUDIES REQUIREMENTS Credits: 25

CORE: Credits: 15

First-Year Composition 6

- + ENG 101 First-Year Composition (3) OR
- + ENG 107 First Year Composition for ESL (3) AND
- + ENG 102 First-Year Composition (3) OR
- + ENG 108 First Year Composition for ESL (3)

Oral Communication 3

- COM 110 Interpersonal Communication (3) OR
- COM 230 Small Group Communication (3)

Critical Reading 3

- + CRE 101 Critical and Evaluative Reading (3) OR  
 equivalent as indicated by assessment

Mathematics 3

Any approved general education course in the Mathematics area.

DISTRIBUTION: Credits: 10

Humanities & Fine Arts 3

- EDU 291 Children's Literature (3) OR
- ENH 291 Children's Literature (3) OR
- Any approved general education course from the Humanities &  
 Fine Arts area.

Social & Behavioral Sciences 3

- CFS157 Marriage and Family Life (3) OR
- Any approved general education course in the Social &  
 Behavioral Sciences area.

Natural Sciences 4

Any approved general education course in the Natural Sciences area.

## EMERGENCY MANAGEMENT

CERTIFICATE OF APPLIED SCIENCE: 5304

### EMERGENCY MANAGEMENT 18 CREDITS

DESCRIPTION: The CCL (Certification of Completion) in Emergency Management provides the student with knowledge and skills required to conduct a comprehensive emergency management program. The program prepares students to manage fire department operations, hazardous materials incidents, tactics, strategy, and safety of firefighting activities, and customer service in the public sector. The student will be prepared for positions such as Emergency Manager, Emergency Management Planner, Emergency Operations Coordinator, Environmental Compliance Planner, and Emergency Management Specialist, working in state, local, federal, and international governments, business and industry, military installations, and health care facilities.

#### PROGRAM REQUIREMENTS:

Note: + indicates course has prerequisites and/or corequisites.  
 Note: Students must earn a grade of "C" or better in all courses within the program.

ADMISSION CRITERIA: None

PROGRAM PREREQUISITES: None

REQUIRED COURSES: Credits: 18

- AJS/FSC139 Emergency Response to Terrorism 3
- AJS/FSC146 Disaster Recovery Operations 3
- AJS/FSC147 Emergency Preparedness 3
- AJS/FSC148 Fundamentals of Emergency Management 3
- AJS/FSC149 Hazard Mitigation 3
- AJS/FSC224 Incident Command Systems 3

ASSOCIATE OF APPLIED SCIENCE: 3018

### EMERGENCY MANAGEMENT 64 CREDITS

DESCRIPTION: The AAS (Associate in Applied Science) in Emergency Management provides the student with knowledge and skills required to conduct a comprehensive emergency management program. The program prepares students to manage fire department operations, hazardous materials incidents, tactics, strategy, and safety of firefighting activities, and customer service in the public sector. The student will be prepared for positions such as Emergency Manager, Emergency Management Planner, Emergency Operations Coordinator, Environmental Compliance Planner, and Emergency Management Specialist, working in state, local, federal, and international governments, business and industry, military installations, and health care facilities.

PROGRAM NOTES: + indicates course has prerequisites and/or corequisites. Students must earn a grade of "C" or better in all courses within the program

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

<b>REQUIRED COURSES:</b>		<b>Credits: 24</b>
AJS101	Introduction to Criminal Justice	3
AJS/FSC139	Emergency Response to Terrorism	3
AJS/FSC146	Disaster Recovery Operations	3
AJS/FSC147	Emergency Preparedness	3
AJS/FSC148	Fundamentals of Emergency Management	3
AJS/FSC149	Hazard Mitigation	3
AJS/FSC224	Incident Command Systems	3
FSC105	Hazardous Materials/First Responder	3
<b>RESTRICTED ELECTIVES:</b>		<b>Credits: 15-18</b>
AJS195	International and Domestic Terrorism	3
AJS225	Criminology	3
AJS270	Community Relations	3
AJS275	Criminal Investigation I	3
FSC211	Fundamentals of Flammable Hazardous Materials	3
FSC212	Dangerous and Explosive Hazardous Materials	3
Approved courses recommended OR		
Any approved AJS/FSC course		
<b>FREE ELECTIVES: None</b>		
<b>GENERAL EDUCATION REQUIREMENTS:</b>		<b>Credits: 25-27</b>
<b>CORE</b>		<b>Credits: 15-17</b>
First-Year Composition		
+ ENG101	First-Year Composition (3) AND	
+ ENG102	First-Year Composition (3)	6
Oral Communication		
	Any approved general education course in the Oral Communication area	3
Critical Reading		
	Any approved general education course in the Critical Reading area	3
Mathematics		
+ MAT102	Mathematical Concepts/Applications OR higher	3-5
<b>DISTRIBUTION</b>		<b>Credits: 10</b>
Humanities & Fine Arts		
AJS123	Ethics and the Administration of Justice	3
Social and Behavioral Sciences		
AJS258	Victimology and Crisis Management	3
Natural Sciences		
	Any approved general education course in the Natural Sciences area	4

## EMERGENCY MEDICAL TECHNOLOGY

CERTIFICATE OF COMPLETION: 5143  
**BASIC EMERGENCY MEDICAL TECHNOLOGY**  
 8 CREDITS

**DESCRIPTION:** The program includes techniques of emergency care, stabilization, and immobilization of victims of illness and injury. Recognition and documentation of signs and symptoms of illness and injury, intervention, and evaluation of the intervention are integrated into the program. Techniques for assessment, administration of oxygen, use of specific immobilization devices, and preparation for transportation are other areas of the program.

**ADMISSION CRITERIA:** Student must 18 years or older at time of admission to the program. Proof of TB testing or chest x-ray with a negative result within 6 months prior to admission. Proof of immunity to measles, mumps and rubella.

**PROGRAM REQUIREMENTS:** Students must earn a grade of "C" or better in the Required Course. "+" indicates course has prerequisites and/or corequisites. Minimum ninth grade level reading proficiency on the Nelson-Denny Examination) OR (ASSET reading test with a minimum score of 41) OR (COMPASS reading test with a minimum score of 81).

**PROGRAM PREREQUISITES:** Credits: 0.5  
 Minimum ninth grade level reading proficiency on the Nelson-Denny Examination OR ASSET reading test with a minimum score of 41 OR COMPASS reading test with a minimum score of 81  
 EMT/HLR101 CPR: Basic Cardiac Life Support OR Current Healthcare Provider certification from the American Heart Association, CPR for Professional Rescuer from the American Red Cross or other equivalent organization at Healthcare Provider Level, meeting the new Guidelines 2002

**PROGRAM NOTES:** + indicates course has prerequisites and/or corequisites.

**REQUIRED COURSES:** Credits: 8  
 Students must earn a grade of "C" or better in the Required Course.  
 + EMT/FSC104 Basic Emergency Medical Technology 8

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

CERTIFICATE OF COMPLETION: 5513

## ADVANCED EMERGENCY MEDICAL TECHNOLOGY (PARAMEDIC)

37.5 CREDITS

**DESCRIPTION:** The Certificate of Completion (CCL) in Advanced Emergency Medical Technology (Paramedic) is designed to provide advanced techniques of emergency care, stabilization, and immobilization of victims of illness and injury. The techniques of emergency care include but are not limited to assessment, detailed physical examination, recognition and documentation of signs and symptoms of illness and injury, critical thinking and diagnosis intervention, and the evaluation of the interventions. The techniques of assessment include but are not limited to electrocardiograph rhythm identification, administration of oxygen, defibrillation, synchronized cardioversion, transcutaneous pacing, and advanced airway techniques. The techniques for immobilization of the victim include but are not limited to the use of specific immobilization devices, peripheral intraosseous and central intravenous techniques, and preparation and care during transportation. An Associate in Applied Science (AAS) is also available.

**PROGRAM NOTES:** Students must earn a grade of "C" or better in all courses required within the program. + indicates course has prerequisite and/or corequisite

**ADMISSION CRITERIA:** Prior to being considered for and accepted into the program, students must complete specified exams and an oral interview with the EMT/FSC department. Additionally, students must have a recommendation from a referring agency. Finally, students should seek department advisement on completing program prerequisites prior to acceptance into the program.

**PROGRAM PREREQUISITES:** Credits: 8  
+ Basic Emergency Medical Technology Certificate (5268) 8

**REQUIRED COURSES:** Credits: 34.5  
+ EMT245 Trauma Management I 2  
+ EMT272AA Advanced Emergency Medical Technology (12.5) AND  
+ EMT272AB Adv. Emergency Medical Technology (12.5) 25  
+ EMT272LL Adv. Emergency Medical Technology Practicum 7.5

**RESTRICTED ELECTIVES:** Credits: 3-4  
SPA101 Elementary Spanish I, *recommended*  
EMT120 Spanish for Emergency-Care Providers 1  
+ EMT165 Pediatric Educ for Prehospital Providers: Basic 2  
+ EMT240 Advanced Cardiac Life Support 2  
+ EMT242 Pediatric Advanced Life Support 1  
+ EMT246 Trauma Management II 4  
+ SPA101 Elementary Spanish I 4

ASSOCIATE OF APPLIED SCIENCE: 3065

## ADVANCED EMERGENCY MEDICAL TECHNOLOGY (PARAMEDIC)

63.5 CREDITS

**DESCRIPTION:** The Associate in Applied Science (AAS) in Advanced Emergency Medical Technology (Paramedic) is designed to provide advanced techniques of emergency care, stabilization, and immobilization of victims of illness and injury. The techniques of emergency care include but are not limited to assessment, detailed physical examination, recognition and documentation of signs and symptoms of illness and injury, critical thinking and diagnosis intervention, and the evaluation of the interventions. The techniques of assessment include but are not limited to electrocardiograph rhythm identification, administration of oxygen, defibrillation, synchronized cardioversion, transcutaneous pacing, and advanced airway techniques. The techniques for immobilization of the victim include but are not limited to the use of specific immobilization devices, peripheral intraosseous and central intravenous techniques, and preparation and care during transportation. A Certificate of Completion (CCL) is also available.

**PROGRAM NOTES:** Students must earn a grade of "C" or better in all courses required within the program. "+" indicates course has prerequisites and/or corequisites.

**ADMISSION CRITERIA:** Prior to being considered for and accepted into the program, students must complete specified exams and an oral interview with the EMT/FSC department. Additionally, students must have a recommendation from a referring agency. Finally, students should seek department advisement on completing program prerequisites prior to acceptance into the program.

**PROGRAM PREREQUISITES:** Credits: 25-42  
+ Basic Emergency Medical Technology Certificate (8) OR  
Intermediate Emergency Med. Technology Certificate (25) 8-25

+ BIO201 Human Anatomy and Physiology I 4  
+ BIO202 Human Anatomy and Physiology II 4  
+ CRE101 Critical and Evaluative Reading I (3) OR  
+ CRE111 Critical Reading for Business and Industry (3) OR  
Equivalent as indicated by assessment 3

+ MAT102 Mathematical Concepts/Applications (3) OR  
Equivalent OR  
Satisfactory score on District placement exam 3

PSY101 Introduction to Psychology 3

**REQUIRED COURSES:** Credits: 42.5  
+ EMT235 Emergency Cardiac Care 3  
+ EMT236 Pharmacology in an Emergency Setting 3  
+ EMT/FSC238 Vehicular Extrication and Patient Stabilization 2  
+ EMT245 Trauma Management I 2  
+ EMT272AA Advanced Emergency Med. Technology (12.5) AND  
+ EMT272AB Advanced Emergency Med. Technology (12.5) 25

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

+ EMT272LL	Adv. Emergency Med. Technology Practicum	7.5
RESTRICTED ELECTIVES:		Credits: 9
SPA101	Elementary Spanish I, <i>recommended</i>	
+ EMT116	Emergency Medical Communications (EMD)	1.5
EMT120	Spanish for Emergency-Care Providers	1
+ EMT130	Adv. Life Support (ALS) Assist for Basic EMTs	1
+ EMT215	Stress and Emergency Services Professionals	3
+ EMT240	Advanced Cardiac Life Support	2
+ EMT242	Pediatric Advanced Life Support	1
+ EMT246	Trauma Management II	4
+ PSY266	Abnormal Psychology	3
+ SPA101	Elementary Spanish I	4
GENERAL EDUCATION:		Credits: 12
CORE: Credits: 9		
First-Year Composition		
	Any approved general education courses in the First-Year Composition area.	6
Oral Communication		
COM100	Introduction to Human Communication	3
Critical Reading		
	Met by CRE101 or CRE111, in Program Prerequisite area	0
Mathematics		
	Met by MAT102, in Program Prerequisite area.	0
DISTRIBUTION: Credits: 3		
Humanities and Fine Arts		
	Any approved general education course in the Humanities and Fine Arts area.	3
Social and Behavioral Sciences		
	Met by PSY101, in Program Prerequisite area.	0
Natural Sciences		
	Met by BIO201, in Program Prerequisite area.	0

## FIRE SCIENCE

CERTIFICATE OF COMPLETION: 5486

### BASIC FIRE FIGHTER

30 CREDITS

**DESCRIPTION:** The Fire Science Technology certificate is designed for students who need (1) advanced training as professional firefighters, (2) basic preparation courses for a career in fire services and/or (3) more comprehensive information about the fire hazard and prevention. Certificate can be used by professional firefighters for promotions and salary advancement within the Fire Services. The program will provide courses for plant safety for fire protection personnel and basic emergency services for laypersons who need intensive first aid training. The unique feature of the program is that the instructors are professional firefighters and/or licensed Emergency Medical Training Personnel.

**PROGRAM REQUIREMENTS:**

Students must earn a grade of "C" or better in all courses within the program. "+" indicates course has prerequisites and/or corequisites.

**PROGRAM PREREQUISITES:** None

**REQUIRED COURSES:** Credits: 30

+ EMT104	Basic Emergency Medical Technology	8
+ EMT238	Vehicular Extrication and Patient Stabilization	2
FSC102	Fire Department Operations	11
FSC105	Hazardous Materials First Responder	3
FSC108	Fundamentals of Fire Prevention	3
FSC208	Firefighter Safety/Building Construction	3

CERTIFICATE OF COMPLETION: 5514

## FIRE SCIENCE

37 CREDITS

**DESCRIPTION:** The Certificate of Completion (CCL) in Fire Science provides practical firefighting, hazardous materials, related operations and fire service management emphasis in this program with history and theory used where necessary to assist professionals to cope with current challenges in the field. This curriculum is designed to (1) provide training for professional fire service personnel in order that they may most efficiently perform their duties (2) prepare people for a career in Fire Service or related field, and (3) provide people with a better understanding of fire and related hazards and challenges faced in providing public safety services. An Associate in Applied Science (AAS) is also available.

**PROGRAM NOTES:** "+" indicates course has prerequisites and/or corequisites. Students must earn a grade of "C" or better in all courses within the program.

**PROGRAM PREREQUISITES:** None

**REQUIRED COURSES:**

Credits: 21

FSC105	Hazardous Materials/First Responder	3
FSC108	Fundamentals of Fire Prevention	3
FSC113	Introduction to Fire Suppression	3



# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

FSC131	Introduction to Urban Technical Rescue	3
FSC202	Supervisory Training for Firefighters	3
+ FSC204	Firefighting Tactics and Strategy	3
+ FSC208	Firefighter Safety and Building Construction	3

**RESTRICTED ELECTIVES:** Credits: 16  
Students should select 16 credit hours from the following courses in consultation with a department advisor.

+ EMT/FSC104	Basic Emergency Medical Technology	8
+ EMT/FSC238	Vehicular Extrication and Patient Stabilization	2
FSC101++	Introduction to Fire Service Selection (3) OR Modular equivalents	3
+ FSC102	Fire Department Operations	11
FSC106	Introduction to Fire Protection	3
FSC114	Haz. Materials First on Scene/Awareness Level	0.5
FSC117	Fire Apparatus	3
FSC118	Fire Hydraulics	3
FSC130	Fitness for Firefighters/CPAT	1
FSC134++	Fitness & Conditioning/Firefighters (3) OR Modular equivalents	3
FSC135	Fire Service Information Management	3
FSC152	Engine Company Officer	1
+ FSC205	Command Strategies for Major Emergencies	3
FSC209	Fire Investigation	3
+ FSC214	Human Resource Management in Fire Service	3
FSC221	Ladder Company Officer	1
GBS/LAS206	Business Law (UCC)	3

ASSOCIATE OF APPLIED SCIENCE: 3064

## FIRE SCIENCE

64 CREDITS

**DESCRIPTION:** The Associate in Applied Science (AAS) in Fire Science provides practical firefighting, hazardous materials, related operations, and fire service management emphasis in this program with history and theory used where necessary to assist professionals to cope with current challenges in the field. This curriculum is designed to (1) provide training for professional fire service personnel in order that they may most efficiently perform their duties, (2) prepare people for a career in Fire Service or a related field, and (3) provide people with a better understanding of fire and related hazards and challenges faced in providing public safety services. A Certificate of Completion (CCL) is also available.

**PROGRAM NOTES:** Students must earn a grade of "C" or better in all courses within the program. If pursuing Bachelor's degree program, contact department advisor. "+" indicates course has prerequisites and/or corequisites.

**PROGRAM PREREQUISITES:** None

<b>REQUIRED COURSES:</b>		<b>Credits: 21</b>
FSC105	Hazardous Materials/First Responder	3
FSC108	Fundamentals of Fire Prevention	3
FSC113	Introduction to Fire Suppression	3
FSC131	Introduction to Urban Technical Rescue	3
FSC202	Supervisory Training for Firefighters	3
+ FSC204	Firefighting Tactics and Strategy	3
+ FSC208	Firefighter Safety and Building Construction	3

**RESTRICTED ELECTIVES:** Credits: 18  
Students should select 18 credit hours from the following courses in consultation with a department advisor.

ACC111	Accounting Principles I (3) AND	
+ ACC112	Accounting Principles II (3) AND	
+ ACC212	Managerial Accounting (3) OR	9
+ EMT/FSC104	Basic Emergency Medical Technology	8
+ EMT/FSC238	Vehicular Extrication and Patient Stabilization	2
FSC101++	Introduction to Fire Service Selection (3) OR Modular Equivalents	3
+ FSC102	Fire Department Operations	11
FSC106	Introduction to Fire Protection	3
FSC114	Haz. Materials First on Scene/Awareness Level	0.5
FSC117	Fire Apparatus	3
FSC118	Fire Hydraulics	3
FSC130	Fitness for Firefighters/CPAT	1
FSC134	Fitness & Conditioning/Firefighters (3) OR Modular Equivalents	3
FSC135	Fire Service Information Management	3
FSC152	Engine Company Officer	1
+ FSC205	Command Strategies for Major Emergencies	3
FSC209	Fire Investigation	3
+ FSC214	Human Resource Management in Fire Service	3
FSC221	Ladder Company Officer	1
GBS/LAS206	Business Law (UCC)	3

**GENERAL EDUCATION REQUIREMENTS:** Credits: 25

**CORE:** Credits: 15

First-Year Composition  
+ Any approved general education courses in the First Year Composition area. 6

Oral Communication  
COM100 Introduction to Human Communication 3

Critical Reading  
+ Any approved general education course in the Critical Reading area. 3

Mathematics  
+ Any approved general education course in the Mathematics area. 3

**DISTRIBUTION:** Credits: 10

Humanities and Fine Arts  
Any approved general education course in the Humanities and Fine Arts area. 3

Social and Behavioral Sciences  
Any approved general education course in the Social and Behavioral Sciences area. 3  
Recommend SOC101 OR SOC140.

Natural Sciences  
+ Any approved general education course in the Natural Sciences area. 4  
Recommend BIO101 OR CHM130 AND CHM130LL OR PHY101.

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

ASSOCIATE IN APPLIED SCIENCE: 3056

## FIRE SCIENCE TECHNOLOGY

69-71 CREDITS

**DESCRIPTION:** The Fire Science Technology Certificate of Completion and Associate in Applied Science (AAS) are designed for students who need (1) advanced training as professional firefighters, (2) basic preparation courses for a career in fire services, and/or (3) more comprehensive information about fire hazard and prevention. The Degree and Certificate can be used by professional firefighters for promotions and salary advancement within the Fire Services. The unique feature of the Degree and Certificate is that the instructors will be professional firefighters and/or licensed Emergency Medical Training Personnel.

**PROGRAM REQUIREMENTS:** "+" indicates course has prerequisites and/or corequisites. Students must earn a grade of "C" or better in all courses within the program.

**PROGRAM PREREQUISITES:** None

**REQUIRED COURSES:** Credits: 40

FSC102	Fire Department Operations I	11
FSC105	Hazardous Materials First Responder	3
FSC118	Fire Hydraulics	3
FSC108	Fundamentals of Fire Prevention	3
FSC111	Emergency Vehicle Driver Operator	2
FSC202	Supervisory Training for Firefighters	3
FSC117	Fire Apparatus	3
FSC204	Firefighting Tactics and Strategy	3
FSC205	Command Strategies for Major Emergencies	3
FSC208	Firefighter Safety and Building Construction	3
FSC214	Human Resource Management for Fire Service	3

**RESTRICTED ELECTIVES:** Credits: 4  
FSC+++++ Fire Science Tech (Any approved FSC course.) 4

**GENERAL EDUCATION REQUIREMENTS:** Credits: 25-27

**CORE:** Credits: 15-17

### First-Year Composition

ENG101	First-Year Composition (3) OR	
ENG107	First-Year Composition for ESL (3) AND	
ENG102	First-Year Composition (3) OR	
ENG111	Technical Writing (3)	6

### Oral Communication

COM100	Introduction to Human Communication (3) OR	
COM110	Interpersonal Communication (3) OR	
COM225	Public Speaking (3) OR	
COM230	Small Group Communication (3)	3

### Critical Reading

CRE101	Critical and Evaluative Reading I (3) OR	
CRE111	Reading for Business, and Industry (3) OR equivalent by assessment	3

### Mathematics

MAT102	Mathematical Concepts/Applications (3) OR	
MAT120	Intermediate Algebra (5) OR	

MAT122	Intermediate Algebra (3) OR equivalent as indicated by assessment OR approved math courses which are required in a specific AAS program OR satisfactory completion of a higher mathematics course.	3-5
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**DISTRIBUTION:** Credits: 10

### Humanities and Fine Arts

	Any approved general education course in the Humanities and Fine Arts area	3
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### Social and Behavioral Sciences

	Any approved general education course from the Social and Behavioral Sciences area	
SOC101	Introduction to Sociology recommended	3

### Natural Sciences

Any approved general education course from the Natural Sciences area  
The following courses are recommended.

BIO100	Biology Concepts (4) OR	
CHM130	Fundamental Chemistry (3) AND	
CHM130LL	Fundamental Chemistry Lab (1) OR	
PHY101	Introduction to Physics (4)	4

## GENERAL BUSINESS

**JOB DESCRIPTION:** General Business graduates may find employment in retail store management, customer relations, management of distribution warehouses, service management, etc.

**JOB OPPORTUNITIES:** Indications are that employment will be good in the future.

**TRANSFERABILITY:** Many of the courses required in this program transfer to a four year university. However, it is critical that the student check with an advisor for specifics.

CERTIFICATE OF COMPLETION: 5262

## GENERAL BUSINESS

33 CREDITS

**DESCRIPTION:** The Certificate of Completion in General Business is designed for those employed in the field who need or want continuing education, or for those who cannot pursue a degree at this time, but want to enter the business field at an entry level point.

**PROGRAM NOTES:** Students must earn a grade of "C" or better in each course in the Required Courses area. "+" indicates prerequisite.

**REQUIRED COURSES:** Credits: 33

ACC 111	Accounting Principles I	3
+ ACC 112	Accounting Principles II	3

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

BPC 110	Computer Usage & Applications (3) OR	
CIS 105	Survey of Computer Info.Systems (3)	3
ECN 111	Macroeconomic Principles	3
ECN 112	Microeconomic Principles	3
GBS 151	Introduction to Business	3
GBS 205	Legal, Ethical Regulatory Issues in Business	3
+ GBS 233	Business Communication	3
MGT 175	Business Organization & Managemt	3
MGT 251	Human Relations in Business	3
MKT 271	Principles of Marketing	3

ASSOCIATE IN APPLIED SCIENCE: 3051

## GENERAL BUSINESS

61-66 CREDITS

DESCRIPTION: This program is designed for students who plan to attend college for two years only and are preparing for entry-level position in business. This career program leads to an Associate in Applied Science in General Business.

PROGRAM NOTES: Students must earn a grade of "C" or better in each course in the Required Courses area. "+" indicates prerequisite. "++" indicates any module.

### REQUIRED COURSES: Credits: 24

ACC 111	Accounting Principles I	3
+ ACC 112	Accounting Principles II	3
BPC 110	Computer Usage & Applications (3) OR	
CIS 105	Survey of Computer Info.Systems (3)	3
ECN 111	Macroeconomic Principles	3
GBS 151	Introduction to Business	3
GBS 205	Legal, Ethical & Regulatory Issues in Business	3
+ GBS 233	Business Communication	3
MGT 175	Business Organization & Management	3

### RESTRICTED ELECTIVES: Credits: 13-15

Students must choose one of the following specialized areas and successfully complete all courses listed in that area.

#### Accounting Credits: 14

+ ACC115	Computerized Accounting (2)
+ ACC212	Managerial Accounting (3)
+ ACC219	Intermediate Accounting (3)
+ ACC221	Tax Accounting (3)
+ ACC222	Payroll Accounting (3)

#### Computer Information Systems Credits: 15

CIS102	Interpersonal & Customer Service Skills (1)
CIS109AM	Networking Technology (2)
CIS 133DA	Internet/Web Development Level I (3)
CIS224	Project Mgt MS Project Windows (3)
+ CIS235	e-Commerce (3)
+ ENG111	Technical Writing (3)

#### Customer Service Credits: 13-15

MGT109	Dev. of Professional Skills & Standards (3)
MGT126	Customer Service Skills & Strategies (3)

MGT229	Management & Leadership (3)
MGT296++	Special Project /Coop Ed (1-3)
MKT267	Principles of Salesmanship (3)

#### Finance Credits: 13

GBS103	Principles of Banking (3)
GBS132	Personal & Family Financial Security (3)
GBS206	Business Law (3)
GBS261	Investments I (3)
IBS104	International Finance (1)

#### General Business Credits: 15

IBS 101	Introduction to International Business (3)
MGT229	Management and Leadership (3)
MKT101	Introduction to Public Relations (3)
MKT267	Principles of Salesmanship (3)
MKT271	Principles of Marketing (3)

#### International Business Credits: 15

IBS101	Introduction to International Business (3)
IBS102	International Marketing (2)
IBS104	International Finance (1)
IBS105	International Law (2)
IBS108	Basics of Import/Export Operations (2)
IBS121	Export Marketing Case Studies (2)
+++++	any foreign language (ARB, FRE, GER, ITA, JPN, SPA, etc) (3)

#### Management Credits: 15

MGT175	Business Organization & Management (3)
MGT229	Management & Leadership (3)
MGT251	Human Relations In Business (3)
MGT276	Personnel/Human Resources in Managemt (3)
MKT271	Principles of Marketing (3)

#### Marketing Credits: 15

+ CIS235	e-Commerce (3)
IBS102	International Marketing (3)
MKT101	Introduction to Public Relations (3)
MKT263	Advertising Principles (3)
MKT271	Principles of Marketing (3)

#### Small Business Credits: 15

MGT253	Owning & Operating a Small Business (3)
MKT267	Principles of Salesmanship (3)
MKT271	Principles of Marketing (3)
SBS213	Hiring and Managing Employees (1)
SBS214	Small Business Customer Relations (1)
SBS220	Internet Marketing for Small Business (2)
SBS230	Financial & Tax Mgt for Small Bus. (2)

GENERAL EDUCATION REQUIREMENTS: Credits: 24-27

CORE: Credits: 15-17

First Year Composition 6

+ Any approved general education course from the First-Year Composition area.

Oral Communication 3

COM 100 or COM 110 or +COM 225 or +COM 230

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

Critical Reading	3
Any approved general education course from the Critical Reading area.	
Mathematics	3-5
Any approved general education course from the Mathematics area.	
<b>DISTRIBUTION:</b>	<b>Credits: 9-10</b>
Humanities & Fine Arts	2-3
Any approved general education course from the Humanities & Fine Arts area.	
Natural Sciences	4
Any approved general education course from the Natural Sciences area.	
Social & Behavioral Sciences	3
IBS109	Cultural Dimension for Int'l Business (3) OR
SBU200	Society & Business (3)

## INTERNATIONAL BUSINESS

CERTIFICATE OF COMPLETION: 5740  
**IMPORT/ EXPORT TRADE**  
 19-20 CREDITS

PROGRAM NOTES: Students must earn a grade of "C" or better in each course in the Required Courses area. "+" indicates prerequisite.

<b>REQUIRED COURSES:</b>	<b>Credits: 16-17</b>
IBS 102	International Marketing 2
IBS 108	Basics of Import/Export Operations 2
IBS 110	International Payments and Collections 1
IBS 111	Risk Management and Loss Control 1
IBS 112	Export Licensing and Regulations 1
IBS 113	United States Customs and Duties 1
IBS 114	Int'l Transportation and Distribution Systems 1
IBS 121	Export Case Studies 2

<i>Choose one course from the following IBS courses:</i>	2
IBS 150	Mexico, Central & South America: Int'l Business Environment (2)
IBS 151	Western Europe: International Business Env. (2)
IBS 152	Japan: International Business Environment (2)
IBS 153	Central & Eastern Europe: Int'l Business Env. (2)
IBS 154	Pacific Rim Countries: Int'l Business Env. (2)

Any Foreign Language Course: 3-4  
 (Prefixes: ARB, CHI, FRE, GER, GRK, HEB, ITA, JPN, POR, RUS, SPA)

<b>RESTRICTED ELECTIVES:</b>	<b>Credits: 3</b>
MGT 135	Purchasing Management (3)
MGT 175	Business Organization and Management (3)
MGT 253	Owning and Operating a Small Business (3)

CERTIFICATE OF COMPLETION: 5742

## INTERNATIONAL BUSINESS

30-32 CREDITS

PROGRAM NOTES: Students must earn a grade of "C" or better in each course in the Required Courses area. "+" indicates prerequisite.

<b>REQUIRED COURSES:</b>	<b>Credits: 30-32</b>
+ CIS 235	e-Commerce 3
GBS 151	Introduction to Business 3
IBS 101	Introduction to International Business 3
IBS 102	International Marketing 2
IBS 104	International Finance 1
IBS 105	International Law 2
IBS 108	Basics of Import/Export Operations 2
IBS 109	Cultural Dimension for International Business 3
IBS 121	Export Marketing Case Studies 2
MGT 175	Business Organization & Management 3

Any Foreign Language Course Sequence: 6-8  
 (ie: SPA101 & 102 or SPA101AA & 102AA) (Prefixes: ARB, CHI, FRE, GER, GRK, HEB, ITA, JPN, POR, RUS, SPA)

## JOURNALISM

CERTIFICATE OF COMPLETION: 5466  
**JOURNALISM**  
 18 CREDITS

DESCRIPTION: The Certificate of Completion in Journalism prepares students to work in the publishing industry whether they have a bachelor's degree in another discipline or are just beginning their career path in journalism. The CCL includes journalism courses required by journalism schools throughout the state and country and requires an internship in journalism and a juried portfolio of published articles to complete the certificate.

<b>REQUIRED COURSES</b>	<b>Credits: 15</b>
+ ENG 101	First-Year Composition 3
ENG 235	Magazine Article Writing (3) OR 3
+ JRN 234	Feature Writing (3) 3
+ JRN 201	News Writing 3
+ JRN 240AB	Journalism Internship 2
JRN 298AA	Special Projects: Portfolio of Published Clips 1
+ MCO 120	Media & Society 3

<b>RESTRICTED ELECTIVES:</b>	<b>Credits: 3</b>
JRN 125	Photo Editing (3)
JRN 133	Development of Small Publications (3)
+ JRN 212	Broadcast Writing (3)
JRN 215	News Production (3)

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

## MEDIA ARTS

CERTIFICATE OF COMPLETION: 5881

### MEDIA ARTS: COMPUTER ART ILLUSTRATION

16 CREDITS

**DESCRIPTION:** This program is designed for the student who wishes to develop an area of specialization in Computer Art/Illustration. The program acquaints the student with art principles and assists the students in developing their abilities to solve design and compositional problems as related to the art. It allows for the development of an individual's personal interest in this area, prepares students for employment, and upgrades skills of those already employed in this field. Employment opportunities are included in multimedia such as illustrator, artist, designer, paste-up artist, free-lance artist-designer, graphic design artist, or multimedia artist.

**PROGRAM NOTES:** Students must earn a grade of "C" or better in all courses within the program. "+" indicates prerequisite.

REQUIRED COURSES	Credits: 16
ART 100 Intro to Computer Graphic Art	1
ART 111 Drawing I	3
ART 116 Life Drawing I	3
+ ART 169 Two Dimensional Computer Design	3
+ ART 173 Computer Art (3) OR	
+ ART 177 Computer-Photographic Imaging (3)	3
+ ART 289 Computer Illustration	3

## MICROSOFT RELATED PROGRAMS

CERTIFICATE OF COMPLETION: 5473

### MICROSOFT DESKTOP SUPPORT TECHNOLOGY

18-19 CREDITS

**DESCRIPTION:** The CCL in Microsoft Desktop Support Technology is designed to provide training to work in an entry-level computer maintenance and help-desk position. Students will develop the skills to successfully troubleshoot desktop environments running on the Microsoft Windows operating system. Courses in the program also help to prepare for the Microsoft Certified Desktop Support Technician (MCDST) examinations.

**JOB DESCRIPTION:** A Microsoft Desktop Support Technician will be required to perform various tasks such as end user support including installing, configuring, managing and troubleshooting Microsoft desktop operating systems and applications either at a call center, Help Desk, or in his/her own computer support business.

**PROGRAM NOTES:** Students must earn a grade of "C" or better for all required courses within the program. "+" indicates course has prerequisite and/or corequisites.

**PROGRAM PREREQUISITES** Credits: 2  
Note: In lieu of the following two courses, students with experience in the information technology field may meet these program prerequisites with the permission of the instructor.

BPC/CIS121AB MS-DOS Operating System	1
CIS102 Interpers. & Cust. Service Skills for IT Prof.	1

REQUIRED COURSES:	Credits: 18-19
BPC 110 Computer Usage and Applications (3) OR	
CIS 105 Survey of Computer Information Systems (3)	3
+ BPC 170 Computer Maintenance I: A+ Prep	3
+ CIS 190 Intro. to Local Area Networks (3) OR	
+ CNT 140 Cisco Networking Fundamentals (4) OR	
MST 140 Microsoft Networking Essentials (3)	3-4
+ MST 141 Support MS Windows Client Operating Syst	3
+ MST 142 Support Applications on MS Windows Client Operating Systems	3
MST 150XP Microsoft Windows XP Professional	3

CERTIFICATE OF COMPLETION: 5841

### MICROSOFT PRODUCT SPECIALIST

13-15 CREDITS

**DESCRIPTION:** This program prepares students for industry-recognized certification. The curriculum is taught by Microsoft Certified Professionals. The Certificate of Completion in Microsoft Product Specialist provides training for an entry-level position working with Windows networks. Knowledge and skills are developed to install, configure, customize, optimize, and troubleshoot Windows servers and Windows client workstations. Courses in the program also help prepare for Microsoft Certified Product Specialist and Microsoft Certified Systems Engineer examinations.

**PROGRAM NOTES:** Students must earn a grade of "C" or better for all required courses within the program. "+" indicates course has prerequisite and/or corequisites.

PROGRAM PREREQUISITES	Credits: 3
CIS 105 Survey of Computer Information Systems (3) OR Permission of Department or Division	

REQUIRED COURSES:	Credits: 13-15
BPC/CIS 121AB MS-DOS Operating System	1
+ BPC 170 Computer Maintenance I: A+ Prep	3
+ CIS 190 Intro. to Local Area Networks (3) OR	
+ CNT 140 Cisco Networking Fundamentals (4) OR	
MST 140 Microsoft Networking Essentials (3)	3-4
+ MST 150++ any MST150 module	3
+ MST 152++ any MST152 module	3-4

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

CERTIFICATE OF COMPLETION: 5843

## MICROSOFT SYSTEMS ENGINEER

32-33 CREDITS

**DESCRIPTION:** The Certificate of Completion in Microsoft Systems Engineer provides training for an intermediate- to supervisory-level position working with Windows networks. The program develops skills to install, configure, customize, optimize, and troubleshoot Windows servers, Windows client workstations and Microsoft Backoffice products. The courses in the program also help to prepare for Microsoft Certified Product Specialist (MCP), Microsoft Certified Systems Administrator (MCSA), and Microsoft Certified Systems Engineer (MCSE) examinations. The curriculum is taught by Microsoft Certified Professionals.

**JOB DESCRIPTION:** A Microsoft Systems Engineer will be required to perform various tasks such as developing a local area network, installing and configuring software, creating and managing user and group accounts, analyzing and optimizing system performance, troubleshooting system and printing problems, training end users, and working as a system administrator.

**PROGRAM NOTES:** Students must earn a grade of "C" or better for all courses required within the program. "+" indicates course has prerequisite and/or corequisites. "++" indicates any module. Overall program minimum GPA = 2.00.

**PROGRAM PREREQUISITES:** Credits: 3  
 CIS 105 Survey of Computer Information Systems (3)  
 OR permission of department or division

**REQUIRED COURSES:** Credits: 32-33

BPC/CIS 121AB	MS-DOS Operating System	1
+ BPC 170	Computer Maintenance I: A+ Prep	3
+ CIS 190	Intro. to Local Area Networks (3) OR	
CNT 140	Cisco Networking Fundamentals (4) OR	
MST 140	Microsoft Networking Essentials (3)	3-4
+ MST 150++	any MST150 course	3
+ MST 152++	any MST152 course	4
+ MST 155	Implementing Windows Ntwk Infrastructure	3
+ MST 157	Implementing Windows Directory Services	3
+ MST 232	Managing Windows Network Environment	3
+ MST 244	Microsoft SQL Server Administration	3
+ MST 253	Designing a Microsoft Windows 2000 Directory Services Infrastructure (3) OR	
+ MST 259	Designing Windows Network Security (3)	3
+ MST 255	Designing Windows Network Infrastructure	3

ASSOCIATE IN APPLIED SCIENCE: 3778

## MICROSOFT NETWORKING TECHNOLOGY

62 CREDITS

**DESCRIPTION:** The Associate in Applied Science in Microsoft Networking Technology program develops skills to implement a network infrastructure and install, configure, monitor, optimize, and troubleshoot Windows server and Windows client workstations. Courses in the program also help to prepare for Microsoft Certified Product Specialist (MCP), Microsoft Certified Systems Administrator (MCSA), and Microsoft Certified Systems Engineer (MCSE) examinations. The curriculum is taught by Microsoft Certified Professionals.

**JOB DESCRIPTION:** A Microsoft Networking administrator will be required to perform various tasks such as developing a local area network, installing and configuring software, creating and managing user and group accounts, analyzing and optimizing system performance, troubleshooting system and printing problems, interoperating with various operating systems, and working as a system administrator.

**PROGRAM NOTES:** Students must earn a grade of "C" or better for all required courses within the program. "+" indicates course has prerequisite and/or corequisites. "++" indicates any module.

**PROGRAM PREREQUISITE:** Credits: 3  
 CIS 105 Survey of Computer Information Systems 3  
 OR permission of department or division.

**REQUIRED COURSES:** Credits: 24-25

BPC/CIS 121AB	MS-DOS Operating System	1
+ BPC 170	Computer Maintenance I: A+ Prep	3
CIS 102	Interpersonal & Customer Service Skills for IT Professionals	1
CIS126DA	UNIX Operating System (3) OR	
CIS126AA	UNIX Operating System: Level I (1) AND	
+ CIS126BA	UNIX Operating System: Level II (1) AND	
+ CIS126CA	UNIX Operating System: Level III (1) OR	
CIS126DL	Linux Operating System (3) OR	
CIS126AL	Linux Operating System I (1) AND	
+ CIS126BL	Linux Operating System II (1) AND	
+ CIS126CL	Linux Operating System III (1)	3
+ CIS 190	Introduction to Local Area Networks (3) OR	
CNT 140	Cisco Networking Basics (4) OR	
MST 140	Microsoft Networking Essentials (3)	3-4
+ MST 150++	Microsoft Windows Professional (any course)	3
+ MST 152++	Microsoft Windows Server (any course)	4
+ MST 155	Implementing Windows Network Infrastr.	3
+ MST 157	Implementing Windows Directory Services	3

**RESTRICTED ELECTIVES:** Credits: 13  
 For MST150++ and MST152++, select a different MS Windows version than the one selected for Required Courses.  
 BPC 110 Computer Usage & Applications (3) OR  
 CIS 105 Survey of Computer Information Systems (3) 3

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

+ BPC 171	Recycling Used Computer Technology	1-3
+ BPC 270	Microcomputer Maintenance II	3
+ CIS 150	Programming Fundamentals	3
+ CIS 159	Visual Basic Programming I	3
+ CIS 162AB	C++: Level I (3) OR	
+ CIS 162AC	Visual C++: Level I (3)	3
+ CIS 280++	Any CIS280 Current Topics in Computing	1-3

Students may select no more than four (4) credits combined from CIS282AA-AC, CIS290AA, AB, AC and CIS296WA-WD courses.

+ CIS 282++	Volunteerism for Computer Info Systems: A Service Learning Experience (any module) (1-3)	
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OR

+ CIS 290++	Comp. Info. Syst. Internship any module (1-3) OR	
+ CIS 296++	Cooperative Education any module (1-4)	1-4

+ CNT 150	Cisco Networking Router Technologies	3
+ MST 141	Supporting MS Windows Desktop Oper Syst	3
+ MST 142	Supporting Appl. on MS Windows Desktop Operating Systems	3
+ MST 150++	Microsoft Windows Professional (any course)	3
+ MST 152++	Microsoft Windows Server (any course)	4
+ MST157	Implementing Windows Directory Services	3
+ MST 232	Managing a Windows Network Environment	3
+ MST 242	Microsoft Exchange Server	4
+ MST 244	Microsoft SQL Server Administration	3
+ MST 252	Microsoft Windows Network Upgrade	3
+ MST 253	Designing a Microsoft Windows Directory Services Infrastructure	2000 3
+ MST 254	Microsoft SQL Server Design & Implem.	3
+ MST 255	Designing Windows Network Infrastructure	3
+ MST 259	Designing Windows Network Security	3
+ MST 298++	Special Projects any module	1-3

GENERAL EDUCATION REQUIREMENTS Credits: 25

CORE: Credits: 15

First-Year Composition 6

+ ENG101	First Year Composition (3) AND	
+ ENG102	First Year Composition (3) OR	
+ ENG107	First Year Composition for ESL (3) AND	
+ ENG108	First Year Composition for ESL (3)	

Oral Communication 3  
Any approved general education course in the Oral Communication area.

Critical Reading 3  
+ CRE101 Critical & Evaluative Reading I (3) OR Equivalent as indicated by assessment

Mathematics 3  
Any approved general education course from the Mathematics area.

DISTRIBUTION: Credits: 10

Humanities & Fine Arts 3  
Any approved general education course from the Humanities & Fine Arts area.

Social & Behavioral Sciences 3  
Any approved general education course from the Social & Behavioral Sciences area.

Natural Science 4  
Any approved general education course from the Natural Science Area.

## MICROSOFT APPLICATIONS DEVELOPMENT

**JOB DESCRIPTION:** Microsoft Applications Developers design and develop custom solutions to build Web-based, distributed, and commerce applications by using Microsoft's products, such as Microsoft SQL™ Server, Microsoft Visual Studio, and Microsoft Component Services. Job tasks include analyzing business requirements, defining the technical architecture, designing a solution, coding and implementing a solution, testing the solution, deploying the solution, and maintaining the solution.

**JOB OPPORTUNITIES:** Career opportunities include systems architect, systems analyst, programmer, e-commerce administrator, database administrator, trainer, and contractor. There is a critical shortage of Microsoft developers as there are approximately 22,000 MCSDs worldwide. The growth of e-commerce and use of Microsoft products will increase the demand for qualified solutions developers. Average salary in the southwest region is \$78,500.

Note: PVCC doesn't offer all courses needed for the Microsoft CCL and AAS degree. Courses needed to complete the program(s) may also be available at CGCC, EMCC, GCC, GWC, PC, SCC and SMC.

CERTIFICATE OF COMPLETION: 5838

## MICROSOFT APPLICATIONS DEVELOPMENT 22 CREDITS

**DESCRIPTION:** The Certificate of Completion in Microsoft Applications Development is designed to provide training for developers who develop, deploy, and maintain applications and components using Visual Studio: Visual Basic (VB), C++, and Structured Query Language (SQL). It also provides training for Microsoft Certified Application Developer (MCAD) certification examinations. The Microsoft Certified Application Developer (MCAD) credential is appropriate for professionals who use Microsoft technologies to develop and maintain department-level applications, components, Web or desktop clients, or back-end data services or work in teams developing enterprise applications.

**PROGRAM NOTES:** Students entering the Microsoft Applications Development program often come with background or experience in the computer programming area. Students must consult with a program advisor as the program prerequisites may not be necessary and may be waived as requirements to the program. Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum G.P.A. = 2.00. + indicates course has prerequisites

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

and/or corequisites.

<b>PROGRAM PREREQUISITES:</b>		Credits: 6
CIS 105	Survey of Computer Information Systems	3
CRE101	Critical and Evaluative Reading I (3) OR Equivalent as indicated by assessment (3) OR Permission of Department or Division	3

<b>REQUIRED COURSES:</b>		Credits: 22
BPC/CIS133DA Internet/Web Development Level I (3) OR		
BPC/CIS133AA Internet/Web Development Level I-A (1) AND		
+ BPC/CIS133BA Internet/Web Development Level I-B (1) AND		
+ BPC/CIS133CA Internet/Web Development Level I-C (1) 3		
CIS102	Interpersonal and Customer Service Skills for IT Professionals	1
+ CIS159	Visual Basic Programming I	3
+ CIS259	Visual Basic Programming II	3
+ CIS164AG	Oracle: Data Modeling and Relational Database Design (2) OR	
+ MST146	Data Modeling & Relatnal Dbase Design (2)	2
+ MST172	Visual Basic .NET Web Application Dev	4
+ MST176	Visual Basic .NET XML Web Services Dev	3
+ MST254	Microsoft SQL Server Design & Implement.	3

RESTRICTED ELECTIVES: None

ASSOCIATE IN APPLIED SCIENCE: 3838

## MICROSOFT APPLICATIONS DEVELOPMENT 60-62 CREDITS

**DESCRIPTION:** The Associate in Applied Science in Microsoft Applications Development is designed to provide training for developers who develop, deploy, and maintain applications and components using Visual Studio: Visual Basic (VB), C++, and Structured Query Language (SQL). It also provides training for Microsoft Certified Application Developer (MCAD) certification examinations. The MCAD credential is appropriate for professionals who use Microsoft technologies to develop and maintain department-level applications, components, Web or desktop clients, or back-end data services or work in teams developing enterprise applications. The program of study combines the technical aspects of the certificate program with selected general education courses in the area of English, communications, mathematics, humanities, social and behavioral sciences, and the natural sciences.

Microsoft Certified Application Developers are professionals who use Microsoft technologies to develop and maintain department-level applications, components, Web or desktop clients, or back-end data services or work in teams developing enterprise applications. Career opportunities include programmer, programmer analyst, and software developer.

**PROGRAM NOTES:** Students entering the Microsoft Applications Development program often come with background or experience in the computer programming area. Students must consult with a program advisor, as the program prerequisites may not be necessary and may

be waived as requirements to the program. Students must earn a grade of "C" or better for all courses required within the program. Overall program minimum G.P.A. = 2.00. + indicates course has prerequisites and/or corequisites. ++ indicates any module.

<b>PROGRAM PREREQUISITES:</b>		Credits: 6
CIS 105	Survey of Computer Information Systems	3
+ CRE101	Critical and Evaluative Reading (3) OR Equivalent as indicated by assessment OR Permission of Department or Division	3

<b>REQUIRED COURSES:</b>		Credits: 22
BPC/CIS133DA Internet/Web Development Level I OR		
BPC/CIS133AA Internet/Web Development Level I-A AND		
+ BPC/CIS133BA Internet/Web Development Level I-B AND		
+ BPC/CIS133CA Internet/Web Development Level I-C 3		
CIS102	Interpersonal & Cust. Service Skills for IT Prof.	1
+ CIS159	Visual Basic Programming I	3
+ CIS259	Visual Basic Programming II	3
+ CIS164AG	Oracle: Data Modeling & Relational Database Design (2) or	
+ MST146	Data Modeling & Relational Database Design (2)	2
+ MST172	Visual Basic .NET Web Application Development	4
+ MST176	Visual Basic .NET XML Web Services Dev.	3
+ MST254	Microsoft SQL Server Design and Implementn	3

<b>RESTRICTED ELECTIVES:</b>		Credits: 16
+ CIS119DO	Introduction to Oracle: SQL	3
+ CIS150	Programming Fundamentals	3
+ CIS162++	Any CIS162 course	3
+ CIS163AA	Java Programming: Level I	3
+ CIS190	Introduction to Local Area Networks (3) OR	
CNT140 Cisco Networking Basics (4) or		
MST140	Microsoft Networking Essentials (3)	3-4
+ CIS225AB	Object-Oriented Analysis and Design	3
+ CIS235	e-Commerce	3

Students may select no more than four (4) credits combined from CIS290AA-AC and CIS296WA-WD courses.

+ CIS290A+	Computer Information Systems Internship (any module) (1-3) or	
+ CIS296W+	Coop. Education (any module) (1-4)	1-4
+ MST150++	any MST150 course	3
+ MST152++	any MST152 course	4
+ MST244	Microsoft SQL Server Administration	3
MST298++	Special Projects (Any module)	1-3

**GENERAL STUDIES REQUIREMENTS** Credits: 22-24

**CORE:**

Credits: 12-14

First-Year Composition	6
+ ENG 101	First-Year Composition (3) AND
+ ENG 102	First-Year Composition (3) OR
+ ENG 107	First-Year Composition for ESL (3) AND
+ ENG 108	First-Year Composition for ESL (3)

Oral Communication 3  
Any approved general studies course in the Oral Communication area.



# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

Critical Reading	0
+ Met by CRE101 in Program Prerequisites	
Mathematics	3-5
+ MAT 120 Intermediate Algebra (5) OR	
+ MAT 121 Intermediate Algebra (4) OR	
+ MAT 122 Intermediate Algebra (3) OR	
Equivalent as indicated by assessment OR	
Satisfactory completion of a higher level math course	
<b>DISTRIBUTION:</b>	<b>Credits: 10</b>
Humanities & Fine Arts	3
Any approved general studies course in the Humanities & Fine Arts area.	
Social and Behavioral Sciences	3
Any approved general studies course in the Social and Behavioral Sciences area.	
Natural Sciences	4
Any approved general studies course in the Natural Sciences area.	

## MICROSOFT SYSTEMS ADMINISTRATION

**JOB DESCRIPTION:** The Microsoft Certified Systems Administrator (MCSA) will be required to implement, to manage, and to troubleshoot networks containing messaging services, file and print servers, and firewalls in addition to configuring Internet access, to enabling remote access for users, and to managing client computers.

CERTIFICATE OF COMPLETION: 5852

## MICROSOFT SYSTEMS ADMINISTRATION

20-21 CREDITS

**DESCRIPTION:** The Certificate of Completion in the Microsoft Systems Administration provides training for professionals who implement, manage, and troubleshoot existing network and system environments based on current Microsoft Server operating systems. Courses in the program also prepare for Microsoft Certified Product Specialist (MCP), Microsoft Certified Systems Administrator (MCSA), and Microsoft Certified Systems Engineer (MCSW) examinations.

**PROGRAM NOTES:** Students must earn a grade of "C" or better in each course in the Required Courses area. "+" indicates prerequisite. "++" indicates any module. Overall required GPA: 2.00

<b>PROGRAM PREREQUISITES:</b>	3
CIS 105 Survey of Computer Information Systems (3) OR	
Permission of Department or Division	

<b>REQUIRED COURSES:</b>	<b>Credits: 20-21</b>
BPC/CIS 121AB MS-Dos Operating System	1
+ BPC 170 Computer Maintenance I: A+ Prep	3
+ CIS 190 Intro. to Local Area Networks (3) OR	
CNT 140 Cisco Networking Fundamentals (4) OR	
MST 140 Microsoft Networking Essentials (3)	3-4
+ MST 150++ any MST150 course	3
+ MST 152++ any MST152 course	4
+ MST 155 Implementing Windows Network Infrastructure	3
+ MST 232 Managing a Windows Network Environment	3

RESTRICTED ELECTIVES: None

## MIDDLE MANAGEMENT BUSINESS LEADERSHIP

**DESCRIPTION:** The purposes of the program in management are 1) to train students for full-time employment in supervisory positions upon graduation; 2) to upgrade the training for personnel already involved in supervisory positions; 3) and/or to provide additional training in specific areas as needed for those already employed in management positions. Students completing the program should find rewarding careers in sales/merchandising, wholesaling, finance, industry, business ownership, and the expanding services industries.

Students currently employed should consult with an advisor about the advantages of Cooperative Education work programs.

CERTIFICATE OF COMPLETION: 5072

## MIDDLE MANAGEMENT

28-30 CREDITS

**PROGRAM NOTES:** Students must earn a grade of "C" or better in each course in the Required Courses area. "++" indicates any module.

<b>REQUIRED COURSES:</b>	<b>Credits: 28-30</b>
ACC 111 Accounting Principles I	3
BPC 110 Computer Usage & Applications (3) OR	
CIS 105 Survey of Computer Info. Systems (3)	3
GBS 151 Introduction to Business	3
+ GBS 233 Business Communication	3
MGT 175 Business Organization & Management	3
MGT 253 Owning & Operating A Small Business	3
MGT 229 Management and Leadership I	3
MGT 251 Human Relations in Business	3
MGT 296++ Cooperative Education (any module)	1-3
MKT 271 Principles of Marketing	3

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

## MUSIC BUSINESS

CERTIFICATE OF COMPLETION: 5258

### MUSIC BUSINESS

40 CREDITS

**DESCRIPTION:** The CCL (Certificate of Completion) in Music Business program is an innovative curriculum designed to prepare students for today's music industry. The certificate and degree with a music business emphasis are designed for both the performing musician and the business student with limited performing experience. This program combines a flexible curriculum with an emphasis in business and marketing, along with music industry related courses and experiences.

**PROGRAM REQUIREMENTS:** "+" indicates course has prerequisites and/or corequisites. "++" indicates any module. Students must earn a grade of "C" or better in all courses within the program.

#### REQUIRED COURSES: Credits: 37

ACC109	Accounting Concepts (3) OR	
ACC111	Accounting Principles I (3)	3
BPC128	Introduction to Desktop Publishing	1
CIS131AA	Doing Business on the Internet	1
+ COM259	Communication in Business and Professions	3
GBS151	Introduction to Business	3
MGT253	Owning and Operating a Small Business	3
MKT271	Principles of Marketing	3
MTC101	Introduction to Music Theory OR Higher Level	3
MUC109	Music Business: Merchandising and the Law	3
MUC110	Music Business: Recording and Mass Media	3
+ MUC111	Digital Audio Workstation I (DAW I)	3
MUC195	Studio Music Recording I	3
MUC295AA	Self Promotion for Music	1
+ MUC297AB	Music Internship	2
SBS230	Financial and Tax Management for Small Business	2

#### RESTRICTED ELECTIVES: Credits: 3

MHL+++++		3
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Note: Any approved MHL prefixed course 3

ASSOCIATE OF APPLIED SCIENCE: 3017

### MUSIC BUSINESS

65 CREDITS

**DESCRIPTION:** The AAS (Associate in Applied Science) in Music Business program is an innovative curriculum designed to prepare students for today's music industry. The certificate and degree with a music business emphasis are designed for both the performing musician and the business student with limited performing experience. This program combines a flexible curriculum with an emphasis in business and marketing, along with music industry related courses and experiences.

**PROGRAM REQUIREMENTS:** "+" indicates course has prerequisites and/or corequisites. "++" indicates any module. Students must earn a grade of "C" or better in all courses within the program.

#### REQUIRED COURSES: Credits: 37

ACC109	Accounting Concepts (3) OR	
ACC111	Accounting Principles I (3)	3
BPC128	Introduction to Desktop Publishing	1
CIS131AA	Doing Business on the Internet	1
+ COM259	Communication in Business and Professions	3
GBS151	Introduction to Business	3
MGT253	Owning and Operating a Small Business	3
MKT271	Principles of Marketing	3
MTC101	Introduction to Music Theory OR Higher Level	3
MUC109	Music Business: Merchandising & the Law	3
MUC110	Music Business: Recording & Mass Media	3
+ MUC111	Digital Audio Workstation I (DAW I)	3
MUC195	Studio Music Recording I	3
MUC295AA	Self Promotion for Music	1
+ MUC297AB	Music Internship	2
SBS230	Financial and Tax Management for Small Business	2

#### RESTRICTED ELECTIVES: Credits: 3

MHL+++	Any approved MHL prefixed course	3
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#### GENERAL EDUCATION REQUIREMENTS: Credits: 25

#### CORE: Credits: 15

First-Year Composition 6

+ ENG101 First-Year Composition (3) AND

+ ENG102 First-Year Composition (3)

Oral Communication 3

Any approved general education course in the Oral Communication Area

Critical Reading 3

Any approved general education course in the Critical Reading Area

Mathematics 3

Any approved general education course in the Mathematics Area

#### DISTRIBUTION Credits: 10

Humanities & Fine Arts 3

Any approved general education course in the Humanities and Fine Arts Area

Social and Behavioral Sciences 3

Any approved general education course in the Social and Behavioral Sciences Area

Natural Sciences 4

Any approved general education course in the Natural Sciences Area

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

## NURSING

**DESCRIPTION:** The Nursing Program is available at eight of the Maricopa Community Colleges. The nursing pathway provides multiple exit points for employment that begins with Nurse Assisting and continues to the Practical Nurse certificate and Registered Nurse degree program. The Nursing Program provides eligibility for students seeking certification and licensure through the Arizona State Board of Nursing. Licensure requirements are the exclusive responsibility of the Arizona State Board of Nursing.

The Nursing Program is approved by the Arizona State Board of Nursing and accredited by the National League for Nursing Accrediting Commission (NLNAC), 61 Broadway 33rd Floor, New York, New York 10006, 212.363.5555, ext 153.

### WAIVER OF LICENSURE/CERTIFICATION GUARANTEE:

Admission or graduation from the Nursing Program does not guarantee obtaining a license or certificate to practice nursing. Licensure and certification requirements and the subsequent procedures are the exclusive right and responsibility of the Arizona State Board of Nursing. Students must satisfy the requirements of the Nurse Practice Act: Statutes, Rules and Regulations, independently of any college of school requirements for graduation.

Pursuant to A.R.S. § 32-1606(B)(17), an applicant for professional or practical nurse license by examination is not eligible for licensure if the applicant has any felony convictions and has not received an absolute discharge from the sentences for all felony convictions. The absolute discharge must be received five or more years before submitting this application. If you cannot prove that the absolute discharge date is five or more years, the Board cannot process your application.

All nurse and nursing assistant applicants for certification and licensure will be fingerprinted to permit the Department of Public Safety to obtain state and federal criminal history information. If there is any question about eligibility for licensure or certification, contact the nursing education consultant at the Arizona State Board of Nursing (602-331-8111). All students must submit a copy of a fingerprint clearance card with their application for the Maricopa Community College District Nursing Program.

**HEALTH DECLARATION:** It is essential that Nursing students be able to perform a number of physical activities in the clinical portion of the program. At a minimum, students will be required to lift patients, stand for several hours at a time and perform bending activities. The clinical nursing experience also places students under considerable mental and emotional stress as they undertake responsibilities and duties impacting patients' lives. Students must be able to demonstrate rational and appropriate behavior under stressful conditions. Individuals should give careful consideration to the mental and physical demands of the program prior to making application.

### HEALTH & SAFETY REQUIREMENTS FOR THE NURSING PROGRAM:

1. Students must submit a completed Health and Safety Documentation Checklist and maintain current status throughout the program.
2. Students must submit a CPR card for Health Care Provider and maintain current status throughout the program.

3. Health Declaration Form signed by a licensed health care provider.
4. Negative urine drug screen.

### GRADE REQUIREMENTS:

Student must obtain a "C" grade or better or pass in "P/Z" graded courses in all courses in program.

### COURSE FEE INFORMATION:

Please see class schedule for information regarding course fees.

### UNIVERSITY STUDENT TRANSFERS:

For students planning a University Program. Students who are planning to earn the Bachelor of Science in Nursing may obtain their prerequisite courses at the Maricopa Community Colleges. For information on courses that meet requirements for admission into a baccalaureate program, please contact a program advisor.

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CERTIFICATE OF COMPLETION: 5963

## NURSE ASSISTING

8 CREDITS

**DESCRIPTION:** The Maricopa Community College District Nursing Program (MCCDNP) is available at eight Maricopa Colleges. The nursing pathway provides multiple exit points for employment that begins with Nurse Assisting and continues to the Practical Nurse certificate and Registered Nurse degree program. The Nursing Program provides eligibility for students seeking certification and licensure through the Arizona State Board of Nursing. Licensure requirements are the exclusive responsibility of the Arizona State Board of Nursing. The MCCC Nursing Program is approved by the Arizona State Board of Nursing and accredited by the National League for Nursing Accrediting Commission (NLNAC), 61 Broadway 33rd Floor, New York, New York 10006, 212.363.5555, ext. 153.

**THE NURSE ASSISTING PATHWAY:** is designed to prepare students to complete the Nurse Assistant Certification through the Arizona State Board of Nursing to practice in a health care agency as a certified nurse assistant. Completion of the nurse assistant program of study provides job ready skills as a nursing assistant. Students may apply to the Nursing Program after completing the prerequisite courses and admission requirements.

**PROGRAM NOTES:** Students must earn a grade of "C" or better in all courses within the program. "+" indicates course has prerequisites and/or corequisites

**ADMISSION CRITERIA:** Application and acceptance into the program, High School graduate or GED, current Health Care Provider CPR Card required before beginning courses. All students must submit a copy of a fingerprint clearance card with their application for the Maricopa Community College District Nursing Program.

**PROGRAM PREREQUISITES:** None.

### REQUIRED COURSES:

HCC130 Fundamentals in Health Care Delivery (3) OR  
HCC130AA Health Care Today (0.5) AND  
HCC130AB Workplace Behaviors in Health Care (0.5) AND

Credits: 8

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

HCC130AC	Personal Wellness and Safety (0.5) AND	
HCC130AD	Communication and Teamwork in Health Care Organizations (0.5) AND	
HCC130AE	Legal Issues in Health Care (0.5) AND	
HCC130AF	Decision Making in the Health Care Setting (0.5)	3
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HCC145AA	Medical Terminology for Health Care Workers I	1
+ NUR156	Nurse Assisting	2
+ NUR157	Nurse Assisting Lab	2

ASSOCIATE OF APPLIED SCIENCE: 3812

## NURSING 69-82 CREDITS

**DESCRIPTION:** The Nursing Program is available at eight of the Maricopa Community Colleges. The nursing pathway provides multiple exit points for employment that begins with Nurse Assisting and continues to the Practical Nurse certificate and Registered Nurse degree program. The Nursing Program provides eligibility for students seeking certification and licensure through the Arizona State Board of Nursing. Licensing requirements are the exclusive responsibility of the Arizona State Board of Nursing.

The Nursing Program is approved by the Arizona State Board of Nursing and accredited by the National League for Nursing Accrediting Commission (NLNAC), 61 Broadway 33rd Floor, New York, New York 10006, 212.363.5555, ext 153.

**PROGRAM REQUIREMENTS:** Students must earn a grade of "C" or better in all courses within the program. "+" indicates course has prerequisites and/or corequisites.

### REGISTERED NURSE PATHWAY

Associate in Applied Science Degree in Nursing Program  
The Associate Applied Science (AAS) degree in Nursing graduate is eligible to apply for licensure as a Registered Nurse (RN). The RN is educated as a generalist who delivers health care to clients and family groups and has competencies related to the art and science of nursing. The RN may be employed in a variety of acute, chronic and community based health care settings. The AAS degree in Nursing provides the graduate with an educational foundation for articulation into the university setting.

**PROGRAM NOTES:** Students must earn a grade of "C" or better in all courses within the program. "+" indicates course has prerequisites and/or corequisites

**ADMISSION CRITERIA:** High School diploma or GED, application and acceptance into the nursing program. A reading score of 50% or higher and a math score of 50% or higher on the Nursing Entrance Exam (NET) must be achieved for admission. Retests can be taken only once in a 60 day period. The entire Nursing Entrance Exam (NET) must be taken on each retest. The test can be taken no more than 3 times in a 12-month period.

The Health Education Systems, Inc. (HESI) test will be administered to all prospective advanced placement students seeking admission into Blocks 3 or 4. A score of 800 or higher is required in order to be granted advanced placement into either of these blocks. A score of

less than 800 will result in placement into either Block 1 or 2. The final decision rests with the Nursing Program Chair at the College to which the student is accepted.

All students must submit a copy of a fingerprint clearance card with their application for the Nursing Program.

**PROGRAM PREREQUISITES:** Credits: 18-31  
**Area Note:** The credit hour range is subject to change depending on the student's educational experience.

BIO156	Introductory Biology for Allied Health (4) OR	
BIO181	General Biology (Majors) I (4) OR One year of high school biology	0-4
+ BIO201	Human Anatomy and Physiology I	4
+ BIO202	Human Anatomy and Physiology II	4
+ BIO205	Microbiology	4
+ CHM130	Fundamental Chemistry (3) AND	
+ CHM130LL	Fundamental Chemistry Laboratory (1) OR One year of high school chemistry	0-4
+ CRE101	Critical and Evaluative Reading I (3) OR Equivalent by assessment	0-3
+ ENG101	First-Year Composition OR	
+ ENG107	First-Year Composition for ESL	3
+ MAT120	Intermediate Algebra (5) OR	
+ MAT121	Intermediate Algebra (4) OR	
+ MAT122	Intermediate Algebra (3) OR Higher Level Math Course	3-5

<b>REQUIRED COURSES:</b>		Credits: 46
HCC145AA	Medical Terminology for Health Care Workers I	1
+ NUR111	Nursing Process/Critical Thinking I	4
+ NUR117	Pharmacology & Medication Administration I	2
+ NUR119	Nursing Science I	5
+ NUR121	Nursing Process/Critical Thinking II	4
+ NUR127	Pharmacology & Medication Administration II	2
+ NUR129	Nursing Science II	5
+ NUR231	Nursing Process/Critical Thinking III	4
+ NUR237	Pharmacology & Medication Administration III	1
+ NUR239	Nursing Science III	5
+ NUR241	Nursing Process/Critical Thinking IV	4
+ NUR249	Nursing Science IV	6
PSY101	Introduction to Psychology	3

**RESTRICTED ELECTIVES:** None.

**GENERAL EDUCATION REQUIREMENTS:** Credits: 5

**CORE:** Credits: 3

First-Year Composition	
Met by ENG101 OR ENG107 in Program Prerequisites area.	
+ ENG102	First-Year Composition (3) OR
ENG108	First-Year Composition for ESL (3)
Oral Communication	0
Waived.	
Critical Reading	
Met by CRE101 in Program Prerequisites area.	0

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

Mathematics	
Met by MAT120, or MAT121, or MAT122 OR	
Higher Level Math Course in Program Prerequisites area.	0
<b>DISTRIBUTION:</b>	<b>Credits: 2</b>
Humanities/Fine Arts	
Any approved course in the Humanities and Fine Arts area.	2
Natural Science	0
Met by BIO201 and BIO202 in Program Prerequisites areas.	
Social and Behavioral Sciences	0
Met by PSY101 in Required Courses area.	

CERTIFICATE OF COMPLETION: 5957

## PRACTICAL NURSING

44-57 CREDITS

**DESCRIPTION:** The Nursing Program is available at eight of the Maricopa Community Colleges. The nursing pathway provides multiple exit points for employment that begins with Nurse Assisting and continues to the Practical Nurse certificate and Registered Nurse degree program. The Nursing Program provides eligibility for students seeking certification and licensure through the Arizona State Board of Nursing. Licensure requirements are the exclusive responsibility of the Arizona State Board of Nursing.

**PRACTICAL NURSE PATHWAY:** Following completion of the practical nurse level program of study, the student is eligible to apply for licensure as a practical nurse. Licensed Practical Nurses (L.P.N.) are employed in acute, long-term, and community-based health care agencies under the direction of a registered nurse. Practical Nurses function within their legal scope of practice and use professional standards of care in illness care and health promotion activities for clients and families across the life span.

**PROGRAM NOTES:** Students must earn a grade of "C" or better in all courses within the program. "+" indicates course has prerequisites and/or corequisites.

**ADMISSION CRITERIA:** High School diploma or GED, application and acceptance into the nursing program. A reading score of 50% or higher and a math score of 50% or higher on the Nursing Entrance Exam (NET) must be achieved for admission. Retests can be taken only once in a 60 day period. The entire Nursing Entrance Exam (NET) must be taken on each retest. The test can be taken no more than 3 times in a 12-month period. All students must submit a copy of a fingerprint clearance card with their application for the Nursing Program.

**PROGRAM PREREQUISITES:** Credits: 18-31

Area Note: The credit hour range is subject to change depending on the student's educational experience.

BIO156	Introductory Biology for Allied Health (4) OR	
BIO181	General Biology (Majors) I (4) OR	
	One year of high school biology	0-4
+ BIO201	Human Anatomy and Physiology I	4
+ BIO202	Human Anatomy and Physiology II	4

+ BIO205	Microbiology	4
+ CHM130	Fundamental Chemistry (3) AND	
+ CHM130LL	Fundamental Chemistry Laboratory (1) OR	
	One year of high school chemistry	0-4
+ CRE101	Critical and Evaluative Reading I (3) OR	
	Equivalent by assessment	0-3
+ ENG101	First-Year Composition OR	
+ ENG107	First-Year Composition for ESL	3
+ MAT120	Intermediate Algebra (5) OR	
+ MAT121	Intermediate Algebra (4) OR	
+ MAT122	Intermediate Algebra (3) OR	
	Higher Level Math Course	3-5

**REQUIRED COURSES:** Credits: 26

HCC145AA	Medical Terminology for Health Care Workers I	1
+ NUR111	Nursing Process/Critical Thinking I	4
+ NUR117	Pharmacology & Medication Administration I	2
+ NUR119	Nursing Science I	5
+ NUR121	Nursing Process/Critical Thinking II	4
+ NUR127	Pharmacology & Medication Administration II	2
+ NUR129	Nursing Science II	5
PSY101	Introduction to Psychology	3

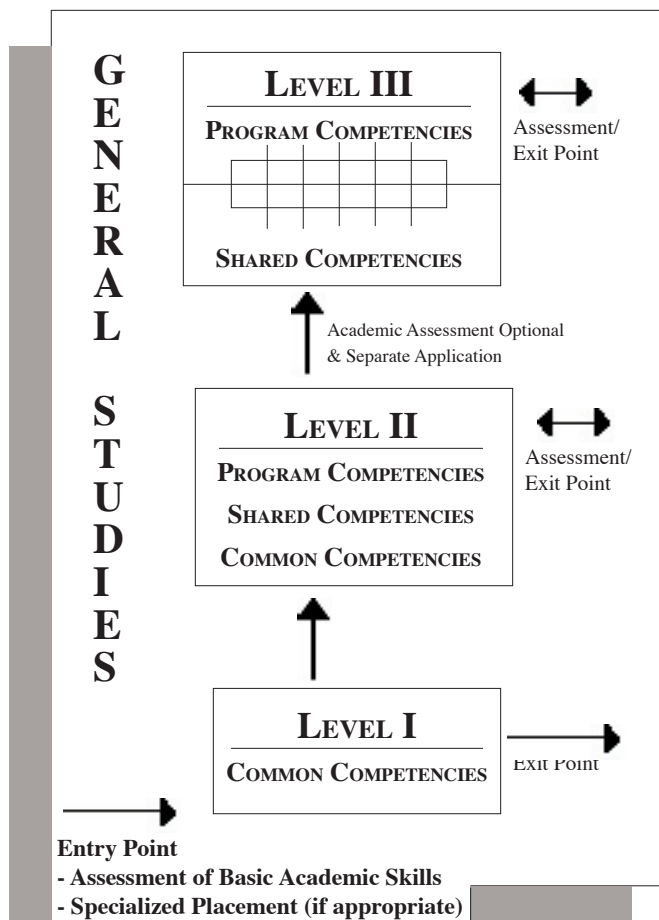
**RESTRICTED ELECTIVES:** None

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

## MARICOPA COMMUNITY COLLEGE DISTRICT HEALTH CARE INTEGRATED EDUCATIONAL SYSTEM (HCIES)

In collaboration and partnership with the health care community and its response to the dynamic changes occurring in the health care arena and health care professions' practice, the Maricopa Community Colleges integrated the curriculum of all allied health and nursing programs. All HCIES program pathways and educational offerings emphasize the achievement of relevant competencies and provide value to the individual, the employer, and the community. As a result, graduates of the various HCIES program pathways will meet the community's demand for a flexible, multi-skilled health care workforce that meets employer and consumer needs. Refer to individual college catalogs for specific health care program pathways.

For further information, <http://healthcare.maricopa.edu/healthcarecourses.php> is a comprehensive information source.



### HCIES Assumption of Risk/Release of Liability

Most of the program pathways of the HCIES include a program of study in a clinical training environment which may contain exposures to risks inherent in patient-oriented educational experiences, such as but not limited to, bodily injury or communicable and infectious diseases. Students enrolling in clinical educational courses will be asked to sign a statement assuming all risks inherent in their coursework.

### Use of Confidential Information

Students enrolled in program pathways of the HCIES will have learning experiences in a health care setting where they will have access to confidential information. Prior to beginning any clinical studies, the students will be asked to sign an agreement to adhere to the requirements of those clinical sites and applicable law, including the Health Insurance Portability and Accountability Act of 1996 (HIPAA).

### HCIES College of Attendance

As the programs within the HCIES are integrated across the Maricopa Community College District, college of attendance requirements for the completion of the health care program pathways can be met through the completion of coursework taken at all the Maricopa Community Colleges and Skill Centers.

### Requirement of Background Check

Students enrolled in most of the HCIES pathways will be in clinical learning experiences, working with children, elderly persons, and other vulnerable populations. Arizona State law and healthcare agency policies require evidence of clear background checks prior to entering such learning experiences. Students seeking admission to some health programs will be required to provide a current Fingerprint Clearance Card at the time of application to or enrollment in clinical courses, according to program guidelines. The Fingerprint Clearance Card must remain in effect for the duration of time of program enrollment. It is advised that students carry proof of the clearance at all times during any agency learning experience.

Note: Even though the Fingerprint Clearance Card is valid for 6 years, certain State licensing boards may require a new background check or clearance card upon request for State licensure or certification.

### WAIVER OF LICENSURE/CERTIFICATE GUARANTEE

Many of the HCIES programs prepare graduates for application for State or National certificates or licenses. In some professions, such licensure and certification is required prior to employment or practice in the profession. Graduation from a HCIES program does not guarantee the receipt of a license or certificate to practice in the field of study.

## ORGANIZATIONAL LEADERSHIP

CERTIFICATE OF COMPLETION: 5731

### ORGANIZATIONAL LEADERSHIP

17-18 CREDITS

**DESCRIPTION:** The Certificate of Completion (CCL) in Organizational Leadership provides students with knowledge and skills needed in today's changing workplace. The program develops leadership and communication skills and techniques for planning, directing, and evaluating business situations. This program also emphasizes procedures for effective allocation of time, money, materials, space, and personnel.

**PROGRAM NOTES:** "+" indicates course has prerequisites and/or corequisites. Students must earn a grade of "C" or better for each course in the "Required Courses" area

**REQUIRED COURSES:** Credits: 17-18

BPC110	Computer Usage and Application (3) OR	
CIS105	Survey of Computer Information Systems (3)	3
GBS110	Human Relations in Business and Industry (3) OR	
MGT251	Human Relations in Business (3)	3
GBS151	Introduction to Business	3
+ GBS233	Business Communication	3
MGT175	Business Organization and Management (3) OR	
TQM240	Project Management in Quality Organizations (2)	2-3
MGT101	Techniques of Supervision (3) OR	
MGT229	Management and Leadership I (3)	3

**RESTRICTED ELECTIVES:** None

## PROGRAM & SYSTEM ANALYSIS

**JOB DESCRIPTION:** Microsoft solutions developers design and develop custom solutions to build Web-based, distributed, and commerce applications by using Microsoft's product, such as Microsoft SQL Server, Microsoft Visual Studio, and Microsoft Component Services. Job tasks include analyzing business requirements, defining the technical architecture, designing a solution, coding and implementing a solution, testing the solution, deploying the solution, and maintaining the solution.

**OPPORTUNITIES:** Career opportunities include systems architect, systems analyst, programmer, e-commerce administrator, database administrator, trainer, LAN administrator network engineer, information systems manager, and contractor. There is a critical shortage of Microsoft developers as there are approximately 22,000 MCSDs worldwide. The growth of e-Commerce and use of Microsoft products will increase the demand for qualified solutions developers. Average salary in the southwest region is \$78,500.

**Note:** PVCC may not offer all courses needed for the following programs. Courses needed to complete the program(s) may also be available at RSC.

CERTIFICATE OF COMPLETION: 5048

### PROGRAMMING & SYSTEM ANALYSIS

25-26 CREDITS

**DESCRIPTION:** The Certificate of Completion (CCL) program provides an in-depth exploration of different computer language and technical skills. The program includes, but is not limited to the following: operating systems, local area networks, business communication, team roles, and dynamics.

**PROGRAM NOTES:** Students must earn a grade of "C" or better for all courses required within the program. "+" indicates course has prerequisites and/or corequisites.

<b>PROGRAM PREREQUISITES:</b>	<b>Credits: 3</b>
+ ENG101	First-Year Composition (3) OR
+ ENG107	First-Year Composition for ESL (3) OR
	Equivalent
	3

**REQUIRED COURSES:** Credits: 25-26

	BPC/CIS117DM Microsoft Access: DBase Management (3) OR	
	BPC/CIS117AM Dbase Management: MS Access - Level I (1)	
	AND	
+ BPC/CIS117BM	Dbase Management: MS Access - Level II (1)	
	AND	
+ BPC/CIS117CM	Dbase Management: MS Access - Lev III (1)	3
CIS105	Survey of Computer Information Systems	3
CIS121AB	MS-DOS (1) OR	
CIS121AE	Windows Operating System: Level I (1) OR	
CIS126A+	Any Level I operating system module (1)	1

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

+ CIS150++	Any Programming Fundamentals (3)	3
<i>Select 2 of the following 3 courses for a total of 6 credits:</i>		
+ CIS159	Visual Basic Programming I (3)	6
+ CIS162++	Any level 1 C language course (3)	
+ CIS163AA	Java Programming Level I (3)	
+ CIS190	Introduction to Local Area Networks (3) OR	
+ CNT140	Cisco Networking Basics (4) OR	
+ MST140	Microsoft Networking Essentials (3)	3-4
+ CIS225++	Any Analysis and Design course (3)	3
+ GBS233	Business Communication	3
Note: ENG101 or ENG107 with a grade of "C" or better or permission of department/division are prerequisite to GBS233.		

RESTRICTED ELECTIVES: None

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ASSOCIATE IN APPLIED SCIENCE: 3844  
**PROGRAMMING &  
 SYSTEM ANALYSIS**  
 62-63 CREDITS

**DESCRIPTION:** In depth exploration of different computer language and technical skills. Includes operating systems, local area networks, business communication, team roles, and dynamics.

**PROGRAM NOTES:** Students must earn a grade of "C" or better in each course in the Required Courses area. "+" indicates prerequisite. "++" indicates any module. Overall GPA: 2.0

**PROGRAM PREREQUISITES:** Credits: 3  
 + CRE101 Critical and Evaluative Reading I (3) OR  
 Equivalent by assessment

**REQUIRED COURSES:** Credits: 25-26

BPC/CIS117DM	MS Access: Database Management (3) OR	
BPC/CIS117AM	Dbase Mgt: Microsoft Access-Level I (1) AND	
+ BPC/CIS117BM	Dbase Mgt: Microsoft Access - Level II (1) AND	
+ BPC/CIS117CM	Dbase Mgt: Microsoft Access - Level III (1)	3
CIS105	Survey of Computer Information Systems	3
CIS121AB	MS-DOS (1) OR	
CIS121AE	Windows Operating System: Level I (1) OR	
CIS126AA	UNIX Operating System: Level I (1) OR	
CIS126AL	Linux Operating System I (1)	1
+ CIS150	Programming Fundamentals (3) OR	
+ CIS150AB	Object-Oriented Programming Fundamentals (3)	3
+ CIS159	Visual Basic Programming I	3
CIS162	C Programming I (3) OR	
+ CIS162AA	C: Level I (3) OR	
+ CIS162AB	C++: Level I (3) OR	
+ CIS162AC	Visual C++: Level I (3) OR	
+ CIS162AD	C#: Level I (3)	3

+ CIS190	Introduction to Local Area Networks (3) OR	
+ CNT140	Cisco Networking Basics (4) OR	
+ MST140	Microsoft Networking Essentials (3)	3-4
+ CIS225	Business Systems Analysis and Design (3) OR	
+ CIS225AB	Object-Oriented Analysis and Design (3)	3
+ GBS233	Business Communication	3
<b>RESTRICTED ELECTIVES:</b>		<b>Credits: 15</b>
CIS126DA	UNIX Operating System	3
+ CIS163AA	Java Programming: Level I	3
+ CIS166	Web Scripting/Programming	3
+ CIS166AA	Introduction to JavaScripting	3
+ CIS166AB	Web Scripting with Perl/CGI	3
+ CIS166AC	Web Scripting w/Active Server Pages (ASP).NET	3
+ CIS166AD	Web Scripting with Java Server Pages (JSP)	3
+ CIS166AE	Web Script w/PHP: Hypertext Preprocessor (PHP)	3
+ CIS169	Introduction to Visual Basic for Applications	3
+ CIS224	Project Mgt Microsoft Project for Windows	3
+ CIS250	Management Information Systems	3
+ CIS259	Visual Basic Programming II	3
+ CIS262	C Programming II	3
+ CIS262AA	C: Level II	3
+ CIS262AB	C++: Level II	3
+ CIS262AC	Visual C++: Level II	3
+ CIS263AA	Java Programming: Level II	3
+ CIS290AC	Computer Information Systems Internship	3

**GENERAL EDUCATION REQUIREMENTS:** Credits: 22

**CORE:** Credits: 12

**First-Year Composition:**

ENG101	First-Year Composition (3) OR	
+ ENG107	First-Year Composition for ESL (3) AND	
+ ENG102	First-Year Composition (3) OR	
+ ENG108	First-Year Composition for ESL (3)	6

**Oral Communication:**  
 Any approved general education course in the Oral Communication area. 3

**Critical Reading:**  
 Met by CRE101 in Program Prerequisites area. 0

**Mathematics:**  
 + MAT212 Brief Calculus 3

**DISTRIBUTION:** Credits: 10  
**Humanities and Fine Arts:**  
 Any approved general education course in the Humanities and Fine Arts area. 3

**Natural Sciences:**  
 Any approved general education course in the Natural Sciences area. 4

**Social and Behavioral Sciences:**  
 ECN111 Macroeconomic Principles (3) OR  
 ECN112 Microeconomic Principles (3) OR  
 SBU200 Society and Business (3) 3



# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

## RETAIL MANAGEMENT

CERTIFICATE OF COMPLETION: 5286  
**RETAIL MANAGEMENT**  
33 CREDITS

**DESCRIPTION:** The Retail Management Certificate is designed to prepare individuals working in the food industry, and related fields, for the management challenges of the future. The curriculum encompasses several business essentials and also emphasizes the skill sets needed for effective management and communication in the work environment.

**PROGRAM REQUIREMENTS:** Note: + indicates course has prerequisites and/or corequisites. Note: Students must earn a "C" or better in all courses within the program.

**ADMISSION CRITERIA:** None  
**PROGRAM PREREQUISITES:** None

REQUIRED COURSES:	Credits:	33
ACC111 Accounting Principles I	3	
BPC110 Computer Usage & Applications (3) OR CISI05 Survey of Computer Information Systems (3)	3	
+ ENG101 First-Year Composition (3) OR + ENG107 First-Year Composition for ESL (3)	3	
GBS110 Human Relations in Business and Industry (3) OR + MGT251 Human Relations in Business (3)	3	
GBS131 Business Calculations (3) OR + MAT102 Mathematical Concepts & Applications (3)	3	
+ GBS233 Business Communication	3	
COM110 Interpersonal Communication (3) OR IND133 Speaking in Business (3)	3	
MGT101 Techniques of Supervision (3) OR MGT229 Management and Leadership I (3)	3	
MGT179 Utilizing the Human Resources Department (3) OR MGT276 Personnel/Human Resources Management (3)	3	
+ MKT268 Merchandising MKT271 Principles of Marketing	3	

ASSOCIATE OF APPLIED SCIENCE: 3048

## RETAIL MANAGEMENT

64 CREDITS

**DESCRIPTION:** The Retail Management degree is designed to prepare individuals working in the retail management, food industry, and related fields, for the mid-level management position challenges of the future. The curriculum encompasses business essentials and also emphasizes the skill sets needed for effective management and communication in the work environment. Instruction will provide the background and knowledge necessary for students to develop the judgment skills they must exercise as business managers.

**PROGRAM NOTES:** Students must earn a grade of "C" or better in all courses within the program. "+" indicates course has prerequisites and/or corequisites.

REQUIRED COURSES:	Credits:	39
ACC111 Accounting Principles I	3	
+ ACC230 Uses of Accounting Information I	3	
+ ACC240 Uses of Accounting Information II	3	
BPC110 Computer Usage and Applications (3) OR CISI05 Survey of Computer Information Systems (3)	3	
COM110 Interpersonal Communication (3) OR IND133 Speaking in Business (3)	3	
GBS110 Human Relations in Business and Industry (3) OR MGT251 Human Relations in Business (3)	3	
GBS131 Business Calculations (3) OR + GBS161 Mathematics of Business (3)	3	
GBS205 Legal, Ethical, and Regulatory Issues in Business + GBS233 Business Communication	3	
MGT101 Techniques of Supervision (3) OR MGT229 Management and Leadership I (3)	3	
MGT179 Utilizing the Human Resources Department (3) OR MGT276 Personnel/Human Resources Management (3)	3	
MKT268 Merchandising MKT271 Principles of Marketing	3	

**RESTRICTED ELECTIVES:** None

**GENERAL EDUCATION:** Credits: 25

**CORE:** Credits: 15

First-Year Composition  
+ ENG101 First-Year Composition (3) OR  
+ ENG107 First-Year Composition for ESL (3) AND  
+ ENG102 First-Year Composition (3) OR  
+ ENG108 First-Year Composition for ESL (3) OR  
+ ENG111 Technical Writing (3) 6  
ENG102 or ENG108 recommended for students pursuing a  
BAS degree at an Arizona university.

Oral Communication  
COM230 Small Group Communication 3

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

Critical Reading		
CRE101	Critical and Evaluative Reading I (3) OR Equivalent by assessment	3
Mathematics		
MAT102	Mathematical Concepts/Applications (3) OR Satisfactory completion of a higher level mathematics course	3
DISTRIBUTION:		Credits: 10
Humanities and Fine Arts		
	Any approved general education course from the Humanities and Fine Arts area.	3
Social and Behavioral Sciences		
SBU200	Society and Business	3
Natural Sciences		
	Any approved general education course from the Natural Sciences area.	4

## STRENGTH, NUTRITION & PERSONAL TRAINING

CERTIFICATE OF COMPLETION: 5445

### STRENGTH & CONDITIONING PERSONAL TRAINER

31 CREDITS

**DESCRIPTION:** The Strength and Conditioning Personal Trainer certificate prepares students for employment in the fitness industry as Strength and Conditioning Personal Trainers/Coaches. This curriculum provides students with a fundamental knowledge of human physiology and anatomy, prevention and treatment of exercise related injuries, emergency response readiness, health appraisals and assessments; application of exercise fitness principles and strength training techniques; a fundamental knowledge of nutrition, weight control, stress management and exercise physiology, and biomechanics; skills in exercise testing and fitness measures as well as writing exercise prescriptions and program designs for diverse populations.

**PROGRAM NOTES:** Students must earn a grade of "C" or better in all courses within the program. "+" indicates course has prerequisite and/or corequisite. Overall GPA required: 2.00

**PROGRAM NOTES:** "+" indicates course has prerequisites and/or corequisites.

**PROGRAM PREREQUISITES:** None

<b>REQUIRED COURSES:</b>	<b>Credits:</b> 31
BIO160	Introduction to Human Anatomy and Physiology 4
HES100	Healthful Living 3
HES154	First Aid/Cardiopulmonary Resuscitation 3
HES271	Prevention and Treatment of Athletic Injuries 3

PED112	Professional Applications of Fitness Principles	3
PED125	Exercise Science	3
PED130	Strength Fitness-Physiological Principles and Training Techniques	3
PED145	Guidelines for Exercise Testing and Prescription	3
+ PED275	Methods of Enhancing Physical Performance	3
+ PED285	Exercise Program Design and Instruction	3

ASSOCIATE OF APPLIED SCIENCE: 3059

## STRENGTH, NUTRITION & PERSONAL TRAINING

72-75 CREDITS

**DESCRIPTION:** The Strength, Nutrition, and Personal Training Associate in Applied Science (AAS) prepares students with the knowledge and experience required to be eligible for the American College of Sports Medicine (ACSM) Health and Fitness Instructor Certification, ACSM personal trainer certification, the National Strength and Conditioning Association (NSCA) personal trainer certification, and the American Council on Exercise (ACE) personal trainer certification. This degree will provide students with a stronger educational background making them more marketable in the field of fitness and nutrition. This degree will also meet the needs of individuals with existing degrees in such fields as Exercise Physiology, Nutrition, Athletic Training and other health related disciplines. Registered dietitians, clinical exercise physiologists, personal trainers, exercise specialists, strength and conditioning specialists, coaches, athletes and others interested in acquiring knowledge in exercise, nutrition and health are also eligible for this program.

**PROGRAM NOTES:** Students must earn a grade of "C" or better required for all courses within the program. "+" indicates course has prerequisite and/or corequisites.

**PROGRAM PREREQUISITES:** None

<b>REQUIRED COURSES:</b>	<b>Credits:</b> 47-48
BPC110	Computer Usage and Applications 3
FON100	Introductory Nutrition 3
+ FON100AD	Nutrition Sports and Physical Activity 1
+ FON137	Nutrition Supplements 2
+ FON230	Nutrition for Special Populations 3
+ FON247	Weight Management Theory 3
HES154	First Aid/Cardiopulmonary Resuscitation (3) OR BLS Health Care Provider & First Aid Certification (3) 3
HES271	Prevention and Treatment of Athletic Injuries 3
MGT253	Owning and Operating a Small Business 3
PED112	Professional Applications of Fitness Principles 3
PED125	Exercise Science 3
PED145	Guidelines for Exercise Testing and Prescription 3
+ PED139++	Practical Applications of Personal Training Skills and Techniques Internship (3) (any module) OR 3
+ PED285	Exercise Program Design and Instruction (3) 3
PSY101	Introduction to Psychology 3

# ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

+ PSY215 Introduction to Sport Psychology 3

AND

Choose one of the following series for 5-6 credits:

Series 1: Credits: 6

PED212SC Instructional Competency Lab: Muscular Strength and Conditioning 2

PED212CR Instructional Competency Laboratory: Cardiorespiratory Exercises and Activities 2

PED212FL Instructional Competency Laboratory: Flexibility and Mind-Body Exercises 2

OR

Series 2: Credits: 5

PED130 Strength Fitness-Physiological Principles and Training Techniques 3

PED132 Cardiovascular Fitness: Physiological Principles and Training Techniques 2

OR

Series 3: Credits: 5

+ PED275 Methods of Enhancing Physical Performance 3

PED132 Cardiovascular Fitness: Physiological Principles and Training Techniques 2

RESTRICTED ELECTIVES: None

GENERAL EDUCATION REQUIREMENTS: Credits: 25-27

CORE: Credits: 15-17

First Year Composition

ENG101 First Year Composition (3) AND

ENG102 First Year Composition (3) OR

ENG107 First-Year Composition for ESL (3) AND

ENG108 First-Year Composition for ESL (3) 6

Oral Communication

COM100 Introduction to Human Communication (3) OR 3

COM110 Interpersonal Communication (3)

Critical Reading

CRE101 Critical and Evaluative Reading I 3

Mathematics

MAT120 Intermediate Algebra (5) OR

MAT121 Intermediate Algebra (4) OR

MAT122 Intermediate Algebra (3) 3-5

DISTRIBUTION: Credits: 10

Humanities and Fine Arts

Any approved general education course in the Humanities and Fine Arts area 3

Social and Behavioral Sciences

CFS205 Human Development (3) OR

HES100 Healthful Living (3) 3

Natural Sciences

BIO160 Introduction to Human Anatomy and Physiology 4

## TEACHING HEALING MEDITATION & STRESS MANAGEMENT

DESCRIPTION: This program provides instruction and experiential training in kinetic, auditory, and visual modalities of healing meditation; instruction and training in the application of these techniques to stress management; and training and practical experience in teaching and utilizing healing meditation for stress management in clinical and professional settings.

CERTIFICATE OF COMPLETION: 5018

### TEACHING HEALING MEDITATION & STRESS MANAGEMENT

21.5 CREDITS

PROGRAM NOTES: Students must earn a grade of "C" or better in all courses within the program. "+" indicates course has prerequisite and/or corequisite. Overall GPA required: 2.00

PROGRAM PREREQUISITES

0-4  
Completion of an AAS degree or higher in a recognized health science discipline from a regionally accredited institution of higher education recognized by Maricopa County Community College District, OR a combination degree in psychology, social work, counseling, health education, exercise science or related field AND 1 year experience in related health fields, OR all of the following HCC courses:

HCC 130 Fundamentals in Health Care Delivery (3) OR

HCC 130AA Health Care Today (0.5) AND

HCC 130AB Workplace Behaviors in Health Care (0.5) AND

HCC 130AC Personal Wellness and Safety (0.5) AND

HCC 130AD Communication and Teamwork in

Health Care Organizations (0.5) AND

HCC 130AE Legal & Ethical Issues in Hlth Care (0.5) AND

HCC 130AF Decision Making in Hlth Care Setting (0.5) 3

HCC 145AA Medical Terminology/Health Care Workers I 1

REQUIRED COURSES

HES 100 Healthful Living 3

PED 101DD Physical Activity: Qi Gong (1) OR

PED 102DD Physical Activity: Qi Gong (1) OR

PED 201DD Physical Activity: Qi Gong (1) OR

PED 202DD Physical Activity: Qi Gong (1) 1

AND

PED 101VR Physical Activity: Tai Chi (1) OR

PED 102 VR Physical Activity: Tai Chi (1) OR

PED 201 VR Physical Activity: Tai Chi (1) OR

PED 202 VR Physical Activity: Tai Chi (1) OR

PED 101YJ Physical Activity: Yoga (1) OR

PED 102YJ Physical Activity: Yoga (1) OR

PED 201YJ Physical Activity: Yoga (1) OR

PED 202YJ Physical Activity: Yoga (1) 1

## ASSOCIATE IN APPLIED SCIENCE DEGREE & CERTIFICATE PROGRAMS

+ SOC 270	Sociology of Health and Illness	3
WED 105	Minimizing Workplace Stress	0.5
WED 151	Introduction to Alternative Medicine	3
WED 162	Meditation and Wellness	1
+ WED 257	Kinetic Meditation	2
+ WED 258	Auditory Meditation	2
+ WED 259	Visual Meditation	2
+ WED 275	Practicum: Teaching Healing Meditation, Stress Management	3

RESTRICTED ELECTIVES: None

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### PRE-PROFESSIONAL PATHWAYS

Students at PVCC who are interested in the following pre-professional programs need to work closely with a PVCC academic advisor to identify the best educational programs:

- Actuarial Science transfer to NAU
- Pre-Education transfer to ASU, NAU, or U of A
- Pre-Engineering transfer to ASU, NAU, or U of A
- Pre-Environmental transfer to U of Findlay
- Pre-Med transfer to Midwestern University/  
Glendale Campus & Universidad Autonoma de  
Guadalajara
- Pre-Nursing transfer to ASU or NAU, or U of A
- Pre-Nursing transfer to an AAS/Nursing at other  
MCCCD Colleges
- Pre-Pharmacy or Biomedical Sciences transfer to  
Midwestern University/Glendale Campus

The associate transfer degrees (AA, AS) provide alignment to several of the above pre-professional programs at the Arizona public universities. A PVCC academic advisor will have checksheets and lists of common courses for specific majors.

PVCC has worked closely with Midwestern University/Glendale Campus to identify courses PVCC students can complete that will apply to the first 2 years of a 4-year pharmacy degree at Midwestern or to a degree in biomedical sciences. In addition to the courses, students must meet other entrance requirements when applying to Midwestern.