# **2017-2018 CATALOG and** STUDENT HANDBOOK **ADDENDUM**

Prepared by the **Instructional Support Services Office** August 3, 2017

phoenixcollege.edu



# **Success Begins Here.**

In efforts to provide current information for Phoenix College's programs, the Instructional Support Services Office has prepared this addendum to provide students, faculty, and staff with the occupational and academic programs that were not available at the time of publication or display of the 2017-2018 Catalog and Student Handbook.

The Phoenix College faculty and student affairs services are here to assist you. See pages 8 through 20 of the 2017-2018 Catalog and Student Handbook for available services at www.phoenixcollege.edu, or visit with your faculty members during their scheduled office hours.

Please contact the Instructional Support Services Office if you have any questions about this document.

Respectfully,

Casandra Kakar, Vice President, Academic Affairs

> For additional information on PC program competencies, visit: https://asa.maricopa.edu/departments/center-for-curriculum-transfer-articulation

> For additional information on MCCCD course competencies, visit: https://asa.maricopa.edu/departments/center-for-curriculum-transfer-articulation

Phoenix College Programs & Awards
The following programs and awards are listed alphabetically by title within
instructional /occupational areas.

Key: AAS [♦] CCL [\*] AC [\*\*] Transfer [•] Shared [※] Not eligible for Financial Aid [CCLxxxxN] **Instructional/Occupational Programs: AREA** Program [Award Type, see Key above] **Page** ART, A/V TECHNOLOGY, AND COMMUNICATION **INFORMATION TECHNOLOGY IMPORTANT UPDATES** Grade of C or Better Now Required for Prerequisite Coursework......20

# ART, A/V TECHNOLOGY, AND COMMUNICATION

Department Chairperson: Dr. K. Schindler

Program Director: Dr. K. Schindler Contact: (602) 285-7277 and/or

lisa.saper-bloom@phoenixcollege.edu

# **Music Business** — Occupational Program Modification Associate in Applied Science - AAS 3017 ₩ 60-63 Credits

The Associate in Applied Science (AAS) 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 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 suffixed courses.

**Admission Criteria:** None.

**Program Prerequisites:** None.

### **Required Courses:** 14 Credits

	MUC109	Music Business: Merchandising and the Law	3
	MUC110	Music Business: Recording and Mass Media	3
	MUC293	Self Promotion for Music	1
+	MUC209	Music Industry Entrepreneurship (3) OR	
	MGT253	Owning and Operating a Small Business (3)	3
+	MUC290AA	Music Business Internship (1) OR	
+	MUC296WA	Cooperative Education (1)	1
	MHL++++	Any MHL Music: History/Literature course	3

### **Restricted Electives:** 12 Credits

Students must select twelve (12) credits from the approved list of Restricted Elective courses below to specialize in Music Production, Disc Jockey Techniques, Songwriting, Performance, Marketing, Business, or Communications. Students must consult with the Music Business Program Director, Music Department Chair or designee to select the Restricted Elective courses recommended for each specialization.

$\mathbf{M}$	usic Production		
+	MUC240	Creative Music Production	4
+	MUC241	Business Principles of Music Production	3
	MUC242	Music Genres and Styles	2
+	MUC294	Portfolio for Music	1
	MUC145	Recording Studio Business Operations	2
+	MUC180	Computer Literacy for the Music Business	3
+	MUC210	Advanced Industry Topics: Concert Promotion and Touring	3
+	MUC211	Advanced Industry Topics: Artist Management and Development	3
	MUC215	Music Industry Seminar: Innovation in Music Technology	1
	MUC274	Music Industry Study Tour	2
+	MUC298AA-AC	Special Projects 1	-3
+	MUC194	Introduction to Audio Mixing Techniques	3
	MUC195	Studio Recording I	3
	MUC195AA	Studio Recording I	3
+	MUC196	Studio Music Recording II	
+	MUC295	Studio Music Recording III	3
+	MUC111	Digital Audio Workstation I (DAW I)	3
+	MUC112	Digital Audio Workstation II (DAW II)	3 3 3 3
	MUC197	Live Sound Reinforcement I	3
+	MUC198	Live Sound Reinforcement II	3 3 3
+	MUC237	Electronic Dance Music Production	
	TCM107	Career Pathways in the Media	3
+	MTC+++	Any MTC Music: Theory/Composition course(s) 1	-3
Di	sc Jockey Techniques	<u>s</u>	
	MUC135	Introduction to Disc Jockey Techniques	3
	MUC136	Turntablism: The Art of the Scratch DJ	3
	MUC137	Digital DJ Performance Techniques	3
	MUC138	Disc Jockey Laboratory	1
+	MUC237	Electronic Dance Music Production	3
+	MUC210	Advanced Industry Topics: Concert Promotion and Touring	3
+	MUC211	Advanced Industry Topics: Artist Management and Development	3
	MUC274	Music Industry Study Tour	2
+	MUC298AA-AC	Special Projects 1	-3
+	MUC180	Computer Literacy for the Music Business	3
+	MUC294	Portfolio for Music	1
	MUC197	Live Sound Reinforcement I	3

<u>Di</u>	<u>Disc Jockey Techniques</u> (continued)			
+	MUC198	Live Sound Reinforcement II	3	
	MTC191	Electronic Music I	3	
+	MTC192	Electronic Music II	3	
+	MUC291AA	Disc Jockey Internship	1	
	TCM107	Career Pathways in the Media	3	
	1 01/110 /			
So	ngwriting			
	MUC114	Song Publishing and Marketing	1	
	MUC115	Song Copyrighting and Demos	2	
	MTC110	Music Notation for Songwriting	1	
	MTC111	Lyric Writing	1	
	MTC112	Song and Melody Forms	1	
	MTC113	Songwriting Techniques	1	
+	MTC+++	Any MTC Electronic Music course(s)	1-3	
+	MTC+++	Any MTC Music: Theory/Composition or Arranging course(s)		
+	MUC180	Computer Literacy for the Music Business	3	
+	MUC210	Advanced Industry Topics: Concert Promotion and Tour	_	
+	MUC211	Advanced Industry Topics: Concert Fromotion and Four-Advanced Industry Topics: Artist Management and Developm	_	
+	MUC294	Portfolio for Music	1	
Т	WIUC294	Portiono foi Music	1	
Pe	erformance			
+	MUP+++	Any MUP Music Performance course(s)	1-3	
+	MTC+++	Any MTC Music: Theory/Composition course(s)	1-3	
	MUC274	Music Industry Study Tour	2	
+	MUC298AA-AC	Special Projects	1-3	
+	MUC294	Portfolio for Music	1	
•	TCM107	Career Pathways in the Media	3	
	1011107	Cureer rumways in the Media	3	
M	arketing			
	MKT101	Introduction to Public Relations	3	
	MKT110	Marketing and Social Networking	3	
	MKT210	Applied Marketing Strategies	3	
	MKT271	Principles of Marketing	3	
	MKT263	Advertising Principles	3	
	MKT267	Principles of Salesmanship	3	
	MKT268	Merchandising	3 3 3 3 3	
+	MKT273	Marketing Research	3	
	MKT/TEC151	Display and Visual Merchandising	3	
	MUC274	Music Industry Study Tour	2	
+	MUC298AA-AC	Special Projects	1-3	
+	MKT111	Applied Marketing and Social Networking	3	
•	TCM107	Career Pathways in the Media	3	
	CIS103	Introduction to Social Media	3	
	SBS221	Social Media Marketing for Small Business	3	
	SDS221	Social ividula ivialkethig for Silian Dusiness	3	

Bu	<u>ısiness</u>		
	GBS131	Business Calculations	3
	GBS151	Introduction to Business	3
	GBS205	Legal, Ethical and Regulatory Issues in Business	3
+	GBS221	Business Statistics	3
	IBS101	Introduction to International Business	3
	IBS109	Cultural Dimensions for International Trade	3
	HRM145	Events Management	3
	ACC111	Accounting Principles I	3
+	ACC112	Accounting Principles II	3
+	ACC115	Computerized Accounting	2
	ACC211	Financial Accounting	3
+	ACC212	Managerial Accounting	3
+	ACC230	Uses of Accounting Information I	3
+	ACC240	Uses of Accounting Information II	3
	CIS105	Survey of Computer Information Systems	3
	BPC110	Computer Usage and Applications	3
	CIS114AE	Excel: Level I	1
	CIS118AB	PowerPoint: Level I	1
	CIS120AF	Computer Graphics: Adobe Photoshop: Level I	1
	CIS120DB	Computer Graphics: Adobe Illustrator	3
	CIS133DA	Internet/Web Development Level I	3
	MUC274	Music Industry Study Tour	2
+	MUC298AA-AC	Special Projects	1-3
	TCM107	Career Pathways in the Media	3
<u>Co</u>	ommunications		
	COM/ART/STO150	Digital Storytelling	3
	COM251	Interviewing	3
+	COM225	Public Speaking	3
	COM263	Elements of Intercultural Communication	3
+	GBS233	Business Communication	3
	MUC274	Music Industry Study Tour	2
+	MUC298AA-AC	Special Projects	1-3
	TCM107	Career Pathways in the Media	3
+	COM259	Communications in Business and Professions	3
	COM250	Introduction to Organizational Communication	3
+	JRN203	Writing for Online Media	3

### Free Electives: 12 Credits

Students should choose twelve (12) credits from the following list of Free Elective courses except courses used to satisfy the Restricted Electives area.

	ACC111	Accounting Principles I	3
	BPC128	Introduction to Desktop Publishing	1
	CIS131AA	Doing Business on the Internet	1
	GBS151	Introduction to Business	3
+	GBS233	Business Communication	3
	MKT110	Marketing and Social Networking	3
	MKT271	Principles of Marketing	3
	MTC101	Introduction to Music Theory (3) OR	
	MTC105	Music Theory I (3) OR	
	MTC103	Introduction to Aural Perception (1) OR	
	MTC106	Aural Perception I (1)	1-3
	MTC113	Songwriting Techniques	1
+	MUC111	Digital Audio Workstation I (DAWI)	3
	MUC135	Introduction to Disc Jockey Techniques	3 2 3
	MUC145	Recording Studio Business Operations	2
+	MUC180	Computer Literacy for the Music Business	3
	MUC195	Studio Music Recording I (3) OR	
	MUC195AA	Studio Music Recording I (3)	3
+	MUC210	Advanced Industry Topics:	
		Concert Promotion and Touring	3
+	MUC211	Advanced Industry Topics: Artist Management and	
		Talent Development	3
	MUC215	Music Industry Seminar: Innovation in Music Technology	1
+	MUC240	Creative Music Production	4
+	MUC241	Business Principles of Music Production	3 2
	MUC274	Music Industry Study Tour	
+	MUC294	Portfolio for Music	1
+	MUC298AA	Special Projects	1
+	MUC298AB	Special Projects	2 3
+	MUC298AC	Special Projects	3
	SBS230	Financial and Tax Management for Small Business	2

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## **General Education Requirements: 22-25 Credits**

# **CORE:** 12-15 Credits **First-Year Composition:**

+	ENGIOI	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 and Professional Writing (3)

### **Oral Communication:**

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

### **Critical Reading:**

+	CRE101	College Critical Reading and Critical Thinking (3) OR	
+	CRE111	Critical Reading for Business and Industry (3) OR	
		Equivalent as indicated by assessment	0-3

#### **Mathematics:**

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

### **DISTRIBUTION:** 10 Credits **Humanities, Arts and Design:**

Any approved general education course from the Humanities, Arts and Design area. 3 **Social-Behavioral Sciences:** 

Any approved general education course from the Social-Behavioral Sciences area. 3 **Natural Sciences:** 

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

Department Chairperson: Dr. K. Schindler

Program Director: Dr. K. Schindler Contact: (602) 285-7277 and/or

lisa.saper-bloom@phoenixcollege.edu

### **Music Business** — Occupational Program Modification Certificate of Completion - CCL 5258 ₩ 26 Credits

The Certificate of Completion (CCL) 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.

NOTE: This Addendum reflects the Governing Board-approved changes to the educational programs and courses and/or relevant catalog information that were not available at the time of development of the Phoenix College 2017-2018 Catalog and Student Handbook.

Revised:

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.

Admission Criteria: None.

**Program Prerequisites:** None.

### **Required Courses:** 11 Credits

	. 4	1 0104110	
	MUC109	Music Business: Merchandising and the Law	3
	MUC110	Music Business: Recording and Mass Media	3
	MUC293	Self Promotion for Music	1
+	MUC209	Music Industry Entrepreneurship (3) OR	
	MGT253	Owning and Operating a Small Business (3)	3
+	MUC290AA	Music Business Internship (1) OR	
+	MUC296WA	Cooperative Education (1)	1

### **Restricted Electives:** 15 Credits

Students must select fifteen (15) credits from the approved list of Restricted Elective courses below to specialize in Music Production, Disc Jockey Techniques, Songwriting, Performance, Marketing, Business, or Communications. Students must consult with the Music Business Program Director, Music Department Chair or designee to select the Restricted Elective courses recommended for each specialization.

### **Music Production**

MUC240	Creative Music Production	4
MUC241	Business Principles of Music Production	3
MUC242	Music Genres and Styles	2
MUC294	Portfolio for Music	1
MUC145	Recording Studio Business Operations	2
MUC180	Computer Literacy for the Music Business	3
MUC210	Advanced Industry Topics: Concert Promotion and Touring	z 3
MUC211	Advanced Industry Topics: Artist Management and Development	i 3
MUC215	Music Industry Seminar: Innovation in Music Technology	1
MUC274	Music Industry Study Tour	2
MUC298AA-AC	Special Projects	1-3
MUC194	Introduction to Audio Mixing Techniques	3
MUC195	Studio Recording I	3
MUC195AA	Studio Recording I	3
MUC196	Studio Music Recording II	3
MUC295	Studio Music Recording III	3
MUC111	Digital Audio Workstation I (DAW I)	3
MUC112	Digital Audio Workstation II (DAW II)	3
MUC197	Live Sound Reinforcement I	3
	MUC241 MUC242 MUC294 MUC145 MUC180 MUC210 MUC211 MUC215 MUC274 MUC298AA-AC MUC194 MUC195 MUC195 MUC196 MUC295 MUC111 MUC112	MUC242 Music Genres and Styles MUC294 Portfolio for Music MUC145 Recording Studio Business Operations MUC180 Computer Literacy for the Music Business MUC210 Advanced Industry Topics: Concert Promotion and Touring MUC211 Advanced Industry Topics: Artist Management and Development MUC215 Music Industry Seminar: Innovation in Music Technology MUC274 Music Industry Study Tour MUC298AA-AC Special Projects MUC194 Introduction to Audio Mixing Techniques MUC195 Studio Recording I MUC195 A Studio Recording I MUC196 Studio Music Recording II MUC295 Studio Music Recording III MUC295 Studio Music Recording II Digital Audio Workstation I (DAW I) MUC112 Digital Audio Workstation II (DAW II) MUC197 Live Sound Reinforcement I

M	Music Production (continued)			
+	MUC198		3	
+	MUC237		3	
	TCM107		3	
+	MTC+++	Any MTC Music: Theory/Composition course(s) 1-		
	1,110	Tany 1122 e 1120019/ e emp estaten e estate (e)		
Di	sc Jockey Technique	<u>s</u>		
	MUC135		3	
	MUC136	Turntablism: The Art of the Scratch DJ	3	
	MUC137	Digital DJ Performance Techniques	3	
	MUC138		1	
+	MUC237		3	
+	MUC210	Advanced Industry Topics: Concert Promotion and Touring	3	
+	MUC211	Advanced Industry Topics: Artist Management and Development		
	MUC274	• • •	2	
+	MUC298AA-AC	Special Projects 1-		
+	MUC180	1 v	3	
+	MUC294		1	
	MUC197		3	
+	MUC198		3	
	MTC191		3	
+	MTC192	Electronic Music II	3	
+	MUC291AA		1	
	TCM107		3	
	1011107	Career I athways in the Media	J	
<u>So</u>	ngwriting			
	MUC114	Song Publishing and Marketing	1	
	MUC115	Song Copyrighting and Demos	2	
	MTC110	Music Notation for Songwriting	1	
	MTC111	Lyric Writing	1	
	MTC112	Song and Melody Forms	1	
	MTC113		1	
+	MTC+++	Any MTC Electronic Music course(s) 1-	-3	
+	MTC+++	Any MTC Music: Theory/Composition or Arranging course(s) 1-	-3	
+	MUC180		3	
+	MUC210	Advanced Industry Topics: Concert Promotion and Touring	3	
+	MUC211	Advanced Industry Topics: Artist Management and Development		
+	MUC294		1	
Pe	<u>erformance</u>			
+	MUP+++	•	-3	
+	MTC+++	, i	-3	
	MUC274		2	
+	MUC298AA-AC	Special Projects 1-	-3	
+	MUC294	Portfolio for Music	1	
	TCM107	Career Pathways in the Media	3	

M	<u>arketing</u>		
	MKT101	Introduction to Public Relations	3
	MKT110	Marketing and Social Networking	3
	MKT210	Applied Marketing Strategies	3
	MKT271	Principles of Marketing	3
	MKT263	Advertising Principles	3
	MKT267	Principles of Salesmanship	3
	MKT268	Merchandising	3
+	MKT273	Marketing Research	3
	MKT/TEC151	Display and Visual Merchandising	3
	MUC274	Music Industry Study Tour	2
+	MUC298AA-AC	Special Projects	1-3
+	MKT111	Applied Marketing and Social Networking	3
	TCM107	Career Pathways in the Media	3
	CIS103	Introduction to Social Media	3
	SBS221	Social Media Marketing for Small Business	3
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<u>Bı</u>	<u>ısiness</u>		
	GBS131	Business Calculations	3
	GBS151	Introduction to Business	3
	GBS205	Legal, Ethical and Regulatory Issues in Business	3
+	GBS221	Business Statistics	3
	IBS101	Introduction to International Business	3
	IBS109	Cultural Dimensions for International Trade	3
	HRM145	Events Management	3
	ACC111	Accounting Principles I	3
+	ACC112	Accounting Principles II	3
+	ACC115	Computerized Accounting	2
	ACC211	Financial Accounting	3
+	ACC212	Managerial Accounting	3
+	ACC230	Uses of Accounting Information I	3
+	ACC240	Uses of Accounting Information II	3
	CIS105	Survey of Computer Information Systems	3
	BPC110	Computer Usage and Applications	3
	CIS114AE	Excel: Level I	1
	CIS118AB	PowerPoint: Level I	1
	CIS120AF	Computer Graphics: Adobe Photoshop: Level I	1
	CIS120DB	Computer Graphics: Adobe Illustrator	3
	CIS133DA	Internet/Web Development Level I	3
	MUC274	Music Industry Study Tour	2
+	MUC298AA-AC	Special Projects	1-3
	TCM107	Career Pathways in the Media	3

### **Communications**

	COM/ART/STO150	Digital Storytelling	3
	COM251	Interviewing	3
+	COM225	Public Speaking	3
	COM263	Elements of Intercultural Communication	3
+	GBS233	<b>Business Communication</b>	3
	MUC274	Music Industry Study Tour	2
+	MUC298AA-AC	Special Projects	1-3
	TCM107	Career Pathways in the Media	3
+	COM259	Communications in Business and Professions	3
	COM250	Introduction to Organizational Communication	3
+	JRN203	Writing for Online Media	3

# **INFORMATION TECHNOLOGY**

**Department Chairperson: Mrs. C. Cloud** 

Program Director: Mr. N. Rouse Contact: (602) 285-7487 and/or

http://www.phoenixcollege.edu/business

Computer Information Systems — Occupational Program Modification Associate in Applied Science – AAS 3152 ₩

61-67 Credits

The Associate in Applied Science (AAS) degree in Computer Information Systems program is designed to prepare students who are planning to find employment using current computer applications. Students will get experience with a variety of operating systems, database management, and popular programming languages. A Certificate of Completion (CCL) is also available.

**Program Notes:** + indicates course has prerequisites and/or corequisites.

++ indicates any suffixed courses.

Students must earn a grade of "C" or better in all courses required within the program. Consultation with an Academic Advisor is recommended for course selection.

Admission Criteria: None.

**Program Prerequisites:** None

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Re	Required Courses: 27-28 Credits			
	ACC111 Accounting Principles I 3			
	CIS105	Survey of Computer Information Systems	3 3 3	
	CIS133DA	Internet/Web Development Level I	3	
	CIS126DA	UNIX Operations System (3) OR		
	CIS126DL	Linux Operating System (3) OR		
+	MST150++	Any Microsoft Windows course (3)	3	
+	CIS150	Programming Fundamentals (3) OR		
+	CIS150AB	Object-Oriented Programming Fundamentals (3)	3	
	CIC170	W. 1D . D 1(2) OD		
+	CIS159	Visual Basic Programming I (3) OR		
+	CIS162++	Any C Programming Level I course (3) OR	2	
+	CIS163AA	Java Programming: Level I (3)	3	
+	CIS190	Introduction to Local Area Networks (3) OR		
	CNT140AA	Introduction to Networks (4) OR		
	MST140	Microsoft Networking Essentials (3)	3-4	
	GBS151	Introduction to Business	3 3	
+	GBS233	Business Communication	3	
Re	Restricted Electives: 12 Credits			
	CIS+++++	Any CIS Computer Information course(s) except c	ourses used	
		to satisfy Required Courses area.	12	
		J 1		
Ge	General Education Requirements: 22-27 Credits			
C	ORE: 12-17 Credits			
	First-Year Composition:			
	ist I cai Compositioi	1.0		

		= <del>-</del>
+	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	al Communication:	-
	Any approved genera	l education course in the Oral Communication area.
Cr	itical Reading:	
+	CRE101	College Critical Reading and Critical Thinking (3) OR

Equivalent by assessment

### **Mathematics:**

+ MAT120 Intermediate Algebra (5) OR Intermediate Algebra (4) OR + MAT121 Intermediate Algebra (3) OR + MAT122

Satisfactory completion of a higher level mathematics course.

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# **DISTRIBUTION:** 10 Credits **Humanities.** Arts and Design:

Any approved general education course in the Humanities, Arts and Design area. 3 **Social-Behavioral Sciences:** 

Macroeconomic Principles (3) OR ECN211 ECN212 Microeconomic Principles (3) OR

Society and Business (3) SBU200 3

**Natural Sciences:** 

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

**Department Chairperson: Mrs. C. Cloud** 

Program Director: Mr. N. Rouse Contact: (602) 285-7487 and/or

http://www.phoenixcollege.edu/business

# Computer Information Systems — Occupational Program Modification Certificate of Completion − CCL 5671 & 21 Credits

The Certificate of Completion (CCL) in Computer Information Systems program is designed to meet the needs of students who are planning to find employment using current computer applications. It is intended for students who may later want to pursue an Associate's Degree in Computer Information Systems, but who do not expect to go beyond the community college program. Students will get experience with a variety of operating systems, database management, and popular programming languages. An Associate in Applied Science (AAS) is also available.

**Program Notes:** + indicates course has prerequisites and/or corequisites.

++ indicates any suffixed course.

Students must earn a grade of "C" or better in all courses required within the program. Consultation with an Academic Advisor is recommended for course selection.

Admission Criteria: None.

**Program Prerequisites:** None.

NOTE: This Addendum reflects the Governing Board-approved changes to the educational programs and courses and/or relevant catalog information that were not available at the time of development of the Phoenix College 2017-2018 Catalog and Student Handbook.

Revised:

Required Courses: 12 Credits			
	CIS105 Survey of Computer Information Systems		3
	CIS133DA	Internet/Web Development Level I	3
	CIS126DA	UNIX Operations System (3) OR	
	CIS126DL	Linux Operating System (3) OR	
+	MST150++	Any Microsoft Windows course (3)	3
+	CIS150	Programming Fundamentals (3) OR	
+	CIS150AB	Object-Oriented Programming Fundamentals (3)	3

### **Restricted Electives:** 9 Credits

CIS+++++ Any CIS Computer Information course(s) except courses used to satisfy Required Courses area.

**Department Chairperson: Mrs. C. Cloud** 

Program Director: Mr. N. Rouse Contact: (602) 285-7487 and/or

http://www.phoenixcollege.edu/business

# Programming and System Analysis — Occupational Program Modification Associate in Applied Science – AAS 3844 & 64-70 Credits

The Associate in Applied Science (AAS) in Programming and System Analysis 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. A Certificate of Completion (CCL) is also available.

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. ++ indicates any suffixed courses. Consultation with an Academic Advisor is recommended for course selection.

**Admission Criteria:** None.

**Program Prerequisites:** None.

Required Courses: 36-37 Credits			
	ACC111	Accounting Principles I	3
	CIS105	Survey of Computer Information Systems	3
	CIS224	Project Management Microsoft Project for Windows	3
	CIS126DA	UNIX Operating System (3) OR	
	CIS126DL	Linux Operating System (3) OR	
+	MST150++	Any Microsoft Windows course (3)	3
+	CIS150	Programming Fundamentals (3) OR	
+	CIS150AB	Object-Oriented Programming Fundamentals (3)	3
+	CIS166++	Any Web Scripting course(s) (3)	3
+	CIS190	Introduction to Local Area Networks (3) OR	
	CNT140AA	Introduction to Networks (4) OR	
+	MST140	Microsoft Networking Essentials (3)	3-4
+	CIS225	Business Systems Analysis and Design (3) OR	
+	CIS225AB	Object-Oriented Analysis and Design (3) OR	
+	CIS250	Management of Information Systems (3)	3
+	CIS119DO	Introduction to Oracle: SQL (3) OR	
+	CIS276DA	MySQL Database (3) OR	
+	CIS276DB	SQL Server Database (3)	3
Se	lect 2 courses for a total		
+	CIS151	Computer Game Development-Level I (3) OR	
+	CIS159	Visual Basic Programming I (3) OR	
	CIS162++	Any C Programming: Level I course (3) OR	_
+	CIS163AA	Java Programming: Level I (3)	6
+	GBS233	Business Communication	3
Re	estricted Electives: 6	Credits	
+	CIS251	Computer Game Development-Level II	3
+	CIS259	Visual Basic Programming II	3
+	CIS262++	Any C Programming: Level II course	3
+	CIS263AA	Java Programming: Level II	3

3-5

# **General Education Requirements: 22-27 Credits**

**CORE:** 12-17 Credits

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
Or	al Communication:		
	Any approved genera	l education course in the Oral Communication area.	3
Cr	itical Reading:		
+	CRE101	College Critical Reading and Critical Thinking (3) OR	
		Equivalent by assessment	0-3
M	athematics:		
+	MAT150	College Algebra/Functions (5) OR	
+	MAT151	College Algebra/Functions (4) OR	

# **DISTRIBUTION:** 10 Credits **Humanities, Arts and Design:**

+ MAT152

Any approved general education course in the Humanities, Arts and Design area. 3 **Social-Behavioral Sciences:** 

College Algebra/Functions (3)

ECN211	Macroeconomic Principles (3) OR	
ECN212	Microeconomic Principles (3) OR	
SBU200	Society and Business (3)	3
<b>Natural Sciences:</b>	•	
Any approved ge	eneral education course in the Natural Sciences area.	4

Department Chairperson: Mrs. C. Cloud

Program Director: Mr. N. Rouse Contact: (602) 285-7487 and/or

http://www.phoenixcollege.edu/business

# Programming and System Analysis — Occupational Program Modification Certificate of Completion — CCL 5048 ₩ 24 Credits

The Certificate of Completion (CCL) in Programming and System Analysis provides an in-depth exploration of different computer language and technical skills. Includes, but is not limited to the following: operating systems, local area networks, team roles, and dynamics. An Associate in Applied Science (AAS) is also available.

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. Consultation with an Academic Advisor is recommended for course selection.

Admission Criteria: None.

**Program Prerequisites:** None.

Required Courses: 21 Credits			
	CIS105	Survey of Computer Information Systems	3
	CIS224	Project Management Microsoft Project for Windows	3
	CIC126DA	LINITY On austin a System (2) OB	
	CIS126DA	UNIX Operating System (3) OR	
	CIS126DL	Linux Operating System (3) OR	2
+	MST150++	Any Microsoft Windows course (3)	3
+	CIS150	Programming Fundamentals (3) OR	
+	CIS150AB	Object-Oriented Programming Fundamentals (3)	3
	CIC151		
+	CIS151	Computer Game Development – Level I (3) OR	
+	CIS159	Visual Basic Programming I (3) OR	
+	CIS162++	Any C Programming: Level I course (3) OR	2
+	CIS163AA	Java Programming: Level I (3)	3
+	CIS225	Business Systems Analysis and Design (3) OR	
+	CIS225AB	Object-Oriented Analysis and Design (3) OR	
+	CIS250	Management of Information Systems (3)	3
+	CIS119DO	Introduction to Oracle: SQL (3) OR	
+	CIS276DA	MySQL Database (3)	
	CIS276DA CIS276DB	SQL Server Database (3)	3
	CIS2/0DB	SQL Server Database (3)	3
Re	stricted Electives: 3	Credits	
+	CIS251	Computer Game Development-Level II	3
+	CIS259	Visual Basic Programming II	3
+	CIS262++	Any C Programming: Level II course	3 3 3
+	CIS263AA	Java Programming: Level II	3

# **IMPORTANT UPDATES**

# Grade of C or Better Now Required for Prerequisite Coursework

Although a grade of "D" or better was previously acceptable in some instances and is still acceptable in limited instances for general graduation requirements, a grade of "C" or better is now required for all courses that are prerequisites or corequisites to other courses.

Unless the requisites for a course stipulate different grade standards, students must complete the prerequisite and/or corequisite requirements for any course with a grade of "C" or better.

IMPORTA	ANT NUMBERS
Academic Advisement Center	(602) 285-7777
Admissions, Registration and Records	(602) 285-7777
Bookstore	(602) 285-7489
Counseling Center	(602) 285-7392
Financial Aid	(855) 622-2332
Public Safety	(602) 285-7254

### The College of You.

We are the Maricopa Community Colleges. We are 10 colleges, 2 skill centers and numerous education centers, all dedicated to educational excellence and to meeting the needs of businesses and the citizens of Maricopa County. Each college is individually accredited, yet part of a larger system - the Maricopa County Community College District, which is one of the largest providers of higher education in the United States.

Whether you are just out of high school, beginning or re-entering college or seeking lifelong education, you'll find that the Maricopa Community Colleges offer a wide range of opportunities for you to create the educational future that's right for you. We offer approximately 1,000 occupational programs (degrees and certificates), and 37 academic associate degrees, and a total of 10,254 courses. We're the largest provider of health care workers and job training in Arizona, making us a major resource for business and industry and the place to be if you're seeking education and job training.

You can learn in the way that's best for you, because we have flexible course delivery, including field based, hybrid, in person, independent study, Internet, mixed media, print based, private instruction, evening, weekend and open-entry/open-exit choices.

If you see a four-year degree in your future, we have transfer agreements with public and private colleges and universities that enable seamless transitions to four-year institutions.

#### Workforce Development (www.maricopa.edu/workforce)

The Maricopa Community College's Workforce Development unit is comprised of three separate departments - Workforce Development, Healthcare Education, and the Maricopa Advanced Technology Education Center (MATEC).

The Workforce Development unit is committed to fulfilling the job training needs of the many and diverse employer communities throughout Maricopa County. It serves as a hub that connects workforce development programs and resources available through the Maricopa Community Colleges and Skill Centers to employer communities in the Greater Phoenix area.

### **Demographics**

### Students

Approximately 200,000 students enrolled in credit and non-credit courses at a Maricopa Community College in 2015-2016.

- 56% women
- 45% Non-Anglo (46% Anglo/Caucasian; 9% Undeclared)
- 34% age 25 or older
- 68% part-time
- 38% intend to transfer
- 25% intend to gain or improve workforce skills
- 12% attend for personal interest
- 51% attend primarily during the day
- 13% attend primarily during the evening
- 34% are enrolled primarily in online or other distance learning courses
- 2% attend primarily on the weekend

#### **Employees**

The Maricopa Community Colleges employed 11,230 employees in 2015-16: 1,498 full-time faculty and instructional staff, 4,822 adjunct faculty, 375 full-time administrators and managers, and 2,570 full-time and 1,965 part-time support staff.

NOTES

Revised: