

# Educational Programs, Degrees and Certificates

## Degrees and Certificates

The current educational programs are listed below with the name of the degree or certificate, the award type, the program code, the major code, and any concentration codes associated with the program. These codes identify the student's program of study in their student record and in MyDegreePlan. If a student is uncertain about which codes to use or for information on programs without program codes, please see an advisor or counselor.

There is an additional column entitled Lead Campus in the Occupational Program list. The lead campus is the only campus to offer all courses required for the certificate or degree. Other campuses may offer introductory course(s) for the certificate or degree. Check the class schedule for the courses offered on each campus or see an advisor or counselor.

Although the Transfer Programs do not have a lead campus, transfer program's core/major courses and some general education courses may not be offered on every campus. Check the class schedule or see an advisor or counselor.

The definitions of the abbreviations in the Award column are:

- AA Associate of Arts** for Transfer  
An Associate of Arts is a credit degree of 60-64 credits for transfer to a college or university into majors related to arts, humanities, social and behavioral science, and education. The AA includes an Arizona General Education Curriculum (AGEC)-A. See General Education Requirements for Transfer Program section for more information on AGECEC.
- ABUS Associate of Business** for Transfer  
An Associate of Business Administration is a credit degree of 60-64 credits for transfer to a college or university into a business or business-related major. The ABUS includes an Arizona General Education Curriculum (AGEC)-B. See the General Education Requirements for Transfer Programs section for more information on AGECEC.
- AFA Associate of Fine Arts** for Transfer  
An Associate of Fine Arts is a credit degree of 60-64 credits for transfer to a college or university into majors related to fine arts. The AFA includes an Arizona General Education Curriculum (AGEC)-A. See General Education Requirements for Transfer Program section for more information on AGECEC.
- AS Associate of Science** for Transfer  
An Associate of Science is a credit degree of 60-64 credits for transfer to a college or university into a science or science-related major. The AS includes an Arizona General Education Curriculum (AGEC)-S. See the General Education Requirements for Transfer Programs section for more information on AGECEC.
- AGS Associate of General Studies**  
An Associate of General Studies is a credit degree of 60 credits designed by the student. If planning to seek employment or to transfer, the student should develop a plan of study with an advisor or counselor.
- AAA Associate of Applied Arts** for Direct Employment  
An Associate of Applied Arts is a credit degree of at least 60 credits for direct employment into jobs requiring some art-related skills and competencies.
- AAS Associate of Applied Science** for Direct Employment  
An Associate of Applied Science is a credit degree of at least 60 credits for direct employment into jobs requiring skills and competencies in the technologies, business, government and public service, and health-related professions.
- CERT Certificate**  
A Certificate is a credit certificate in a specific field of study of less than 60 credits for direct employment into a job or for transfer to a college or university.
- CTD Certificate of Completion**  
For students completing credit or clock-hour courses in a prescribed pathway, as approved by the College Curriculum Council, and leading to improved employability, job opportunities, or transfer to a bachelor's degree program, a certificate of completion may be awarded. A certificate of completion confirms via the academic transcript that a student has completed an educational program of prescribed courses that prepares him or her to progress in a career path or to take degree-applicable credit courses.
- COC Certificate of Competency**  
For students completing noncredit courses in a prescribed pathway, as reviewed by the College Curriculum Council, that prepares students for employment. A certificate of competency confirms via the academic transcript that a student enrolled in a noncredit educational program and has demonstrated achievement in a set of competencies that prepares him or her to progress in a career path and/or is prepared to take a licensure exam. In order to offer and confer a certificate of competency, the certificate must list the relevant competencies achieved by the student.
- COA Certificate of Achievement**  
A certificate of achievement may be awarded for approved programs of study such as basic skills or English as Second Language (ESL) coursework and other curriculum offered by the Center for International Education and Global Engagement. A certificate of achievement confirms via the academic transcript that the student enrolled in coursework and met the minimum competencies outlined in the associated course outlines.
- CERA Post-Degree Certificate**  
A Post-Degree Certificate is a credit certificate in a specific field of study of less than 60 credits for direct employment into a job. An Associate's Degree or a Bachelor's Degree (depending on the program) is required before beginning a Post-Degree Certificate. See program display for specific requirements.

# Credit Degrees and Certificates

There are three lists of credit certificates and degrees:

- Occupational Programs (WFD, CTD, CERT, CERA, AAA, and AAS)
- General Studies Programs (AGS)
- Transfer Programs (CERT, AA, ABUS, AFA and AS)

## Campus legend:

- CC = Community Campus
- DV = Desert Vista Campus
- DC = Downtown Campus
- EC = East Campus
- NW = Northwest Campus
- WC = West Campus

## Occupational Programs

Program	Award	Program Code	Major Code	Concentration Code	Lead Campus*
<b>Accounting</b>					
Accounting	CERT	CRTACCOUNTIN	ACT		WC
Accounting	AAS	AASACCOUNTIN	ACC		WC
<b>Administration of Justice Studies</b>					
Administration of Justice Studies	AAS	AASADMINJUST	AJS		EC
<b>Applied Arts</b>					
Applied Arts	AAA	AAAAPPLDARTS	APT		WC
<b>Archaeology</b>					
Field Archaeology <b>Under Review</b>	CERT	CRTFLDARCHEO	ARF		WC
Concentrations:					
Field and Lab Fundamentals				ARCL	
Field Methods				ARCM	
Geospatial Information Studies & Technology				ARCC	
Southwestern Cultures				ARCS	
<b>Automotive Technology</b>					
Automotive Mechanics	CERT	CRTAUTOMECHS	AUM		DC
Automotive Technology	AAS	AASAUTOTECHN	AUT		DC
<b>Aviation Technology</b>					
Advanced Aviation Technology <b>Under Review</b>	CERT	<b>Selective Admissions**</b>			DV
Concentrations:					
General Mechanics				AVMG	
Airframe Mechanics				AVMF	
Powerplant				AVMP	
Aviation Structural Repair				AVMS	
Aviation Technology	AAS	<b>Selective Admissions**</b>			DV
Concentrations:					
Airframe and Powerplant				AVMA	
Structural Repair				AVMS	
Avionics Technician				AVMT	
Avionics Technician	CERT	<b>Selective Admissions**</b>			DV

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\*\* Selective Admissions Requirements—See an advisor

## Occupational Programs (continued)

Program	Award	Program Code	Major Code	Concentration Code	Lead Campus*
<b>Behavioral Health Services</b>					
Behavioral Health Services <b>Under Review</b>	CERT	CRTBHS	BHS		DV
<b>Biotechnology</b>					
Biotechnology	CERT	<b>Selective Admissions**</b>			WC
<b>Building and Construction Technologies</b>					
Basic Building & Construction Technologies	CERT	CRTBLDGCON-B	BCB		DC
Advanced Building & Construction Technologies <b>Under Review</b>	CERT	CRTBLDGCON-A	BCA		DC
<u>Concentrations:</u>					
Carpentry				BCTC	
Electrical				BCTE	
Facilities Maintenance				BCTF	
Heating, Ventilation, Air Conditioning, & Refrigeration (HVAC-R)				BCTH	
Plumbing				BCTP	
Building & Construction Technologies	AAS	AASBLDGCONST	BCT		DC
<u>Concentrations:</u>					
Building Management				BCTB	
Cabinetmaking				BCTK	
Carpentry				BCTC	
Construction Management				BCTM	
Electrical				BCTE	
Electrical Utilities Technology				BCTG	
Facilities Maintenance				BCTF	
Heating, Ventilation, Air Conditioning, & Refrigeration (HVAC-R)				BCTH	
Natural Gas Technology				BCTN	
Plumbing				BCTP	
Solar Installer				BCTI	
Cabinetmaking	CERT	CRTCМК	CMK		DC
Home Maintenance and Repair					
Minor Home Improvements	CERT	CRTMHI	MHI		DC
Limited Remodeling and Repair	CERT	CRTLRR	LRR		DC
General Residential Contractor	CERT	CRTGRC	GRC		DC
Solar Installer	CERT	CRTSIC	SIC		DC
<b>Business</b>					
Basic Business	CERT	CRTBUSINES-B	BUB		EC
Advanced Business	CERT	CRTBUSINES-A	BUA		EC
Business	AAS	AASBUSINESS	BUS		EC
<u>Concentrations:</u>					
Logistics					
Marketing					
Management					
Tourism					
Customer Service Management	CERT	CRTCSV	CSV		DC
Logistics and Supply Chain Management (Basic)	CERT	CRTLGC	LGC		EC
Logistics and Supply Chain Management (Advanced)	CERT	CRTLGV	LGV		EC
Logistics and Supply Chain Management	AAS	AASLGM	LGM		EC
Retail Management	CERT	CRTBFR	BFR		DC
<b>Child Development Associate</b>					
See Education					

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\*\* Selective Admissions Requirements—See an advisor

## Occupational Programs (continued)

Program	Award	Program Code	Major Code	Concentration Code	Lead Campus*
<b>Clinical Research Trial Coordinator</b>					
Clinical Research Coordinator	AAS	<b>Selective Admissions**</b>			NW
Clinical Research Coordinator	CERT	<b>Selective Admissions**</b>			NW
<b>Computer-Aided Drafting/Design Technology</b>					
Computer-Aided Drafting/Design, Basic <b>Under Review</b>	CERT	CRTCONDRFT-B	CAB		DC
Computer-Aided Drafting/Design, Adv. <b>Under Review</b>	CERT	CRTCONDRFT-A	CAA		DC
Computer-Aided Drafting/Design	AAS	AASELECMECHN	CAD		DC
<u>Concentrations:</u>					
Mechanical/Electro-Mechanical Construction				DFTA DFTC DFTI	
Integrated Circuit Layout Design					
Integrated Circuit Layout Design	CERT	CRTICD	ICD		DC
<b>Computer Information Systems</b>					
Computer Programmer Specialist	CERT	<b>Selective Admissions**</b>			WC
<u>Concentrations:</u>					
Programming in "C"				CSPC	
Programming in Visual Basic				CSPV	
Programming for the Web				CSPW	
Computer Programmer/Analyst	AAS	AASCMPPRGANL	CSP		WC
Systems Administration/Networking	CERT	CRTNETWRKADM	CSD		WC
<u>Concentrations:</u>					
Administrator				CSNA	
CISCO				CSNC	
Microsoft				CSNM	
Linux				CSNX	
Systems Administration/Networking	AAS	AASCOMPSYSAD	CSN		WC
<u>Concentrations:</u>					
Administrator				CSNA	
Cyber Security				CSNY	
<b>Culinary Arts</b>					
Culinary Arts <b>Under Review</b>	CERT	<b>Selective Admissions**</b>			DV
Culinary Arts <b>Under Review</b>	AAS	<b>Selective Admissions**</b>			DV
<b>Dental Studies</b>					
Dental Assisting Education	CERT	<b>Selective Admissions**</b>			WC
Dental Hygiene	AAS	<b>Selective Admissions**</b>			WC
Dental Laboratory Technology					
Complete Dentures Technologist	CERT	<b>Selective Admissions**</b>			WC
Dental Ceramics Technologist	CERT	<b>Selective Admissions**</b>			WC
Fixed Bridgework Technologist	CERT	<b>Selective Admissions**</b>			WC
Partial Dentures Technologist	CERT	<b>Selective Admissions**</b>			WC
Dental Laboratory Technology	AAS	<b>Selective Admissions**</b>			WC

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\*\* Selective Admissions Requirements—See an advisor

## Occupational Programs (continued)

Program	Award	Program Code	Major Code	Concentration Code	Lead Campus*
<b>Digital Arts</b>					
Digital Arts <b>Under Review</b>	CERT	CRTCOMMGRAPH	DAC		WC
Digital Arts <b>Under Review</b>	AAS	AASCOMMGRAPH	DAR		WC
<u>Concentrations:</u>					
Design				DARD	
Illustration				DARI	
Multimedia				DARM	
Web Design				DARW	
Digital and Film Arts <b>Under Review</b>	CERT	CRTDIGIFILM	MDF		WC
<u>Concentrations:</u>					
Animation				MDFA	
Cinematography				MDFC	
Digital Video Production				MDFD	
Sound Design				MDFS	
Digital and Film Arts <b>Under Review</b>	AAS	AASDIGIFILM	MEF		WC
Digital and Film Arts – Animation <b>Under Review</b>	AAS	AASANIMATION	ANM		WC
Digital Game & Simulation <b>Under Review</b>	AAS	AASDAG	DAG		WC
<u>Concentrations:</u>					
Digital Animation and Production				DAGA	
Digital Programming				DAGP	
<b>Direct Care Professional</b>					
Basic Direct Care Professional	CERT	CRTDCP	DCP		NW
<b>Education</b>					
<b>Early Childhood Education and Child Development Associate</b>					
Basic Early Childhood Studies <b>Under Review</b>	CERT	CRTECB	ECB		DV
<u>Concentrations:</u>					
Child Development Associate Credential Preparation		ECBC			
Early Childhood Foundations		ECBF			
Advanced Early Childhood Studies	CERT	CRTECA	ECA		DV
Early Childhood Studies	AAS	AASECS	ECS		DV
<b>Teacher Education</b>					
Elementary and Secondary Certification <b>Under Review</b>	CERA		<b>Selective Admissions**</b>		CC
Special Education Mild-Moderate Disability Certification <b>Under Review</b>	CERA		<b>Selective Admissions**</b>		CC
Special Education Mild-Moderate Disability Certification for Certified Teachers <b>Under Review</b>	CERA		<b>Selective Admissions**</b>		CC
<b>Educational Technology</b>					
Basic Educational Technology	CERT	CRTINTEDUTEC	ETB		CC
<b>Emergency Medical Technology</b>					
Emergency Medical Technology	CERT		<b>Selective Admissions**</b>		EC
EMT Paramedic	AAS		<b>Selective Admissions**</b>		EC
<b>Fashion Design</b>					
Fashion Design	CERT	CRTFDC	FDC		WC
Also See Applied Arts, Art Electives list					

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## Occupational Programs (continued)

Program	Award	Program Code	Major Code	Concentration Code	Lead Campus*
<b>Fire Science</b>					
Fire Science Academy Track	CERT				CC
Fire & Emergency Services Higher Education (FESHE)	AAS				CC
<u>Concentrations:</u>					
Fire and Emergency Service Higher Education (FESHE)			FSCF		
Vocational Academy			FSCV		
<b>Fitness and Sport Sciences</b>					
Coaching	CERT	CRTCOACHING	FSG		WC
Fitness Professional	CERT	CRTFITNESS	FSP		WC
<b>Fraud Examination</b>					
Fraud Examination	CERA				DC
<b>Health Information Management</b>					
Health Information Technology <b>Under Review</b>	AAS				DC
Health Information Technology <b>Under Review</b>	CERT				DC
<u>Concentrations:</u>					
Medical Billing and Coding				OAHB	
Medical Front Office Support				OAHF	
Health Information Management				OAHM	
(see also Office and Administrative Professions)					
<b>Hotel and Restaurant Management</b>					
Hotel and Restaurant Management	CERT	CRTHRM	HRC		NW
<b>Human Resources</b>					
Human Resources	CERT	CRTHUMANRES	HRS		CC
<b>Law Enforcement Academy</b>					
Law Enforcement Academy	CERT				CC
Law Enforcement	AAS				CC
<b>Logistics and Supply Chain Management</b>					
See Business					
<b>Legal Assistant</b>					
See Paralegal					
<b>Machine Tool Technology</b>					
Machine Tool Technology <b>Under Review</b>	CERT	CRTMACHNTOOL	MCT		DC
<u>Concentrations:</u>					
Computer Numerical Control (CNC) Machinist				MACC	
Mechanical Inspector				MACI	
Manual Machinist				MACM	
Machine Operator				MACO	
Computer Numerical Control (CNC) Programmer				MACP	

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## Occupational Programs (continued)

Program	Award	Program Code	Major Code	Concentration Code	Lead Campus*
Machine Tool Technology <u>Concentrations:</u> Computer Numerical Control (CNC) Machinist Mechanical Inspector Manual Machinist Machine Operator Computer Numerical Control (CNC) Programmer	AAS	AASMACHNTOOL	MAC	MACC MACI MACM MACO MACP	DC
<b>Message</b> See Therapeutic Massage					
<b>Medical Assistant Under Review</b>					
Medical Assistant <u>Concentrations:</u> Administrative Clinical	CERT	Selective Admissions**		HPMA HPMC	DV DV DV
<b>Medical Laboratory Technician</b>					
Medical Laboratory Technician	AAS	Selective Admissions**			WC
<b>Nursing</b>					
Associate Degree Nursing	AAS	Selective Admissions**			WC
Practical Nursing	CERT	Selective Admissions**			WC
<b>Paralegal</b>					
Paralegal	AAS	AASLEGALASST	LAS		DC
Paralegal	CERA	Selective Admissions**			DC
<b>Pharmacy Technology</b>					
Pharmacy Technology	CERT	Selective Admissions**			EC
Pharmacy Technology	AAS	Selective Admissions**			EC
<b>Phlebotomy</b>					
Phlebotomy	CERT	Selective Admissions**	PHB		DV
<b>Radiologic Technology</b>					
Radiologic Technology	AAS	Selective Admissions**			WC
<b>Respiratory Care</b>					
Respiratory Care	AAS	Selective Admissions**			WC
<b>Social Services</b>					
Social Services	AAS	AASSOCIALSRV	SSE		WC
Substance Use Disorders Specialty	AAS	AASSUBSTABUS	SSS		WC
Youth Services Specialty	AAS	AASYOUTHSERV	SSY		WC
Basic Social Services	CERT	CRTSOCIALSRV	SSC		WC
Substance Use Disorders Specialty	CERT	CRTSUBSTABUS	SSA		WC
Domestic Violence Intervention	CERT	CRTDOMESVIOL	SSD		WC
Community Health Advisor	CERT	CRTHEALTHADV	CHA		WC
<b>Technical Writing &amp; Communication</b>					
Technical Writing & Communication	CERA	Selective Admissions**			DC

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\*\* Selective Admissions Requirements—See an advisor



## Occupational Programs (continued)

Program	Award	Program Code	Major Code	Concentration Code	Lead Campus*
<b>Technology</b>					
Electronic Assembly Technology <b>Under Review</b>	CERT	CRTTECHNOLGY	TEE		WC
Technology <b>Under Review</b>	AAS	AASTEK	TEK		WC
<u>Concentrations:</u>					
Electronic				TEKE	
IT Specialist				TEKI	
Optics				TEKO	
<b>Therapeutic Massage</b>					
Therapeutic Massage	CERT	<b>Selective Admissions**</b>			NW
Therapeutic Massage	AAS	<b>Selective Admissions**</b>			NW
<b>Tourism</b>					
See Tourism concentration in Business					
<b>Translation and Interpretation Studies</b>					
Translation & Interpretation Studies	CERT	<b>Selective Admissions**</b>			DC
Translation & Interpretation Studies	AAS	<b>Selective Admissions**</b>			DC
<b>Truck Driver Training</b>					
Class A Vehicle Driver	CERT	<b>Selective Admissions**</b>			CC
Coach/Transit Bus Driver	CERT	<b>Selective Admissions**</b>			CC
<b>Veterinary Science</b>					
Veterinary Practice Assistant	CERT	<b>Selective Admissions**</b>			EC
Veterinary Technician	AAS	<b>Selective Admissions**</b>			EC
<b>Welding</b>					
Welding and Fabrication	AAS	AASWELDING	WLD		DC

## General Studies

Program	Award	Program Code	Major Code	Concentration Code
General Studies	AGS	AGSGENRSTUDY	AGS	

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\*\* Selective Admissions Requirements—See an advisor

## Transfer Programs

Program	Award	Program Code	Major Code	Concentration Code
<b>Administration of Justice Studies</b>	AA	AOADMINJUST	AJT	
<b>American Sign Language &amp; Interpretation Studies</b> <i>Under Review</i>	AGS	<b>Selective Admissions**</b>		
<b>American Indian Studies</b>	AA	AOAAMRINDSTU	AIS	
<b>Anthropology</b>	AA	AOAANTHROPOL	ANT	
<u>Concentrations:</u> Anthropology Archaeology				AANT AARC
<b>Arizona General Education Curriculum (AGEC) CERT</b>				
AGEC-A (Liberal Arts) AGEC-B (Business Administration) AGEC-S (Science/Technology)		Use program code of Transfer degree		
<b>Arts, Fine</b>				
Associate of Fine Arts Degree, Visual and Performing Arts	AFA	AFAFINEARTS	AFA	
<u>Concentrations:</u> Dance Music Theater Visual Arts		<b>Selective Admissions**</b>		AFAD AFAT AFAV
<b>Business</b>				
Business Administration	ABUS	AOBBUSIADMIN	BUD	
International Business Management	CERT	<b>Selective Admissions**</b>		
Retailing and Fashion Consumer Sciences	AA	AOABFT	BFT	
<b>Education</b>				
Early Childhood Education	AA	AOAECE	ECE	
Education	AA	AOAEDUCATION	EDU	
<u>Concentrations:</u> Elementary Education Early Childhood Education				EDUL EDUC
<b>Engineering</b>				
Engineering <i>Under Review</i>	AS	AOSSCIENCE	ASI	
<b>Honors Program</b>				
Honors Program	CERT	<b>Selective Admissions**</b>		
<b>Hotel and Restaurant Management</b>				
Hotel and Restaurant Management	AA	AOAHSPTALITY	HRM	
<b>Liberal Arts</b>				
Associate of Arts	AA	AOALIBRALART	ALA	
General, no concentrations				(none)
<u>Concentrations:</u> History Psychology				ALAH ALAP

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## Transfer Programs (continued)

Program	Award	Program Code	Major Code	Concentration Code
<b>Political Science</b>				
Political Science	AA	AOAPOLITLSCI	POS	
<b>Science</b>				
Associate of Science	AS	AOSSCIENCE	ASI	
<b>Social Services</b>				
Social Services	AA	AOASOCIALSRV	SST	
<b>Sociology</b>				
Sociology	AA	AOASOCIOLOGY	SOC	

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\*\* Selective Admissions Requirements—See an advisor

# Accounting

Learn the skills and knowledge needed for bookkeeping and accounting careers. Students interested in becoming a certified public accountant should refer to the Business Administration transfer program.

## Accounting — Certificate for Direct Employment

Understand business practices and learn specific accounting skills.

### What can I do with this certificate?

**Career Options:** Entry-level bookkeeping and accounting positions

**Academic Options:** Continue your studies by taking classes toward an Accounting Associate of Applied Science degree or explore business transfer options.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-65.html>

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Lead Faculty: 520-206-7216

Program/Major Codes: **CRTACCOUNTIN/ACT**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation</b>		
ACC 100	Practical Accounting Procedures .....	3
ACC 150*	Payroll Accounting .....	3
ACC 200*	Computerized Accounting I .....	4
ACC 204*	Individual Tax Accounting .....	4
ACC 211*	Financial Accounting ( <i>was ACC 101</i> ) SUN# ACC 2201 .....	3
ACC 215*	QuickBooks Computer Accounting .....	3
BUS 148	Ethics in the Workplace .....	3
WRT 154*	Career Communications .....	3
<b>Total credits as displayed .....</b>		<b>26</b>

† Core or support course(s) fulfill this requirement.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* This course requirement may be waived with a required score on the writing assessment test.

# Accounting — Associate of Applied Science Degree for Direct Employment

Learn the theory, systems and basic problems of business accounting.

## What can I do with this degree?

**Career Options:** Entry-level positions in private, public and government accounting.

**Academic Options:** Continue your studies by taking other business programs or work to complete a Bachelor of Applied Science program.

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Lead Faculty: 520-206-7216

Program/Major Codes: **AASACCOUNTIN/ACC**

## General Education Requirements - A grade of C or better is required for graduation

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	6
WRT 154 is recommended.	
Analysis and Critical Thinking Requirement .....	6
Humanities and Social Science Requirement .....	6
ECN 201 or 202 and BUS 148 are recommended.	
Computer and Information Literacy Requirement .....	1-3
CIS/CSA 104 is recommended.	
Special Requirements	
BUS 148 is recommended.	
<b>Subtotal .....</b>	<b>19-21*</b>

Course Number	Course Title	Credit Hours
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## Required Core Courses - A grade of C or better is required for graduation.

ACC 100	Practical Accounting Procedures .....	3
ACC 150*	Payroll Accounting .....	3
ACC 200*	Computerized Accounting I .....	4
ACC 204*	Individual Tax Accounting .....	4
ACC 211*	Financial Accounting (was ACC 101) SUN# ACC 2201 .....	3
ACC 212*	Managerial Accounting (was ACC 102) SUN# ACC 2202 .....	3
ACC 215*	QuickBooks Computer Accounting .....	3
ACC 233	Cost Accounting .....	3
or ACC 273*	Governmental Accounting	
ACC 221*	Intermediate Accounting I .....	3
Electives:	.....	3
Complete 3 credits from the following list: ACC 190, 250, ECN, MKT, MGT		
<b>Subtotal .....</b>		<b>32</b>

## Required Support Courses

BUS 100	Introduction to Business .....	3
BUS 220	Legal Environment of Business .....	3
CSA 110	Spreadsheets: Microsoft Excel .....	3
<b>Subtotal .....</b>		<b>9</b>
<b>Total credits as displayed .....</b>		<b>60-62</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

# Administration of Justice

## Administration of Justice Studies — Associate of Applied Science Degree for Direct Employment

This two-year degree covers a broad range of knowledge and professional skills in criminal law, corrections, and the American justice system. Students planning to transfer to ASU should complete the **Administration of Justice - Associate of Arts degree** instead.

### What can I do with this degree?

**Career Options:** Find entry-level employment or promotion in corrections or criminal justice.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** East Campus

**Department/Contact Information:**

Dean: 520-206-7694

Lead Faculty: 520-206-7477

Program/Major Codes: **AASADMINJUST/AJS**

### General Education Requirements - A grade of C or better is required for graduation

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement . . . . .	†
WRT 101 and 102 fulfill this requirement.	
Analysis and Critical Thinking Requirement . . . . .	6
(NAU's BAS degree requires MAT 142 or higher and a four hour lab science. Please refer to the NAU Liberal Studies course list for options.)	
Humanities and Social Science Requirement . . . . .	3
AJS 225 fulfills 3 credits of the Social Science requirement. Complete a course from the Humanities & Fine Arts or Leadership & Ethics category.	
Computer and Information Literacy Requirement . . . . .	†
CIS/CSA 104 fulfills this requirement.	
Special Requirement . . . . .	
POS 201 fulfills this requirement.	
<b>Subtotal . . . . .</b>	<b>9†</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

AJS 101	Introduction to Administration of Justice Systems SUN# AJS 1101 . . . . .	3
AJS 109	Criminal Law . . . . .	3
AJS 115	Criminal Procedures . . . . .	3
AJS 123	Corrections as a Process . . . . .	3
AJS 124	Ethics and the Administration of Justice . . . . .	3
AJS 201	Rules of Evidence . . . . .	3
AJS 212	Juvenile Justice Procedures . . . . .	3
AJS 225	Criminology . . . . .	3

In addition, select two of the following courses: . . . . . 6

AJS 170	Forensic Pathology and Death Investigation
AJS 204	Criminal Investigation
AJS 210	Police Community and Human Relations
AJS 246	Race and Ethnicity Issues in the Administration of Justice
AJS 260*	Criminal Justice Management
AJS 280	Terrorism in the 21st Century

**Subtotal . . . . . 30**

**Required Support Courses**

CIS/CSA 104*	Computer Fundamentals .....	3
CMN 120	Business and Professional Communications .....	3
POS 201	American National Government and Politics SUN# POS 1110.....	3
POS 231	American State and Local Governments and Politics SUN# POS 1130.....	3
PSY 101	Introduction to Psychology SUN# PSY1101.....	4
SOC 101	Introduction to Sociology SUN# SOC 1101 .....	3
WRT 101*	Writing I SUN# ENG 1101 .....	3
WRT 102*	Writing II SUN# ENG 1102.....	3
<b>Subtotal</b> .....		<b>25</b>
<b>Total credits as displayed</b> .....		<b>64</b>

† Core or support course(s) fulfill this requirement.  
 ¥ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or support courses.  
 \* This course has a prerequisite, co-requisite, or recommendation. See course description section.

**Administration of Justice Studies — Associate of Arts Degree for Transfer**

Prepare for advanced studies in corrections procedures and the criminal justice system.

**What can I do with this degree?**

- Career Options:** While this degree is intended for transfer, it also may lead to employment or advancement within the justice system.
- Academic Options:** Transfer to a university degree program in Criminal Justice, Justice Studies, or a related program.
- Location:** East Campus
- Department/Contact Information:**  
 Dean: 520-206-7694  
 Lead Faculty: 520-206-7477
- Program/Major Codes:** **AOADMINJUST/AJT**

**Arizona General Education Curriculum (AGEC-A) Requirements - A grade of C or better is required for graduation.**

Course lists for each General Education category listed below can be found starting on page 74.

English Composition .....	6
Humanities and Fine Arts.....	6
Biological and Physical Sciences .....	8
Mathematics .....	3
Social and Behavioral Sciences .....	†
AJS 225 and either SOC 101 or PSY 101 fulfills this requirement.	
Other Requirements .....	6
Special Requirements	
The I, C, and G requirements should be fulfilled by completing appropriate courses in the above categories.	
<b>Subtotal</b> .....	<b>29¥</b>

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
AJS 101	Introduction to Administration of Justice Systems SUN# AJS 1101.....	3
AJS 109	Criminal Law .....	3
AJS 115	Criminal Procedures .....	3
AJS 123	Corrections as a Process .....	3
AJS 124	Ethics and the Administration of Justice .....	3
AJS 201	Rules of Evidence .....	3
AJS 212	Juvenile Justice Procedures .....	3
AJS 225	Criminology .....	3
Department Electives:		
In addition, select two of the following courses: .....		6
AJS 170	Forensic Pathology and Death Investigation	
AJS 204	Criminal Investigation	
AJS 210	Police Community and Human Relations	
AJS 246	Race and Ethnicity Issues in the Administration of Justice	
AJS 260*	Criminal Justice Management	
AJS 280	Terrorism in the 21st Century	
<b>Subtotal .....</b>		<b>30</b>
<b>Required Support Courses</b>		
Select one of the following courses:		
PSY 101	Introduction to Psychology SUN# PSY1101.....	4
or SOC 101	Introduction to Sociology SUN# SOC 1101.....	3
<b>Subtotal .....</b>		<b>3-4</b>
<b>Total credits as displayed .....</b>		<b>62-63</b>

† Core or support course(s) fulfill this requirement.

‡ AGEC requires 35 credits. This subtotal shows the AGEC credits not fulfilled by core, support, or Support courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.



# American Indian Studies

## American Indian Studies — Associate of Arts Degree for Transfer

Learn more about the cultures, histories, and issues facing Native Americans.

### What can I do with this degree?

**Career Options:** Entry-level employment with American Indian cultural or social services agencies, including tribal agencies.

**Academic Options:** Transfer to a university degree program in Liberal Arts and Sciences.

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6996

Lead Faculty: 520-206-6905

Program/Major Codes: **AOAAMRINDSTU/AIS**

### Arizona General Education Curriculum (AGEC-A) Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

English Composition .....	6
Humanities and Fine Arts.....	3
AIS/ANT 206 fulfills 3 credits in the Humanities category. Complete one course from the Art List.	
Biological and Physical Sciences .....	8
Mathematics.....	3
Social and Behavioral Sciences .....	†
AIS/HIS 124 and HUM 260 fulfill this requirement.	
Other Requirements .....	†
Second language courses fulfill this requirement.	
AGEC Special Requirements .....	†
AIS/HIS 124 and HUM 260 fulfill the I, C and G requirements.	
<b>Subtotal .....</b>	<b>20‡</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

AIS/HIS 122	Tohono O'odham History and Culture .....	3
AIS/HIS 124	History and Culture of the Yaqui People .....	3
AIS/ANT/HIS 148	History of Indians of North America .....	3
AIS/ANT 206	Contemporary Native Americans of the Southwest .....	3
HUM 260	Intercultural Perspectives .....	3
<b>Subtotal .....</b>		<b>15</b>

### Required Support Courses

Second Language Requirement .....	16
Completion of a Language course numbered 202, fourth-semester level or ASL 202*. (Bilingual or international students should consult an advisor or counselor concerning exceptions to this requirement.) If a student satisfies the Language requirement in fewer than 16 credits, additional credit hours of transferable electives must be completed to meet the minimum associate degree requirement of 60 credit hours.	
<b>Complete 9-13 transferable electives .....</b>	<b>9-13</b>
<b>Subtotal .....</b>	<b>25-29</b>
<b>Total credits as displayed .....</b>	<b>60-64</b>

† Core or support course(s) fulfill this requirement.

‡ AGECE requires 35 credits. This subtotal shows the AGECE credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See description section.

# American Sign Language and Interpreter Studies

## American Sign Language and Interpreter Studies—Associate of General Studies Degree for Transfer

Learn pre-interpreting skills such as cognitive processing and translation. This program includes lecture and laboratory skills. Students will develop the intralingual skills in English and American Sign Language needed to analyze discourse in English and American Sign Language (ASL).

### What can I do with this degree?

**Career Options:** The AGS degree in American Sign Language and Interpreter Studies provides the graduate with an educational foundation for articulation to a baccalaureate granting institution.

**Academic Options:** Transfer to a university degree program in Interpreter Studies or a related program.

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6996

Lead Faculty: 520-206-6094

Video Relay Service/Video Phone: 520-445-8338

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

### Program Prerequisites

Before enrolling in this program, you must fulfill the following requirements.

WRT	101*	Writing I .....	5
ASL	101	American Sign Language I .....	4
ASL	102*	American Sign Language II .....	4
ASL	201*	American Sign Language III .....	4
Complete or be concurrently enrolled in			
WRT	102*	Writing II .....	5
ASL	202*	American Sign Language IV .....	5
<b>Subtotal</b> .....			<b>12</b>

### Arizona General Education Curriculum Requirements (AGEC-A) - A grade of C or better is required in all courses for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

English Composition .....	†
WRT 101 and WRT 102 fulfill this requirement.	
Humanities and Fine Arts .....	6
Biological and Physical Sciences .....	8
Mathematics .....	3
Social and Behavioral Science Requirement .....	6
Other Requirements .....	†
ASL 201 and 202 fulfill this requirement	
AGEC Special Requirements	
The I, C, and G requirements should be fulfilled by selecting appropriate courses in the above categories.	
<b>Subtotal</b> .....	<b>23‡</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

ASL	200*	Introduction to the Deaf Community .....	3
ASL	202*	American Sign Language IV .....	4
ASL	203*	Comparative Analysis of ASL and English .....	3

ASL 215*	ASL Literature: Narratives .....	3
ITP 201*	Ethics and Social Justice of Interpreting .....	3
ITP 211*	Fundamentals of Interpreting I .....	3
ITP 212*	Fundamentals of Interpreting II .....	3
<b>Subtotal</b> .....		<b>22</b>

**Required Support Courses**

CSA 100**	Computer Fundamentals .....	1
WRT 101*	Writing I SUN# ENG 1101 .....	3
WRT 102*	Writing II SUN# ENG 1102 .....	3
<b>Subtotal</b> .....		<b>7</b>
<b>Total credits as displayed with program prerequisites</b> .....		<b>64</b>

¥ AGEC requires 35 credits. This subtotal shows the AGEC credits not fulfilled by core, support or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* Completion of the AGEC-A and CSA 100 meet the general education requirements for the AGS degree.

§ Credits counted below.

† Program prerequisite(s) fulfill this requirement.

# Anthropology

## Anthropology — Associate of Arts Degree for Transfer

Learn about human biological and cultural differences, including human biology and origins, linguistics and world cultures both past and present.

### What can I do with this degree?

**Academic Options:** Attend a university degree program in anthropology or archaeology. You may also choose to pursue a Field Archaeology Certificate to learn practical archaeological fieldwork techniques.

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6996

Lead Faculty: 520-206-6905

Program/Major/Concentration Codes: **AOAANTHROPOL/ANT/\*\*\*\*** (see concentration codes below)

### Arizona General Education Curriculum Requirements (AGEC-A) - A grade of C or better is required for graduation.

*Course lists for each General Education category listed below can be found starting on page 74.*

English Composition .....	6
Humanities and Fine Arts .....	6
Biological and Physical Sciences** .....	8
Mathematics .....	3
Social and Behavioral Sciences .....	3
ANT 101 fulfills 3 credits of this requirement. Complete a non-ANT course from this category.	
Other Requirements .....	†
ANT 102 and 210 fulfill this requirement.	
Special Requirements	
ANT 210 fulfills the I and G requirement. The C requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal</b> .....	<b>26¥</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

ANT/ARC 101	Human Origins and Prehistory .....	3
ANT 102	Introduction to Cultural Anthropology and Linguistics .....	3
ANT/ARC 204IN	Human Evolution: Ape Men, Cave Women and Missing Links .....	4
ANT 210*	Cultural Anthropology .....	3
ANT 215	The Nature of Language .....	3
ANT/ARC 225*	Principles of Archaeology .....	3
Second Language	.....	8
Completion of a Language course numbered 102*, second semester level. (Bilingual students should consult an advisor or counselor concerning exceptions to this requirement.) If a student satisfies the Language requirement in fewer than 8 credits, additional credit hours of transferable electives may be required to meet the minimum associate degree requirement of 60 credit hours.		
<b>Subtotal</b> .....		<b>27</b>

### Core Concentrations - A grade of C or better is required for graduation.

Complete one of the following concentrations: .....	9-12
Department chair or faculty advisor approval is recommended in the selection of the program option.	

#### **Anthropology Concentration** (Concentration Code: AANT)

Anthropology Electives in consultation with an Anthropology faculty advisor .....	6-8
or Language courses numbered 201 and 202, third and fourth semester level	

NOTE: ASU, NAU and UA require fourth semester level language proficiency for a B.A. in Anthropology

Transferable Elective .....	3
<b>Subtotal</b> .....	<b>9-11</b>

**Archaeology Concentration** (Concentration Code: AARC)

ARC 275	Archaeology Excavation I .....	4
GLG 101IN	Physical Geology SUN# GLG 1101 .....	**
GLG 102IN*	Historical Geology .....	**
or BIO 109IN	Natural History of the Southwest	
Archaeology Electives in consultation with an Anthropology faculty advisor .....	6-8	
or Language courses numbered 201 and 202, third and fourth semester level		
NOTE: ASU, NAU and UA require fourth semester level language proficiency for a B.A. in Anthropology		
<b>Subtotal</b> .....		<b>10-12</b>
<b>Total credits as displayed</b> .....		<b>62-65</b>

† Core or support course(s) fulfill this requirement.

‡ AGEC requires 35 credits. This subtotal shows the AGEC credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* For the Archaeology Concentration, GLG 101IN and either GLG 102IN or BIO 109IN meet the Biological and Physical Sciences AGEC requirement.

# Archaeology

## Field Archaeology Certificate for Direct Employment

**This certificate is currently under review. See the website or an advisor for details.**

Dig into the past by studying archaeological fieldwork. Courses are designed for those seeking professional skills, those working toward an Anthropology degree with an archaeology emphasis, as well as for those with a general interest in archaeology. This program emphasizes the preservation and conservation of resources and applied skills in archaeology, particularly related to the pre-history of southern Arizona.

### What can I do with this certificate?

**Career Options:** Seek employment in entry-level archaeology positions.

**Academic Options:** Students planning to transfer to a four-year archaeology degree program should pursue an Anthropology AA degree simultaneously with this certificate.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-30.html>

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6996

Lead Faculty: 520-206-6905

Program/Major/Concentration Codes: **CRTFLDARCHEO/ARF/\*\*\*\*** (see concentration codes below)

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
ANT/ARC 101 or ANT/ ARC 204IN	Human Origins and Prehistory .....	3-4
ANT/ARC/GIS 181	Global Positioning Systems Basics .....	1
ANT/ARC/GEO/ GIS 265	Mapping Concepts .....	1
ANT/ARC 275	Archaeological Excavation I .....	4
ANT/ARC 276*	Archaeological Surveying I .....	4
<b>Subtotal</b> .....		<b>13-14</b>
<b>Core Concentrations - A grade of C or better is required for graduation.</b>		
Complete one (or more) of the following concentrations.....		4-15
Department faculty approval is recommended in the selection of the program concentration and electives.		
<b>Field and Lab Fundamentals</b> (Concentration Code: ARCL)		
ANT/ARC 180	Artifact Identification: Tucson Basin .....	1
ANT/ARC 225*	Principles of Archaeology .....	3
<b>Subtotal</b> .....		<b>4</b>
<b>Southwestern Cultures</b> (Concentration Code: ARCS)		
ANT 102 or ANT 112	Introduction to Cultural Anthropology and Linguistics .....	3
AIS/ANT/ARC 205	Introduction to Southwestern Prehistory .....	3
ANT/ARC 225*	Principles of Archaeology .....	3
<b>Subtotal</b> .....		<b>9</b>

*Continued next page*

**Field Methods** (Concentration Code: ARCM)

ANT/ARC 225*	Principles of Archaeology .....	3
ANT/ARC 250*	Archaeology Laboratory .....	4
ANT/ARC 277* or ANT/ARC 278*	Archaeological Excavation II .....	4
ANT/ARC/GIS 281	Global Positioning Systems .....	1
ARC Elective	Elective in consultation with ARC faculty advisor .....	3
<b>Subtotal</b> .....		<b>15</b>

**Geospatial Information Studies and Technology** (Concentration Code: ARCC)

ANT/ARC/ GEO/GIS 267*	Introduction to Geographic Information Systems .....	3
ANT/ARC/ GIS 281	Global Positioning Systems .....	1
ANT/ARC/GEO/ GIS 284*	Computer Cartography and CAD .....	3
ANT/ARC/ GIS 286* or DAR 120	Electronic and Digital Field Mapping .....	4
ARC, CIS, DAR, Elective	Elective in consultation with Archeology faculty advisor .....	3
<b>Subtotal</b> .....		<b>14</b>
<b>Total credits as displayed</b> .....		<b>17-29</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

# Arizona General Education Curriculum

## Arizona General Education Curriculum (AGEC) — Certificate for Transfer

Complete lower-division general education requirements for transfer to ASU, NAU or UA.

It is strongly recommended that students complete the Associate of Arts, Associate of Business Administration, or Associate of Science degrees in addition to the AGEC before transferring. The AGEC without a degree is not eligible for financial aid.

### What can I do with this certificate?

**Academic Options:** Continue your studies by taking additional transfer coursework to complete an Associate of Arts, Associate of Business Administration, or Associate of Science degree, then transfer to a college or university.

**Locations:** All campuses

**Contact Information:** Contact any campus Student Services office ([www.pima.edu/current-students/advising/contact-us.html](http://www.pima.edu/current-students/advising/contact-us.html))

### Required Courses

At least 35 credits and 11 courses are required for this certificate.

Complete an AGEC-A for Associate of Arts, Associate of Fine Arts, and Bachelor of Arts degrees; complete an AGEC-B for Associate of Business and Bachelor of Science in Business degrees; complete an AGEC-S for Associate of Science and most Bachelor of Science degrees.

### Arizona General Education Curriculum (AGEC) Requirements - A grade of C or better is required in all courses for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

English Composition (2 courses) .....	6
Mathematics (1 course) .....	3
Biological and Physical Sciences (2 courses w/ labs) .....	8
Humanities and Fine Arts (2 courses) .....	6
Social and Behavioral Sciences (2 courses) .....	6
Other Requirements (2 courses) .....	6
Special Requirements	
The I, C, and G requirements should be fulfilled by completing appropriate courses in the above categories.	
<b>Total credits</b> .....	<b>35</b>



# Arts

Gain knowledge and experience working in a variety of media.

## Associate Degrees:

- Applied Arts
- Associate of Arts: Visual Arts Concentration
- Associate of Arts: Dance Concentration
- Associate of Arts: Music Concentration
- Associate of Arts: Theater Concentration

## Applied Arts

### Applied Arts — Associate of Applied Arts Degree for Direct Employment

Gain experience working in a variety of art media or focus on a single area of interest. Learn art history or principles of effective art education. Students interested in digital and film arts should pursue a degree or certificate in that subject area.

Students interested in transferring to a university should complete an Associate of Fine Arts degree, concentrating in visual arts, dance, music or theater.

#### What can I do with this degree?

**Career Options:** Work as an artist, artist assistant or entry-level art instructor.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)).

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6690

Lead Faculty: 520-206-6882

Program/Major Codes: **AAAAPPLDARTS/APT**

#### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	6
Analysis and Critical Thinking Requirement .....	6
Humanities and Social Science Requirement .....	†
ART 130 and 131 fulfill this requirement.	
Computer and Information Literacy Requirement .....	1-3
Special Requirement	
ART 130 fulfills this requirement.	
<b>Subtotal .....</b>	<b>13-15†</b>

Course Number	Course Title	Credit Hours
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#### Required Core Courses - A grade of C or better is required for graduation.

ART 100	Basic Design .....	3
ART 110*	Drawing I SUN# ART 1111 .....	3
ART 115*	Color and Composition .....	3
ART 120*	Sculptural Design SUN# ART1115 .....	3
ART 130	Art and Culture: Prehistoric Through Gothic SUN# ART 1101 .....	3
ART 131	Art and Culture: Late Gothic Through Modern Periods SUN# ART 1102 .....	3
ART/FDC 288	Portfolio Preparation .....	3
<b>Subtotal .....</b>		<b>21</b>

**Art Electives: - A grade of C or better is required for graduation.**

Complete courses in any combination from any of the following categories..... 30

**Art History and Art Education**

ART 105	Exploring Art and Visual Culture .....	3
ART 133	Art in America .....	3
ART 135	Pre-Columbian Art .....	3
ART 136	Body and Art .....	3
ART 230	History of Photography .....	3
ART 250*	Gallery and Museum Practices .....	3
ART 2961*	Independent Study in ART: Art History .....	3

**Ceramics**

ART 160*	Ceramics I .....	3
ART 260*	Ceramics II .....	3
ART 261*	Ceramics III .....	3
ART 262*	Ceramics IV .....	3
ART 29612*	Independent Study in ART: Ceramics .....	3

**Digital Arts**

DAR 103	Introduction to Digital Arts .....	3
DAR 120	Applied Computer Graphics .....	4
DAR 122*	DeskTop Graphics: Adobe Illustrator .....	4
DAR 146	Lighting for Photography I .....	4
DAR 173	History of American Cinema .....	3
DAR 223*	Digital Drawing and Painting .....	4
DAR 226*	DeskTop Publishing for Digital Arts: Adobe InDesign .....	4
DAR 246	Lighting for Photography II .....	4

**Fashion Design**

FDC 110	Clothing Construction I .....	3
FDC 111	Clothing Construction II .....	3
FDC 112	Pattern Fitting .....	3
FDC 121*	Flat Pattern Making I .....	3
FDC 122	History of Clothing .....	3
FDC 123*	Computer Pattern-Making I .....	3
FDC 126	Textiles .....	3
FDC 131	Fashion Styling .....	3
FDC 132	Global Fashion and Culture .....	3
FDC 135*	Fashion Show/Event Planning .....	3
FDC 141	Introduction to Fashion Design .....	3
FDC 144*	Fashion Drawing .....	3
FDC 211*	Clothing Construction III .....	3
FDC 212*	Tailoring: Jackets .....	3
FDC 213*	Tailoring: Pants and Shirts .....	3
FDC 214*	Bridal and Formal Wear .....	3
FDC 215*	Sewing with Knits .....	3
FDC 221*	Flat Patternmaking II .....	3
FDC 223*	Computer Pattern-Making II .....	3
FDC 224*	Computer Pattern-Making III .....	3
FDC 241*	Draping I .....	3
FDC 242*	Draping II .....	3
FDC 245	Digital Fashion Design .....	3
FDC 289*	Fashion Design and Clothing Capstone .....	3

**Fiber Art**

ART 180*	Weaving I: Four-Harness Loom .....	3
ART 181*	Mixed Media Fibers .....	3

ART 280*	Weaving II .....	3
ART 29618*	Independent Study in ART: Fibers .....	3
<b>Metalwork</b>		
ART 123*	Lost Wax Sculpture Casting .....	3
ART 170*	Metalwork I: Jewelry .....	3
ART 175*	Ferrous Metalwork: Blacksmithing, Tool Making/Knife Making .....	3
ART 270*	Metalwork II: Jewelry .....	3
ART 271*	Metalwork II: Smithing and Casting .....	3
ART 29613*	Independent Study in ART: Metals .....	3
<b>Painting and Drawing</b>		
ART 106	Survey of Painting Materials and Techniques .....	3
ART 109	Watercolor Painting .....	3
ART 210*	Drawing II .....	3
ART 213*	Life Drawing I .....	3
ART 215*	Painting I .....	3
ART 217*	Painting II .....	3
ART 227	Painting III .....	3
ART 29614*	Independent Study in ART: Painting, Drawing, and Design .....	3
<b>Photography</b>		
ART 128*	Digital Photography I .....	4
ART 140*	Photography I .....	3
ART 141*	Photography II .....	3
ART 146*	Lighting for Photography I .....	4
ART 147*	Alternative Processes in Photography .....	3
ART 232	Digital Photography II .....	4
ART 246*	Lighting for Photography II .....	4
ART 29615*	Independent Study in ART: Photography .....	3
<b>Printmaking</b>		
ART 212*	Printmaking I .....	3
ART 214*	Printmaking II .....	3
ART 216*	Screenprinting I .....	3
ART 218*	Screenprinting II .....	3
ART 219*	Printmaking III .....	3
ART 29616*	Independent Study in ART: Printmaking .....	3
<b>Sculpture/Glass Art</b>		
ART 121*	Figure Sculpture .....	3
ART 220*	Sculpture .....	3
ART 265*	Furnace Glassblowing I .....	3
ART 266*	Furnace Glassblowing II .....	3
ART 29617*	Independent Study in ART: Sculpture .....	3
ART 29619*	Independent Study in ART: Glass .....	3
<b>Other</b>		
MKT 139 or BUS 100	Retailing .....	3
MAC 110	Introduction to Business .....	4
WLD 120	Manual Machine Shop .....	4
	Welding for Metal Sculpture .....	4
<b>Subtotal</b> .....		<b>30</b>
<b>Total credits as displayed</b> .....		<b>64-66</b>

† Core or support course(s) fulfill this requirement.

‡ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Fine Arts

Gain knowledge and experience working in a variety of media.

- Associate of Arts: Visual Arts Concentration
- Associate of Arts: Music Concentration
- Associate of Arts: Theater Concentration
- Associate of Arts: Dance Concentration

### Visual and Performing Arts — Associate of Fine Arts for Transfer — Visual Arts Concentration

Study a variety of art forms or learn art history while preparing to transfer to a 4-year university.

#### What can I do with this degree?

**Career Options:** Work as an artist, art educator or in art or performance production.

**Academic Options:** Transfer to a university to complete a bachelor's degree.

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6690

Lead Faculty: 520-206-6882

Program/Major/Concentration Codes: **AFAFINEARTS/AFA/AFAV**

#### Arizona General Education Curriculum Requirements (AGEC-A) - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

English Composition .....	6
Humanities and Fine Arts..... †	
ART 100 and 130 fulfill this requirement.	
Biological and Physical Sciences .....	8
Mathematics.....	3
Social and Behavioral Sciences .....	6
Other Requirements .....	†
ART 110 and 131 fulfill requirement.	
Special Requirements	
ART 130 fulfills the I and G requirements. The C requirement should be fulfilled by a course in the Social and Behavioral Sciences category.	
<b>Subtotal .....</b>	<b>23</b>

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
ART 100	Basic Design .....	3
ART 110*	Drawing I SUN# ART 1111 .....	3
ART 115*	Color and Composition .....	3
ART 120*	Sculptural Design SUN# ART 1115 .....	3
ART 130	Art and Culture: Prehistoric Through Gothic SUN# ART 1101 .....	3
ART 131	Art and Culture: Late Gothic Through Modern Periods SUN# ART 1102 .....	3
ART 210*	Drawing II .....	3
or ART 213*	Life Drawing I .....	3
<b>Subtotal .....</b>		<b>21</b>

**Required Support Courses- A grade of C or better is required for graduation.****Art Electives**

Complete five or six courses for a minimum of 16 credits from any of the following categories: ..... 16  
 (These courses cannot double-dip with Required Core Courses)

**Art in the Craft Media**

ART 160*	Ceramics I	3
ART 170*	Metalwork I: Jewelry	3
ART 180*	Weaving I: Four-Harness Loom	3
ART 181*	Mixed Media Fibers	3
ART 260*	Ceramics II	3
ART 261*	Ceramics III	3
ART 262*	Ceramics IV	3
ART 270*	Metalwork II: Jewelry	3
ART 271*	Metalwork II: Smithing and Casting	3
ART 280*	Weaving II	3
ART 29612*	Independent Study in ART: Ceramics	3
ART 29618*	Independent Study in ART: Fibers	3

**Photography**

ART 128*	Digital Photography I	4
ART 140*	Photography I	3
ART 141*	Photography II	3
ART 147*	Alternative Processes in Photography	3
ART 230	History of Photography	3
ART 29615*	Independent Study in ART: Photography	3

**Art History**

ART 135	Pre-Columbian Art	3
ART 136	Body and Art	3
ART 29611*	Independent Study in ART: Art History	3

**Drawing, Painting, and Sculpture**

ART 106	Survey of Painting Materials and Techniques	3
ART 109	Watercolor Painting	3
ART 121*	Figure Sculpture	3
ART 210*	Drawing II (If not taken as a Required Core Course)	3
ART 213*	Life Drawing I (If not taken as a Required Core Course)	3
ART 215*	Painting I	3
ART 217*	Painting II	3
ART 220*	Sculpture	3
ART 29614*	Independent Study in ART: Painting, Drawing, and Design	3
ART 29617*	Independent Study in ART: Sculpture	3

**Printmaking**

ART 212*	Printmaking I	3
ART 214*	Printmaking II	3
ART 216*	Screenprinting I	3
ART 218*	Screenprinting II	3
ART 219*	Printmaking III	3

<b>Subtotal</b>		<b>16</b>
<b>Total credits</b>		<b>60</b>

† Core or support course(s) fulfill this requirement.

‡ AGEC requires 35 credits. This subtotal shows the AGEC credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Visual and Performing Arts — Associate of Fine Arts for Transfer — Dance Concentration

Learn to teach or perform dance while preparing to transfer to a 4-year university.

### What can I do with this degree?

**Career Options:** Work as a dancer or dance instructor.

**Academic Options:** Transfer to a university to complete a bachelor's degree.

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6690

Lead Faculty: Dance 206-6826

Program/Major/Concentration Codes: **AFAFINEARTS/AFA/AFAD**

### Arizona General Education Curriculum Requirements (AGEC-A) - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

English Composition .....	6
Humanities and Fine Arts** .....	6
Biological and Physical Sciences .....	8
Mathematics .....	3
Social and Behavioral Sciences .....	6
Other Requirements** .....	6
Special Requirements	
The I, C, and G requirements should be fulfilled by completing appropriate courses in the above categories.	
<b>Subtotal .....</b>	<b>35</b>

### Required Core Courses - A grade of C or better is required for graduation.

DNC 107	Dance Conditioning .....	2
DNC 150	Ballet I .....	2
DNC 151*	Ballet II .....	2
DNC 166	Modern Dance I .....	2
DNC 167*	Modern Dance II .....	2
DNC 180*	Choreography .....	2
DNC 200	Dance Appreciation and History .....	3
DNC 219	Jazz Dance I .....	2
DNC 220*	Jazz Dance II .....	2
DNC 230*	Rhythms for Dance .....	2
DNC 269*	Dance Production and Performance .....	3
DNC 280	Business for Dance Careers .....	3
<b>Subtotal .....</b>	<b>27</b>	

### Support Electives

Choose up to 5 credits.\*\*\*

Note: Classes taken for repeat credit will only count once. ....	5	
DNC 152*	Ballet III .....	2
DNC 168*	Modern Dance III .....	2
DNC 221	Jazz Dance III .....	2
MUS 151	Exploring Music .....	3
MUS 160	Popular Music in America .....	3
THE 105*	Theater Appreciation .....	3
<b>Subtotal .....</b>	<b>5</b>	
<b>Total credits .....</b>	<b>67</b>	

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* Some support electives fulfill requirements in this category. See an advisor.

\*\*\* Additional credits may be needed to have a minimum of 60 credits if these courses also satisfy General Education Requirements.

## Visual and Performing Arts — Associate of Fine Arts for Transfer — Music Concentration

Study music theory and performance while preparing to transfer to a four-year university.

### What can I do with this degree?

**Career Options:** Work as a musician or music teacher.

**Academic Options:** Transfer to a university to complete a bachelor's degree.

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6690

**Lead Faculty:** Music 206-6826

**Selective Admissions Program:** You are not fully admitted to this program until you have auditioned. See the website or an advisor for details.

### Arizona General Education Curriculum Requirements (AGEC-A) - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

English Composition .....	6
Humanities and Fine Arts .....	†
MUS 125 and 201 fulfill this requirement.	
Biological and Physical Sciences .....	8
Mathematics .....	3
Social and Behavioral Sciences .....	6
Other Requirements .....	3
MUS 202 fulfills 3 credits of this requirement. Complete a non-Humanities and Fine Arts course from this category.	
Special Requirements	
The I, C, and G requirement should be fulfilled by courses in the above categories.	
<b>Subtotal .....</b>	<b>26</b>

### Required Core Courses - A grade of C or better is required for graduation.

MUP 161-168*	Studio Instruction: I (Major) .....	2
MUP 171-178*	Studio Instruction: II (Major) .....	2
MUP 261-268*	Studio Instruction: III (Major) .....	2
MUP 271-278*	Studio Instruction: IV (Major) .....	2
MUS 125*	Structure of Music I .....	3
MUS 126*	Structure of Music II .....	3
MUS 127*	Aural Perception I .....	2
MUS 129*	Aural Perception II .....	2
MUS 141	Piano Class I (Majors) .....	2
MUS 142*	Piano Class II (Majors) .....	2
MUS 143*	Piano Class III (Majors) .....	2
MUS 144*	Piano Class IV (Majors) .....	2
MUS 201*	History and Literature of Music I .....	3
MUS 202*	History and Literature of Music II .....	3
MUS 223*	Structure of Music III SUN# MUS 2222** .....	3
MUS 224*	Aural Perception III SUN# MUS 2222** .....	2
MUS 226*	Structure of Music IV SUN# MUS 2223*** .....	3
MUS 228*	Aural Perception IV SUN# MUS 2223*** .....	2
<b>Subtotal .....</b>	<b>42</b>	

### Core Options: - A grade of C or better is required for graduation.

Complete six credits from the following. A course may be taken more than once to fulfill this requirement:

MUS 116*	Pima Community College Orchestra .....	2
MUS 120*	Concert Band .....	3
MUS 130*	Chorale (SATB) .....	3
MUS 131*	College Singers (SATB) .....	3

<b>Subtotal</b> .....	<b>6</b>
<b>Total credits</b> .....	<b>74</b>

† Core or support course(s) fulfill this requirement.

¥ AGEC requires 35 credits. This subtotal shows the AGEC credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* Both MUS 223 and 224 must be completed in order to get the MUS 2222 SUN designation.

\*\*\* Both MUS 226 and 228 must be completed in order to get the MUS 2223 SUN designation.

## Visual and Performing Arts — Associate of Fine Arts for Transfer — Theater Concentration

Study acting and theater production while preparing to transfer to a 4-year university.

### What can I do with this degree?

**Career Options:** Work as an actor or in performance production.

**Academic Options:** Transfer to a university to complete a bachelor's degree.

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6690

Lead Faculty: Theater 206-6720

Program/Major/Concentration Codes: **AFAFINEARTS/AFA/AFAT**

### Arizona General Education Curriculum Requirements (AGEC-A) - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

English Composition .....	6
Humanities and Fine Arts .....	†
THE 105 and 140 fulfill this requirement.	
Biological and Physical Sciences .....	8
Mathematics .....	3
Social and Behavioral Sciences .....	6
Other Requirements .....	6
Special Requirements	
THE 105 fulfills the C requirement. The I and G requirements should be fulfilled by completing appropriate courses in the above categories.	
<b>Subtotal</b> .....	<b>29¥</b>

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
THE 104	Voice and Movement for the Actor .....	3
THE 105*	Theater Appreciation .....	3
THE 111	Stagecraft .....	3
THE 113	Stagecraft Crew .....	1
THE 125*	Theater Production .....	2
THE 140	History of Theater to the 18th Century .....	3
THE 149	Introduction to Acting I .....	3
THE 151*	Introduction to Acting II .....	3
THE 220	Stage Lighting .....	3
THE 245	Principles of Dramatic Structure SUN# THE 2220 .....	3
THE ELEC	Any transferable THE course .....	3
<b>Subtotal</b> .....		<b>30</b>



**Core Options: - A grade of C or better is required for graduation.**

Complete one of the following options after consulting with a theatre department faculty advisor or counselor:

**Option 1**

THE 118	Basic Theater Graphics .....	3
THE 223	Scene Design .....	3

**Option 2**

THE 250*	Acting: Auditioning for Theater .....	3
THE 251*	Acting: Shakespeare and Classical Literature .....	3

<b>Subtotal</b> .....	<b>6</b>
<b>Total credits</b> .....	<b>65</b>

† Core or support course(s) fulfill this requirement.

‡ AGEC requires 35 credits. This subtotal shows the AGEC credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

# Associate of Arts

## Associate of Arts Degree for Transfer in Liberal Arts

Prepare to transfer by completing your general education requirements for a wide variety of university majors. Engage in creative pursuits such as writing, art, history or languages.

Concentrations are available for Psychology and History, and emphases in Creative Writing and Communication. Specialized AA degrees are available in: Administration of Justice, American Indian Studies, Anthropology, Elementary Education, Hotel and Restaurant Management, Political Science, Social Services and Sociology.

Students, especially those transferring to the University of Arizona, are encouraged to enroll in STU 210, Transfer Strategies, to plan for the transfer process and success at the university.

Students who wish to transfer to an Arizona university and pursue a major in any of the following areas, should complete the PCC **Associate of Arts in Liberal Arts degree for transfer** (refer to university major guides for core or elective courses and language requirements).

- Biology (for ASU and NAU; for the UA complete the Associate of Science)
- Communication
- Creative Writing
- Digital Film Arts
- Education: Secondary or Special Education/Rehabilitation
- English
- Environmental Science
- Family Studies
- Gender and Womens Studies
- Journalism
- Languages
- Literature
- Mathematics
- Media Arts
- Mexican American Studies
- Physical Education, Exercise and Wellness, Athletic Trainer
- Pre-Agriculture
- Pre-Pharmacy
- Pre-Law
- Social Services: Substance Use Disorder Specialty or Youth Services Specialty
- Spanish

### What can I do with this degree?

**Academic Options:** Transfer to a university and major in subjects other than science, business or technology. Additional information on transferring to a university is available online (<http://www.pima.edu/transfer/transferringfrompima.shtml>) or from any advisor or counselor.

**Locations:** All campuses

**Contact Information:** Contact any campus Student Services office ([www.pima.edu/mhtml/email/advising](http://www.pima.edu/mhtml/email/advising)).

Program/Major Codes: **AOALIBRALART/ALA**

**Arizona General Education Curriculum Requirements (AGEC-A) - A grade of C or better is required in all courses for graduation.**

*Course lists for each General Education category listed below can be found starting on page 74.*

English Composition .....	6
Humanities and Fine Arts.....	6
Biological and Physical Sciences .....	8
Mathematics.....	3
Social and Behavioral Sciences .....	6
Other Requirements .....	6
AGEC Special Requirements	
The I, C, and G requirements should be fulfilled by completing appropriate courses in the above categories.	
<b>Subtotal .....</b>	<b>35</b>

**Required Core - A grade of C or better is required for graduation.**

Select 25-29 transferable credits from transfer guides, second language courses, or any transferable courses.....	25-29
Second Language Requirement .....	(0-16)
The second language requirement is dependent upon your major. It is not a requirement for this degree, but many university bachelor of arts degrees require a language course numbered 202, fourth-semester level. (Bilingual or international students should consult an advisor or counselor concerning exceptions to this requirement.)	
<b>Subtotal .....</b>	<b>25-29</b>
<b>Total credits as displayed .....</b>	<b>60-64</b>

# Associate of Science

## Associate of Science Degree for Transfer

Complete lower-division general education requirements for transferring to a university to pursue a major in the life sciences, physical sciences, or computer science. Students interested in preparing for professional degrees in dentistry, medicine or veterinary science should complete this degree.

Pre-Pharmacy students should complete the **Associate of Arts degree**.

Students who wish to transfer to an Arizona university and pursue a major in any of the following areas, should complete the PCC **Associate of Science degree for transfer** (refer to university transfer guides for core or elective courses and language requirements).

- Astronomy
- Biochemistry
- Biology (for UA; for ASU and NAU you can complete the Associate of Arts)
- Chemistry
- Computer Science
- Engineering
- Exercise Science
- Geology
- Microbiology
- Molecular/Cellular Biology
- Physics
- Pre-Agriculture
- Pre-Dentistry
- Pre-Medicine
- Pre-Veterinary Science
- Zoology

### What can I do with this degree?

**Academic Options:** Transfer to a university in a life or physical sciences program, computer science or engineering program.

**Locations:** All campuses

**Contact Information:** Contact any campus Student Services office ([www.pima.edu/mhtml/email/advising](http://www.pima.edu/mhtml/email/advising)).

Program/Major Codes: **AOSSCIENCE/ASI**

### Arizona General Education Curriculum Requirements (AGEC-S) - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

English Composition .....	6
Humanities and Fine Arts.....	6
Biological and Physical Sciences .....	†
The combination of CHM 151 & 152 and their labs or PHY 210 & 216 and their labs, or BIO 181 & 182 and their labs, fulfill this requirement.	
Mathematics.....	†
MAT 220 fulfills this requirement.	
Social and Behavioral Sciences .....	6
Other Requirement Options.....	6
Complete MAT courses above MAT 220 and/or additional Science courses from the Biological and Physical Sciences list.	
AGEC Special Requirements	
The I, C, and G requirements should be fulfilled by completing appropriate courses in the above categories.	
<b>Subtotal .....</b>	<b>24</b> †

Course Number	Course Title	Credit Hours
<b>Required Core Courses: A grade of C or better is required in all courses for graduation.</b>		
BIO 181IN* and	General Biology I: (Majors) SUN# BIO 1181 .....	8-10
BIO 182IN* OR	General Biology II: (Majors) SUN# BIO 1182	
CHM 151/151LB or 151IN* and	General Chemistry I SUN# CHM 1151	
CHM 152/152LB or 152IN* OR	General Chemistry II SUN# CHM 1152	
PHY 210/210LB or 210IN* and	Introductory Mechanics SUN# PHY 1121	
PHY 216/216LB or 216IN* and	Introductory Electricity and Magnetism SUN# PHY 1131	
MAT 220*	Calculus I SUN# MAT 2220 .....	5
Major/Electives .....	Complete additional science and math courses as needed to meet major requirements for a bachelor's degree. The second language requirement is dependent upon your major. It is not a requirement of this degree, but some university degrees require a language proficiency. (Bilingual or international students should consult an advisor or counselor concerning exceptions to this requirement.)	21-25
<b>Subtotal .....</b>		<b>36-40</b>
<b>Total credits as displayed .....</b>		<b>60-64</b>

† Core or support course(s) fulfill this requirement.

‡ AGEC requires 35 credits. This subtotal shows the AGEC credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Astronomy

Learn more about our vast universe and its fascinating contents – planets, stars, comets, galaxies, black holes and more – by taking astronomy courses. Classes include lecture, activities labs, and outside observation projects.

Astronomy courses are offered as part of the requirements of the **Associate of Science degree**, or may be taken as required or elective courses to complete other degrees. Students interested in pursuing a degree at ASU, NAU or UA should meet with an astronomy faculty member or advisor to plan their course of study using the appropriate major guide.

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### What can I do with my studies in astronomy?

**Career options:** After completing a bachelor's degree, seek employment as a science teacher, museum/planetarium staff member, or science writer.

**Academic options:** Continue studies toward a Bachelor of Science in astronomy, planetary sciences, or education.

**Locations:** All campuses

**Contact Information:** Contact any campus Student Services office ([www.pima.edu/mhtml/email/advising](http://www.pima.edu/mhtml/email/advising)).

# Automotive Technology

Begin a career as an auto mechanic, or expand your skills and attain higher-level positions. Classes are hands-on and self-paced. The program is accredited by the National Automotive Technician Education Foundation (NATEF).

## Automotive Mechanics — Certificate for Direct Employment

From engine diagnosis and repair to electrical fundamentals, steering and alignment, and brakes, cover the basics of auto mechanics.

### What can I do with this certificate?

**Career Options:** Entry-level auto mechanic or technician.

**Academic Options:** Continue your studies by taking additional courses toward the Automotive Technology AAS degree.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-37.html>

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Auto Lab: 520-206-7190

Program/Major Codes: **CRTAUTOMECHS/AUM**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
AUT 100	Small Engine Troubleshooting & Repair .....	3
AUT 101	Automotive Maintenance .....	3
AUT 105	Light Line Maintenance .....	3
AUT 120	Engine Diagnosis and Repair .....	3
AUT 128	Automotive Electrical Fundamentals and Applications .....	3
AUT 139	Automotive Steering and Alignment Systems .....	3
AUT 140	Automotive Brakes Diagnosis and Repair .....	3
<b>Total credits as displayed .....</b>		<b>21</b>

## Automotive Technology — Associate of Applied Science Degree for Direct Employment

From steering and suspension to engines and electrical systems, understand car repair inside and out. Master the basics and prepare for entry-level positions or choose additional advanced courses.

### What can I do with this degree?

**Career options:** Auto mechanic or technician, service writer, parts specialist or auto sales positions.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Auto Lab: 520-206-7190

Program/Major Codes: **AASAUTOTECHN/AUT**

**General Education Requirement - A grade of C or better is required for graduation.**

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	6
Analysis and Critical Thinking Requirement .....	6
Humanities and Social Science Requirement .....	6
Computer and Information Literacy Requirement .....	1-3
<b>Subtotal .....</b>	<b>19-21</b>

<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>
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**Required Core Courses - A grade of C or better is required for graduation.**

AUT 100	Small Engine Troubleshooting and Repair .....	3
AUT 101	Automotive Maintenance .....	3
AUT 105	Light Line Maintenance .....	3
AUT 120	Engine Diagnosis and Repair .....	3
AUT 122	Engine Remove and Install .....	3
AUT 124	Automotive Diesel Engine Tune-Up .....	3
AUT 126	Engine Performance and Driveability Troubleshooting .....	3
AUT 128	Automotive Electrical Fundamentals and Applications .....	3
AUT 129	Automotive Electrical Accessories .....	3
AUT 132	Automotive Drivetrain Removal and Replacement .....	3
AUT 133	Automatic Transmission/Transaxle Service and Rebuilding .....	3
AUT 136	Automotive Manual Transmission and Driveline Service .....	3
AUT 138	Automotive Suspension Systems .....	3
AUT 139	Automotive Steering and Alignment Systems .....	3
AUT 140	Automotive Brakes Diagnosis and Repair .....	3
AUT 142	Automotive Heating, Ventilation, and Air Conditioning .....	3
<b>Subtotal .....</b>	<b>48</b>	
<b>Total credits as displayed .....</b>	<b>67-69</b>	

¥ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.



# Aviation Technology

## Aviation Technology — Associate of Applied Science for Direct Employment

Gain skills and knowledge of Airframe and Powerplant, Structural Repair, or Avionics.

The Airframe and Powerplant courses are taught per Federal Aviation Regulations Part 147 for FAA Aviation Maintenance Technician training to allow a student to be qualified for Airframe and Powerplant certification. Aviation Structural Repair has been offered as specialty training and does not fall under FAA Part 147 guidelines. Instead it is an industry directed curriculum preparing students to perform heavy structural repairs that exceed the requirements of Part 147 Airframe and Powerplant training.

### What can I do with this degree?

- Career Options:** Work in the aircraft industry as an Aviation Maintenance Technician.
- Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima’s Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.
- Location:** Desert Vista Campus
- Department/Contact Information:**  
 Dean: 520-206-5250  
 Lead Faculty: 520-206-5910
- Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

### Program Prerequisites

Students must have completed the following prerequisites (with grades posted) before they may begin the application process.

REA 091 with a grade of C or better or Reading assessment at REA 112 or higher .....	0-4
MAT 086 with a grade of C or better or Math assessment at MAT 092 or higher.....	0-3
<b>Subtotal</b> .....	<b>0-7</b>

**Students pursuing the Airframe and Powerplant concentration must complete the General Mechanics advanced certificate courses before enrolling in the Airframe Mechanics or Powerplant courses.**

**Students enrolled in an Avionics or Structural Repair program (degree concentration or certificate) who also wish to be eligible for Airframe and Powerplant certification must be concurrently enrolled in or have completed the General Mechanics advanced certificate courses before enrolling in Airframe Mechanics or Powerplant courses.**

### General Education Requirements - A grade of C or better is required for graduation.

*Course lists for each General Education category listed below can be found starting on page 74.*

Communication Requirement .....	6
Analysis and Critical Thinking Requirement .....	3-6
(GTM 105V in the <i>Structural Repair concentration</i> fulfills 3 credits in the Mathematics category.)	
Humanities and Social Science Requirement .....	6
Computer and Information Literacy Requirement .....	1-3
<b>Subtotal</b> .....	<b>16-21</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

Complete one of the following concentrations .....	41-69
<b>Airframe and Powerplant</b> (Concentration Code: AVMA)	
AVM 105      Aircraft Sheetmetal Repair .....	5
AVM 130*    Aircraft Composite Repair .....	5
AVM 209      Intermediate Electricity .....	5
AVM 211      Alternate Structures .....	5
AVM 218      Airframe Rigging and Landing Gear Systems .....	3

AVM 219*	Airframe Inspections	3
AVM 223	Hydraulic and Pneumatic Power	3
AVM 224	Atmospheric Controls	3
AVM 225	Fire, Ice, Rain and Fuel Systems	3
AVM 226*	Engine Electrical Systems	5
AVM 227	Engine Air Flow Systems	3
AVM 228*	Aircraft Propellers	3
AVM 229*	Engine Support Systems	3
AVM 231	Engine Principles, Monitoring, and Inspection	5
AVM 232	Reciprocating Engine Overhaul	5
AVM 233	Turbine Engines	5
AVM 234*	Engine Fuel Metering and Operation	5
<b>Subtotal</b>		<b>69</b>

**Structural Repair** (Concentration Code: AVMS)

AVM 101*	Structural Repair I	4
AVM 102*	Structural Repair II	4
AVM 110	Aircraft Blueprint Reading	3
AVM 114	Regulatory Requirements	3
AVM 150*	Structural Repair III	4
AVM 151*	Structural Repair IV	4
AVM 165	Aircraft Hardware and Fasteners	3
AVM 203*	Structural Repair V	4
AVM 204*	Structural Repair VI	4
AVM 205	Motion Dynamics	3
AVM 206	Materials and Processes	3
AVM 210/210LB	Advanced Composite Aircraft Repair I	5
AVM 211	Alternate Structures	5
AVM 260*/260LB*	Advanced Composite Aircraft Repair II	4
GTM 105V***	Applied Technical Mathematics for Aviation	3
<b>Subtotal</b>		<b>56</b>

**Avionics Technician** (Concentration Code: AVMT)

ATT 100*	Basic Electricity for Avionics	3
ATT 101*	Avionics Familiarization	3
ATT 102*	Aircraft Electrical Systems	3
ATT 103*	Basics of Avionics Installation	3
ATT 104*	Operating Systems I, Communication and Navigation	4
ATT 201*	Operating Systems II, GPS Navigation and Autopilot	3
ATT 202*	GPS Navigation and Autopilot Installation	5
ATT 203*	Avionics Test Equipment	4
ATT 204*	Glass Cockpit Installer	5
ATT 205*	Operating Systems III, Infrared and Weather Radar	3
ATT 206*	Infrared and Weather Radar Installation	5
<b>Subtotal</b>		<b>41</b>

**Total credits as displayed with program prerequisites** ..... **60-97**

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

¥ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

## Advanced Aviation Technology — Certificate for Direct Employment

**This certificate is under review. See the website or an advisor for details.**

Gain basic skills in General Mechanics, Airframe Mechanics, Powerplant, or Structural Repair.

### What can I do with this certificate?

**Career Options:** Entry-level positions in aircraft building, maintenance and repair.

**Academic Options:** Take additional courses toward the Aviation Technology AAS degree.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-38.html>

**Location:** Desert Vista Campus

**Department/Contact Information:**

Dean: 520-206-5250

Lead Faculty: 520-206-5910

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

### Program Prerequisites

Students must have completed the following prerequisites (with grades posted) before they may begin the application process.

REA 091 with a grade of C or better or Reading assessment at REA 112 or higher .....	0-4
MAT 086 with a grade of C or better or Math assessment at MAT 092 or higher.....	0-3
<b>Subtotal .....</b>	<b>0-7</b>

**Students must complete the General Mechanics courses before enrolling in the Airframe Mechanics or Powerplant courses.**

**Students enrolled in an Avionics or Structural Repair program (degree concentration or certificate) who also wish to be eligible for Airframe and Powerplant certification must be concurrently enrolled in or have completed the General Mechanics courses before enrolling in Airframe Mechanics or Powerplant courses.**

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

Complete one of the following concentrations:

**General Mechanics** (Concentration Code: AVMG)

AVM 110	Aircraft Blueprint Reading .....	3
AVM 114	Regulatory Requirements .....	3
AVM 202	Aviation Safety .....	3
AVM 205	Motion Dynamics .....	3
AVM 206	Materials and Processes .....	3
AVM 207*	Weight and Balance .....	3
AVM 208*	Basic Electricity .....	5
GTM 105V**	Applied Technical Mathematics for Aviation .....	3
<b>Subtotal .....</b>		<b>26</b>

**Airframe Mechanics** (Concentration Code: AVMF)

AVM 105	Aircraft Sheetmetal Repair .....	5
AVM 130*	Aircraft Composite Repair .....	5
AVM 209*	Intermediate Electricity .....	5
AVM 218	Airframe Rigging and Landing Gear Systems .....	3
AVM 223	Hydraulic and Pneumatic Power .....	3
AVM 224	Atmospheric Controls .....	3
AVM 225	Fire, Ice, Rain, and Fuel Systems .....	3
<b>Subtotal .....</b>		<b>27</b>

**Powerplant** (Concentration Code: AVMP)

AVM 226*	Engine Electrical Systems .....	5
AVM 228*	Aircraft Propellers .....	3
AVM 229*	Engine Support Systems .....	3
AVM 232	Reciprocating Engine Overhaul .....	5

AVM 233	Turbine Engines .....	5
AVM 234*	Engine Fuel Metering and Operation .....	5
<b>Subtotal</b> .....		<b>26</b>
<b>Structural Repair</b> (Concentration Code: AVMS)		
AVM 101*	Structural Repair I .....	4
AVM 102*	Structural Repair II .....	4
AVM 114	Regulatory Requirements .....	3
AVM 150*	Structural Repair III .....	4
AVM 151*	Structural Repair IV .....	4
AVM 203*	Structural Repair V .....	4
AVM 204*	Structural Repair VI .....	4
<b>Subtotal</b> .....		<b>27</b>
<b>Total credits as displayed with program prerequisites</b> .....		<b>26-34</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.  
 \*\* GTM 105V fulfills 3 credits in the Mathematics category in the AAS Aviation Technology degree.

## Avionics Technician — Certificate for Direct Employment

Master the broad range of skills needed to work with aircraft electronics including GPS systems, autopilot, communication systems, and weather radar. Learn avionics installation, operating systems, troubleshooting and system integration.

### What can I do with this certificate?

**Career Options:** Seek entry-level positions in aircraft avionics, diagnostics, maintenance and repair.

**Academic Options:** Continue your studies by take additional courses toward the Aviation Technology AAS degree.

**More Information:** Review program costs, student debt, on-tme graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-39.html>

**Location:** Desert Vista Campus

**Department/Contact Information:**

Dean: 520-206-5250  
 Lead Faculty: 520-206-5910

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

### Program Prerequisites

Students must have completed the following prerequisites (with grades posted) before they may begin the application process.

REA 091 with a grade of C or better or Reading assessment at REA 112 or higher .....	0-4
MAT 086 with a grade of C or better or Math assessment at MAT 092 or higher.....	0-3
<b>Subtotal</b> .....	<b>0-7</b>

### General Education Courses - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	3
Analysis and Critical Thinking Requirement .....	3
<b>Subtotal</b> .....	<b>6</b>

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
ATT 100*	Basic Electricity for Avionics .....	3
ATT 101*	Avionics Familiarization .....	3
ATT 102*	Aircraft Electrical Systems .....	3
ATT 103*	Basics of Avionics Installation .....	3
ATT 104*	Operating Systems I, Communication and Navigation .....	4
ATT 201*	Operating Systems II, GPS Navigation and Autopilot .....	3
ATT 202*	GPS Navigation and Autopilot Installation .....	5
ATT 203*	Avionics Test Equipment .....	4
ATT 204*	Glass Cockpit Installer .....	5
ATT 205*	Operating Systems III, Infrared and Weather Radar .....	3
ATT 206*	Infrared and Weather Radar Installation .....	5
<b>Subtotal .....</b>		<b>41</b>
<b>Total credits as displayed with program prerequisites .....</b>		<b>47-54</b>
* This course has a prerequisite, co-requisite, or recommendation. See course description section.		

## Biology

Study the science of living systems by taking biology courses that focus on microbiology, plant science, human anatomy and physiology, marine biology, biotechnology and more. Students learn through lecture and hands-on lab experiences.

Biology courses are offered as part of the requirements of the **Associate of Science degree**, or may be taken as required or elective courses to complete other degrees. Students interested in pursuing a degree at ASU, NAU, or UA should meet with biology faculty or an advisor to plan their course of study using the appropriate major guide.

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### *What can I do with my studies in biology?*

**Career options:** Work as a technician in laboratories, manufacturing firms, or government.

**Academic options:** Continue studies toward a Bachelor of Science in biology, microbiology, agriculture, plant or animal science and more.

**Locations:** All campuses

**Contact Information:** Contact any campus Student Services office ([www.pima.edu/mhtml/email/advising](http://www.pima.edu/mhtml/email/advising)).

# Behavioral Health Services

Learn to work in a clinical behavioral health care setting and deliver basic behavioral health services. This program includes training within laboratory and clinical settings.

**Before enrolling in this program**, students must take the College Reading, Math and Writing assessment and achieve the appropriate placement scores.

## Behavioral Health Services — Certificate for Direct Employment

**This certificate is under review. See the website or an advisor for details.**

### What can I do with this certificate?

**Career Options:** Seek an entry-level position or career advancement as a behavioral health specialist, human services technician, family advocate, or paraprofessional analyst in hospitals, behavioral health clinics, nursing care facilities, or nonprofit agencies.

**Academic Options:** Complete the additional courses needed to pursue a Social Services certificate or a Social Services degree.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-93.html>

**Location:** Desert Vista Campus

**Department/Contact Information:**  
 Dean: 520-206-5142

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

Course Number	Course Title	Credit Hours
<b>Required Core Course - A grade of C or better is required for graduation.</b>		
BHS 132	Communication Skills in Behavioral Health Services .....	3
BHS 154*	Behavioral Health Lab and Safety Protocol .....	3
BHS 172	Clinical Behaviors .....	3
BHS 189LC*	Behavioral Health Clinic - Basic .....	1
BHS 250*	Case Documentation .....	2
SSE 128	Introduction to Behavioral Health .....	3
SSE 204*	Counseling in a Multicultural Setting .....	3
<b>Total credits as displayed .....</b>		<b>18</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

# Biotechnology

Prepare for a high-tech career in biotechnology by completing this certificate and working in local industry, or using it to complement an associate or bachelor's degree in the life sciences.

## Biotechnology — Certificate for Direct Employment

**This certificate is currently under review. See the website or an advisor for details.**

### What can I do with this certificate?

**Career Options:** Entry-level positions in biotechnology laboratories or career advancement when used to supplement existing degrees or work experience.

**Academic Options:** Complete additional courses to earn an Associate of Science degree.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-21.html>

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6763

Lead Faculty: 206-6810

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

### Program Prerequisites

Before enrolling in this program, you must complete the following courses:

MAT 097*	or higher, or placement into MAT 151 or higher	0-3
BIO 181IN*	General Biology I: Majors	4
CHM 151*/151LB* or 151IN*	General Chemistry I	5
<b>Subtotal</b>		<b>9-12</b>

Course Number	Course Title	Credit Hours
<b>Required Core Course - A grade of C or better is required for graduation.</b>		
BIO 206	Biotechnology Instrumentation I	4
BIO 207*	Biotechnology Instrumentation II	4
BIO 299*	Co-op: Biotechnology	1
BIO 299WK*	Co-op Work: Biotechnology	3
CHM 152*/152LB* or CHM 152IN*	General Chemistry II SUN# CHM 1152	5
CHM 235*/235LB* or CHM 235IN*	General Organic Chemistry I SUN# CHM 2235	5
CHM 236*/236LB* or CHM 236IN*	General Organic Chemistry II SUN# CHM 2236	5
<b>Subtotal</b>		<b>27</b>
<b>Total credits as displayed with program prerequisites</b>		<b>36-39</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.



## Building and Construction Technologies

Learn how to construct and maintain buildings with courses in the specialized fields of the building and construction industry including facilities maintenance, electrical, plumbing, carpentry, HVAC-R, and construction management. Classes are hands-on and self-paced.

### Basic Building and Construction Technologies — Certificate for Direct Employment

Get started in facilities maintenance. Courses cover tools, safety, rigging, and reading blueprints, as well as technical electives based on student interests.

#### What can I do with this certificate?

**Career Options:** Apply for entry-level positions in facilities maintenance.

**Academic Options:** Continue your studies through the Advanced Certificate program.

**More Information:** Review program costs, student debt, on-time graduation and more <https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-32.html>

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Lead Faculty: 520-206-7137

Program/Major Codes: **CRTBLDGCON-B/BCB**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
BCT 105**	Professionalism in Service, Construction Math, Basic Rigging .....	3
BCT 107**	Basic Safety, Hand and Power Tools, Blueprint Reading .....	3
<b>Subtotal</b> .....		<b>6</b>
<b>Required Support Courses</b>		
GTM 105*	Applied Technical Mathematics .....	3
Technical Electives:	.....	9
Complete 9 credit hours from the following list with the approval of the department chair or faculty advisor: BCT 104, 106, 132, 145, 150, 172		
<b>Subtotal</b> .....		<b>12</b>
<b>Total credits as displayed</b> .....		<b>18</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* BCT 100, 112 and 115 substitute for BCT 105. BCT 111, 113 and 114 substitute for BCT 107.

### Advanced Building and Construction Technologies — Certificate for Direct Employment

**This certificate is currently under review. See the website or an advisor for details.**

Advance to technician or journeyman levels. Choose from concentrations in facilities maintenance, HVAC-R, electrical systems, plumbing, or carpentry.

#### What can I do with this certificate?

**Career Options:** Apply for entry-level positions in building and construction trades.

**Academic Options:** Continue your studies by taking classes in the Associate of Applied Science program.

**More Information:** Review program costs, student debt, on-time graduation and more <https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-36.html>

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Lead Faculty: 520-206-7137

Program/Major/Concentration Codes: **CRTBLDGCON-A/BCA/\*\*\*\*** (see concentration codes below)

**General Education Courses - A grade of C or better is required for graduation.**

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	3
Analysis and Critical Thinking Requirement .....	†
GTM 105 fulfills this requirement.	
<b>Subtotal .....</b>	<b>3</b>

Course Number	Course Title	Credit Hours
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**Required Core Courses - A grade of C or better is required for graduation.**

BCT 105**	Professionalism in Service, Construction Math, Basic Rigging .....	3
BCT 107**	Basic Safety, Hand and Power Tools, Blueprint Reading .....	3
<b>Subtotal .....</b>		<b>6</b>

**Required Support Courses**

CSA 100*	Computer Literacy .....	1
GTM 105*	Applied Technical Mathematics .....	3
BCT Technical Electives:		
Complete four credit hours of BCT course work with the approval of the department chair or faculty advisor .....		4
<b>Subtotal .....</b>		<b>8</b>

**Core Concentrations - A grade of C or better is required for graduation.**

Complete one of the following concentrations:

Department chair or faculty advisor approval is recommended in the selection of the Concentration. .... 15-16

**Carpentry** (Concentration Code: BCTC)

BCT 101	Principles of Construction .....	3
BCT 120*	Blueprint Reading for Construction ) .....	3
BCT 145*	Carpentry I .....	4
BCT 146	Woodworking I .....	3
BCT 147*	Woodworking II .....	3
<b>Subtotal .....</b>		<b>16</b>

**Facilities Maintenance** (Concentration Code: BCTF)

BCT 104*	Introduction to Equipment Maintenance .....	4
BCT 106*	Soldering and Brazing for BCT .....	4
BCT 132*	Residential and Industrial HVAC I .....	4
BCT 172*	Electrical I .....	4
<b>Subtotal .....</b>		<b>16</b>

**Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC-R)** (Concentration Code: BCTH)

BCT 104*	Introduction to Equipment Maintenance .....	4
BCT 106*	Soldering and Brazing for BCT .....	4
BCT 132*	Residential and Industrial HVAC I .....	4
BCT 133*	Residential and Industrial HVAC II .....	4
<b>Subtotal .....</b>		<b>16</b>

**Electrical** (Concentration Code: BCTE)

BCT 135*	National Electrical Code Residential Wiring Applications .....	4
BCT 172*	Electrical I .....	4
BCT 173*	Electrical II .....	4
BCT 174*	Electrical III .....	4
<b>Subtotal .....</b>		<b>16</b>

**Plumbing** (Concentration Code: BCTP)

BCT 106*	Soldering and Brazing for BCT .....	4
BCT 120*	Blueprint Reading for Construction .....	3
BCT 181*	Residential and Industrial Plumbing I .....	4
BCT 182*	Residential and Industrial Plumbing II .....	4
<b>Subtotal</b> .....		<b>15</b>
<b>Total credits as displayed</b> .....		<b>32-33</b>

† Core or support course(s) fulfill this requirement.

‡ General Education requires 6 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* BCT 100, 112 and 115 substitute for BCT 105. BCT 111, 113 and 114 substitute for BCT 107.

## Cabinetmaking — Certificate for Direct Employment

Get started in cabinetmaking and furniture construction. Courses cover tools, safety, cabinetmaking fundamentals, finishing techniques, and furniture design and construction.

### What can I do with this certificate?

**Career Options:** Apply for positions as a cabinetmaker, furniture builder, or start your own business.

**Academic Options:** Continue your studies by pursuing the Building and Construction Technologies AAS degree with a concentration in cabinetmaking.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-41.html>

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Lead Faculty: 520-206-7137

Program/Major Codes: **CRTCМК/МК**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
BCT 105**	Professionalism in Service, Construction Math, Basic Rigging .....	3
BCT 107**	Basic Safety, Hand and Power Tools, Blueprint Reading .....	3
BCT 146	Woodworking I .....	3
BCT 147*	Woodworking II .....	3
BCT 148*	Cabinetmaking I .....	3
BCT 149*	Cabinetmaking II .....	3
BCT 153	Finishing Techniques in Cabinet and Furniture Making .....	3
BCT 159*	Furniture Design and Construction .....	3
<b>Subtotal</b> .....		<b>24</b>
<b>Required Support Courses</b>		
CAD 101	Computer-Aided Drafting .....	4
<b>Subtotal</b> .....		<b>4</b>
<b>Total credits as displayed</b> .....		<b>28</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* BCT 100, 112 and 115 substitute for BCT 105. BCT 111, 113 and 114 substitute for BCT 107

## Home Maintenance and Repair: Minor Home Improvements — Certificate for Direct Employment

Learn to perform home improvements while preparing to take the Arizona Contractor Business Management (C-62 Minor Home Improvements) examination.

### What can I do with this certificate?

**Career Options:** After acquiring the C-62 Minor Home Repair license, contract with home owners to perform home improvement projects up to \$2,500 per project.

**Academic Options:** Continue your studies by taking classes toward the Building and Construction Trades advanced certificate or associates degree with a possible concentration in Facilities Maintenance.

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Lead Faculty: 520-206-7137

Program/Major Codes: **CRTMHI/MHI**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
BCT 105*	Professionalism in Service, Construction Math, Basic Rigging .....	3
BCT 107*	Basic Safety, Hand and Power Tools, Blueprint Reading .....	3
BCT 202	Construction Business Management .....	3
<b>Total credits as displayed .....</b>		<b>9</b>

\* BCT 100, 112 and 115 substitute for BCT 105. BCT 111, 113 and 114 substitute for BCT 107.

## Home Maintenance and Repair: Limited Remodeling and Repair — Certificate for Direct Employment

Master the skills needed for home remodeling and repair while preparing for the Arizona Contractor Business Management (C-61 Limited Remodeling and Repair) examination.

### What can I do with this certificate?

**Career Options:** After acquiring the C-61 Limited Remodeling and Repair license, contract with home owners to perform home improvement projects up to \$25,000 including scope of work allowed under the C-7 carpentry classification.

**Academic Options:** Continue your studies by taking classes toward the Building and Construction Trades advanced certificate or associates degree with a possible concentration in Facilities Maintenance or Carpentry.

**More Information:** Review program costs, student debt, on-time graduation and more <https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-33.html>

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Lead Faculty: 520-206-7143

Program/Major Codes: **CRTLRR/LRR**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
BCT 101	Principles of Construction .....	3
BCT 102	Building Materials .....	3
BCT 105**	Professionalism in Service, Construction Math, Basic Rigging .....	3
BCT 107**	Basic Safety, Hand and Power Tools, Blueprint Reading .....	3
BCT 120*	Blueprint Reading for Construction .....	3
BCT 202	Construction Business Management .....	3
<b>Total credits as displayed .....</b>		<b>18</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* BCT 100, 112 and 115 substitute for BCT 105. BCT 111, 113 and 114 substitute for BCT 107.

## Home Maintenance and Repair: General Residential Contractor — Certificate for Direct Employment

Learn advanced home construction skills while preparing for the Arizona Contractor Business Management (B – General Residential Contractor) examination.

### What can I do with this certificate?

**Career Options:** After acquiring the B – General Residential Contractor license, perform home construction as a General Building Contractor capable of working on any part of a residence with the exception of some specialized areas such as electrical and plumbing.

**Academic Options:** Continue your studies by taking classes toward the Building and Construction Trades advanced certificate or associates degree with a possible concentration in Construction Management, Carpentry or Facilities Maintenance.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-35.html>

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Lead Faculty: 520-206-7143

Program/Major Codes: CRTGRC/GRC

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
BCT 101	Principles of Construction .....	3
BCT 102	Building Materials .....	3
BCT 105**	Professionalism in Service, Construction Math, Basic Rigging .....	3
BCT 107**	Basic Safety, Hand and Power Tools, Blueprint Reading .....	3
BCT 120*	Blueprint Reading for Construction .....	3
BCT 123	Concrete/Masonry .....	3
BCT 145*	Carpentry I .....	4
BCT 202	Construction Business Management .....	3
BCT 286*	International Residential Code (IRC) I .....	3
<b>Total credits as displayed .....</b>		<b>28</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* BCT 100, 112 and 115 substitute for BCT 105. BCT 111, 113 and 114 substitute for BCT 107.

## Solar Installer — Certificate for Direct Employment

Learn the skills necessary to become a successful Solar Installer. Designed for individuals with building trades experience, this certificate provides Photovoltaic Installer preparation training for the North American Board of Certified Energy Practitioners (NABCEP) Photovoltaic Installer Certification exam and the Photovoltaic Installer Advanced Certification exam.

**Before enrolling in this program,** you must test higher than REA 091 on the PCC assessment, or complete REA 091 with a grade of C or better.

### What can I do with this certificate?

**Career Options:** Obtain employment in the solar installation field.

**Academic Options:** Continue your studies by completing the Building and Construction Technologies AAS degree.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-31.html>

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134  
 Lead Faculty: 520-206-7137  
 Program/Major Codes: **CRTSIC/SIC.**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
BCT 105**	Professionalism in Service, Construction Math Basic Rigging	3
BCT 107**	Hand and Power Tools, Blueprint Reading	3
BCT 135*	National Electric Code Electrical Wiring Applications	4
BCT 172*	Electrical I	4
SLR 101	Basic Photovoltaic Installation	3
SLR 102	Advanced Photovoltaic Installation	3
SLR 130	Solar Hot Water Systems	4
<b>Total credits as displayed</b>		<b>24</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.  
 \*\* BCT 100, 112 and 115 substitute for BCT 105. BCT 111, 113 and 114 substitute for BCT 107.

## Building and Construction Technologies — Associate of Applied Science Degree for Direct Employment

Learn advanced construction skills, or prepare to transfer to NAU’s Construction Management degree. Choose from one of the concentrations listed below. Complete the Building Management and the Cabinetmaking concentrations by taking classes exclusively in the evenings or in a combination of weekdays and evenings. All other concentrations can be completed by taking classes in a combination of weekdays and evenings.

**Before enrolling in this program,** you must complete REA 081, WRT 090, and MAT 082. Students should have successfully completed course work or assessments within the first year of the program.

### What can I do with this degree?

**Career Options:** Apply technical level positions in the building and construction trades.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima’s Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134  
 Lead Faculty: 520-206-7137

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

### General Education Courses - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement	6
Analysis and Critical Thinking Requirement***	3
GTM 105 fulfills 3 credits in the Mathematics category. Complete a course from the Science or Critical Thinking category.	
Humanities and Social Science Requirement	6
Computer and Information Literacy Requirement	†
CSA 100 fulfills this requirement.	
Special Requirements	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal</b>	<b>15</b>

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
BCT 105**	Professionalism in Service, Construction Math, Basic Rigging .....	3
BCT 107**	Basic Safety, Hand and Power Tools, Blueprint Reading .....	3
<b>Subtotal</b> .....		<b>6</b>
<b>Required Support Courses</b>		
CSA 100*	Computer Literacy .....	1
GTM 105*	Applied Technical Mathematics .....	3
BCT Technical Electives:		
Complete 3 credit hours of BCT course work with the approval of the department chair or faculty advisor .....		3
<b>Subtotal</b> .....		<b>7</b>
<b>Core Concentrations - A grade of C or better is required for graduation.</b>		
Complete one of the following concentrations: .....		32-36
Department chair or faculty advisor approval is recommended in the selection of the program option.		
<b>Building Management</b>		
ACC 100	Practical Accounting Procedures .....	3
BCT 102	Building Materials .....	3
BCT 120*	Blueprint Reading for Construction .....	3
BUS 220	Legal Environment of Business .....	3
CSA 110*	Spreadsheets: Microsoft Excel .....	3
MGT 122*	Supervision .....	3
Technical Electives: .....		
Complete 14 credit hours from the following list with the approval of the department chair or faculty advisor BCT and CAD		14
<b>Subtotal</b> .....		<b>32</b>
<b>Cabinetmaking</b>		
BCT 145*	Carpentry I .....	4
BCT 146	Woodworking I .....	3
BCT 147*	Woodworking II .....	3
BCT 148*	Cabinetmaking I .....	3
BCT 149*	Cabinetmaking II .....	3
BCT 153	Finishing Techniques in Cabinet and Furniture Making .....	3
BCT 159*	Furniture Design and Construction .....	3
CAD 101	Computer-Aided Drafting .....	4
Technical Electives .....		
Complete 6 credits from BCT and/or CAD		6
<b>Subtotal</b> .....		<b>32</b>
<b>Carpentry</b>		
BCT 101	Principles of Construction .....	3
BCT 120*	Blueprint Reading for Construction .....	3
BCT 123	Concrete/Masonry .....	3
BCT 145*	Carpentry I .....	4
BCT 146	Woodworking I .....	3
BCT 147*	Woodworking II .....	3
BCT 245*	Carpentry II .....	4
BCT 286*	International Residential Code (IRC) I .....	3
BCT 287*	International Residential Code (IRC) II .....	3
Technical Electives .....		
Complete 3 credits from BCT or CAD		3
<b>Subtotal</b> .....		<b>32</b>

**Construction Management**

ACC 211***	Financial Accounting ( <i>was ACC 101</i> ) SUN# ACC 2201	3
BCT 101	Principles of Construction	3
BCT 102	Building Materials	3
BCT 120*	Blueprint Reading for Construction	3
BCT 123	Concrete/Masonry	3
BCT 202	Construction Business Management	3
BCT 204*	Construction Surveying	3
BCT 286	International Residential Code (IRC) I	3
BCT 287*	International Residential Code (IRC) II	3
CAD 101	Computer-Aided Drafting	4
MGT 122*	Supervision	3
<b>Subtotal</b>		<b>34</b>

**Electrical**

BCT 135*	National Electrical Code Residential Wiring Applications	4
BCT 172*	Electrical I	4
BCT 173*	Electrical II	4
BCT 174*	Electrical III	4
BCT 184*	National Electrical Code I	3
BCT 271*	Electrical IV	4
BCT 272*	Electrical V	4
BCT 273*	Electrical VI	4
BCT 274*	Electrical VII	4
<b>Subtotal</b>		<b>35</b>

**Electrical Utilities Technology**

BCT 120	Blueprint Reading for Construction	3
BCT 172	Electrical I	4
BCT 173	Electrical II	4
BCT 174	Electrical III	4
BCT 184	National Electrical Code I	3
BCT 202	Construction Business Management	3
BCT 265	Sustainability for the Building Trades	3
EUT 103	Generation Steam Systems	3
EUT 104	Overhead and Underground Systems, Hardware, and Equipment	4
EUT 106	Measuring Electricity	3
<b>Subtotal</b>		<b>34</b>

**Facilities Maintenance**

BCT 104*	Introduction to Equipment Maintenance	4
BCT 106*	Soldering and Brazing for BCT	4
BCT 132*	Residential and Industrial HVAC I	4
BCT 133*	Residential and Industrial HVAC II	4
BCT 134*	Residential and Industrial HVAC III	4
BCT 145*	Carpentry I	4
BCT 150*	Plumbing Basics	4
BCT 172*	Electrical I	4
<b>Subtotal</b>		<b>32</b>

**Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC-R)**

BCT 104*	Introduction to Equipment Maintenance	4
BCT 106*	Soldering and Brazing for BCT	4
BCT 132*	Residential and Industrial HVAC I	4
BCT 133*	Residential and Industrial HVAC II	4
BCT 134*	Residential and Industrial HVAC III	4



BCT 231*	Residential and Industrial HVAC IV	4
BCT 232*	Residential and Industrial HVAC V	4
BCT 233*	Residential and Industrial HVAC VI	4
BCT 234*	Residential and Industrial HVAC VII	4
<b>Subtotal</b>		<b>36</b>

**Natural Gas Technology**

BCT 202	Construction Business Management	3
BCT 265	Sustainability for Building Trades	3
BCT 286	International Residential Code (IRC) I	3
BCT 287*	International Residential Code (IRC) II	3
BUS 220	Legal Environment of Business	3
CAD 101	Computer-Aided Drafting	4
ICT 100	Energy Industry Fundamentals (F,Sp)	3
ICT 101	Introduction to the Natural Gas Industry (F,Sp)	3
MGT 110	Human Relations in Business and Industry (F, Sp, Su)	3
MGT 122*	Supervision	3
<b>Subtotal</b>		<b>31</b>

**Plumbing**

BCT 106*	Soldering and Brazing for BCT	4
BCT 120*	Blueprint Reading for Construction	3
BCT 181*	Residential and Industrial Plumbing I	4
BCT 182*	Residential and Industrial Plumbing II	4
BCT 183*	Residential and Industrial Plumbing III	4
BCT 236*	Residential and Industrial Plumbing IV	4
BCT 237*	Residential and Industrial Plumbing V	4
BCT 238*	Residential and Industrial Plumbing VI	4
BCT 239*	Residential and Industrial Plumbing VII	4
<b>Subtotal</b>		<b>35</b>

**Solar Installer**

BCT 135*	National Electric Code Residential Wiring Applications	4
BCT 172*	Electrical I	4
BCT 202	Construction Business Management	3
BCT 265	Sustainability in Construction Installation	3
SLR 101	Beginning Photovoltaic Installation	3
SLR 102	Advanced Photovoltaic Installation	3
SLR 130*	Solar Hot Water Systems	4
Electives		8
<b>Subtotal</b>		<b>32</b>

**Total credits as displayed** ..... **60-64**

† Core or support course(s) fulfill this requirement.  
 ¥ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.  
 \* This course has a prerequisite, co-requisite, or recommendation. See course description section.  
 \*\* BCT 100, 112 and 115 substitute for BCT 105. BCT 111, 113 and 114 substitute for BCT 107.  
 \*\*\* Prerequisite MAT 092 or higher required for Construction Management concentration,

## Business Careers

- Business
- Customer Service Management
- Fashion Merchandising and Retail Management
- International Business Studies
- Logistics and Supply Chain Management

## Business

Explore the world of business including accounting, marketing, finance, economics and business administration. Acquire marketable business skills for employment in a variety of fields or prepare to start your own business.

### Basic Business — Certificate for Direct Employment

Get an introduction to business skills and principles.

#### What can I do with this certificate?

**Career Options:** Entry-level business operations.

**Academic Options:** Continue your studies with the Advanced Business Certificate program.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-59.html>

Locations: All campuses.

**Department/Contact Information:**

Dean: 520-206-7694

Lead Faculty: 520-206-7691

Program/Major Codes: **CRTBUSINES-B/BUB**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
BUS 100	Introduction to Business .....	3
BUS 151*	Mathematics of Business .....	3
MGT 110	Human Relations in Business and Industry .....	3
<b>Total credits as displayed .....</b>		<b>9</b>
<b>Required Support Courses</b>		
ACC 100	Practical Accounting Procedures .....	3
WRT 101*	Writing I SUN# ENG 1101 .....	3
or WRT 154*	Career Communications	
Electives - Complete 1-3 credit hours from the following list: .....		1-3
ACC, BUS, CIS, CSA, ECN, FIN, MGT, MKT		
<b>Subtotal .....</b>		<b>7-9</b>
<b>Total credits as displayed .....</b>		<b>16-18</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Advanced Business — Certificate for Direct Employment

Learn fundamental principles of business and skills in accounting, management and marketing.

### What can I do with this certificate?

**Career Options:** Entry-level business and marketing functions.

**Academic Options:** Continue your studies through the Business or Business Administration programs.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-60.html>

**Locations:** All campuses.

**Department/Contact Information:**

Dean: 520-206-7694

Lead Faculty: 520-206-7691

Program/Major Codes: **CRTBUSINES-A/BUA**

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement . . . . .	†
WRT 101 or 154 fulfills this requirement.	
Analysis and Critical Thinking Requirement . . . . .	0-3
BUS 151 (only if taken after Spring 2008) fulfills this requirement.	
<b>Subtotal . . . . .</b>	<b>0-3‡</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

BUS 100	Introduction to Business . . . . .	3
BUS 151*	Mathematics of Business . . . . .	3
BUS 220	Legal Environment of Business . . . . .	3
MGT 110	Human Relations in Business and Industry . . . . .	3
<b>Subtotal . . . . .</b>		<b>12</b>

### Required Support Courses

ACC 100	Practical Accounting Procedures . . . . .	3
ACC 211*	Financial Accounting ( <i>was ACC 101</i> ) SUN# ACC 2201 . . . . .	3
CIS/CSA 104*	Computer Fundamentals . . . . .	3
MGT 280*	Business Organization and Management . . . . .	3
MKT 111	Principles of Marketing . . . . .	3
WRT 101*	Writing I SUN# ENG 1101 . . . . .	3
or WRT 154*	Career Communications . . . . .	
<b>Subtotal . . . . .</b>		<b>18</b>
<b>Total credits as displayed . . . . .</b>		<b>30-33</b>

† Core or support course(s) fulfill this requirement.

‡ General Education requires 6 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Business — Associate of Applied Science Degree for Direct Employment

Learn basic business principles and specialize in marketing, management or tourism. Students planning to transfer to a four-year university should pursue the Associate of Business Administration.

### What can I do with this degree?

**Career Options:** Carry out basic business functions, especially in marketing, management or tourism, for an employer or to open a small business.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)).

**Locations:** Management concentration at the East and West Campuses; Marketing concentration at the West Campus; Tourism concentration at the East Campus

**Department/Contact Information:**

Dean: 520-206-7694

Lead Faculty: 520-206-7691

Program/Major/Concentration Codes: **AASBUSINESS/BUS/\*\*\*\*** (see concentration codes below)

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement . . . . .	3
WRT 101 or 154 fulfills 3 credits of this requirement. Complete an appropriate course from the pairs listed in the Communication category.	
Analysis and Critical Thinking Requirement . . . . .	3-6
BUS 151 (only if taken after Spring 2008) fulfills 3 credits in the Mathematics category. Complete a course from the Science or Critical Thinking category.	
Humanities and Social Science Requirement . . . . .	3
ECN 201 or 202 fulfills 3 credits of the Social Science category. Complete a course from the Humanities/Fine Arts or Leadership/Ethics category.	
Computer and Information Literacy Requirement . . . . .	†
CIS/CSA 104 fulfills this requirement.	
Special Requirements	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal</b> . . . . .	<b>9-12†</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

BUS 100	Introduction to Business . . . . .	3
BUS 151*	Mathematics of Business . . . . .	3
BUS 220	Legal Environment of Business . . . . .	3
MGT 110	Human Relations in Business and Industry . . . . .	3
<b>Subtotal</b> . . . . .		<b>12</b>

### Required Support Courses

ACC 100	Practical Accounting Procedures . . . . .	3
ACC 211	Financial Accounting ( <i>was ACC 101</i> ) SUN# ACC 2201 . . . . .	3
CIS/CSA 104*	Computer Fundamentals . . . . .	3
ECN 201*	Microeconomic Principles SUN# ECN 2202 . . . . .	3
or ECN 202*	Macroeconomic Principles SUN# ECN 2201 . . . . .	3
MGT 280*	Business Organization and Management . . . . .	3
MKT 111	Principles of Marketing . . . . .	3
WRT 101*	Writing I SUN# ENG 1101 . . . . .	3
or WRT 154*	Career Communications . . . . .	3
Electives: Select 6 credits hours from the following list: . . . . .		6
ACC, BUS, CIS, CSA, ECN, FIN, MGT, MKT		
<b>Subtotal</b> . . . . .		<b>27</b>

**Core Concentrations: - A grade of C or better is required for graduation.**

Complete one of the following concentrations: ..... 12

Select a minimum of 12-13 credit hours from one concentration: Department faculty advisor or counselor approval is recommended in the selection of the program concentration and courses within the concentration.

**Logistics Concentration** (Concentration Code: BUSL)

LGM 101	Principles of Logistics and Supply Chain Management	3
LGM 102*	Inventory Control	3
LGM 103	Contracts and Freight Claims	
or LGM 104	Survey of Leisure Products	3
LGM 105	Warehouse Management	
or LGM 106	Transportation and Traffic Management	3
<b>Subtotal</b>		<b>12</b>

**Management Concentration** (Concentration Code: BUSM)

MGT 122*	Supervision	3
MGT 124	Small Business Management	3
MGT 270*	Computer Applications for Managers	3
MGT 276*	Human Resources	3
<b>Subtotal</b>		<b>12</b>

**Marketing Concentration** (Concentration Code: BUSK)

DAR 120	Applied Computer Graphics	4
MKT 113	Salesmanship	3
MKT 125	Advertising	3
MKT 139	Retailing	3
MKT 196*	Independent Study in Marketing and Business	3
<b>Subtotal</b>		<b>12-13</b>

**Tourism Concentration** (Concentration Code: BUST)

TVL 101	Introduction to the Travel Industry	3
TVL 102	Computerized Reservation Systems I	3
or TVL 109	Survey of Leisure Products	
or TVL 211	Tour Direction and Tour Group Management	
TVL 103	Geography for the Tourism Professional	3
TVL 121	Tourism Sales and Marketing	3
<b>Subtotal</b>		<b>12</b>
<b>Total credits as displayed</b>		<b>60-64</b>

† Core or support course(s) fulfill this requirement.

¥ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Business Administration — Associate of Business Administration (ABUS) Degree for Transfer

Jump start your career by completing this degree and then transferring to a university business administration degree or related program.

### What can I do with this degree?

**Career Options:** This degree is designed for transfer rather than direct employment. After completing a 4-year degree, students are qualified for a variety of business careers including accounting, finance, management and marketing.

**Academic Options:** Transfer to a 4-year university to complete your bachelor's degree.

**Locations:** All campuses

**Contact Information:** Contact any campus Student Services office ([www.pima.edu/mhtml/email/advising](http://www.pima.edu/mhtml/email/advising)).

Program/Major Codes: **AOBBUSIADMIN/BUD**

### Arizona General Education Curriculum Requirement (AGEC-B) - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

English Composition .....	6
Humanities and Fine Arts .....	6
Biological and Physical Sciences .....	8
Mathematics .....	†
MAT 212 or 220 fulfills this requirement.	
Social and Behavioral Sciences .....	3
ECN 201 fulfills 3 credits of this requirement. Complete a non-ECN course from this category.	
Other Requirements .....	†
CIS 120 and ECN 202 fulfill this requirement.	
Special Requirements	
The I, C, and G requirements should be fulfilled by selecting appropriate courses in the above categories.	
<b>Subtotal .....</b>	<b>23<del>4</del></b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

ACC 211*	Financial Accounting (was ACC 101) SUN# ACC 2201 .....	3
ACC 212*	Managerial Accounting (was ACC 102) SUN# ACC 2202 .....	3
BUS 205*	Statistical Methods in Economics and Business SUN# BUS 2201 .....	3
BUS 220	Legal Environment of Business .....	3
CIS 120	Computer Applications for Business SUN# CIS 1120 .....	4
ECN 201*	Microeconomic Principles SUN# ECN 2202 .....	3
ECN 202*	Macroeconomic Principles SUN# ECN 2201 .....	3
MAT 151*	College Algebra SUN# MAT 1151 .....	4

(MAT 151 may be substituted by another transferable course if the student has tested above MAT 151 or completed a College MAT course numbered higher than 151 with a grade C or better.)

Business Math Requirement: .....

Please note: The UA accepts the combination of MAT 212 and BUS 277. ASU accepts the combination of MAT 220 and 231, or MAT 212 and an additional Math course at ASU. The NAU BSBA program in Flagstaff only requires MAT 172, while their BBA program through the Extended Campus requires MAT 212 and either MAT 151 or 172. Regardless of which university a student plans to transfer, any student who wants to earn a Pima ABUS degree still needs one of the three combinations listed below.

MAT 212            Topics in Calculus SUN# MAT 2212  
and BUS 277      Analytical Methods in Business

or

MAT 172\*        Finite Mathematics  
and 212\*        Topics in Calculus SUN# MAT 2212

or

MAT 220\*        Calculus I    SUN# MAT 2220  
and 231\*        Calculus II   SUN# MAT 2230

Business Administration Electives .....

See an advisor to complete the appropriate number of transferable electives so the program total is 60–64 credits. Transfer courses (check the Course Equivalency Guide online) from the following business prefixes are recommended: ACC, BUS, CIS, FIN, MGT, MKT or language courses.

<b>Subtotal</b> .....	<b>37-41</b>
<b>Total credits as displayed</b> .....	<b>60-64</b>

† Core or support course(s) fulfill this requirement.  
 ‡ AGEC requires 35 credits. This subtotal shows the AGEC credits not fulfilled by core, support, or second language courses.  
 \* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Retailing and Fashion Consumer Sciences – Associate Degree for Transfer

Jump start your retail management or fashion merchandising career by completing this degree and then transferring to a university retailing/merchandising degree or related program emphasizing various principles employed to manage the retail supply chain in order to satisfy consumers' needs.

### What can I do with this certificate?

**Career Options:** Retail management personnel examine retail, marketing, fashion, and management principles that are applied across a broad spectrum of U.S. and global retail businesses including store, catalog, internet, services firms and other businesses that support these diverse retailers.

**Academic Options:** Transfer to the University of Arizona or other school to pursue a degree in retailing/merchandising or a related degree.

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7046

Lead Faculty: 520-206-7206

Program/Major Codes: **AOABFT/BFT**

### Arizona General Education Curriculum Requirement (AGEC-A) - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

English Composition .....	6
Humanities and Fine Arts. ....	3
ART 100 meets 3 credits of this requirement. Complete a course from the Humanities list.	
Biological and Physical Sciences .....	8
Mathematics. ....	†
MAT 212 fulfills this requirement.	
Social and Behavioral Sciences .....	3
ECN 201 fulfills 3 credits of this requirement. Complete a non-ECN course from the Social and Behavioral Sciences list.	
Other Requirements .....	†
CIS 120 and MAT 172 fulfill this requirement.	
Special Requirements	
The I, C, and G requirements should be fulfilled by selecting appropriate courses in the above categories.	
<b>Subtotal</b> .....	<b>20‡</b>

<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>
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### Required Core Courses - A grade of C or better is required for graduation.

MGT 130*	Retail Analysis .....	3
MKT 140	Fashion Merchandising .....	3
MKT 240*	Fashion Merchandising Planning and Control .....	4
<b>Subtotal</b> .....		<b>10</b>

**Required Support Courses**

ACC 211*	Financial Accounting (was ACC 101) SUN# ACC 2201	3
ACC 212*	Managerial Accounting (was ACC 102) SUN# ACC 2202	3
ART 100	Basic Design	3
BUS 125	eCommerce	3
BUS 205*	Statistical Methods in Economics and Business SUN# BUS 2201	3
CIS 120*	Computer Applications for Business SUN# CIS 1120	4
ECN 201	Microeconomic Principles SUN# ECN 2201	3
ECN 202	Macroeconomic Principles SUN# ECN 2202	3
MAT 172	Finite Mathematics	3
MAT 212	Topics in Calculus SUN# MAT 2212	3
Electives: Complete 2-3 credit hours from the following list:		2-3
MKT 139 or STU 210		
<b>Subtotal</b>		<b>33-34</b>
<b>Total credits as displayed</b>		<b>63-64</b>

† Core or support course(s) fulfill this requirement.

‡ AGEC requires 35 credits. This subtotal shows the AGEC credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Retail Management — Certificate for Direct Employment

Learn the skills needed to succeed as a supervisor or manager in a retail business. This program meets the requirements of the Western Association of Food Chains (WAFC).

### What can I do with this certificate?

**Career Options:** Advance in your career as a retail manager or supervisor.

**Academic Options:** Continue your studies with other degrees and certificates in Business.

**More Information:** Review program costs, student debt, on-time graduation and more

<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-64.html>

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7046

Lead Faculty: 520-206-7216

Program/Major Codes: **CRTBFR/BFR**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
CIS/CSA 104	Computer Fundamentals	3
CMN 120	Business and Professional Communication	3
FIN 107	Business Finance	3
MGT 110	Human Relations in Business and Industry	3
MGT 276*	Human Resources	3
MGT 280	Business Organization and Management	3
MKT 111	Principles of Marketing	3
MKT 139	Retailing	3
<b>Subtotal</b>		<b>24</b>
<b>Total credits as displayed</b>		<b>24</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.



# International Business Studies

## International Business Management Certificate

Learn International business and management skills while working with students from other countries. Non-English speakers must verify English proficiency requirements with the Center for International Education and Global Engagement or online at <https://www.pima.edu/new-students/international/application-instructions.html>).

### What can I do with this certificate?

**Career Options:** Entry-level business operations with a diverse workforce, either domestically or abroad.

**Academic Options:** Continue your studies with the Advanced Business Certificate program.

**More Information:** Review program costs, student debt, on-time graduation and more

<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-58.html>

**Locations:** All campuses.

**Department/Contact Information:**

Dean: 520-206-7134

Program/Major Codes: **CRTIBM/IBM**

Course Number	Course Title	Credit Hours
Required Core Courses - A grade of C or better is required for graduation.		
BUS 148	Business Ethics .....	3
BUS 210*	International Business .....	3
ECN 202*	Principles of Macroeconomics .....	3
IBS 120	Cultural Environment of International Business .....	3
MGT 135	International Management .....	3
WRT 154*	Career Communications .....	3
<b>Total credits as displayed .....</b>		<b>18</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

# Logistics and Supply Chain Management

## Basic Logistics and Supply Chain Management — Certificate for Direct Employment

Get an introduction to logistics and transportation skills and principles.

### What can I do with this certificate?

**Career Options:** Entry-level positions in logistics.

**Academic Options:** Continue your studies with the Logistics and Supply Chain Management Advanced Certificate program.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-61.html>

**Location:** East Campus

**Department/Contact Information:**

Dean: 520-206-7694

Program/Major Codes: **CRTLGC/LGC**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
LGM 101	Principles of Logistics and Supply Chain Management .....	3
LGM 102*	Inventory Control .....	3
LGM 104	Computerized Logistics .....	3
LGM 105	Warehouse Management .....	3
<b>Total credits as displayed .....</b>		<b>12</b>
<b>Required Support Courses</b>		
WRT 101* or WRT 154*	Writing I SUN# ENG 1101 .....	3
LGM 109	Readiness Skills for Logistics Careers .....	1
Electives- Choose 3 credit hours from the following list: .....		3
LGM 106	Transportation and Traffic Management	
LGM 108	International Logistics	
<b>Subtotal .....</b>		<b>7</b>
<b>Total credits as displayed .....</b>		<b>19</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Advanced Logistics and Supply Chain Management — Certificate for Direct Employment

Learn fundamental principles of and skills of logistics and transportation, inventory control, and warehouse management.

### What can I do with this certificate?

**Career Options:** Entry-level positions in warehouse and transportation.

**Academic Options:** Continue your studies through the Logistics and Supply Chain Management AAS degree program.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-62.html>

**Location:** East Campus

**Department/Contact Information:**  
 Dean: 520-206-7694

Program/Major Codes: **CRTLGV/LGV**

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	†
WRT 101 or 154 fulfills this requirement.	
Analysis and Critical Thinking Requirement .....	3
<b>Subtotal .....</b>	<b>3‡</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

LGM 101	Principles of Logistics and Supply Chain Management .....	3
LGM 102*	Inventory Control .....	3
LGM 104	Computerized Logistics .....	3
LGM 105	Warehouse Management .....	3
<b>Subtotal .....</b>		<b>12</b>

### Required Support Courses

LGM 106	Transportation and Traffic Management .....	3
LGM 108	International Logistics .....	3
LGM 109	Readiness Skills for Logistics Careers .....	1
or LGM 196*	Independent Study in Logistics and Supply Chain Management	
LGM 190*	Logistics and Supply Chain Internship .....	3
MGT 122*	Supervision .....	3
WRT 101*	Writing I SUN# ENG 1101 .....	3
or WRT 154*	Career Communications	
<b>Subtotal .....</b>		<b>16</b>
<b>Total credits as displayed .....</b>		<b>31</b>

† Core or support course(s) fulfill this requirement.

‡ General Education requires 6 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Logistics and Supply Chain Management — Associate of Applied Science Degree for Direct Employment

Learn fundamental principles of logistics and transportation, as well as skills in inventory control, warehouse management, business, and supervision.

### What can I do with this degree?

**Career Options:** Entry-level to supervisory-level positions in inventory control, transportation, and warehouse management.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** East Campus

**Department/Contact Information:**

Dean: 520-206-7694

Program/Major Codes: **AASLGM/LGM**

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	3
WRT 101 or 154 fulfills 3 credits of this requirement. Complete an appropriate course from the pairs listed in the Communication category.	
Analysis and Critical Thinking Requirement .....	6
Humanities and Social Science Requirement .....	†
GEO 104 and MGT/STU 230 fulfill this requirement.	
Computer and Information Literacy Requirement .....	†
CIS/CSA 104 fulfills this requirement.	
Special Requirements	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal</b> .....	<b>9</b> ‡

Course Number	Course Title	Credit Hours
---------------	--------------	--------------

### Required Core Courses - A grade of C or better is required for graduation.

LGM 101	Principles of Logistics and Supply Chain Management .....	3
LGM 102*	Inventory Control .....	3
LGM 103	Contracts and Freight Claims .....	3
LGM 104	Computerized Logistics .....	3
LGM 105	Warehouse Management .....	3
LGM 106	Transportation and Traffic Management .....	3
LGM 107	Introduction to Purchasing .....	3
LGM 108	International Logistics .....	3
LGM 190*	Logistics and Supply Chain Internship .....	3
or LGM 196*	Independent Study in Logistics and Supply Chain Management	
<b>Subtotal</b> .....		<b>27</b>

<b>Required Support Courses</b>		
BUS 100	Introduction to Business .....	3
BUS 125	eCommerce .....	3
CIS/CSA104*	Computer Fundamentals .....	3
GEO 104	World Regional Geography .....	3
MGT 122*	Supervision .....	3
MGT/STU 230	Dynamics of Leadership .....	3
WRT 101*	Writing I SUN# ENG 1101 .....	3
or WRT 154*	Career Communications .....	3
Electives: Select 3 credits hours from the following list: .....		3
ACC 100, BUS 148, 220, CSA 110, MGT 130, 280; MKT 100, 111		
<b>Subtotal</b> .....		<b>24</b>
<b>Total credits as displayed</b> .....		<b>60</b>

† Core or support course(s) fulfill this requirement.

¥ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Chemistry

Study the composition, properties and interactions of substances by taking chemistry courses that focus on general, consumer, forensic or organic chemistry. Students learn through lecture and hands-on lab experiences.

Chemistry courses are offered as part of the requirements of the **Associate of Science degree**, or may be taken as required or elective courses to complete other degrees. Students interested in pursuing a degree at ASU, NAU or UA should meet with chemistry faculty or an advisor to plan their course of study using the appropriate major guide.

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### *What can I do with my studies in chemistry?*

**Career options:** Work as a technician in laboratories, chemical manufacturing, government, and technical service firms

**Academic options:** Continue studies towards a Bachelor of Science in chemistry, chemical engineering, engineering, education, pharmacy or other health-care fields

**Contact Information:** Contact any campus Student Services office ([www.pima.edu/mhtml/email/advising](http://www.pima.edu/mhtml/email/advising)).

# Clinical Research Coordinator

## Clinical Research Coordinator — Associate of Applied Science for Direct Employment

Learn to manage clinical research trials involving human subject in classes taught by physicians and other clinical research professionals.

### What can I do with this degree?

**Career Options:** Seek an entry-level position or career advancement in hospitals, medical centers, universities, or private research group.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima’s Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** Northwest Campus

**Department/Contact Information:**

Dean: 520-206-2216

Lead Faculty: 520-206-2153

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

### Program Prerequisites

Complete the following courses with a grade of “C” or better before enrolling in this program:

MAT 097**	Intermediate Algebra .....	3
WRT 101*	Writing I .....	†
<b>Subtotal</b> .....		<b>3</b>

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	†
WRT 101 and either WRT 102 or CMN 120 fulfill this requirement.	
Analysis and Critical Thinking Requirement .....	†
BIO 160IN and MAT 097 or higher fulfill this requirement.	
Humanities and Social Science Requirement .....	6
Computer and Information Literacy Requirement .....	†
CIS/CSA 104 fulfills this requirement.	
Special Requirement	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal</b> .....	<b>6†</b>

Course Number	Course Title	Credit Hours
---------------	--------------	--------------

### Required Core Courses - A grade of C or better is required for graduation.

CRC 101*	Foundations of Clinical Research .....	3
CRC 110*	Clinical Research Common Terminology .....	3
CRC 201*	Clinical Research Regulatory Compliance .....	3
CRC 230*	Introduction to Clinical Research Study Protocol .....	2
CRC 240*	Pharmacology for Clinical Trials .....	4
CRC 250*	Clinical Research Site Coordination and Management .....	3
CRC 260IN	Lab Skills and Professional Practice .....	3
CRC 270*	Research Management for Sponsors and CROs .....	3
CRC 291*	Clinical Research Coordinator Internship .....	3
<b>Subtotal</b> .....		<b>27</b>

<b>Required Support Courses - A grade of C or better is required for graduation.</b>		
BIO 160IN	Introduction to Human Anatomy and Physiology .....	4
CIS/CSA 104*	Computer Fundamentals .....	3
CSA 110	Spreadsheets: Microsoft Excel .....	3
REA 112HP***	Critical Reading for Health Professions .....	0-4
WRT 101*	Writing I SUN# ENG 1101 .....	3
WRT 102* or CMN 120	Writing II SUN# ENG 1102..... Business and Professional Communication	3
Electives.....		7-11
<b>Subtotal .....</b>		<b>27</b>
<b>Total credits as displayed with program prerequisites .....</b>		<b>60</b>

† Core or support course(s) fulfill this requirement.  
 ‡ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.  
 \* This course has a prerequisite, co-requisite, or recommendation. See course description section.  
 \*\* MAT 142, 151, 188, 189, 220 may be substituted for MAT 097.  
 \*\*\* REA 112 may be substituted for REA 112HP. REA 112HP may be waived with an appropriate Reading score on the College Placement assessment. If waived, additional electives will be needed to fulfill Required Support Courses.



# Computer-Aided Design

Prepare for careers in a variety of manufacturing and construction settings. Master basic to advanced computer-aided design skills for high-demand careers.

## Basic Computer Aided Design — Certificate for Direct Employment

**This certificate is currently under review. See the website or an advisor for details.**

Learn basic drafting and design fundamentals using computer-aided drafting (CAD) tools.

### What can I do with this certificate?

**Career Options:** Work as an entry-level drafter/designer in manufacturing and construction industries.

**Academic Options:** Continue your studies by completing the advanced Computer-Aided Drafting/design certificate.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-15.html>

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Lead faculty: 206-7252

Program/Major Codes: **CRTCONDRFT-B/CAB**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
CAD 101	Computer-Aided Drafting .....	4
<b>Subtotal</b> .....		<b>4</b>
<b>Required Support Courses</b>		
CAD: Complete 12 credit hours of CAD courses numbered 120 or higher with the approval of the department chair or faculty advisor.....		12
<b>Total credits as displayed</b> .....		<b>16</b>

## Advanced Computer Aided Design — Certificate for Direct Employment

**This certificate is currently under review. See the website or an advisor for details.**

Gain advanced computer-aided design (CAD) skills.

### What can I do with this certificate?

**Career Options:** Apply for advanced drafting/design positions.

**Academic Options:** Pursue an associate degree in Computer-Aided Drafting/design.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-14.html>

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Lead faculty: 520-206-7252

Program/Major Codes: **CRTCONDRFT-A/CAA**

**General Education Requirements - A grade of C or better is required for graduation.**

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	3
Analysis and Critical Thinking Requirement .....	3
<b>Subtotal .....</b>	<b>6</b>

Course Number	Course Title	Credit Hours
---------------	--------------	--------------

**Required Core Courses - A grade of C or better is required for graduation.**

CAD 101	Computer-Aided Drafting .....	4
<b>Subtotal .....</b>		<b>4</b>

**Required Support Courses**

CAD	Complete 12 credit hours of CAD courses numbered 120 or higher with the approval of the department chair or faculty advisor. ....	12
Technical Electives .....		8
	Complete 8 credit hours at the 100 level or higher from the following list with the approval of the department chair or faculty advisor: BCT, CAD, ENG, LTP, MAC, SLR, TEC or WLD.	
<b>Subtotal .....</b>		<b>20</b>
<b>Total credits as displayed .....</b>		<b>30</b>

## Integrated Circuit Layout Design – Certificate for Direct Employment

Graduates of the Integrated Circuit Layout Design program are employed by firms who design and manufacture the subminiature electronic circuits that are at the nucleus of all electronic and computerized equipment. Integrated circuit designers use computer-aided design systems to design the templates or masks that are used to manufacture microelectronic circuits. Graduates of this program may also be employed as electronic circuit board designers and layout specialists.

Learn basic drafting and design fundamentals using Computer-Aided Drafting (CAD) tools.

**What can I do with this certificate?**

**Career Options:** Work as an entry-level integrated circuit layout designer in manufacturing industries.

**Academic Options:** Continue your studies by completing Computer-Aided Drafting AAS degree.

**More Information:** Review program costs, student debt, on-time graduation and more

<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-16.html>

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Lead faculty: 206-7252

Program/Major Codes: **CRTICD/ICD**

Course Number	Course Title	Credit Hours
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**Required Core Courses - A grade of C or better is required for graduation.**

CAD 104*	Integrated Circuit Layout Fundamentals .....	4
CAD 114	Electronic Manufacturing Processes .....	2
CAD 154*	Integrated Circuit Layout Design I .....	4
CAD 204*	Integrated Circuit Layout Design II .....	4
CAD 254*	Integrated Circuit Layout Design III .....	4
<b>Subtotal .....</b>		<b>18</b>

**Required Support Course**

TEC 100	Introduction to Electronics Technology .....	3
<b>Subtotal .....</b>		<b>3</b>
<b>Total credits as displayed .....</b>		<b>21</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Computer-Aided Design — Associate of Applied Science Degree for Direct Employment

Choose from three Computer-Aided Drafting/design concentrations.

### What can I do with this degree?

**Career Options:** Work as a drafter modeler and entry level designer in industries such as manufacturing, electronics, building construction and site development.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Lead faculty: 520-206-7252

Program/Major/Concentration Codes: **AASELECMECHN/CAD/\*\*\*\*** (see concentration codes below)

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	6
Analysis and Critical Thinking Requirement .....	6
Humanities and Social Science Requirement .....	6
Computer and Information Literacy Requirement .....	†
CAD 101 fulfills this requirement.	

Special Requirement

The C or G requirement should be fulfilled by completing an appropriate course in the above categories.

**Subtotal .....**18¥

Course Number	Course Title	Credit Hours
---------------	--------------	--------------

### Required Core Courses - A grade of C or better is required for graduation.

CAD 101	Computer-Aided Drafting .....	4
CAD 280*	Computer Aided Design Portfolio .....	1
<b>Subtotal .....</b>		<b>5</b>

### Core Concentrations - A grade of C or better is required for graduation.

Complete one of the following concentrations: ..... 37  
 Department faculty approval is recommended when selecting concentration and technical elective courses.

#### Mechanical/Electro-Mechanical Concentration (Concentration Code: DFTA)

CAD 142	Introduction to Parametric Modeling: SolidWorks .....	4
CAD 152*	Technical Drafting .....	4
CAD 153*	Electro-Mechanical Design .....	4
CAD 172*	Geometric Dimensioning and Tolerancing .....	3
CAD 203*	Advanced Electro-Mechanical Design .....	4
CAD 242*	Advanced Parametric Modeling: SolidWorks .....	4
CAD 270*	Integrated Mechanical/Electro-Mechanical Design .....	4
MAC 100	Introduction to Machine Tool .....	3
Technical Electives .....		7

Complete 7 credit hours from the following list: CAD 199, 199WK, 222, 232, 242, 252, 282, ENG, MAC, TEC 100, 101, WLD 110, or MAT 151 or higher

**Subtotal .....**37

**Construction** (Concentration Code: DFTC)

CAD 151	Computer-Aided Design for Construction	4
CAD 155*	Residential Computer-Aided Design	4
CAD 157*	Introduction to Site Development and Design	4
<i>Complete 16 credit hours from the following courses:</i>		16
CAD 127	Introduction to MicroStation	4
CAD 166	Introduction to Revit	4
CAD 206*	Commercial Design: Revit	4
CAD 207*	Land Development Design: Civil 3D	4
CAD 247*	Transportation Design: MicroStation	4
CAD 256*	Advanced Commercial Design: Revit	4
CAD 257*	Advanced Land Development Design: Civil 3D	4
CAD 265*	Design for Sustainability	4
CAD 266*	Mechanical, Electrical, Plumbing Design: Revit MEP	4
Technical Electives		9
Complete 9 credit hours from the following list: BCT 101, 102, 204, 265, CAD 196, 199, 199WK, 296, LTP 119, 129, 140		
<b>Subtotal</b>		<b>37</b>

**Integrated Circuit Layout Design** (Concentration Code: DFTI)

CAD 104*	Integrated Circuit Layout Fundamentals	4
CAD 114	Electronic Manufacturing Processes	2
CAD 153*	Electro-Mechanical Drafting and Design	4
CAD 154*	Integrated Circuit Layout Design I	4
CAD 204*	Integrated Circuit Layout Design II	4
CAD 254*	Integrated Circuit Layout Design III	4
TEC 100	Introduction and Overview of Electronics	3
TEC 101*	Physics for Technology	3
Technical Electives		9
Complete 9 credit hours from the following list with the approval of the department chair or faculty advisor: CAD 196, 199, 199WK, 203, 296 or other approved CAD courses; ENG; TEC 121, 122, 123.		
<b>Subtotal</b>		<b>37</b>
<b>Total credits as displayed with program prerequisites</b>		<b>60</b>

† Core or support course(s) fulfill this requirement.

‡ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

# Computer Information Systems

Prepare for a career as a programmer, network administrator, systems administrator or database administrator, or upgrade existing skills and improve job performance.

## Computer Programmer Specialist — Certificate for Direct Employment

**This certificate is currently under review. See the website or an advisor for details.**

Take the fast track to becoming a computer programmer with this accelerated program, or enhance existing skills. Choose from concentrations in C programming, Visual Basic programming or web programming.

### What can I do with this certificate?

**Career Options:** Become a C or Visual Basic programmer, or a web site designer, developer or administrator.

**Academic Options:** Continue your studies by taking courses toward a Computer Programmer/Analyst or Associate of Science degree.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-45.html>

**Locations:** East Campus, West Campus

**Department/Contact Information:**

Dean:

206-6996 (West Campus);

206-7694 (East Campus)

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

Course Number	Course Title	Credit Hours
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### Program Prerequisites and Required Core Courses - A grade of C or better is required for graduation.

Complete one of the following concentrations:

Department chair or faculty advisor approval is recommended in the selection of the program concentration. . . . . 19-32

#### Programming in C (Concentration Code: CSPC)

##### Prerequisites for concentration:

CIS 129\* Programming and Problem Solving I . . . . . 5

CIS 131\* Programming and Problem Solving II . . . . . 4

CIS 250\* Introduction to Assembly Language . . . . . 3

**Subtotal** . . . . . **12**

##### Core Concentration:

CIS 265\* The C Programming Language . . . . . 4

CIS 269\* Data Structures . . . . . 5

CIS 278\* C++ and Object-Oriented Programming . . . . . 4

CIS 279\* Java Programming . . . . . 5

**Subtotal** . . . . . **18**

**Total credits as displayed with program prerequisites** . . . . . **30**

#### Programming in Visual Basic (Concentration Code: CSPV)

##### Prerequisites for concentration:

CIS 129\* Programming and Problem Solving I . . . . . 5

Recommended:

CIS/CSA 104\* Computer Fundamentals . . . . . 0-3

**Subtotal** . . . . . **5-8**

##### Core Concentration:

CIS 141\* Introduction to VB.NET . . . . . 4

CIS 162 Database Design and Development . . . . . 3

CIS 241\* Advanced Visual Basic.NET Programming . . . . . 4

CIS Department Elective (for this concentration only) . . . . . 3-5

Complete any CIS course 129 or higher including prerequisite courses.

<b>Subtotal</b> .....	<b>14-16</b>
<b>Total credits as displayed with program prerequisites</b> .....	<b>19-24</b>
<b>Programming for the Web</b> (Concentration Code: CSPW)	
<b>Prerequisites for concentration:</b>	
CIS/CSA 104*      Computer Fundamentals .....	3
CIS 119*            Network Essentials .....	3
<b>Subtotal</b> .....	<b>6</b>
<b>Core Concentration:</b>	
BUS 125            eCommerce .....	3
CIS 121            Web Publishing .....	3
CIS 185*           Introduction to Python .....	4
CIS 266*           CGI Programming with PERL .....	3
CIS 273*           Advanced Web Page Development .....	4
CIS 279*           Java Programming .....	5
DAR 112            Graphic Design .....	4
<b>Subtotal</b> .....	<b>26</b>
<b>Total credits as displayed with program prerequisites</b> .....	<b>32</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Computer Programmer/Analyst — Associate of Applied Science Degree for Direct Employment

Learn to design and develop software programs and applications. Courses focus on problem solving and structured programming concepts.

### What can I do with this degree?

**Career Options:** Become a programmer or programmer/analyst.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Locations:** East Campus, West Campus

**Department/Contact Information:**

Dean:  
206-7694 (East Campus);  
206-6996 (West Campus)

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

### Program Prerequisites

Before enrolling in this program, you must fulfill the following requirement.

CIS 129*            Programming and Problem Solving I .....	5
<b>Subtotal</b> .....	<b>5</b>

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	†
WRT 101 and WRT 102 fulfill this requirement.	
Analysis and Critical Thinking Requirement .....	†
MAT 172 and a lab science course fulfill this requirement.	
Humanities and Social Science Requirement .....	3
ECN 201 fulfills 3 credits of the Social Science category. Complete a course from the Leadership/Ethics or Humanities/Fine Arts category that also meets the cultural diversity (C) or the global awareness (G) requirement.	

Computer and Information Literacy Requirement .....	†
Core courses fulfill this requirement.	
Special Requirement	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal</b> .....	<b>3‡</b>

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
CIS 131*	Programming and Problem Solving II .....	5
CIS 141*	Introduction to VB.NET .....	4
CIS 162	Database Design and Development .....	3
CIS 182	Introduction to ANSISQL .....	3
CIS 250*	Introduction to Assembly Language .....	3
CIS 265*	The C Programming Language .....	4
CIS 269*	Data Structures .....	5
CIS 278*	C++ and Object Oriented Programming .....	4-5
or CIS 279*	Java Programming	
CIS 280*	Systems Analysis and Design: Concepts and Tools .....	4
CIS 281*	Systems Analysis and Design: Applications .....	3
<b>Subtotal</b> .....		<b>38-39</b>

#### Required Support Courses

ACC 211*	Financial Accounting (was ACC 101) SUN# ACC 2201 .....	3
ECN 201*	Microeconomic Principles SUN# ECN 2202 .....	3
MAT 172*	Finite Mathematics .....	3
WRT 101*	Writing I SUN# ENG 1101 .....	3
WRT 102*	Writing II SUN# ENG 1102 .....	3
Laboratory Science: Select one course from the following list: .....		4
AST 101IN, 102IN		
BIO 100IN, 105IN, 181IN		
GEO 102		
GLG 101IN, 102IN		
CIS Elective: Select a course below for 3 credit hours .....		3
CIS 199, 219, 221, 225, 241, 266, 299		
<b>Subtotal</b> .....		<b>22</b>
<b>Total credits as displayed with program prerequisites</b> .....		<b>68-69</b>

† Core or support course(s) fulfill this requirement.

‡ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Systems Administration/Networking — Certificate for Direct Employment

**This certificate is currently under review. See the website or an advisor for details.**

Pursue a systems administration or networking career. Concentrate on a specific type of system or follow the administrator concentration for a well-rounded exposure to network administration.

### What can I do with this certificate?

**Career Options:** Become a CISCO, Linux, Microsoft or general network administrator.

**Academic Options:** Continue your studies by taking courses toward a System Administration/Networking or Associate of Science degree.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-56.html>

**Locations:** East Campus, West Campus

**Department/Contact Information:**

Dean:

206-7694 (East Campus);

206-6996 (West Campus)

Program/Major/Concentration Codes: **CRTNETWRKADM/CSD/\*\*\*\*** (see concentration codes below)

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
Complete one of the following concentrations: .....		17-20
Department chair or faculty advisor approval is recommended in the selection of the program concentration.		
<b>Systems Administration/Networking – CISCO</b> (Concentration Code: CSNC)		
CIS 170*	CISCO I: Networking Fundamentals .....	5
CIS 171*	CISCO II: Networking Router Technologies .....	5
CIS 172*	CISCO III: Advanced Routing and Switching .....	5
CIS 173*	CISCO IV: Project Based Learning .....	5
<b>Subtotal</b> .....		<b>20</b>
<b>Systems Administration/Networking – Linux</b> (Concentration Code: CSNX)		
CIS 136	Microcomputer Components .....	3-4
or TEC 130/130LB*	Computer Assembly and Testing	
CIS 119*	Network Essentials .....	3-5
or CIS 170*	CISCO I: Networking Fundamentals	
CIS 137*	Introduction to the UNIX Operating System .....	3
CIS 225*	Linux (UNIX) System and Network Administration .....	4
CIS 226*	Advanced Linux Networking .....	4
<b>Subtotal</b> .....		<b>17-20</b>
<b>Systems Administration/Networking – Microsoft</b> (Concentration Code: CSNM)		
CIS 103	Microsoft Windows Operating System Professional Administration .....	4
CIS 219	Introduction to Virtual Computing .....	4
CIS 221*	Microsoft Windows Server .....	4
CIS 222*	Implementing Windows Network Infrastructure .....	4
CIS 223*	Implementing Windows Directory Services .....	4
<b>Subtotal</b> .....		<b>20</b>
<b>Systems Administration/Networking – Administrator</b> (Concentration Code: CSNA)		
CIS 103	Microsoft Windows Operating System Professional Administration .....	4
CIS 119*	Network Essentials .....	3
CIS 219*	Introduction to Virtual Computing .....	4
CIS 221*	Microsoft Windows Server .....	4
CIS 225*	LINUX (UNIX) System and Network Administration .....	4
<b>Subtotal</b> .....		<b>19</b>
<b>Total credits as displayed</b> .....		<b>17-20</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.



## Systems Administration/Networking — Associate of Applied Science Degree for Direct Employment

Learn to install and administer small computer systems; or study networking technologies such as CISCO, Microsoft and Novell. Courses also prepare students for industry-standard certification exams.

### What can I do with this degree?

**Career Options:** Administer microcomputer systems, administer CISCO, Microsoft or Novell systems.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Locations:** East Campus, West Campus

**Department/Contact Information:**

Dean: 206-7694 (East Campus),  
206-6996 (West Campus)

Program/Major/Concentration Codes: **AASCOMPYSAD/CSN/\*\*\*\*** See concentration codes below)

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	6
Analysis and Critical Thinking Requirement .....	6
Humanities and Social Science Requirement .....	6
Computer and Information Literacy Requirement .....	†
Core courses fulfill this requirement.	
Special Requirement	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal .....</b>	<b>18</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

CIS 103	Microsoft Windows Operating System Professional Administration .....	4
CIS 119*	Network Essentials .....	3-5
or CIS 170*	CISCO I: Networking Fundamentals	
CIS 133	Fundamentals of Personal Computer Security .....	3
CIS 136	Microcomputer Components .....	3-4
or TEC 130/130LB	Computer Assembly and Testing	
CIS 137*	Introduction to the UNIX Operating System .....	3
CIS 219*	Introduction to Virtual Computing .....	4
CIS 221*	Microsoft Windows Server .....	4
CIS 225*	Linux (UNIX) System and Network Administration .....	4
<b>Subtotal .....</b>		<b>28-31</b>

Course Number	Course Title	Credit Hours
<b>Core Concentrations - A grade of C or better is required for graduation.</b>		
Complete one of the following concentrations: .....		20-23
Department chair or faculty advisor approval is recommended in the selection of the program concentration.		
<b>Cyber Security Concentration</b> (Concentration Code: CSNY)		
Choose any five courses:		
CIS 132*	Introduction to Computer Forensics .....	4
CIS 171*	CISCO II Networking Router Technologies .....	5
CIS 216*	Introduction to Wireshark and Network Analysis .....	4
CIS 223*	Implementing Windows Directory Services .....	4
or CIS 235*	Advanced Topics in Linux/Unix Security	
CIS 228*	Fundamentals of Network Security .....	4
CIS 229*	Protecting Your PC and Network: Countermeasures to Network Intrusion .....	4
<b>Subtotal</b> .....		<b>20-21</b>
<b>Administrator</b> (Concentration Code: CSNA)		
Choose any five courses.		
CIS 171*	CISCO II: Networking Router Technologies .....	5
CIS 172*	CISCO III: Advanced Routing and Switching .....	5
CIS 173*	CISCO IV: Project Based Learning .....	5
CIS 216*	Introduction to Wireshark and Network Analysis .....	4
CIS 218*	Introduction to Voice over IP (VoIP) .....	4
CIS 222*	Implementing Windows Network Infrastructure .....	4
CIS 223*	Implementing Windows Directory Services .....	4
CIS 226*	Advanced Linux Networking .....	4
CIS 228*	Fundamentals of Network Security .....	4
CIS 235*	Advanced Topics in Linux/Unix Security .....	4
<b>Subtotal</b> .....		<b>20-23</b>
<b>Total credits as displayed</b> .....		<b>66-72</b>

† Core or support course(s) fulfill this requirement.

‡ General Education requires 18 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

# Culinary Arts

Set your culinary career in motion and prepare to work in hotels, restaurants and resorts.

## Culinary Arts — Certificate for Direct Employment

**This certificate is currently under review. See the website or an advisor for details**

Courses focus on cold foods, hot foods, baking, nutrition, safety and sanitation, and general restaurant operations.

**Before you can enroll,** you must interview with a Culinary Arts faculty member.

### What can I do with this certificate?

**Career Options:** Gain entry-level employment as a cook, menu planner, dining room manager or other culinary positions.

**Academic Options:** Continue your studies by completing the Associate of Applied Science degree.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-2.html>

**Location:** Desert Vista Campus

**Department/Contact Information:**

Dean: 520-206-5105

Lead Faculty: 520-206-5164

**Selective Admissions Program:** You are not fully admitted to this program until you have completed an interview. See the website or an advisor for details.

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
CUL 101	Principles of Restaurant Operations .....	3
CUL 110	Food Service Nutrition .....	2
CUL 115	Food Service Sanitation and Safety .....	3
CUL 130	Hot Foods I .....	3
CUL 140	Culinary Principles .....	3
CUL 150	Garde Manger .....	3
CUL 160	Bakery and Pastry Production I .....	3
CUL 230	Hot Foods II .....	3
CUL 251	International Cuisine: World of Flavor .....	3
CUL 260*	Bakery and Pastry Production II .....	3
<b>Total credits as displayed .....</b>		<b>29</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Culinary Arts — Associate of Applied Science Degree for Direct Employment

**This certificate is currently under review. See the website or an advisor for details**

Courses focus on culinary management, budgeting, and hands-on food preparation.

**Before you can enroll**, you must interview with a Culinary Arts faculty member.

### What can I do with this degree?

**Career Options:** Become a cook, menu planner, caterer, dining room manager or work in other culinary positions.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** Desert Vista Campus

**Department/Contact Information:**

Dean: 520-206-5105

Lead Faculty: 520-206-5164

**Selective Admissions Program:** You are not fully admitted to this program until you have completed an interview. See the website or an advisor for details.

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	6
Analysis and Critical Thinking Requirement .....	6
Humanities and Social Science Requirement .....	6
Computer and Information Literacy Requirement .....	1-3
<b>Subtotal .....</b>	<b>19-21</b>

Course Number	Course Title	Credit Hours
---------------	--------------	--------------

### Required Core Courses - A grade of C or better is required for graduation.

CUL 101	Principles of Restaurant Operations .....	3
CUL 110	Food Service Nutrition .....	2
CUL 115	Food Service Sanitation and Safety .....	3
CUL 130	Hot Foods I .....	3
CUL 140	Culinary Principles .....	3
CUL 150	Garde Manger .....	3
CUL 160	Bakery and Pastry Production I .....	3
CUL 180	Food in History .....	3
CUL 185	Catering Operations .....	2
CUL 230	Hot Foods II .....	3
CUL 251	International Cuisine: World of Flavor .....	3
CUL 260*	Bakery and Pastry Production II .....	3
<b>Subtotal .....</b>	<b>34</b>	

### Required Support Courses

Complete nine credits from the following:

ACC 100	Practical Accounting Procedures .....	3
CUL 161	Cake Decorating and Candy Making .....	3
CUL 162	Art of Chocolate .....	1
CUL 163	Sauces .....	3
CUL 199WK	Co-op Work: Culinary Arts .....	1-3
CUL 261*	Advanced Cake Decorating .....	3
<b>Subtotal .....</b>	<b>9</b>	

**Total credits as displayed .....** **62-64**

## Dental Studies

Complete programs to work in direct patient care as a dental hygienist or assistant, or prepare for a career in a dental laboratory.

- Dental Assisting Education
- Dental Hygiene
- Dental Laboratory Technologies

## Dental Assisting Education

### Dental Assisting Education — Certificate for Direct Employment

Learn to assist dentists and other dental professionals in patient care. Complete at least 336 hours of clinical work in dental clinics or offices. This program is accredited by the American Dental Association Commission on Dental Accreditation.

**Before enrolling in this program**, you must meet certain requirements:

This degree requires a special program application. Students may request a program application available at: [www.pima.edu/programs-courses/credit-programs-degrees/health-professions/dental/dental-hygiene/index.html](http://www.pima.edu/programs-courses/credit-programs-degrees/health-professions/dental/dental-hygiene/index.html) when all prerequisites are complete.

**Because of the clinical component of this program, students must:**

- Be able to perform a number of physical activities in the clinical portion of the program. At a minimum, students will need to stand for several hours at a time and perform bending activities. The clinical 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 submitting an application.
- Present proof of immunization and/or immunity for MMR/Varicella/Hepatitis-B/TDaP.
- Show proof of negative TB skin test or negative chest x-ray for TaB.
- Maintain health insurance and a current CPR card at the Health Care Provider Level throughout the program.

### What can I do with this certificate?

**Career Options:** Take the exams to gain National Dental Assisting Certification, Arizona Oral Radiology Certification and Coronal Polishing Certification. Work as a dental assistant in hospitals, clinics and dental offices.

**Academic Options:** Continue your studies by taking courses toward the Dental Hygienist AAS degree.

**More Information:** Review program costs, student debt, on-time graduation and more <https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-42.html>

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6661

Lead Faculty: 520-206-6916

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

### Program Prerequisites

Students must have completed the following requirements before they begin the application process:

Appropriate score on the College reading assessment score or completion of REA 112 .....	0-4
High school or college biology course .....	0-4
High school diploma or G.E.D. ....	
<b>Subtotal</b> .....	<b>0-8</b>

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
DAE 159*	Introduction to Health Care for Dental Assisting .....	2
DAE 160*	Orientation to Dental Care .....	1
DAE 161*	Biomedical Dental Science .....	3
DAE 162/162LB*	Dental Assisting I .....	3
DAE 163/163LC*	Oral Radiography .....	3
DAE 164/164LB*	Dental Materials .....	3
DAE 165/165LC*	Dental Assisting Procedures I/Dental Assisting Procedures Clinical I .....	2
DAE 166*	Dental Assisting II .....	3
DAE 167*	Dental Assisting III .....	3
DAE 169/169LC*	Dental Assisting Procedures II/Dental Assisting Procedures Clinical II .....	6.5
<b>Total credits as displayed with program prerequisites .....</b>		<b>29.5-37.5</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

# Dental Hygiene

## Dental Hygiene — Associate of Applied Science Degree for Direct Employment

Learn dental hygiene and dental health education. This program is accredited by the American Dental Association Commission on Dental Accreditation.

**Before enrolling in this program,** you must meet certain requirements:

This degree requires a special program application. Once all prerequisites are complete students can access the program application on the MyPima Academics tab in the Degrees and Programs section. Additional application information is available at <http://www.pima.edu/programs-courses/credit-programs-degrees/health-professions/dental/dental-hygiene/index.html>.

**To participate in the clinical portion of the program, the students must:**

1. Obtain an Arizona DPS Fingerprint Clearance Card.
2. Pass a urine toxicology screening exam.
3. 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 dental 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 submitting an application and be advised that they may be exposed to blood borne pathogens and infectious diseases during delivery of care.
4. Present proof of immunization or immunity for MMR/Varicella/Hep-B, Hep-A, TB and TDap.
5. Show proof of negative TB skin test or negative chest x-ray for TB.
6. Maintain health insurance.

Health related professions students are advised that state/national license exams or certification applications may include a personal history section in which prospective applicants must report and may have to provide a detailed explanation of legal situations. Examples of situations which may prohibit licensure or certification include, but are not limited to: felony or misdemeanor convictions, substance abuse, conviction of an offense involving immoral behavior, or being guilty of acts which deceive, defraud or cause harm to the public in any way.

Fingerprinting may be part of many state and federal licensing and certification processes. If there is any question about eligibility for licensure or certification, it is the responsibility of the applicant to contact the state and/or federal agency responsible for licensure or certification.

Students who opt to leave the dental hygiene program may re-enter one time without need to repeat mandatory course work, if they re-enter within one (1) year, based on space availability.

### What can I do with this degree?

**Career Options:** Take national and regional exams in preparation for state licensure, then work in general or specialty dental offices, hospitals, schools, public health or government agencies.

**Academic Options:** Continue your studies at Northern Arizona University for a Bachelor of Science in Dental Hygiene or other online baccalaureate opportunities.

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6661

Lead Faculty: 520-206-6916

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

### Program Prerequisites

Student must have completed the following basic requirements before they may begin the application process.

REA 112* or an appropriate score on the College Reading assessment .....	0-4
MAT 097* with a grade of C or better within the last eight years or Math assessment score at MAT 151 within the last eight or MAT 151 or 167 within the last eight years. ....	0-3
CHM 140/140LB or 140IN*, BIO 201IN*, BIO 202IN*, and BIO 205IN* with a combined average grade of B or better within the last six years. Complete the CHM 130/130LB or 130IN* prerequisite and the BIO 156IN prerequisite as needed. ....	22-26
CSA 100** or CIS/CSA 104** .....	1-3
<b>Subtotal</b> .....	<b>23-36</b>

**General Education Requirements - A grade of C or better is required for graduation.**

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement	†
WRT 101 and 102 fulfill this requirement	
Analysis and Critical Thinking Requirement	†
Math and Science program prerequisites fulfill this requirement	
Humanities and Social Science Requirement	3
SOC 101 fulfills 3 credits in the Social Science category. Complete a course from the Humanities/Fine Arts or Leadership/Ethics category.	
Computer and Information Literacy Requirement	†
Core courses fulfill this requirement	
Special Requirement	
SOC 101 fulfills this requirement	
<b>Subtotal</b>	<b>3‡</b>

<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>
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**Required Core Courses - A grade of C or better is required for graduation.**

DHE 101/101LC*	Dental Hygiene I/Dental Hygiene I Clinical	5
DHE 104/104LB*	Dental and Oral Morphology/Dental and Oral Morphology Lab	2
DHE 107*	Oral Embryology and Histology	2
DHE 112*	Preventive Dentistry	3
DHE 116/116LC*	Oral Radiography/Oral Radiography Clinical	3
DHE 119*	Periodontology	2
DHE 120*	Oral Pathology	2
DHE 122*	Pharmacology	2
DHE 132/132LB*	Dental Materials/Dental Materials Lab	3
DHE 150/150LB/ 150LC*	Dental Hygiene II/Dental Hygiene II Lab/Dental Hygiene II Clinical	5.5
DHE 208/208LC*	Pain and Anxiety Control for Dental Hygiene/Pain and Anxiety Control for Dental Hygiene Clinical	2
DHE 209	Ethics and Practice Management	1
DHE 212	Nutrition and Oral Health	1
DHE 213/213CA/ 213CB*	Advanced Periodontal Services/Advanced Periodontal Services Clinical-A/Advanced Periodontal Services Clinical-B	4
DHE 216*	Community and Dental Health Education	3
DHE 250/250LC*	Dental Hygiene III/Dental Hygiene III Clinical	7
DHE 255/255LC*	Dental Hygiene IV/Dental Hygiene IV Clinical	4
<b>Subtotal</b>		<b>51.5</b>

**Required Support Courses**

CMN 102	Introduction to Speech Communication SUN# COM 1100	3
PSY 101	Introduction to Psychology SUN# PSY 1101	4
SOC 101	Introduction to Sociology SUN# SOC 1101	3
WRT 101*	Writing I SUN# ENG 1101	3
WRT 102*	Writing II SUN# ENG 1102	3
<b>Subtotal</b>		<b>16</b>
<b>Total credits as displayed with program prerequisites</b>		<b>93.5-106.5</b>

† Core or support course(s) fulfill this requirement.  
 ‡ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.  
 \* This course has a prerequisite, co-requisite, or recommendation. See course description section.  
 \*\* CIS 100 or 120 can be used to meet program requirements.



# Dental Laboratory Technologies

## Dental Laboratory Technology — Associate of Applied Science Degree for Direct Employment

Learn the skills to construct and repair dentures, partial dentures, crowns, bridges and other dental appliances. Get 1,492 clock hours of laboratory practice. This program is accredited by the American Dental Association Commission on Dental Accreditation.

**Before enrolling in this program,** please complete a program application (available at: [www.pima.edu/programs-courses/credit-programs-degrees/health-professions/dental/dental-laboratory-admission.html](http://www.pima.edu/programs-courses/credit-programs-degrees/health-professions/dental/dental-laboratory-admission.html))

### What can I do with this degree?

**Career Options:** Work in a dental lab.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)).

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6661

Lead Faculty: 520-206-3100

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement	6
Analysis and Critical Thinking Requirement	†
CHM 130/130LB or 130IN and the MAT support course fulfill this requirement.	
Humanities and Social Science Requirement	6
Computer and Information Literacy Requirement	1-3
Special Requirement	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal</b>	<b>13-15</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

DLT 101/101LB*	Dental Morphology	3
DLT 102*	Non-Metallic Dental Materials	3
DLT 103/103LB*	Complete Dentures	4
DLT 104/104LB*	Dental Occlusion	4
DLT 105/105LB*	Partial Denture Construction	4
DLT 106/106LB*	Orthodontic Appliances	3
DLT 108*	Laboratory Management	3
DLT 201/201LB*	Dental Laboratory I	3
DLT 202*	Dental Metallurgy	3
DLT 203/203LB*	Fixed Bridgework	4
DLT 204/204LB*	Dental Laboratory II	3
DLT 206/206LB*	Dental Ceramics	4
DLT 207/207LB*	Advanced Dental Laboratory Technology	5
<b>Subtotal</b>		<b>46</b>

**Required Support Courses**

CHM 130*/130LB* or CHM 130IN*	Fundamental Chemistry SUN# CHM 1130 .....	5
MAT*	Any course at the 100 or higher level .....	1-4
MGT 124	Small Business Management .....	3
<b>Subtotal</b> .....		<b>9-12</b>
<b>Total credits as displayed</b> .....		<b>68-73</b>

† Core or support course(s) fulfill this requirement.

‡ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Complete Dentures Technologist — Certificate for Direct Employment

This accelerated program teaches skills for specialized work in a dental laboratory. It also prepares you to earn certificates in other dental laboratory specialties.

### What can I do with this certificate?

**Career Options:** Work in a dental lab constructing complete dentures. Increase opportunities for employment and promotion within the dental laboratory industry.

**Academic Options:** Pursue a degree in Dental Laboratory Technology AAS. Take classes to earn other specialized certificates.

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6661

Lead Faculty: 520-206-3100

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
DLT 101/101LB*	Dental Morphology** .....	3
DLT 102*	Non-Metallic Dental Materials .....	3
DLT 103/103LB*	Complete Dentures .....	4
DLT 108*	Laboratory Management** .....	3
<b>Total credits as displayed</b> .....		<b>13</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* Please note that DLT 101/101 LB and DLT 108 taken as part of any certificate will satisfy the requirement for subsequent certificates.

## Dental Ceramics Technologist — Certificate for Direct Employment

This accelerated program teaches skills for specialized work in a dental laboratory. It also helps you earn certificates in other dental laboratory specialties.

### What can I do with this certificate?

**Career Options:** Work in a dental lab constructing implants, crowns and other dental ceramic work. Increase opportunities for employment and promotion within the dental laboratory industry.

**Academic Options:** Pursue a degree in Dental Laboratory Technology AAS. Take classes to earn other specialized certificates.

**More Information:** Review program costs, student debt, on-time graduation and more

<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-43.html>

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6661

Lead Faculty: 520-206-3100

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
DLT 101/101LB*	Dental Morphology**	3
DLT 108*	Laboratory Management**	3
DLT 204/204LB*	Dental Laboratory II	3
DLT 206/206LB*	Dental Ceramics	4
DLT 207/207LB *	Advanced Dental Laboratory Technology	5
<b>Total credits as displayed</b>		<b>18</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* Please note that DLT 101/101 LB and DLT 108 taken as part of any certificate will satisfy the requirement for subsequent certificates.

## Fixed Bridgework Technologist — Certificate for Direct Employment

This accelerated program teaches skills for specialized work in a dental laboratory. It also helps you earn certificates in other dental laboratory specialties.

### What can I do with this certificate?

**Career Options:** Work in a dental lab constructing fixed bridges. Increase opportunities for employment and promotion within the dental laboratory industry.

**Academic Options:** Pursue a degree in Dental Laboratory Technology AAS. Take classes to earn other specialized certificates.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-46.html>

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6661

Lead Faculty: 520-206-3100

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
DLT 101/101LB*	Dental Morphology**	3
DLT 108*	Laboratory Management**	3
DLT 201/201LB*	Dental Laboratory I	3
DLT 202*	Dental Metallurgy	3
DLT 203/203LB*	Fixed Bridgework	4
<b>Total credits as displayed</b>		<b>16</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* Please note that DLT 101/101 LB and DLT 108 taken as part of any certificate will satisfy the requirement for subsequent certificates.

## Partial Dentures Technologist — Certificate for Direct Employment

This accelerated program teaches skills for specialized work in a dental laboratory. It also helps you earn certificates in other dental laboratory specialties.

### What can I do with this certificate?

**Career Options:** Work in a dental lab constructing partial dentures. Increase opportunities for employment and promotion within the dental laboratory industry.

**Academic Options:** Pursue a degree in Dental Laboratory Technology AAS. Take classes to earn other specialized certificates.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-44.html>

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6661

Lead Faculty: 520-206-3100

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
DLT 101/101LB*	Dental Morphology**	3
DLT 104/104LB*	Dental Occlusion	4
DLT 105/105LB*	Partial Denture Construction	4
DLT 106/106LB*	Orthodontic Appliances	3
DLT 108*	Laboratory Management**	3
<b>Total credits as displayed</b>		<b>17</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* Please note that DLT 101/101LB and DLT 108 taken as part of any certificate will satisfy the requirement for subsequent certificates.

# Digital Arts Studies

Whether your medium is print or film, television or the web, sharpen your skills and enhance your career prospects with these hands-on programs. Students wishing to prepare to transfer to a 4-year university program in audio, film and/or video should follow the Associate of Arts degree.

## Digital Arts

### Digital Arts — Certificate for Direct Employment

**This certificate is currently under review. See the website or an advisor for details**

Prepare for entry level positions in the digital arts. Choose from concentrations in graphic design, desktop publishing or web design.

#### What can I do with this certificate?

**Career Options:** Become a graphic designer, desktop publisher or web designer.

**Academic options:** Pursue an associates degree in Digital Arts.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-12.html>

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6690

Lead Faculty: 520-206-6840

Program/Major Codes: **CRTCOMMGRAPH/DAC**

Course Number	Course Title	Credit Hours
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#### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement	3
Analysis and Critical Thinking Requirement	3
<b>Subtotal</b>	<b>6</b>

#### Required Core Courses - A grade of C or better is required for graduation.

DAR 101*	Color Rendering and Theory	4
DAR 102	Fundamentals of Digital Design	4
DAR 111*	Typography	4
DAR 112	Graphic Design	4
DAR 120	Applied Computer Graphics	4
DAR 226*	DeskTop Publishing for Digital Arts: Adobe InDesign	4
<b>Subtotal</b>		<b>24</b>

#### Required Support Courses

Complete 12 credit hours in DAR elective courses above the 100 level (excluding DAR 100, 102, 103, and 120). (Department faculty, advisor or counselor approval is recommended in the selection of the DAR elective courses.)

Electives	12
<b>Total credits as displayed</b>	<b>42</b>

\*This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Digital Arts — Associate of Applied Science Degree for Direct Employment

**This degree is currently under review. See the website or an advisor for details**

Prepare for a career in design, illustration, multimedia, web design or printing technology.

### What can I do with this degree?

**Career Options:** Become a print designer, web designer, illustrator, multimedia artist, or press operator.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6690

Lead Faculty: 520-206-6840

Program/Major/Concentration Codes: **AASCOMMGRAPH/DAR/\*\*\*\*** (see concentration codes below)

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	6
Analysis and Critical Thinking Requirement .....	6
Humanities and Social Science Requirement .....	3
ART 105, 130, or 131 fulfills 3 credits of this requirement. Complete a course from the Social Science or Leadership & Ethics category.	
Computer and Information Literacy Requirement .....	†
Core courses fulfill this requirement	
Special Requirement	
ART 105, 130 or 131 fulfill this requirement.	
<b>Subtotal</b> .....	<b>15</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

DAR 101*	Color Rendering and Theory .....	4
DAR 102	Fundamentals of Digital Design .....	4
DAR 111*	Typography .....	4
DAR 112	Graphic Design .....	4
DAR 120	Applied Computer Graphics .....	4
DAR 122*	DeskTop Graphics: Adobe Illustrator .....	4
DAR 221*	Photo Image Editing: Adobe PhotoShop .....	4
DAR 226*	DeskTop Publishing for Digital Arts: Adobe InDesign .....	4
DAR 256*	Web Design I .....	4
DAR 288*	Digital Arts Business and Portfolio Capstone .....	2
<b>Subtotal</b> .....		<b>38</b>

### Required Support Course

ART 105	Exploring Art and Visual Studies .....	3
or ART 130	Art and Culture: Prehistoric Through Gothic SUN# ART 1101	
or ART 131	Art and Culture: Late Gothic Through Modern Periods SUN# ART 1102	
<b>Subtotal</b> .....		<b>3</b>

### Core Concentrations - A grade of C or better is required for graduation.

Complete one of the following concentrations: ..... 20  
 Department faculty advisor or counselor approval is recommended in the selection of the program concentration.

**Design** (Concentration Code: DARD)

DAR 128	Digital Photography I .....	4
DAR 210*	Digital Arts Design Studio: Advertising Design .....	4
DAR 211*	Digital Arts Design Studio: Product Design .....	4
DAR 212	Digital Arts Design Studio: Package Design .....	4
DAR 230*	Production Techniques for Print .....	4
<b>Subtotal</b> .....		<b>20</b>

**Illustration** (Concentration Code: DARI)

DAR 140*	Digital Arts Illustration Studio: Illustration Technique and Media .....	4
DAR 145*	Digital Arts Illustration Studio: Character Development for Animation & Print .....	4
DAR 222*	Advanced Photo Image Editing: Adobe PhotoShop .....	4
or DAR 223*	Digital Drawing and Painting	
DAR 230*	Production Techniques for Print .....	4
DAR 240*	Digital Arts Illustration Studio: Book Illustration .....	4
<b>Subtotal</b> .....		<b>20</b>

**Multimedia** (Concentration Code: DARM)

DAR 115	Digital Video Editing .....	4
DAR 222*	Advanced Photo Image Editing: Adobe PhotoShop .....	4
or DAR 223*	Digital Drawing and Painting	
DAR 250*	Computer 2D Animation: Adobe After Effects .....	4
DAR 251*	Computer 3D Animation: Maya .....	4
DAR 252*	Interactive Design I .....	4
<b>Subtotal</b> .....		<b>20</b>

**Web Design** (Concentration Code: DARW)

DAR 115	Digital Video Editing .....	4
DAR 222*	Advanced Photo Image Editing: Adobe PhotoShop .....	4
DAR 252*	Interactive Design I .....	4
DAR 254*	Interactive Design II .....	4
DAR 257*	Web Design II .....	4
<b>Subtotal</b> .....		<b>20</b>
<b>Total credits as displayed</b> .....		<b>76</b>

† Core or support course(s) fulfill this requirement.

‡ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Digital and Film Arts

### Digital and Film Arts — Certificate for Direct Employment

**This certificate is currently under review. See the website or an advisor for details**

Learn to work with various film, digital video, and analog video formats; how to purchase and repair equipment; and how to assess media production needs. Program includes internship opportunities at television stations, production centers, industrial video facilities and audio production studios.

#### What can I do with this certificate?

**Career Options:** Become a media center manager; television/film camera operator, digital video editor or commercial producer; script writer or audio technician.

**Academic Options:** Pursue an Associate’s degree in Digital and Film Arts.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-95.html>

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6690

Lead Faculty: 520-206-6976

Program/Major Codes: **CRTDIGIFILM/MDF/\*\*\*\*** (see concentration codes below)

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
DAR 103	Introduction to Digital Arts .....	3
DAR 115	Digital Video Editing .....	4
DAR 124	Writing for Film and Television .....	3
DAR 173	History of American Cinema .....	3
<b>Subtotal</b> .....		<b>13</b>
<b>Core Concentrations - A grade of C or better is required for graduation.</b>		
Complete courses from one of the following concentrations: .....		14-15
Department faculty advisor or counselor approval is recommended in the selection of the program concentration, and required for selection of electives.		
<b>Cinematography</b> (Concentration Code: MDFC)		
DAR 175*	Cinematography .....	3
DAR 205*	Lighting for Film and Video .....	4
DAR 215*	Advanced Cinematography .....	4
DAR 217*	Post Production for Film .....	4
<b>Subtotal</b> .....		<b>15</b>
<b>Digital Video Production</b> (Concentration Code: MDFD)		
DAR 125*	Digital Video Production I .....	3
DAR 205*	Lighting for Film and Video .....	4
DAR 225*	Digital Video Production II .....	4
DAR 277*	Film/Video Production Financing .....	3
<b>Subtotal</b> .....		<b>14</b>
<b>Sound Design</b> (Concentration Code: MDFS) <b>This concentration is under review and may be inactivated.</b>		
DAR 177*	Location Sound for Film/Video .....	4
DAR 218*	Introduction to Film Music .....	3
DAR 275*	Basic Audio Production .....	4
DAR 276*	Advanced Audio Production .....	4
<b>Subtotal</b> .....		<b>15</b>
<b>Animation</b> (Concentration Code: MDFA)		
DAR 176	Film Animation .....	3
DAR 250*	Computer 2D Animation: Adobe After Effects .....	4
DAR 251*	Computer 3D Animation: Maya .....	4
DAR 252*	Interactive Design I .....	4
<b>Subtotal</b> .....		<b>15</b>
<b>Total credits as displayed</b> .....		<b>27-28</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.



## Digital and Film Arts — Associate of Applied Science Degree for Direct Employment

**This degree is currently under review. See the website or an advisor for details**

Prepare for a career in television, film, video or other media. Courses cover filming, editing, production, design, lighting, script writing, and photography. Students also have internship opportunities. Students seeking to transfer into a digital/film arts program at a university should pursue an Associate of Arts degree.

### What can I do with this degree?

**Career Options:** Leads to careers in television, film and audio production, including producer, editor, director, writer, camera operator, sound designer, web designer and graphic designer.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6690

Lead Faculty: 520-206-6976

Program/Major Codes: **AASDIGIFILM/MEF**

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	†
WRT 101 and 102 fulfill this requirement	
Analysis and Critical Thinking Requirement .....	6
Humanities and Social Science Requirement .....	6
Computer and Information Literacy Requirement .....	†
CSA 100 fulfills this requirement	
Special Requirement	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal .....</b>	<b>12</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

DAR 103	Introduction to Digital Arts .....	3
DAR 115	Digital Video Editing .....	4
DAR 124	Writing for Film and Television .....	3
DAR 125*	Digital Video Production I .....	3
DAR 173	History of American Cinema .....	3
DAR 175*	Cinematography .....	3
DAR 205*	Lighting for Film and Video .....	4
DAR 215*	Advanced Cinematography .....	4
DAR 217*	Post Production for Film .....	4
DAR 225*	Digital Video Production II .....	4
DAR 275*	Basic Audio Production .....	4
DAR 285*	Documentary Television and Film Production .....	4
<b>Subtotal .....</b>		<b>43</b>

**Required Support Courses**

CSA 100*	Computer Fundamentals .....	1
WRT 101*	Writing I SUN# ENG 1101 .....	3
WRT 102*	Writing II SUN# ENG 1102.....	3
Electives	.....	3-4
Select 3-4 credits from the following list: DAR 176, 177, 224, 290E2, 296I8		
<b>Subtotal</b> .....		<b>10-11</b>
<b>Total credits as displayed</b> .....		<b>65-66</b>

† Core or support course(s) fulfill this requirement.

¥ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Digital and Film Arts Animation — Associate of Applied Science Degree for Direct Employment

**This degree is currently under review. See the website or an advisor for details**

Develop skills in animation, cinematography, video production and script writing. Courses also cover drawing, illustration, cartooning, digital imaging and computer animation. Students seeking to transfer into a digital/film animation program at a university should complete an Associate of Arts degree.

### What can I do with this degree?

**Career Options:** Obtain employment as a writer, producer, editor, director, camera operator, sound designer, or graphic artist.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6690

Lead Faculty: 520-206-6976

Program/Major Codes: **AASANIMATION/ANM**

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	†
WRT 101 and 102 fulfill this requirement	
Analysis and Critical Thinking Requirement .....	6
Humanities and Social Science Requirement .....	3
DAR 250 fulfills 3 credits of this requirement. Complete a course from the Social Science, or Leadership & Ethics category which meets the Cultural Diversity (C) or Global Awareness (G) requirement.	
Computer and Information Literacy Requirement .....	†
CSA 100 fulfills this requirement.	
<b>Subtotal</b> .....	<b>9¥</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

DAR 101*	Color Rendering and Theory .....	4
DAR 103	Introduction to Digital Arts .....	3
DAR 115	Digital Video Editing .....	4
DAR 120	Applied Computer Graphics .....	4
DAR 122*	DeskTop Graphics: Adobe Illustrator .....	4
DAR 124	Writing for Film and Television .....	3

DAR 140*	Digital Arts Illustration Studio: Illustration Technique and Media .....	4
DAR 176	Film Animation .....	4
DAR 221*	Photo Image Editing: Adobe PhotoShop .....	4
DAR 222*	Advanced Photo Image Editing: Adobe PhotoShop .....	4
DAR 223*	Digital Drawing and Painting .....	4
DAR 250*	Computer 2-D Animation: Adobe After Effects .....	4
DAR 251*	Computer 3-D Animation: Maya .....	4
DAR 258*	Advanced Computer 3-D Animation: Maya .....	4
<b>Subtotal</b> .....		<b>54</b>

#### Required Support Courses

CSA 100*	Computer Literacy .....	1
WRT 101*	Writing I SUN# ENG 1101 .....	3
WRT 102*	Writing II SUN# ENG 1102 .....	3
<b>Subtotal</b> .....		<b>7</b>
<b>Total credits as displayed</b> .....		<b>70</b>

† Core or support course(s) fulfill this requirement.

‡ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Digital and Film Arts — Associate of Arts Degree for Transfer

A student planning to obtain a Digital and Film Arts degree should follow the **Associate of Arts Degree for Transfer in Liberal Arts**.

The program is designed to prepare students to transfer to a four-year college or university program in audio, film, and/or video. Good writing skills and creative background in art, design, computers, and photography are helpful in this degree option.

Verification of transfer courses should be established with the transfer university or college or a Pima Community College counselor or faculty advisor.

Program/Major Codes: **AOALIBRALART/ALA**

## Digital Game and Simulation

### Digital Game and Simulation — Associate of Applied Science Degree for Direct Employment

**This degree is currently under review. See the website or an advisor for details**

Prepare for a career in digital games and simulations.

#### What can I do with this degree?

**Career Options:** Become a game play tester; game designer or programmer; or an artist, character builder, or modeler working with digital games and simulations.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6690

Lead Faculty: 520-206-6908

Program/Major/Concentration Codes: **AASDAG/DAG/\*\*\*\*** (see concentration codes below)**General Education Courses - A grade of C or better is required for graduation.**

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	6
Analysis and Critical Thinking Requirement** .....	3
MAT 145 or 188 fulfills 3 credits of this requirement. Complete a course from the Science or Critical Thinking category.	
Humanities and Social Science Requirement*** .....	6
Computer and Information Literacy Requirement .....	†
Core courses fulfill this requirement	
Special Requirement	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal .....</b>	<b>15‡</b>

Course Number	Course Title	Credit Hours
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**Required Core Courses - A grade of C or better is required for graduation.**

GAM 101	Game Design I .....	4
GAM 102*	Game Design II .....	4
GAM 120*	Introduction to Game Programming .....	4
GAM 201*	Game Design III .....	4
GAM 218*	Game Design Portfolio Capstone .....	4
<b>Subtotal .....</b>		<b>20</b>

**Core Concentrations - A grade of C or better is required for graduation.**

Complete courses from one of the following concentrations: ..... 27-31  
 Department faculty or advisor approval is recommended.

**Digital Programming** (Concentration Code: DAGP)

CIS 129*	Programming and Problem Solving I .....	5
CIS 142*	Introduction to C# .....	4
CIS 278*	C++ and Object-Oriented Programming .....	4
CIS 279*	Java Programming .....	5
GAM 150*	Game Programming I .....	4
GAM 296*	Independent Study in Game Design .....	1-4
MAT 188*	Precalculus I .....	4
<b>Subtotal .....</b>		<b>27-30</b>

**Digital Animation and Production** (Concentration Code: DAGA)

ART 213*	Life Drawing I .....	3
DAR 122*	Desktop Graphics: Adobe Illustrator .....	4
DAR 221*	Photo Image Editing: Adobe Photoshop .....	4
DAR 250*	Computer 2D Animation: Adobe After Effects .....	4
DAR 251*	Computer 3D Animation: Maya .....	4
DAR 252*	Interactive Design I .....	4
DAR 258*	Advanced Computer 3D Animation: Maya .....	4
MAT 145*	Mathematics for Game Design .....	4
<b>Subtotal .....</b>		<b>31</b>

**Total credits as displayed .....** **62-66**

† Core or support course(s) fulfill this requirement.

‡ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* Physics is recommended.

\*\*\* ART 100 or 110 is recommended.

# Direct Care Professional

## Basic Direct Care Professional — Certificate for Direct Employment

Gain the basic knowledge and skills needed to provide direct care for the aged or for individuals with physical, mental or developmental disabilities.

### What can I do with this certificate?

**Career Options:** Work for a health care agency providing care to individuals in a home setting who need assistance due to aging and physical disabilities, Alzheimer’s and other forms of dementia, and developmental disabilities.

**Academic Options:** Pursue a Certified Nursing Assistant (CNA) certificate, Licensed Practical Nurse (LPN) or Registered Nurse (RN) program, or a Special Education Teaching certificate.

**Location:** Desert Vista Campus

**Department/Contact Information:**

Dean: 520-206-5098

Program/Major Codes: **CRTDCP/DCP**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
DCP 101	Direct Support Professional: Principles of Care Giving .....	2.25
DCP 102*	Direct Support Professional: Aging and Physical Disabilities .....	2
DCP 103*	Direct Support Professional: Alzheimer’s and Other Forms of Dementia .....	2
DCP 104*	Direct Support Professional: Developmental Disabilities .....	2
<b>Total</b> .....		<b>8.25</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description.

## Education

From infancy through high school, from classroom basics to advanced certification, gain the skills to educate tomorrow's leaders.

- Early Childhood Education
- Teacher Education
- Educational Technology

## Early Childhood Education and Child Development Associate

Prepare to care for children, birth through age eight, by learning theories and skills to best support young children's growth and development.

### Basic Early Childhood Studies — Certificate for Direct Employment

**This certificate is currently under review. See the website or an advisor for details.**

Learn fundamental concepts in Early Care and Education. Courses focus on child development, learning and culture as well as teaching techniques, observation, and curriculum.

#### What can I do with this certificate?

**Career Options:** Apply for the national Child Development Associate credential; or meet the CDA equivalency as defined by the National Association for the Education of Young Children (NAEYC), apply for a position working with young children, or use the coursework to meet the state Department of Health Service professional development requirements.

**Academic Options:** Continue your studies by applying your coursework towards the Advanced Early Childhood Studies Certificate and/or the Early Childhood Studies AAS.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-18.html>

**Location:** Desert Vista Campus

**Department/Contact Information:**

Center for Early Childhood Studies: 520-206-5245

Dean: 520-206-5098

Lead Faculty: 520-206-5107

Program/Major/Concentration Codes: **CRTECB/ECB/\*\*\*\*** (see concentration codes below)

Course Number	Course Title	Credit Hours
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#### Required Core Courses - A grade of C or better is required for graduation.

CDA 102	The Child's Total Learning Environment .....	1
CDA 103	Curriculum Planning and Schedule Development .....	1
CDA 121	Techniques for Observing Children .....	1
CDA 155	Understanding How Children Learn and Develop .....	1
CDA 161	Principles of Social Competence .....	1
CDA 222	Elements of Children's Culture .....	1
ECE 115*	Supervision and Administration of Early Childhood Programs .....	3
<b>Subtotal</b> .....		<b>9</b>

#### Core Concentrations - A grade of C or better is required for graduation.

Complete one of the following Concentrations: .....

#### Child Development Associate Credential (CDA) Preparation (Concentration Code: ECBC)

CDA 229	Child Development Associate Assessment Preparation .....	3
Electives:	Complete 4 credits from ECE and/or CDA courses.....	4

<b>Subtotal</b> .....	<b>7</b>
<b>Early Childhood Foundations Concentration</b> (Concentration Code: ECBF)	
ECE 117 Child Growth and Development .....	3
Electives: Complete 4 credits from ECE and/or CDA courses.....	4
<b>Subtotal</b> .....	<b>7</b>
<b>Total credits as displayed</b> .....	<b>16</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Advanced Early Childhood Studies — Certificate for Direct Employment

Acquire theoretical knowledge and develop the competencies needed to enter a career and to continue professional growth in the care and education of children birth through age eight in various settings.

### What can I do with this certificate?

**Career Options:** Apply for the national Child Development Associate credential; or meet the CDA equivalency as defined by the National Association for the Education of Young Children (NAEYC), apply for a position working with young children, or use the coursework to meet state Department of Health Service professional development requirements.

**Academic Options:** Continue your studies by applying your coursework toward the Early Childhood Studies AAS.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-7.html>

**Location:** Desert Vista Campus

**Department/Contact Information:**

Center for Early Childhood Studies: 520-206-5245

Dean: 520-206-5098

Lead Faculty: 520-206-5107

Program/Major Codes: **CRTECA/ECA**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
ECE 117*	Child Growth and Development .....	3
ECE 118*	Foundations of Early Childhood Education (was ECE 200) (only if taken after Summer 2014).....	3
or CDA 102	The Child's Total Learning Environment .....	1
and CDA 121	Techniques for Observing Children .....	1
and CDA 271	Professionalism in Childcare .....	1
ECE 226*	Positive Child Guidance .....	3
ECE 228*	The Young Child: Family, Culture, and Community .....	3
ECE 240*	Assessment of Young Children .....	3
ECE 246*	Integrating Learning and Lesson Planning: Literacy (was ECE 110) .....	3
ECE 292*	Early Childhood Education: Theory to Practice (was ECE 190) .....	4
<b>Total credits as displayed</b> .....		<b>22</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Early Childhood Studies — Associate of Applied Science Degree for Direct Employment

Learn to excel at caring for and educating young children through this flexible, high-quality program. Students planning to transfer to a four-year university should pursue the Early Childhood Education or Elementary Education AA degree.

### What can I do with this degree?

**Career Options:** Become a teacher's aide, lead teacher or director of a pre-school center, or open your own home child care center.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** Desert Vista Campus

**Department/Contact Information:**

Center for Early Childhood Studies: 520-206-5245

Dean: 520-206-5098

Lead Faculty: 520-206-5107

Program/Major Codes: **AASECS/ECS**

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	6
Analysis and Critical Thinking Requirement .....	6
Humanities and Social Science Requirement .....	6
Computer and Information Literacy Requirement .....	1-3
Special Requirement	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal .....</b>	<b>19-21</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

ECE 117	Child Growth and Development .....	3
ECE 118	Foundations of Early Childhood Education ( <i>was ECE 200</i> ) (only if taken after Summer 2014).....	3
or CDA 102	The Child's Total Learning Environment .....	1
and CDA 121	Techniques for Observing Children .....	1
and CDA 271	Professionalism in Childcare .....	1
ECE 226*	Positive Child Guidance .....	3
ECE 228*	The Young Child: Family, Culture, and Community .....	3
ECE 240*	Assessment of Young Children .....	3
ECE 246*	Integrating Learning and Lesson Planning: Literacy ( <i>was ECE 110</i> ) .....	3
ECE 292*	Early Childhood Education: Theory to Practice ( <i>was ECE 190</i> ) .....	4
Electives: Complete 17-19 credits so that the total credits is at least 60. Contact the Center for Early Childhood Studies to select appropriate electives, which can include additional ECE and/or CDA courses .....		17-19
<b>Subtotal .....</b>		<b>41</b>
<b>Total credits as displayed .....</b>		<b>60-62</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.



## Early Childhood Education — Associate of Arts for Transfer

Learn how to effectively teach young children while preparing to transfer to a four-year degree program.

### What can I do with this degree?

**Career Options:** Become a teacher’s aide, lead teacher or director of a pre-school center, paraprofessional, or instructional aide, or open your own home child care center.

**Academic Options:** Transfer to a four-year degree program in early childhood education/elementary education.

**Location:** Desert Vista Campus.

**Department/Contact Information:**

Center for Early Childhood Studies: 520-206-5245

Dean: 520-206-5098

Lead Faculty: 520-206-5107

Program/Major Codes: **AOAECE/ECE**

### General Education Requirements A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

English Composition .....	6
Humanities and Fine Arts..... †	
ART 105 and HIS 101 fulfill this requirement.	
Biological and Physical Sciences .....	†
BIO 105IN and the Earth/Space or Physical Science course fulfill this requirement	
Mathematics .....	†
MAT 142 fulfills this requirement.	
Social and Behavioral Sciences .....	†
GEO 103 and POS 210 fulfill this requirement	
Other Requirements .....	†
HIS 141 and either the language or the CMN course fulfill this requirement.	
Special Requirements	
HIS 101 and 141 fulfill the I, C, and G requirements.	
<b>Subtotal .....</b>	<b>64</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

ECE 117*	Child Growth and Development .....	3
ECE 228*	The Young Child: Family, Culture and Community .....	3
ECE 240*	Assessment of Young Children .....	3
ECE 246*	Integrating Learning and Lesson Planning: Literacy (was ECE 110) .....	3
ECE 292*	Early Childhood Education: Theory to Practice (was ECE 190) .....	4
<b>Subtotal .....</b>		<b>16</b>

### Required Support Courses

ART 105	Exploring Art and Visual Culture .....	3
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**History:**

Complete both courses .....

HIS 101 Introduction to Western Civilization I

HIS 141 History of the United States I

**Life Science:**

BIO 105IN Environmental Biology .....

**Earth/Space Science or Physical Science:**

Choose one of the following: .....

AST 101IN Solar System

AST 102IN Stars, Galaxies, Universe

CHM 121/121LB

or CHM 121IN Chemistry and Society I

*continued next page*

CHM 130*/130LB* or CHM 130IN*	Fundamental Chemistry SUN# CHM 1130
CHM 151*/151LB* or CHM 151IN*	General Chemistry I SUN# CHM 1151
GEO 101	Physical Geography: Weather and Climate
GEO 102	Physical Geography: Land Forms and Oceans
GLG 101IN	Physical Geology SUN# GLG 1101
GLG 102IN*	Historical Geology
PHY 121*/121LB* or PHY 121IN*	Introductory Physics I SUN# PHY 1111

**Mathematics:**

Complete all three courses.....	9
MAT 142* Topics in College Mathematics (or any Math course numbered 151 or higher)	
MAT 146* Mathematics for Elementary Teachers I	
MAT 147* Mathematics for Elementary Teachers II	

**Civics and Government:**

POS 210 National and State Constitutions .....	3
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**Elementary Science:**

SCT 280* Process of Science for Elementary Educators I .....	3
SCT 281* Process of Science for Elementary Educators II .....	3

**Social and Behavioral Science:**

GEO 103 Cultural Geography .....	3
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**Speech Communication or Language**

Students planning to attend ASU or NAU may complete CMN 102 or CMN 110 or a language course; students planning to attend the UA must complete one of the following: CHI 202, FRE 202, GER 202, JPN 202, ASL 202, SPA 202, or SPA 203.	3-5
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**Subtotal** ..... **41-44**

**Total credits as displayed** ..... **63-66**

† Core or support course(s) fulfill this requirement.

‡ AGEC requires 35 credits. This subtotal shows the AGEC credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## K-12 Education

Prepare to become an elementary or secondary school teacher.

Students who plan to teach in elementary school should pursue the **Elementary Education Associate of Arts degree**; those who wish to teach secondary school should pursue an Associate of Arts. All students will need to complete an education degree at a 4-year college or university before becoming a teacher.

Students who have already earned a bachelor's degree in any discipline can immediately start working toward teacher certification and advanced endorsements.

### Elementary Education — Associate of Arts for Transfer

Complete the first two years of an elementary education degree with a concentration in Early Childhood or Elementary Education and transfer to a four-year degree program.

#### What can I do with this degree?

**Career Options:** Elementary school instructional aide.

**Academic Options:** Transfer to a four-year elementary education degree program. Students interested in secondary education, rehabilitation or special education should pursue the general Associate of Arts degree.

**Locations:** Classes can be taken at multiple campuses.

Program/Major/Concentration Codes: **AOAEDUCATION/EDU/\*\*\*\*** (see concentration codes below)

**Department/Contact Information:**

Lead Faculty: 520-206-5313

#### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

English Composition .....	6
Humanities and Fine Arts .....	†
ART 105 and HIS 101 fulfill this requirement.	
Biological and Physical Sciences .....	†
BIO 105IN and the Earth/Space or Physical Science course fulfill this requirement	
Mathematics .....	†
MAT 142 fulfills this requirement.	
Social and Behavioral Sciences .....	†
GEO 103 and POS 210 fulfill this requirement	
Other Requirements .....	†
HIS 141 and either the language or CMN course fulfill this requirement.	
Special Requirements	
HIS 101 and 141 fulfill the I, C, and G requirements.	
<b>Subtotal</b> .....	<b>6</b> ¥

Course Number	Course Title	Credit Hours
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#### Required Core Courses - A grade of C or better is required for graduation.

EDU 202	Introduction to the Exceptional Learner .....	3
<b>Subtotal</b> .....		<b>3</b>

#### Required Support Courses

ART 105	Exploring Art and Visual Culture .....	3
<b>History:</b>		
Complete both courses .....		
		6
HIS 101	Introduction to Western Civilization I	
HIS 141	History of the United States I	
<b>Life Science:</b>		
BIO 105IN	Environmental Biology .....	4
<b>Earth/Space Science or Physical Science:</b>		
Choose one of the following: .....		
		4-5
AST 101IN	Solar System	

AST 102IN	Stars, Galaxies, Universe	
CHM 121/121LB or CHM 121IN	Chemistry and Society I	
CHM 130*/130LB* or CHM 130IN	Fundamental Chemistry SUN# CHM 1130	
CHM 151*/151LB* or CHM 151IN*	General Chemistry I SUN# CHM 1151	
GEO 101	Physical Geography: Weather and Climate	
GEO 102	Physical Geography: Land Forms and Oceans	
GLG 101IN	Physical Geology SUN# GLG 1101	
GLG 102IN*	Historical Geology	
PHY 121*/121LB* or PHY 121IN*	Introductory Physics I SUN# PHY 1111	
<b>Elementary Science:</b>		
SCT 280*	Process of Science for Elementary Educators I	3
SCT 281*	Process of Science for Elementary Educators II	3
<b>Mathematics:</b>		
Complete all three courses:		9
MAT 142*	Topics in College Mathematics (or any Math course numbered 151 or higher)	
MAT 146*	Mathematics for Elementary Teachers I	
MAT 147*	Mathematics for Elementary Teachers II	
<b>Civics and Government:</b>		
POS 210	National and State Constitutions	3
<b>Social and Behavioral Science:</b>		
GEO 103	Cultural Geography	3
<b>Subtotal</b>		<b>38-39</b>

### Core Concentrations - A grade of C or better is required for graduation.

Complete one of the following concentrations:		15-21
<b>Elementary Education</b> (Concentration Code: EDUL)		
EDU 200*	Introduction to Education	3
EDU 201	Diversity in Education	3
EDU 206	Relationships in Classroom Settings	3
ETT 101	Introduction to Educational Technology	3
Speech Communication or Language:		3-5
Students planning to attend ASU or NAU may choose one of the following speech courses or a language course:		
CMN 102	Introduction to Speech Communication SUN# COM 1100	
CMN 110	Public Speaking	
Students planning to attend the UA must complete a 4th semester language course from the following: ASL 202, CHI 202, FRE 202, GER 202, GRK 202, ITA 202, JPN 202, LAT 202, SPA 202 or 203		
<b>Subtotal</b>		<b>15-17</b>

### Early Childhood Education (Concentration Code: EDUC)

(This option is for students planning to transfer to UA South for the B.S. in Elementary Education, as well as the Early Childhood Education Endorsement. This concentration requires more credits than a typical transfer degree due to the additional state-mandated endorsement coursework.)		
ECE 117	Child Growth and Development	3
ECE 118	Foundations of Early Childhood in Education (was ECE 200) (only if taken after Summer 2014)	3
ECE 228*	The Young Child: Family, Culture and Community	3
ECE 240*	Assessment of Young Children	3
ECE 292**	Early Childhood Education: Theory to Practice (was ECE 190)	4
Second Language		4-5
Completion of a Language course numbered 102*, second semester level.		
<b>Subtotal</b>		<b>20-21</b>
<b>Total credits as displayed</b>		<b>62-69</b>

† Core or support course(s) fulfill this requirement.

‡ AGEC requires 35 credits. This subtotal shows the AGEC credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* Students may request a waiver for the ECE 292 requirement provided one year of full-time early childhood (pre-K and/or Kindergarten) experience can be documented.

## Education — Elementary or Secondary Certification — Post-Degree Certificate for Direct Employment

**This certificate is currently under review. See the website or an advisor for details.**

Prepare for Arizona teacher certification with this post-degree program. Learn from field-intensive, standards-based courses, as well as from a supervised and directed internship. Complete this program by taking classes exclusively online.

Program Prerequisites: Before you can enroll, you must earn a bachelor’s degree and meet additional admission requirements. Additional information on admission, course availability, program phases and more is available online.

### What can I do with this certificate?

**Career Options:** Elementary or secondary school teacher.

**Academic Options:** Continue your education with post-graduate work in education or a subject discipline.

**Location:** Desert Vista Campus

**Department/Contact Information:**

Lead Faculty: 520-206-5313

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

Course Number	Course Title	Credit Hours
<b>Core - A grade of C or better is required for graduation.</b>		
<b>Foundations:</b>		
EDC/ESE 250	Introduction to Teaching .....	3
EDC/ESE 251	Educational Psychology .....	3
EDC/ESE 252	Survey of Exceptional Education .....	3
EDC/ESE 257	21st Century Learning .....	3
POS 210**	National and State Constitutions.....	3
<b>Subtotal</b> .....		<b>15</b>
<b>Methods Courses:</b>		
EDC 286	Structured English Immersion Methods (Completion).....	3
<b>Subtotal</b> .....		<b>3</b>
<b>Core Total</b> .....		<b>18</b>

### Core Options: A grade of C or better is required for graduation.

Choose one of the following options:

#### Elementary Concentration

##### Foundations:

EDC 254	Classroom Management Elementary.....	3
EDC 262	Practicum 1: Elementary.....	2
<b>Subtotal</b> .....		<b>5</b>

##### Methods:

EDC 263	Practicum 2: Elementary.....	2
EDC 270	Elementary Methods: English Language Arts.....	3
EDC 271	Elementary Methods: Math.....	3
EDC 272	Elementary Methods: Reading/Phonics.....	3
EDC 273	Elementary Methods: Science/Social Studies.....	3
EDC 274	Elementary Methods: Instruction Across the Curriculum.....	3
EDC 291	Student Teaching: Elementary.....	8
<b>Subtotal</b> .....		<b>25</b>

**Elementary Concentration Total** ..... **30**

**Elementary Teacher Program Total**..... **48**

**Secondary Concentration****Foundations:**

EDC 256	Classroom Management Secondary.....	3
EDC 264	Practicum 1: Secondary.....	2
<b>Subtotal</b>		<b>5</b>

**Methods:**

EDC 265	Practicum 2: Secondary.....	2
EDC 275	Secondary Methods: English Language Arts/Social Sciences.....	3
or EDC 276	Secondary Methods: Math/Science	
EDC 277	Secondary Methods: Instruction Across the Curriculum.....	3
EDC 292	Student Teaching: Secondary.....	8

**Subtotal** ..... **16**

**Secondary Concentration Total** ..... **21**

**Secondary Teacher Program Total** ..... **39**

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* This course is not required with an official passing score in the Constitutions of the U.S. and Arizona AEPA (Arizona Educator Proficiency Assessment.) See program advisor for additional information.

## Special Education Mild-Moderate Disabilities Certification — Post-Degree Certificate for Direct Employment

**This certificate is currently under review. See the website or an advisor for details.**

Prepare for Arizona Special Education Mild-Moderate Disabilities (grades K-12) certification. This post-degree program applies to students who do not have K-12 teacher certification. Courses emphasize professional teaching standards, technology, diversity and current teaching theory, and include supervised and directed field experiences. A program GPA of 3.0 or higher is required for graduation.

**Program Prerequisites:** Before you can enroll, you must earn a bachelor's degree and meet additional admission requirements.

### What can I do with this certificate?

**Career Options:** Special Education K-12 Teacher.

**Academic Options:** Continue your education with post-degree work in education or pursue other specialized endorsements offered by Pima.

**Location:** Desert Vista Campus

**Department/Contact Information:**

Dean: 520-206-5098

Lead Faculty: 520-206-5313

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

Course Number	Course Title	Credit Hours
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### Required Courses – Must be completed with grades of C or higher. A program GPA of 3.0 or higher is required for graduation.

**Foundations:**

EDC/ESE 250	Introduction to Teaching.....	3
EDC/ESE 251	Educational Psychology.....	3
EDC/ESE 252	Survey of Exceptional Education.....	3
ESE 254	Foundations of Instruction: Mild-Moderate Disabilities.....	3
ESE 255	Classroom Management for Mild-Moderate Disabilities.....	3
EDC/ESE 257	21st Century Learning.....	3
<b>Subtotal</b>		<b>18</b>

**Methods:**

ESE 260	Practicum 1: Mild-Moderate Disabilities	2
ESE 261	Practicum 2: Mild-Moderate Disabilities (F-Sp)	2
ESE 270	Methods of Instruction: Students/Mild-Moderate Disabilities (F-Sp)	3
ESE 271*	Mild-Moderate Methods: K-12 Inst. Across the Curriculum (Su)	3
ESE 272*	Developmental Reading, Instruction, Assessment, Remediation (Su)	3
ESE 273	Diagnosis and Assessment of Mild-Moderate Disabilities (F-Sp)	3
ESE 290	Student Teaching: Mild-Moderate Disabilities (F-Sp)	8
<b>Subtotal</b>		<b>24</b>

**Required Support Courses**

EDC 286***	Structured English Immersion Methods	3
POS 210**	National and State Constitutions	3
<b>Subtotal</b>		<b>6</b>
<b>Total credits as displayed</b>		<b>48</b>

\* This course has a prerequisite, co-requisite or recommendation. See course description section

\*\* This course is not required with an official passing score in the Constitutions of the U.S. and Arizona AEPA (Arizona Educator Proficiency Assessment.) See program advisor for additional information.

\*\*\* This course is not required if an SEI Endorsement is displayed on the student's teaching certificate.

## Special Education Mild-Moderate Disabilities Certification for Certified Teachers — Post-Degree Certificate for Direct Employment

**This certificate is currently under review. See the website or an advisor for details.**

Prepare for Arizona Special Education Mild-Moderate Disabilities (grades K-12) certification. This post-degree program applies to students who have Elementary, Secondary, or Special Education teacher certification. Courses emphasize professional teaching standards, technology, diversity and current teaching theory, and include supervised and directed field experiences. A program GPA of 3.0 or higher is required for graduation.

**Program Prerequisites:** Before you can enroll, you must earn a bachelor's degree and meet additional admission requirements.

### What can I do with this certificate?

**Career Options:** Special Education K-12 Teacher.

**Academic Options:** Continue your education with post-degree work in education or pursue other specialized endorsements offered by Pima.

**Location:** Desert Vista Campus

**Department/Contact Information:**

Dean: 520-206-5098

Lead Faculty: 520-206-5313

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

Course Number	Course Title	Credit Hours
<b>Required Courses – Must be completed with grades of C or higher. A program GPA of 3.0 or higher is required for graduation.</b>		
<b>Foundations:</b>		
EDC/ESE 252	Survey of Special Education	3
ESE 254	Foundations of Instruction: Mild-Moderate Disabilities	3
ESE 255	Classroom Management for Mild-Moderate Disabilities	3
EDC/ESE 257	21st Century Learning	3
<b>Subtotal</b>		<b>12</b>

**Methods:**

ESE 260	Practicum 1: Mild-Moderate Disabilities .....	2
ESE 261	Practicum 2: Mild-Moderate Disabilities .....	2
ESE 270	Methods of Instruction: Students/Mild-Moderate Disabilities .....	3
ESE 271*	Mild-Moderate Methods: K-12 Inst. Across the Curriculum .....	3
ESE 272*	Developmental Reading, Instruction, Assessment, Remediation .....	3
ESE 273	Diagnosis and Assessment of Mild-Moderate Disabilities .....	3
ESE 290	Student Teaching: Mild-Moderate Disabilities .....	8
<b>Subtotal</b>	.....	<b>24</b>

**Required Support Courses**

EDC 286***	Structured English Immersion Methods .....	3
POS 210**	National and State Constitutions .....	3
<b>Subtotal</b>	.....	<b>6</b>
<b>Total credits as displayed</b>	.....	<b>36-42</b>

\* This course has a prerequisite, co-requisite or recommendation. See course description section

\*\* This course is not required with an official passing score in the Constitutions of the U.S. and Arizona AEPA (Arizona Educator Proficiency Assessment.) See program advisor for additional information.

\*\*\* This course is not required if an SEI Endorsement is displayed on the student's teaching certificate.



# Emergency Medical Technology

## Emergency Medical Technology — Certificate for Direct Employment

Learn pre-hospital emergency medical care, including physical assessment, medical techniques and ambulance operations. This program is approved by the Arizona Department of Health Services, Bureau of Emergency Medical Services towards certification as an EMT in the State of Arizona. Complete this program by taking classes exclusively on weekdays or exclusively on evenings.

### Before enrolling in this program you must meet certain admission requirements:

- Be 18 years old when class starts.
- Provide proof of a negative drug screening; obtain a drug screen form and instructions from the EMT Service Center at East Campus.
- Provide a fingerprint clearance card or be fingerprinted the first day of class.
- Have cardio-pulmonary resuscitation (CPR) certification at the Healthcare Provider level with at least 6 months left in the certification period. This card must remain current throughout the EMT program and the certification process.
- Have the ability to lift 125 pounds alone and 250 pounds with a partner.
- Must provide proof of personal medical insurance. This coverage must remain current throughout the course.
- Appropriate placement score on the College Reading Assessment test.
- Meet with EMT Service Center staff prior to enrolling in the course.
- Provide immunization records for: Measles, Mumps, Rubella (MMR), Varicella (VZV, Varivax)
- Tetanus/Diphtheria (adult type e.g., Td or Tdap) within the last ten years.
- Tuberculosis (TB) screening indicating negative activity (given no more than six months prior to the beginning of the course)
- Hepatitis B vaccination series (HBV is encouraged but is not required)
- Flu vaccine is highly encouraged

EMT Program information is available online at <https://www.pima.edu/programs-courses/credit-programs-degrees/public-safety/emt/basic-emt.html>

Certification testing requires an additional fee to the National Registry of Emergency Medical Technicians (NREMT). Students with felony and some misdemeanor convictions may not be eligible for certification—contact the Arizona Department of Health Services for additional information about eligibility.

### What can I do with this certificate?

**Career Options:** Take required Arizona and National Registry of Emergency Medical Technicians exams that qualify you to work as an emergency medical technician.

**Academic Options:** Once you receive EMT certification and work as an emergency medical technician, continue your studies by pursuing the Paramedic Associate of Applied Science Degree.

**Locations:** East Campus, Community Campus

#### Department/Contact Information:

Dean: 520-206-7694

EMT Lab: 520-206-7839

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

Course Number	Course Title	Credit Hours
<b>Required Core Course - A grade of C or better is required for graduation.</b>		
EMT 100*	Emergency Medical Technology .....	12
<b>Total credits as displayed .....</b>		<b>12</b>

## Emergency Medical Technology — Paramedic — Associate of Applied Science Degree for Direct Employment

The Associate of Applied Science program increases the knowledge and skill of the I-EMT and the EMT-B in advanced life support including endotracheal intubation, cardiac arrhythmia recognition and intervention. The program also includes drug therapy, invasive procedures, advanced airway management, and I.V. therapy.

**Before enrolling in this program**, you must meet certain admission requirements:

- A. American Heart Association Basic Life Support for the Healthcare Provider certification card. This card must remain current throughout the paramedic program and the certification process
- B. Current EMT or EMT-Intermediate certification. This certification **MUST** remain current throughout the paramedic program and certificate process (a lapse in certification will result in immediate expulsion from the program) and be either:
  - National Registry certification; or
  - State of Arizona certification
- C. Documentation of being 18 years old.
- D. Appropriate placement score on the College Reading Assessment test.
- E. For Paramedic courses, successful completion of a minimum of 24 contact hours of hazardous materials training that meets the requirements of the National Fire Protection Association's NFPA 472: Standard for Professional Competence of Responders to Hazardous Materials Incidents, 1997 Edition; Competencies for First Responders at the Operations Level, is required.
- F. Current health insurance coverage. This coverage must remain current throughout the course of training and the certification process.
- G. Negative results of a 5 panel drug screening within 6 months of the course start date. Screening must include:
  - a. Marijuana
  - b. Cocaine
  - c. Barbiturates
  - d. Sedatives
  - e. Amphetamines
- H. Provide proof of immunity or immunization for the following:
  - a. Proof of negative TB test or chest X-ray within 6 months prior to application as defined in R9-25-308 (D) and proof of annual TB testing while enrolled in the program.
  - b. Measles (Rubeola)/Mumps/Rubella.
  - c. Tetanus/Diphtheria within the last 10 years.
  - d. Results of serological testing showing Hepatitis B (HBV) immunization, begin HBV vaccination series, or sign the release of liability claims/declination form.
- I. Successfully Screen for the following areas:
  - a. ALS written exam
  - b. Oral Board screening
  - c. Practicals screening

### What can I do with this degree?

**Career Options:** Paramedic

**Academic Options:** See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Locations:** Community Campus

**Department/Contact Information:**

Dean: 520-206-6569

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	6
Analysis and Critical Thinking Requirement .....	6
Humanities and Social Science Requirement .....	6
Computer and Information Literacy Requirement .....	1-3
<b>Subtotal .....</b>	<b>19-21*</b>

Course Number	Course Title	Credit Hours
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**Required Core Courses - A grade of C or better is required for graduation.**

All of the core courses require acceptance into the Paramedic Program.

EMT 140	Pre-Hospital Trauma Life Support .....	1.5
EMT 155	Advanced Medical Life Support .....	1.5
EMT 158	Transition Training for EMT .....	1.5
EMT 170*	ALS Operations .....	1
EMT 205*	ALS Pharmacology and Medication Administration .....	3
EMT 214*	ALS Advanced Special Considerations .....	2.5
EMT 218*	Paramedic National Registry Preparatory Course .....	3.5
EMT 219*	ALS Foundations .....	1.5
EMT 221*	ALS Airway and Ventilation .....	1.5
EMT 222*	ALS Patient Assessment and Assessment Based Management .....	1.5
EMT 223*	ALS Trauma Emergencies and Systems .....	2
EMT 224*	ALS Medical Emergencies .....	4
EMT 225*	ALS Special Medical Considerations .....	2
EMT 227LC*	ALS Practicum: Clinical Lab .....	3
EMT 228LC*	ALS Practicum: Vehicular Lab .....	3
EMT 230*	Basic ECG Interpretation .....	1.5
EMT 242*	ALS Advanced Foundations .....	2
EMT 244*	ALS Advanced Medical Emergencies .....	2.5
EMT 247LC*	ALS Advanced Practicum: Clinical Lab .....	3
EMT 248LC*	ALS Advanced Practicum: Vehicular Lab .....	3
EMT 250	Advanced Cardiac Care .....	1.5
EMT 252	Pediatric Advanced Life Support .....	1.5
EMT 254*	Advanced ECG Interpretation .....	3
EMT 258 or EMT 243*	Pediatric Education for Pre-Hospital Professionals Emergency Pediatric Care (EPC) Initial .....	1.5
EMT 263	Tox-Medic .....	1.5
EMT 295*	ALS Independent Research .....	3
<b>Subtotal .....</b>		<b>57</b>
<b>Total credits as displayed .....</b>		<b>76-78§</b>

¥ General Education requires 19-21 hours. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

§ This degree may be completed with less than the credits displayed as long as the course requirements are fulfilled with a minimum of 60 credits.

\*\* Contact the department at 206-6569 for course offerings.

# Engineering

## Engineering—Associate of Science Degree for Transfer

**This degree is currently under review. See the website or an advisor for details.**

Students who wish to transfer to an Arizona university and pursue a major in Engineering should complete the PCC Associate of Science degree for transfer (refer to university major guides for core or elective courses and language requirements.)

### What can I do with this degree?

**Academic Options:** Transfer to a university to complete a bachelor's degree in Engineering\*\*.

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6763

Lead Faculty: 520-206-6679

Program/Major Codes: **AOSSCIENCE/ASI**

### Arizona General Education Curriculum Requirements (AGEC-S) - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

English Composition .....	6
Humanities and Fine Arts.....	6
Biological and Physical Sciences .....	†
The combination of CHM 151 & 152 and their labs or PHY 210 & 216 and their labs, or BIO 181 & 182 and their labs, fulfill this requirement.	
Mathematics.....	†
MAT 220 fulfills this requirement.	
Social and Behavioral Sciences .....	6
Other Requirement Options.....	6
Complete MAT courses above MAT 220 and/or additional Science courses from the Biological and Physical Sciences list.	
AGEC Special Requirements	
The I, C, and G requirements should be fulfilled by completing appropriate courses in the above categories.	
<b>Subtotal .....</b>	<b>24 ‡</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses: A grade of C or better is required in all courses for graduation.

BIO 181IN* and BIO 182IN* OR CHM 151/151LB or 151IN* and CHM 152/152LB or 152IN* OR PHY 210/210LB or 210IN* and PHY 216/216LB or 216IN*	General Biology I: (Majors) SUN# BIO 1181 General Biology II: (Majors) SUN# BIO 1182 General Chemistry I SUN# CHM 1151 General Chemistry II SUN# CHM 1152 Introductory Mechanics SUN# PHY 1121 Introductory Electricity and Magnetism SUN# PHY 1131	8-10
MAT 220* Calculus I SUN# MAT 2220 .....		5
Major/Electives.....		21-25
Complete additional science and math courses as needed to meet major requirements for a bachelor's degree. The second language requirement is dependent upon your major. It is not a requirement of this degree, but some university degrees require a language proficiency. (Bilingual or international students should consult an advisor or counselor concerning exceptions to this requirement.)		
<b>Subtotal .....</b>		<b>36-40</b>
<b>Total credits as displayed .....</b>		<b>60-64</b>

† Core or support course(s) fulfill this requirement.

‡ AGEC requires 35 credits. This subtotal shows the AGEC credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* ASU: <https://engineering.asu.edu/advising/>; NAU: <https://nau.edu/cefns/engineering/>; UA: <http://www.advising.arizona.edu> or <http://engineering.arizona.edu>

# Fashion Design

Prepare for an exciting career in Fashion Design. Complete this program by taking classes in the Fashion Design and Clothing Department at Pima's West Campus.

## Fashion Design — Certificate for Direct Employment

Prepare for entry-level careers in fashion design for the apparel industry by studying fashion drawing, imaginative design, historical costumes, sewing applications, textiles, and pattern drafting.

### What can I do with this certificate?

**Career Options:** Seek entry level positions with apparel manufacturers, clothing retailers, tailoring or alteration businesses, speciality clothing shops, or start your own business.

**Academic Options:** Continue your studies by taking courses toward the AAA in Applied Arts.

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6690

Lead Faculty: 520-206-3028

Program/Major Codes: **CRTFDC/FDC**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
FDC 110	Clothing Construction I .....	3
FDC 111*	Clothing Construction II .....	3
FDC 112	Pattern Fitting.....	3
FDC 121*	Flat Pattern Making I .....	3
FDC 122	History of Clothing .....	3
FDC 126	Textiles .....	3
FDC 141	Introduction to Fashion Design .....	3
FDC 144*	Fashion Drawing .....	3
FDC 211*	Clothing Construction III .....	3
<b>Total credits as displayed.....</b>		<b>27</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

# Fire Science

## Fire Science Academy Track — Certificate for Direct Employment

Gain firefighting, hazardous materials and wildland firefighting skills. This program meets Arizona certification requirements for Firefighter I and II, and will enable students to achieve International Fire Service Accreditation Congress (IFSAC) certification as a Hazmat First Responder. In addition, students will be awarded a certificate of completion for wildland firefighting training from the National Wildfire Coordinating Group. Complete this program by taking classes in a combination of evenings and weekends.

### What can I do with this certificate?

**Career Options:** Students will be eligible to take the State of Arizona Certification Test to become a certified firefighter and/or work as a wildland firefighter.

**Academic Options:** Continue your studies by taking classes toward an Associate of Applied Science in Fire Science.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-25.html>

**Location:** Community Campus

**Department/Contact Information:**

Dean/Lead Faculty: 520-206-6350

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

### Program Prerequisites

Before enrolling in this program you must fulfill the following requirement:

Students must provide documented certification from the State of Arizona or National Registry of Emergency Medical Technicians stating that they have obtained a minimum of EMT certification.

### Required Core Courses - A grade of C or better is required for graduation.

FSC 101	Principles of Emergency Services .....	3
FSC 110	Rope I .....	1
FSC 130*	Strength and Fitness for the Fire Service .....	2.5
FSC 149*	Fire Operations I .....	4
FSC 150*	Fire Operations II .....	4
FSC 153	Hazardous Materials .....	1.5
FSC 160	Wildland Firefighting .....	3
FSC 167	Rescue Practices for the Fire Service .....	2.5
FSC 173*	Records and Reports .....	1
<b>Total credits as displayed .....</b>		<b>22.5</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Fire and Emergency Services Higher Education (FESHE) — Associate of Applied Science Degree for Direct Employment

Learn firefighting skills, prepare for the day-to-day demands of the profession and learn to cope with challenges in the field. This degree prepares students to move toward managerial and command positions. Complete this program by taking classes in a combination of weekdays, evenings and weekends.

### What can I do with this degree?

**Career Options:** Seek employment or increase promotional opportunities in the fire service.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima’s Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** Community Campus

**Department/Contact Information:**

Dean/Lead Faculty: 520-206-6350

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

### Program Prerequisites

Before enrolling in this program, you must fulfill the following requirements.

Students must provide documented certification from the State of Arizona or National Registry of Emergency Medical Technicians stating that they have obtained a minimum of EMT certification.

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement . . . . .	†
WRT 101 and 102 fulfill this requirement.	
Analysis and Critical Thinking Requirement . . . . .	6
Humanities and Social Science Requirement . . . . .	3
STU/MGT 230 fulfills 3 credits in the Leadership/Ethics category. Complete a course from the Humanities/Fine Arts or Social Science category.	
Computer and Information Literacy Requirement . . . . .	†
CSA 100 fulfills this requirement.	
Special Requirement	
STU 230 fulfills this requirement.	
<b>Subtotal . . . . .</b>	<b>9</b>

### Required Core Courses - A grade of C or better is required for graduation.

FSC 101	Principles of Emergency Services . . . . .	3
FSC 120	Fire Behavior and Combustion . . . . .	3
FSC 123*	Building Construction Related to the Fire Service . . . . .	3
FSC 124*	Fire Prevention . . . . .	3
FSC 126*	Fire Protection Systems in the Fire Service . . . . .	3
FSC 127	Principles of Emergency Services Safety and Survival . . . . .	3
<b>Subtotal . . . . .</b>		<b>18</b>

### Required Support Courses

STU/MGT 230	Dynamics of Leadership . . . . .	3
WRT 101*	Writing I SUN# ENG 1101 . . . . .	3
WRT 102*	Writing II SUN# ENG 1102 . . . . .	3
CSA 100	Computer Literacy . . . . .	1
<b>Subtotal . . . . .</b>		<b>10</b>

**Core Concentrations - A grade of C or better is required for graduation.**

Complete one of the following concentrations:

**Fire and Emergency Service Higher Education (FESHE) (Concentration Code: FSCF)**

FSC 125	Fire Protection Hydraulics and Water Supply .....	3
FSC 174*	Fire Investigation I .....	3
FSC 230*	Fire Investigation II .....	3
FSC 249*	Occupational Safety and Health for Emergency Services .....	3
FSC 250*	Principles of Fire and Emergency Service Administration .....	3
FSC 251*	Hazardous Materials Chemistry .....	3
FSC 252*	Fire Service Strategy and Tactics .....	3
FSC 253*	Legal Aspects of Emergency Services .....	3
<b>Subtotal</b> .....		<b>24</b>

**Vocational Academy (Concentration Code: FSCV)**

Complete 27 credits from any of the fire science course offerings listed below or the FESHE courses listed above:

FSC 110	Rope I .....	1
FSC 111	Rope II .....	1
FSC 112*	Rope III .....	1
FSC 116*	Confined Space I for First Responders .....	1
FSC 117*	Confined Space II for First Responders .....	1
FSC 118*	Swift Water Rescue for First Responders .....	1
FSC 121*	Trench Rescue for First Responders .....	1
FSC 122*	Structural Collapse Rescue for First Responders .....	1
FSC 130	Strength and Fitness for Fire Science .....	2.5
FSC 149	Fire Operations I .....	4
FSC 150*	Fire Operations II .....	4
FSC 153	Hazardous Materials .....	1.5
FSC 154*	Advanced Fire Prevention .....	3
FSC 160	Wildland Firefighting .....	3
FSC 163*	Fire Apparatus and Equipment .....	3
FSC 168*	Special Hazard Tactical Problems .....	3
FSC 170*	Fire Science Leadership .....	3
or FSC 170A*	Fire Science Leadership I .....	1
and FSC 170B*	Fire Science Leadership II .....	1
and FSC 170C*	Fire Science Leadership III .....	1
FSC 173*	Records and Reports .....	1
FSC 180*	Driver Training for Fire Science .....	3
FSC 189*	Current Issues in Fire Science .....	2
FSC 260*	Fire and Emergency Services Instructor I .....	2
FSC 261*	Fire and Emergency Services Instructor II .....	2
FSC 270*	Leadership I for Fire Services Executives .....	1
FSC 271*	Leadership II for Fire Services Executives .....	1
FSC 272*	Leadership III for Fire Services Executives .....	1
FSC 273*	Leadership IV for Fire Services Executives .....	1
FSC 274*	Leadership V for Fire Services Executives .....	1
FSC 275*	Leadership VI for Fire Services Executives .....	1
FSC 280	Fire Chief Preparation .....	4
<b>Subtotal</b> .....		<b>27</b>
<b>Total credits as displayed</b> .....		<b>61-64</b>

† Core or support course(s) fulfill this requirement.

‡ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.



# Fitness and Sport Sciences

Learn to coach athletes, teach physical education or train individuals in personal fitness.

## Fitness and Sport Sciences — Coaching Certificate for Direct Employment

Learn effective coaching techniques applicable to all sports.

### What can I do with this certificate?

- Career Options:** Seek certification from the Arizona Department of Education, the National Federation of Interscholastic Coaches Association or the American Sport Education Program. Coach a high school-level sports team.
- Academic Options:** Pursue a Fitness Professional Certificate. A student planning to transfer to obtain a bachelor's degree in Exercise Science should follow the Associate of Science Degree for Transfer.
- More Information:** Review program costs, student debt, on-time graduation and more <https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-8.html>
- Location:** West Campus
- Department/Contact Information:**  
 Dean: 520-206-6996  
 Lead Faculty: 520-206-6996  
 Program/Major Codes: **CRTCOACHING/FSG**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
EDC 240*	Adolescent Development .....	3
FSS 238*	Introduction to Sports Injury Management .....	3
FSS 271*	Sport Psychology .....	3
FSS 272* or FSS 285*	Coaching Techniques and Practices .....	3
Physiology	Select one of the following: FSS 234, FSS 234A & FSS 234B, FSS 273, BIO 160IN, BIO 201IN*, or BIO 202IN* .....	3-4
<b>Total credits as displayed .....</b>		<b>15-16</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

**Information:** To become certified by the Arizona State Department of Education to be a Head Coach in an Arizona high school without a teaching certificate you will have to apply to the state and submit your transcripts after you complete the Coaching Certificate. There are additional requirements such as having current CPR certification, documented coaching experiences and finger printing. For more information, please see [www.azed.gov/educator-certification](http://www.azed.gov/educator-certification).

## Fitness Professional Certificate for Direct Employment

Learn exercise and fitness theories and the skills to teach people how to safely exercise. The program may include work-related experiences at the Fitness and Conditioning Center and in local fitness clubs and agencies.

### What can I do with this degree?

- Career Options:** Work as a personal trainer and/or group fitness instructor in your own business or within a fitness club or agency. Take exams for certification through the American College of Sports Medicine (ACSM), the American Council of Exercise (ACE), or the National Strength and Conditioning Association (NSCA).
- Academic Options:** Pursue a Coaching Certificate. A student planning to transfer to obtain a bachelor's degree in Exercise Science should follow the Associate of Science Degree for Transfer.
- More Information:** Review program costs, student debt, on-time graduation and more <https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-22.html>

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6996

Lead Faculty: 520-206-6685

Program/Major Codes: **CRTFITNESS/FSP**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
FSS 208*	Professional Activities: Group Fitness .....	2
FSS 218*	Professional Activities: Weight Training .....	2
FSS 234* or FSS 234A & 234B*		
	Fundamentals of Exercise Science .....	4
FSS 236*	Communication and Exercise Adherence .....	2
FSN 154	Nutrition .....	3
or FSS 241*	Nutrition for Exercise and Sport	
FSS 276*	Personal Trainer: Muscular Strength, Endurance, Flexibility .....	3
FSS 277*	Personal Trainer: Cardiovascular Endurance/Body Composition .....	3
FSS 281*	Personal Trainer Exam Preparation .....	1
<b>Subtotal</b> .....		<b>20</b>

<b>Required Support/Elective Courses</b>		
Select 6 credits from the following list:		
FAW 182	Healthy Living and Wellness .....	3
FAW 183	Lifestyle Wellness Coaching .....	2
FAW 184	Healthy, Wellness, and Physical Activity .....	3
FSS 238*	Introduction to Sports Injury Management .....	3
FSS 260*	Business Practices for the Personal Trainer .....	3
FSS 262*	Personal Trainer: Special Populations .....	2
FSS 270*	Advanced Principles for Athletic Conditioning .....	1
FSS 271*	Sport Psychology .....	3
FSS 273*	Sport Physiology .....	3
FSS 280*	Lifestyle and Weight Management Consultant .....	1
FSS 291*	Fitness and Sport Sciences Internship .....	3-4
<b>Subtotal</b> .....		<b>6</b>
<b>Total credits as displayed</b> .....		<b>26</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Physical Education, Exercise and Wellness, Athletic Trainer

A student planning to transfer to obtain a bachelor's degree in Physical Education, Exercise and Wellness, or Athletic Trainer should follow the Associate of Arts Degree for Transfer in Liberal Arts. A student planning to transfer to obtain a bachelor's degree in Exercise Science should follow the Associate of Science Degree for Transfer. A student should meet with Fitness and Sport Science faculty or an advisor to plan courses. Students who plan to transfer should contact an advisor from their chosen school and/or use a transfer guide for verification of transfer courses.

# Fraud Examination

## Fraud Examination — Post-Degree Certificate for Direct Employment

An introduction to fraud examination principles for the fraud examination. Applicants for this certificate should be an Associate Member of the Association of Certified Fraud Examiners (CFE) in good standing. See the Association of Certified Fraud Examiners (ACFE) web site for examination requirements, which include minimum academic and professional requirements at [www.acfe.com](http://www.acfe.com).

### What can I do with this certificate?

**Career Options:** Enhance your opportunity for advancement in several career fields including accounting, business, law enforcement, and loss prevention upon successful completion of the Certified Fraud Examiner (CFE) examination.

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Lead Faculty: 520-206-7216

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

Course Number	Course Title	Credit Hours
Required Core Courses - A grade of C or better is required for graduation.		
ACC 211*	Financial Accounting ( <i>was ACC 101</i> ) SUN# ACC 2201	3
ACC 260*	Principles of Fraud Examination	3
AJS 201	Rules of Evidence	3
BUS 148	Ethics in the Workplace	3
CIS 132	Introduction to Computer Forensics	4
FIN 217*	Analyzing Financial Data	1
<b>Total credits as displayed</b>		<b>17</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

# General Studies

## General Studies — Associate of General Studies Degree

This degree allows students to uniquely design an associate's degree in collaboration with a faculty member, advisor or counselor. Courses may be chosen from a variety of subject areas. Students should meet with an advisor or counselor before beginning this degree. Engineering students who plan to transfer to a university should follow courses outlined in the engineering concentration.

### What can I do with this degree?

**Career Options:** Select courses to fit careers of your choice.

**Academic Options:** Continue taking classes toward a transfer degree.

**Locations:** All campuses

Program/Major Codes: **AGSGENRSTUDY/AGS**

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	6
Analysis and Critical Thinking Requirement .....	6
Humanities and Social Science Requirement .....	6
Computer and Information Literacy Requirement .....	1-3
Special Requirement	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal</b> .....	<b>19-21</b>

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
Electives .....		39-41
Complete courses numbered 100 or higher. See an advisor to develop an education plan.		
<b>Subtotal</b> .....		<b>39-41</b>
<b>Total credits as displayed</b> .....		<b>60</b>

# Geology

Study the earth – its processes, materials, history and effect on humans and life – by taking courses in geology that focus on physical geology, historical geology, geological processes, oceanography and more. Students learn through a combination of lecture, hands-on lab experiences, and field trips.

**Geology courses are offered as part of the requirements of the Associate of Science degree**, or may be taken as required or elective courses to complete other degrees. Students interested in pursuing a degree at ASU, NAU, or UA should meet with geology faculty or an advisor to plan their course of study using the appropriate transfer guide.

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## *What can I do with my studies in geology?*

**Career options:** Work as a technician in laboratories, with geophysical surveying firms, in the petroleum industry, government, and technical service firms.

**Academic options:** Continue studies towards a bachelor of science in geology, geosciences, geological engineering, engineering, or education.

# Health Information Management

## Health Information Technology — Associate of Applied Science for Direct Employment

**This degree is currently under review. See the website or an advisor for details.**

Prepare for a career as a medical billing and coding specialist or other HIT professional.

### What can I do with this degree?

**Career Options:** Find entry-level employment as a medical coder, medical billing and insurance claims specialist, or physician or hospital coder.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Lead Faculty: 520-206-7186

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

Course Number	Course Title	Credit Hours
<b>General Education Requirements - A grade of C or better is required for graduation.</b>		
<i>Course lists for each General Education category listed below can be found starting on page 74.</i>		
	Communication Requirement . . . . .	†
	WRT 101 and 102 fulfill this requirement.	
	Analysis and Critical Thinking Requirement . . . . .	2
	BIO 160IN fulfills 4 credits of this requirement. Complete another course from the Math, Science, or Critical Thinking category. The math competency must be met.	
	Humanities and Social Science Requirement . . . . .	6
	Computer and Information Literacy Requirement . . . . .	†
	CSA 100 fulfills this requirement.	
	Special Requirement	
	The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal</b>		<b>8</b>

### Required Core Courses - A grade of C or better is required for graduation.

HIT 100	Introduction to Health Information Management . . . . .	3
HIT 101*	Introduction to ICD Coding . . . . .	3
HIT 102*	CPT Coding . . . . .	3
HIT 105	Medical Terminology . . . . .	4
HIT 108	Health Information Employment Policies . . . . .	1
HIT 112*	Health Insurance and Medical Billing . . . . .	3
HIT 125	Pathophysiology and Pharmacology for Health Information Technology . . . . .	4
HIT 150	Introduction to Health Management Information Systems . . . . .	3
HIT 175	Health Information Statistics and Research . . . . .	4
HIT 201*	Advanced ICD Coding . . . . .	3
HIT 202*	Advanced Classification Systems Applications . . . . .	3
HIT 210*	Medical Quality Assurance and Supervision . . . . .	3
HIT 211*	Medicolegal Aspects in Health Information Management . . . . .	3
HIT 225	Health Management Information Systems . . . . .	3
HIT 290*	Health Information Technology Internship . . . . .	3
<b>Subtotal</b>		<b>46</b>

**Required Support Courses - A grade of C or better is required for graduation.**

BIO 160IN	Introduction to Human Anatomy and Physiology .....	4
CIS 120*	Applications for Business SUN# CIS 1120 .....	4
CSA 100*	Computer Literacy .....	1
WRT 101*	Writing I .....	3
WRT 102*	Writing II .....	3
<b>Subtotal</b> .....		<b>15</b>
<b>Total credits as displayed with program prerequisites</b> .....		<b>66</b>

† Core or support course(s) fulfill this requirement.

‡ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Health Information Technology — Certificate for Direct Employment

**This certificate is currently under review. See the website or an advisor for details.**

Become a Health Information Technician, specializing in medical billing and insurance, coding, front office support, or health information management.

### What can I do with this certificate?

**Career Options:** Become a coder, insurance or medical records technician, or professional in a medical facility or health care or insurance agency.

**Academic Options:** Continue your studies by taking additional courses toward the Health Information Technology concentration of the Office and Administrative Professions degree.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-70.html>

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Lead Faculty: 520-206-7186

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

Course Number	Course Title	Credit Hours
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**Required Core Courses - A grade of C or better is required for graduation.**

BIO 160IN	Introduction to Human Anatomy and Physiology .....	4
HIT 100	Introduction to Health Information Management .....	3
HIT 105	Medical Terminology .....	4
HIT 108	Health Information Employment Policies .....	1
HIT 125	Pathophysiology and Pharmacology for HIT .....	4
<b>Subtotal</b> .....		<b>16</b>

**Core Concentrations - A grade of C or better is required for graduation.**

Complete one of the following concentrations .....

**Medical Billing and Coding** (Concentration Code: OAHB)

HIT 101*	Introduction to ICD Coding .....	3
HIT 102*	CPT Coding .....	3
HIT 112*	Health Insurance and Medical Billing .....	3
HIT 202*	Advanced Classification Systems Applications .....	3
or HIT 290*	Health Information Technology Internship .....	3
<b>Subtotal</b> .....		<b>12</b>

**Medical Front Office Support** (Concentration Code: OAHF)

CSA 110*	Spreadsheets: Microsoft Excel .....	3
CIS 120*	Computer Applications for Business SUN# CIS 1120.....	4
HIT 211*	Medicolegal Aspects in Health Information Management .....	3
HIT 225 or HIT 290*	Health Management Information Systems .....	3
	Health Information Technology Internship .....	
<b>Subtotal</b> .....		<b>13</b>

**Health Information Management** (Concentration Code: OAHM)

HIT 150	Introduction to Health Management Information Systems .....	3
HIT 175	Health Information Statistics and Research .....	4
HIT 210*	Medical Quality Assurance and Supervision .....	3
HIT 225 or HIT 290*	Health Management Information Systems .....	3
	Health Information Technology Internship .....	
<b>Subtotal</b> .....		<b>13</b>
<b>Total credits as displayed with program prerequisites</b> .....		<b>28-29</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.



# History Concentration – Transfer

Study the origins and development of society by taking courses that focus on the history of regions, countries and peoples from pre-historic times to the present.

History courses are offered as part of the requirements of the **Associate of Arts in Liberal Arts degree**, or may be taken as required or elective courses to complete other degrees. Students planning to transfer to a university to major in history should complete this history concentration\* as part of completing the **Associate of Arts in Liberal Arts degree**, including the **AGEC-A**. Students should meet with a history faculty member, an advisor, or a counselor to plan their course of study using the appropriate major guide.

Please note that one or two of the History concentration courses below may also fulfill AGEC-A general education requirements of the Associate of Arts in Liberal Arts. See an advisor or counselor.

**What can I do with my studies in history?**

**Career options:** After completing a bachelor’s degree, seek employment in a variety of fields including teaching, research, journalism, law, government, or business. For additional information see: <http://www.historians.org/jobs-and-professional-development/career-resources/careers-for-history-majors>.

**Academic options:** Continue studies toward a bachelor of arts in history, education, or the other social sciences. All courses in Pima’s concentration are not required at all transfer universities, but provide a good lower division preparation for history majors.

**Locations:** All Campuses

Program/Major/Concentration Codes: **AOALIBRALART/ALA/ALAH**

Course Number	Course Title	Credit Hours
<b>Required Core Courses – A grade of C or better is required for graduation.</b>		
HIS 101	Introduction to Western Civilization I .....	3
or HIS 101 HC	Introduction to Western Civilization I: Honors	
HIS 102	Introduction to Western Civilization II .....	3
or HIS 102 HC	Introduction to Western Civilization II: Honors	
HIS 141	United States History I .....	3
or HIS 141HC	United States History I: Honors	
HIS 142	United States History II .....	3
or HIS 142HC	United States History II: Honors	
HIS 160	Latin America Before Independence .....	3
<b>Total Credits as displayed.....</b>		<b>15*</b>

\* To be awarded this concentration you must complete the course requirements above and the Associate of Arts in Liberal Arts with an AGEC-A.

# Histotechnology

## Histotechnician—Associate of Applied Science Degree for Direct Employment

Learn techniques and theory of histotechnology for immediate employment and licensure. Gain internship experience in both research & development and a clinical laboratory. This program is based on the requirements of the National Accrediting Agency for Clinical Laboratory Sciences. Complete this program, including prerequisites, in five semesters. HTP courses are only offered in 8 week formats.

### What can I do with this degree?

**Career Options:** Take the American Society of Clinical Pathologists licensure exams. Assist pathologists and dermatologists in hospitals and private practice, or work in industrial or academic research and development.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)).

**Location:** Northwest Campus

**Department/Contact Information:**

Dean: 520-206-2180

Lead Faculty: 520-206-2299

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

Course Number	Course Title	Credit Hours
<b>Program Prerequisites - Complete the following courses with a grade of "C" or better before enrolling in this program:</b>		
BIO 156IN	Introduction to Biology Allied Health or passing grade on Biology Assessment Exam .....	0-4
BIO 201IN *	Human Anatomy and Physiology I .....	4-5
or BIO 201IH*	Human Anatomy, Physiology and Histology	
BIO 202IN*	Human Anatomy and Physiology II.....	4
BIO 205IN*	Microbiology.....	4
CHM 130IN*	Fundamental Chemistry .....	5
MAT 097 or higher	Intermediate Algebra or Math assessment score into MAT 151 or higher.....	0-3
REA 091*	Reading Improvement II or Reading assessment into REA 112 or higher .....	0-4
<b>Subtotal</b> .....		<b>17-29</b>

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	†
CMN 120 and WRT 154 fulfill this requirement.	
Analysis and Critical Thinking Requirement .....	†
MAT 097 and BIO 201IN or BIO 201IH fulfill this requirement.	
Humanities and Social Science Requirement .....	6
Computer and Information Literacy Requirement .....	†
CSA 100 fulfills this requirement.	
Special Requirement***	
CMN 120 fulfills the C or G requirement.	
<b>Subtotal</b> .....	<b>6†</b>

### Required Core Courses: A grade of C or better is required for graduation.

BIO 112*	Bioscience Laboratory Fundamentals .....	3
HIT 105	Medical Terminology .....	4
HTP 101*	Histology .....	4
HTP 105*	Histotechniques I .....	4

HTP 200*	Histotechniques II .....	4
HTP 201*	Histotechniques III .....	4
HTP 202*	Histotechniques IV .....	3
HTP 291*	Internship to Histotechnology .....	5
<b>Subtotal</b> .....		<b>31</b>

**Required Support Courses: A grade of C or better is required for graduation.**

CMN 120**	Business and Professional Communications .....	3
CSA 100*	Computer Literacy .....	1
WRT 154**	Career Communications .....	3
<b>Subtotal</b> .....		<b>7</b>
<b>Total credits</b> .....		<b>61-73</b>

† Support course(s) or prerequisites fulfill this requirement.

‡ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* WRT 101 and WRT 102 may be substituted for CMN 120 and WRT154.

\*\*\* If CMN 120 is not completed, the C or G requirement must be met by completing a C or G course found in the General Ed Section.

# Honors

## Honors Program — Certificate

The Honors Program offers academically excellent students a variety of enrichment opportunities to assist them in attaining their full academic potential.

**Before enrolling in this program,** students must meet certain requirements:

- 1.a. Incoming freshmen, with less than 12 college credits, must have maintained a GPA of at least 3.5 at an accredited high school, and scored 90 or higher on both the reading and writing portions of the College assessment tests.  
OR
- 1.b. Continuing students must have completed at least 12 college credits in courses numbered 100 or higher, with a GPA of 3.5 or better.
2. Complete HON 101: Honors Colloquium with a grade of B or better.

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

### Required Courses:

To earn this certificate, students must complete a minimum of 15 credits of Honors coursework with an overall 3.5 GPA.

Course Number	Course Title	Credit Hours
<b>Required Core Course - A grade of B or better is required for graduation.</b>		
HON 101*	Honors Colloquium .....	3
<b>Subtotal .....</b>		<b>3</b>
<b>Required Support Courses - A grade of B or better is required for graduation.</b>		
Electives - Select a minimum of 12 credits from the following:		
HON 210	College Honors Advisory Council .....	1
HON 244*	Honors Field Excursions .....	1-3
HON 296*	Honors Independent Study Project .....	1-3
WRT 101HC*	Writing I: Honors .....	3
WRT 102HC*	Writing II: Honors .....	3
Honors Courses in any Prefix ** .....		3-12
Honors Contracts in regular courses *** .....		3-12
<b>Subtotal .....</b>		<b>12</b>
<b>Total credits as displayed .....</b>		<b>15</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* See the class schedule for current offerings.

\*\*\* To start an Honors Contract you must have completed HON 101. Meet with an Honors Coordinator at any campus or contact us at

<http://www.pima.edu/programs-courses/honors/honors-contact-us.html>

# Hotel and Restaurant Management

Learn basic principles of hotel and restaurant management.

## Hotel and Restaurant Management — Certificate for Direct Employment

Work in the resort/hotel or restaurant industry while completing an entry-level, career-track certificate that provides an introduction to hotel/restaurant management. Earn credit for co-op work experience.

### What can I do with this degree?

**Career Options:** Entry-level employment in hotel or restaurant management

**Academic Options:** Courses can apply to an Associates Degree or to the HRM baccalaureate degree at Northern Arizona University. This program does not transfer to Arizona State University or The University of Arizona.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-73.html>

**Location:** Northwest Campus

**Department/Contact Information:**

Dean: 520-206-2216

Lead Faculty: 520-206-2176

Program/Major Codes: **CRTHRM/HRC**

Course Number	Course Title	Credit Hours
<b>Required Core Course - A grade of C or better is required for graduation.</b>		
CSA 110	Spreadsheets: Microsoft Excel .....	3
HRM 100	Introduction to Hospitality Industry .....	3
HRM 104	Hotel Food and Beverage Management .....	3
HRM 199/199WK*	Introductory Co-op/Introductory Co-op Work: Hotel and Restaurant Management .....	3
or		
HRM 299/299WK*	Advanced Co-op/Advanced Co-op Work: Hotel and Restaurant Management .....	3
<b>Subtotal</b> .....		<b>12</b>
<b>Required Support Courses</b>		
HRM 101	Front Office Procedures .....	3
HRM 110	Food Service Systems Management .....	3
HRM 111*	Commercial Food .....	3
HRM 150	Hospitality Property Management .....	3
<b>Subtotal</b> .....		<b>12</b>
<b>Total credits as displayed</b> .....		<b>24</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Hotel and Restaurant Management — Associate of Arts Degree for Transfer

Learn basic principles of hotel and restaurant management while completing lower-division required courses for a bachelor's degree in Hotel-Restaurant Management.

### What can I do with this degree?

**Career Options:** Entry-level employment in hotel or restaurant management

**Academic Options:** Complete a bachelor's degree in Hotel and Restaurant Management in Tucson through a partnership with NAU. Completion of required program courses, including AGECE-A requirements, allows students to waive 12 upper-division liberal studies courses upon transfer to NAU.

Students can complete a bachelor's degree in Hotel and Restaurant Management through NAU in Tucson.

**Location:** Northwest Campus

**Department/Contact Information:**

Dean: 520-206-2180

Lead Faculty: 520-206-2299

Program/Major Codes: **AOAHSPITALITY/HRM**

Course Number	Course Title	Credit Hours
<b>Arizona General Education Curriculum Requirements (AGECE-A) - A grade of C or better is required for graduation.</b>		
<i>Course lists for each General Education category listed below can be found starting on page 74.</i>		
	English Composition .....	6
	Humanities and Fine Arts .....	6
	Biological and Physical Sciences .....	8
	Mathematics .....	3
	Social and Behavioral Sciences .....	3
	ECN 200 fulfills 3 credits of this requirement. Complete a non-ECN course from this category.	
	Other Requirements .....	†
	Second language support courses fulfill this requirement.	
	Special Requirements	
	The I, C, and G requirements should be fulfilled by courses in the above categories.	
<b>Subtotal</b> .....		<b>26¥</b>
<b>Required Core Courses - A grade of C or better is required.</b>		
HRM 100	Introduction to Hospitality Industry .....	3
HRM 101	Front Office Procedures .....	3
HRM 150	Hospitality Property Management .....	3
<b>Subtotal</b> .....		<b>9</b>
<b>Required Support Courses</b>		
ACC 211*	Financial Accounting ( <i>was ACC 101</i> ) SUN# ACC 2201 .....	3
CIS 120*	Computer Applications for Business SUN# CIS 1120 .....	4
ECN 200*	Basic Economic Principles .....	3
HRM 110	Food Service Systems Management .....	3
HRM 111*	Commercial Food .....	3
	Second Language Requirement .....	8
	Completion of two semesters of a language course numbered 101, 102*, 201* or 202*	
	Hospitality Elective .....	3
	Complete 3 credits of transferable electives.	
<b>Subtotal</b> .....		<b>27</b>
<b>Total credits as displayed</b> .....		<b>62</b>

† Core or support course(s) fulfill this requirement.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

¥ AGECE requires 35 credits. This subtotal shows the AGECE credits not fulfilled by core, support, or second language courses.

# Human Resources

## Human Resources — Certificate for Direct Employment

Learn the principles and practices associated with a career in Human Resources.

### What can I do with this certificate?

**Career Options:** Move into basic human relations functions with a current employer. Find employment in human relations tasks.

**Academic Options:** Expand your business knowledge through other business programs.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-74.html>

**Location:** Community Campus

**Department/Contact Information:**

Dean: 520-206-6424

Lead Faculty: 520-206-7216

Program/Major codes: **CRTHUMANRES/HRS**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
HRS 101	Introduction to Human Resources Management .....	3
HRS 102	Human Resource Law .....	3
HRS 103	Benefits and Compensation .....	3
HRS 104	Job Requirements, Recruitment, and Personnel Selection .....	3
HRS 105	Training and Development .....	3
HRS 106	Labor Relations .....	3
<b>Total credits as displayed .....</b>		<b>18</b>

# Law Enforcement

## Law Enforcement Academy — Certificate for Direct Employment

Learn the skills needed to begin a career in law enforcement while preparing for the licensure examination. Completion of the program exceeds the minimum P.O.S.T. requirements for entry-level employment as an Arizona peace officer.

### Before enrolling in this program you must meet certain requirements:

- High school diploma or GED
- At least 21 years of age upon completion of the academy
- No felony convictions
- U.S. Citizen
- Must possess a valid driver's license
- Physical requirement test
- Written evaluation
- Psychological evaluation
- Oral Board review
- Background investigation
- Medical evaluation
- Polygraph exam
- Other requirements that are specific to Arizona Peace Officer Standards and Training Board (Az P.O.S.T.)  
<https://post.az.gov/>

### What can I do with this certificate?

**Career Options:** After passing the licensure examination, seek entry-level employment as an Arizona police officer.

**Academic Options:** Continue your studies by working toward an associate's degree in Law Enforcement.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-24.html>

**Location:** Public Safety and Emergency Services Institute.

#### Department/Contact Information:

Director: 520-206-6484

Lead Faculty: 520-206-3963

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

Course Number	Course Title	Credit Hours
<b>General Education Requirements - A grade of C or better is required for graduation.</b>		
<i>Course lists for each General Education category listed below can be found starting on page 74.</i>		
	Communication Requirement	3
	Analysis and Critical Thinking Requirement	3
	<b>Subtotal</b>	<b>6</b>
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
LEA 110	Law Enforcement Academy Part I	24
LEA 210*	Law Enforcement Academy Part II	23
	<b>Subtotal</b>	<b>47</b>
	<b>Total credits as displayed</b>	<b>53</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.



## Law Enforcement Academy — Associate of Applied Science for Direct Employment

Completion of the program meets and exceeds the minimum AZ P.O.S.T. requirements for entry-level employment as an Arizona peace officer.

### What can I do with this degree?

**Career options:** Work in law enforcement and public safety. This AAS provides law enforcement officer training.

**Academic Options:** Transfer to a Bachelor's of Applied Science degree in Criminal Justice at Northern Arizona University or Administration of Justice at University of Arizona South.

**Location:** Community Campus

**Department/Contact Information:**  
Program Staff: 520-206-6350

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

### Before enrolling in this program you must meet certain requirements:

- High school diploma or GED
- At least 21 years of age upon completion of the academy
- No felony convictions
- U.S. Citizen
- Must possess a valid driver's license
- Physical requirement test
- Written evaluation
- Oral Board review
- Background investigation
- Medical evaluation
- Polygraph exam
- Other requirements that are specific to Arizona Peace Officer Standards and Training Board (Az P.O.S.T.)

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	6
Analysis and Critical Thinking Requirement .....	6
Humanities and Social Science Requirement .....	3
AJS 225 fulfills 3 credits of this requirement. Complete a course from the Humanities/Fine Arts or the Leadership/Ethics category.	
Computer Information and Literacy Requirement .....	1-3
<b>Subtotal .....</b>	<b>16-18</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

LEA 110	Law Enforcement Academy Part I .....	24
LEA 210*	Law Enforcement Academy Part II .....	23
<b>Subtotal .....</b>		<b>47</b>

### Required Support Courses

AJS 101	Introduction to Administration of Justice Systems .....	3
AJS 225	Criminology .....	3
<b>Subtotal .....</b>		<b>6</b>
<b>Total .....</b>		<b>69-71</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Literature

Explore the world's literature by taking classes focusing on world, British and American writers including their novels, poetry, plays and more.

Literature courses are offered as part of the requirements of the **Associate of Arts degree**, or may be taken as required or elective courses to complete other degrees. Students interested in pursuing a degree at ASU, NAU or UA should meet with literature faculty or an advisor to plan their course of study using the appropriate major guide.

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### *What can I do with my studies in literature?*

**Academic Options:** Continue studies towards a bachelor of arts in English, education or other humanities disciplines.

# Machine Tool Technology

Gain skills and experience needed for employment as a machinist.

## Machine Tool Technology — Certificate for Direct Employment

**This certificate is currently under review. See the website or an advisor for details.**

Learn fundamental skills in machine shop operations, specializing in one of the concentrations listed below.

### What can I do with this certificate?

**Career Options:** Entry-level employment in a variety of machine tool technology careers.

**Academic Options:** Pursue the Machine Tool Technology - AAS Degree.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-40.html>

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Lead Faculty: 520-206-7139

Program/Major/Concentration Codes: **CRTMACHNTOOL/MCT/\*\*\*\***

Course Number	Course Title	Credit Hours
<b>General Education Requirements - A grade of C or better is required for graduation.</b>		
Course lists for each General Education category listed below can be found starting on page 74. <i>NOTE:</i> Not all Concentrations require General Education, see the Concentration section below.		
	Communication Requirement .....	3
	Analysis and Critical Thinking Requirement .....	†
	GTM 105 fulfills this requirement.	
<b>Subtotal</b> .....		<b>3</b>
<b>Required Core Courses for all concentrations - A grade of C or better is required for graduation.</b>		
MAC 100	Introduction to Machine Tool .....	3
MAC 110	Manual Machine Shop .....	4
<b>Subtotal</b> .....		<b>7</b>
<b>Required Support Course for all concentrations</b>		
GTM 105*	Applied Technical Mathematics .....	3
<b>Subtotal</b> .....		<b>3</b>
<b>Concentrations - Complete one of the following concentrations:</b>		
Department chair or faculty advisor approval is recommended in the selection of the concentration.		
<b>Machine Operator</b> (Concentration Code: MACO)		
General Education - <i>not required</i> for this concentration		
<b>Concentration Core Course – A grade of C or better is required for graduation</b>		
MAC 130*	Machine Setup and Fixture Making .....	3
<b>Subtotal</b> .....		<b>3</b>
<b>Concentration Support Courses</b>		
CAD 117	Print Reading with CAD for Manufacturing .....	4
CAD 172*	Geometric Dimensioning and Tolerancing .....	3
<b>Subtotal</b> .....		<b>7</b>
<b>Total credits as displayed</b> .....		<b>20</b>

**Manual Machinist** (Concentration Code: MACM)General Education - *not required* for this concentration**Concentration Core Courses – A grade of C or better is required for graduation**

MAC 125*	Mechanical Inspection	4
MAC 130*	Machine Setup and Fixture Making	3
MAC 275	Applied Metallurgy	4
<b>Subtotal</b>		<b>11</b>

**Concentration Support Courses**

CAD 117	Print Reading with CAD for Manufacturing	4
CAD 172*	Geometric Dimensioning and Tolerancing	3
<b>Subtotal</b>		<b>7</b>
<b>Total credits as displayed</b>		<b>28</b>

**Mechanical Inspector** (Concentration Code: MACI)General Education - *not required* for this concentration**Concentration Core Courses – A grade of C or better is required for graduation**

MAC 125*	Mechanical Inspection	4
MAC 275	Applied Metallurgy	4
<b>Subtotal</b>		<b>8</b>

**Concentration Support Courses**

CAD 117	Print Reading with CAD for Manufacturing	4
CAD 172*	Geometric Dimensioning and Tolerancing	3
<b>Subtotal</b>		<b>7</b>
<b>Total credits as displayed</b>		<b>25</b>

**Computer Numerical Control (CNC) Machinist** (Concentration Code: MACC)**Entrance requirement:** Two years minimum manual machinist or CNC operator experience required, or MAC 110.General Education – *is required* for this concentration**Concentration Core Courses – A grade of C or better is required for graduation**

MAC 125*	Mechanical Inspection	4
MAC 150*	Computer Numerical Control (CNC) Mill Programming I	4
MAC 155*	Computer Numerical Control (CNC) Mill Programming II	4
MAC 160*	Computer Numerical Control (CNC) Lathe Programming	4
<b>Subtotal</b>		<b>16</b>

**Concentration Support Courses**

CAD 117	Print Reading with CAD for Manufacturing	4
CAD 172*	Geometric Dimensioning and Tolerancing	3
<b>Subtotal</b>		<b>7</b>
<b>Total credits as displayed</b>		<b>36</b>

**Computer Numerical Control (CNC) Programmer** (Concentration Code: MACP)General Education – *is required* for this concentration**Concentration Core Courses – A grade of C or better is required for graduation**

MAC 150*	Computer Numerical Control (CNC) Mill Programming I	4
MAC 155*	Computer Numerical Control (CNC) Mill Programming II	4
MAC 160*	Computer Numerical Control (CNC) Lathe Programming	4
MAC 257 *	Computer Aided Machining (CAM) I	4
MAC 258*	Computer Aided Machining (CAM) II	4
MAC 259*	Computer Aided Machining (CAM) III: Solid Modeling	4
<b>Subtotal</b>		<b>24</b>

**Concentration Support Courses**

CAD 117	Print Reading with CAD for Manufacturing .....	4
CAD 172*	Geometric Dimensioning and Tolerancing .....	3
<b>Subtotal</b> .....		<b>7</b>
<b>Total credits as displayed</b> .....		<b>44</b>

† Core or support course(s) fulfill this requirement.

¥ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Machine Tool Technology — Associate of Applied Science Degree for Direct Employment

Learn fundamental skills in machine shop operations, specializing in one of the concentrations listed below.

### What can I do with this certificate?

**Career Options:** Begin a career in machine tool technology.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima’s Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Lead Faculty: 520-206-7139

Program/Major/Concentration Codes: **AASMACHNTOOL/MAC/\*\*\*\* (see concentration codes below)**

Course Number	Course Title	Credit Hours
<b>General Education Requirements - A grade of C or better is required for graduation.</b>		
<i>Course lists for each General Education category listed below can be found starting on page 74.</i>		
Communication Requirement .....		6
Analysis and Critical Thinking Requirement .....		†
GTM 105 and MAC 275 fulfill this requirement.		
Humanities and Social Science Requirement .....		6
Computer and Information Literacy Requirement .....		†
Special Requirement		
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.		
<b>Subtotal</b> .....		<b>12¥</b>

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
MAC 100	Introduction to Machine Tool .....	3
MAC 110	Manual Machine Shop .....	4
MAC 275	Applied Metallurgy .....	4
<b>Subtotal</b> .....		<b>11</b>

<b>Required Support Courses</b>		
Course Number	Course Title	Credit Hours
CAD 117	Print Reading with CAD for Manufacturing .....	4
CAD 172*	Geometric Dimensioning and Tolerancing .....	3
CSA 100*	Computer Literacy .....	1
GTM 105*	Applied Technical Mathematics .....	3
<b>Subtotal</b> .....		<b>11</b>

**Core Concentrations - A grade of C or better is required for graduation.**

Complete one of the following concentrations (options):

Department chair or faculty advisor approval is recommended in the selection of the core concentration and technical electives.

**Machine Operator** (Concentration Code: MACO)

MAC 130*	Machine Setup and Fixture Making	3
ELEC	Technical Electives	27
Complete 27 credit hours at the 100 level or higher from the following list with the approval of the department chair or faculty advisor: AUT, BCT, CAD, CIS, CSA, ENG, MAC, MAT, WLD.		
<b>Subtotal</b>		<b>30</b>

**Manual Machinist** (Concentration Code: MACM)

MAC 125*	Mechanical Inspection	4
MAC 130*	Machine Setup and Fixture Making	3
ELEC	Technical Electives	23
Complete 23 credit hours at the 100 level or higher from the following list with the approval of the department chair or faculty advisor: AUT, BCT, CAD, CIS, CSA, ENG, MAC, MAT, WLD.		
<b>Subtotal</b>		<b>30</b>

**Mechanical Inspector** (Concentration Code: MACI)

MAC 125*	Mechanical Inspection	4
ELEC	Technical Electives	26
Complete 26 credit hours at the 100 level or higher from the following list with the approval of the department chair or faculty advisor: AUT, BCT, CAD, CIS, CSA, ENG, MAC, MAT, WLD.		
<b>Subtotal</b>		<b>30</b>

**Computer Numerical Control (CNC) Machinist** (Concentration Code: MACC)

MAC 125*	Mechanical Inspection	4
MAC 150*	Computer Numerical Control (CNC) Mill Programming I	4
MAC 155*	Computer Numerical Control (CNC) Mill Programming II	4
MAC 160*	Computer Numerical Control (CNC) Lathe Programming	4
ELEC	Technical Electives	14
Complete 14 credit hours at the 100 level or higher from the following list with the approval of the department chair or faculty advisor: AUT, BCT, CAD, CIS, CSA, ENG, MAC, MAT, WLD.		
<b>Subtotal</b>		<b>30</b>

**Computer Numerical Control (CNC) Programmer** (Concentration Code: MACP)

MAC 150*	Computer Numerical Control (CNC) Mill Programming I	4
MAC 155*	Computer Numerical Control (CNC) Mill Programming II	4
MAC 160*	Computer Numerical Control (CNC) Lathe Programming	4
MAC 257*	Computer Aided Machining (CAM) I	4
MAC 258*	Computer Aided Machining (CAM) II	4
MAC 259*	Computer Aided Machining (CAM) III: Solid Modeling	4
ELEC	Technical Electives	6
Complete 6 credit hours at the 100 level or higher from the following list with the approval of the department chair or faculty advisor: AUT, BCT, CAD, CIS, CSA, ENG, MAC, MAT, WLD		
<b>Subtotal</b>		<b>30</b>
<b>Total credits as displayed</b>		<b>64</b>

† Core or support course(s) fulfill this requirement.

¥ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

# Mathematics

## Associate of Arts Degree for Transfer in Liberal Arts

**A student planning to obtain a mathematics degree should follow the Associate of Arts Degree for Transfer in Liberal Arts.** Meet with a mathematics faculty or an advisor to plan courses. The student who plans to transfer to a college or university to complete his/her bachelor's degree should also contact an advisor or counselor from their chosen school for verification of transfer courses.

**Information:** All students enrolling in their first mathematics course with the College and all new, full-time students are required to take the mathematics assessment tests. Completion of prerequisite courses within the last 3 years with a grade of C or better or a satisfactory score on the assessment test is required for all math courses.

Program Identification Code: **AOALIBRALART**

# Medical Assistant

## Medical Assistant — Certificate for Direct Employment

**This certificate is currently under review. See the website or an advisor for details.**

Learn advanced skills in patient care and prepare to take exams for licensure. Concentrations can be in either the front or back office, or for the full medical assistant who has training in both environments.

**Before enrolling in this program,** students must take the College Reading, Math and Writing assessments.

- Students must also present evidence they have earned first aid/CPR certification from a recognized training provider.

### What can I do with this certificate?

**Career Options:** Upon completion of this certificate, students are eligible to take the American Medical Technologist Exam (AMT) for Medical Assistants or the Registered Medical Assistant Exam (RMA). Work as a Medical Assistant in physicians' offices, medical centers, urgent care facilities, and clinics.

**Academic Options:** Take courses to qualify as a medical coding and billing specialist or practical nurse.

**More Information:** Review program costs, student debt, on-time graduation and more <https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-96.html>

Location: Desert Vista Campus

**Department/Contact Information:**

Dean: 520-206-5142

Lead Faculty: 520-206-5142

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
HCA 119	Human Anatomy and Physiology for Health Care .....	2
MDA 120	Medical Assistant Profession .....	2
MDA 121	Medical Assistant Skills for Success .....	2
MDA 124	Medical Terminology for Health Care Workers .....	2
<b>Subtotal</b> .....		<b>8</b>
<b>Core Concentrations - A grade of C or better is required for graduation.</b>		
Complete one or more of the following concentrations: .....		9-10
<b>Administrative Medical Assistant</b> (Concentration Code: HPMA)		
MDA 125*	Orientation to ICD-9 Coding .....	3
MDA 126	Medical Billing and Insurance for Medical Assistants .....	3
MDA 127	Administrative Procedures for Medical Assistants .....	3
MDA 190A*	Medical Assistant Front Office Externship .....	1
<b>Subtotal</b> .....		<b>10</b>
<b>Clinical Medical Assistant</b> (Concentration Codes: HPMC)		
HCA 103	Orientation to Pharmacology .....	3
MDA 122	Medical Assistant Clinical Care .....	2
MDA 123	Medical Assistant Clinical Procedures .....	3
MDA 190B*	Medical Assistant Back Office Externship .....	1
<b>Subtotal</b> .....		<b>9</b>
<b>Total credits as displayed</b> .....		<b>17-18</b>



# Medical Laboratory Technician

## Medical Laboratory Technician — Associate of Applied Science Degree for Direct Employment

Prepare for a career in medical laboratory technology through classroom study and supervised clinical experience. Learn about blood, analysis of body fluids, bacteriology, parasitology, clinical chemistry and other aspects of medical laboratory technology.

This program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences.

**Before enrolling in this program** you must meet certain requirements.

This degree program requires a special program application. Students may request a program application when all prerequisites are complete. In addition, students must have completed the program prerequisites (with grades posted) before they may begin the application process.

**To participate in the clinical portion of the program, students must:**

- Obtain an Arizona Department of Public Safety Fingerprint Clearance Card.
- Pass a urine toxicology screening exam from a certified laboratory.
- Provide proof of immunity status to Measles, Mumps, Rubella and Hepatitis B Virus.
- Provide proof of immunization to Tetanus, Diphtheria, Pertussis, and Influenza.
- Provide proof of a negative TB skin test or a negative chest x-ray within the last two years.
- Provide proof of health insurance coverage.
- Provide a declaration of health from a licensed care provider.

### Essential Functions

To successfully participate in the PCC MLT program and become employable in a medical facility, the student should be able to perform essential functions expected of the working professional. Some examples of these essential functions are:

**Vision:** Should possess visual acuity, color, shade and depth perception to accurately perform and interpret laboratory tests. Must be able to read computer screens, specimen/reagent labels, and warning signs.

**Communication:** Should possess the ability to clearly and accurately communicate with patients and health care professionals, and to accurately follow verbal and written instructions.

**Physical Activity:** Should be able to stand and/or sit for prolonged periods and move freely and safely through the laboratory. Should be able to grasp, sit, squat, stoop, bend, reach, push, pull, and lift and carry up to 50 pounds.

**Manual Dexterity:** Should possess sufficient hand-eye coordination to efficiently, accurately and safely operate laboratory equipment, such as pipettes, inoculating loops, precision instrumentation, and perform phlebotomy procedures.

**NOTE:** Students in the Medical Laboratory Technician program may be exposed to potentially infectious blood, tissues, and body fluids.

### What can I do with this degree?

**Career Options:** Work in the clinical laboratory of a hospital, clinic, reference laboratory, blood bank, coroner's office or in biomedical research.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** West Campus

**Department/Contact Information:**  
Dean: 520-206-6763

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

**Program Prerequisites**

Students must have completed the following prerequisites before they may begin the application process.

Appropriate reading assessment score or completion of REA 112. ....	0-4
MAT 151* College Algebra .....	§
CHM 151/151LB* or 151IN* and CHM 152/152LB* or 152IN* with a combined average grade of B or better within the last seven years. NOTE: The average may be met with a grade of C in one course and a grade of A in the other. ....	§
Completion of BIO 201IN* and BIO 202IN* with a combined average grade of B or better within the last seven years. Note: The average may be met with a grade of C in one course and a grade of A in the other. Complete the BIO 156IN prerequisite as needed. ....	§-4
BIO 205IN* Microbiology with a grade of B or better. ....	§
<b>Subtotal</b> .....	<b>0-8</b>

**General Education Requirements A grade of C or better is required for graduation.**

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	†
WRT 101 and CMN 120 fulfill this requirement.	
Analysis and Critical Thinking Requirement .....	†
MAT 151 and BIO 201IN fulfill this requirement.	
Humanities and Social Science Requirement .....	3
BIO 250 fulfills 3 credits of the Leadership/Ethics category. Complete a course from the Humanities/Fine Arts or Social Science category.	
Computer and Information Literacy Requirement .....	1-3
Special Requirement .....	
BIO 250 fulfills this requirement.	
<b>Subtotal</b> .....	<b>4-6‡</b>

Course Number	Course Title	Credit Hours
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**Required Core Courses - A grade of C or better is required for graduation.**

BIO 250	Biomedical Ethics .....	3
MLT 101*	Phlebotomy for Medical Laboratory Technology .....	3
MLT 199*	Introductory Co-op: Phlebotomy Lab Assisting .....	1
MLT 199WK*	Introductory Co-op Work: Phlebotomy Lab Assisting .....	1.25
MLT 200	Urinalysis/Body Fluids .....	3
MLT 211	Hematology .....	5
MLT 221	Clinical Chemistry .....	4
MLT 231	Immunohematology/Immunology .....	5
MLT 251	Clinical Microbiology .....	5
MLT 260	Parasitology and Immunology/Serology .....	3
MLT 299*	Advanced Co-op: Medical Laboratory Technician .....	1
MLT 299WK*	Advanced Co-op Work: Medical Laboratory Technology .....	8
<b>Subtotal</b> .....		<b>42.25</b>

**Required Support Courses - A grade of C or better is required for graduation.**

BIO 201IN*	Human Anatomy and Physiology I SUN# BIO 2201 .....	4
BIO 202IN*	Human Anatomy and Physiology II SUN# BIO 2202 .....	4
BIO 205IN*	Microbiology SUN# BIO 2205 .....	4
CHM 151/151LB or 151IN*	General Chemistry I .....	5
	General Chemistry I SUN# CHM 1151	
CHM 152/152LB or 152IN*	General Chemistry II .....	5
	General Chemistry II SUN# CHM 1152	
CMN 120	Business and Professional Communication .....	3
MAT 151*	College Algebra SUN# MAT 1151 .....	4
WRT 101*	Writing I SUN# ENG 1101 .....	3
<b>Subtotal</b> .....		<b>32</b>
<b>Total credits as displayed with program prerequisites</b> .....		<b>78.25-88.25</b>

Note: For the following courses, one (1) course may be repeated one (1) time. If a course needs to be repeated, re-entry into the remaining courses will be based on space availability: MLT 101, 199, 199WK, 200, 211, 221, 231, 251, 260, 299, and 299WK.

# Nursing

Gain skills in patient care for employment as a registered nurse, licensed practical nurse, or nursing assistant.

## Associate Degree Nursing — Associate of Applied Science Degree for Direct Employment

Get comprehensive education and practical experience in nursing, and prepare to become licensed as a registered nurse. Students who choose to leave the program before completing the degree may qualify for other certificates.

This program has approval from the Arizona State Board of Nursing, and is accredited by the Accreditation Commission for Education in Nursing, Inc., 3343 Peachtree Rd. NE, Suite 850, Atlanta, GA 30326 [www.acenursing.org](http://www.acenursing.org)

### Before enrolling in this program you must meet certain requirements:

This degree program requires a special program application. Once all prerequisites are complete students can access the program application on the MyPima Academics tab in the Degrees and Programs section.

### To participate in the clinical portion of the program, the students must:

1. Obtain an Arizona DPS Fingerprint Clearance Card.
2. Pass a urine toxicology screening exam.
3. 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.
4. Present proof of a variety of immunization including but not limited to MMR/Varicella/Hep-B/TDap/influenza.
5. Show proof of negative TB skin test or negative chest x-ray for TB.
6. Maintain health insurance and a CPR card at the Health Care Provider Level throughout the program.

Licensed Practical Nurses with work experience, including graduates from Pima's Center for Training and Development, are eligible to apply for entry into the second year of the Associate Degree Nursing (ADN) Program by completing the prerequisites listed above. If accepted, the student must successfully complete a five credit transition course (NRS 188/188LS) and meet all acceptance requirements for admission into the third semester of the Associate Degree Nursing (ADN) Program.

### Program Transfer and Re-entry

Students currently enrolled in another accredited ADN Nursing Program wishing to transfer to Pima, or students wishing to re-enter the program, should contact the Nursing Department Office at 520-206-6661.

If a student initiates a withdraw, or withdraws while failing, a core nursing class during a semester, they will be withdrawn from all nursing core classes within that semester and will have to repeat all the core courses within the semester (core nursing courses, HCA 102, or HCA 155). This action may have an effect on the student's status in the program, financial aid, and community sponsored support.

Pima Community College and Northern Arizona University have partnered to offer qualified students the opportunity to earn a Bachelor of Science in Nursing while pursuing their Associate's Degree in Nursing. For more information go to <http://www.pima.edu/programs-courses/credit-programs-degrees/health-professions/nursing/nursing-concurrent.html>

### What can I do with this degree?

**Career Options:** Take the National Council Licensure Examination (NCLEX-RN) to be eligible to work as a registered nurse.

**Academic Options:** Pursue a bachelor's degree in nursing at a university.

**Location:** West Campus

**Department/Contact Information:**

Department Chair: 520-206-6661

Dean: 520-206-6663

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

### Program Prerequisites

Students must have completed the following prerequisites (**with a grade of B or better within the last four years**) before they may begin the application process.

Appropriate reading assessment score..... 0

MAT 097* or Math assessment score into MAT 151* or higher within the last four years	0-3
BIO 201IN*, or BIO 201IH*, and BIO 202IN*	
Note: Complete the BIO 056IN prerequisite as needed.	8-9
PSY 101 Introduction to Psychology	4
<b>Subtotal</b>	<b>12-16</b>

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement	†
WRT 101 and WRT 102 fulfill this requirement.	
Analysis and Critical Thinking Requirement	†
BIO 201IN, or 201 IH or 202 IN; and MAT 097 or 151 fulfill this requirement.	
Humanities and Social Science Requirement	3
PSY 101 fulfills 4 credits in the Social Science category. Complete a course from the Humanities/Fine Arts or Leadership/Ethics category which also meets the cultural diversity (C) or the global awareness (G) requirement.	
Computer and Information Literacy Requirement	†
Core or support courses fulfill this requirement	
Special Requirement	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal</b>	<b>3¥</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

NRS 104*/104LC*/104LS*	Nursing Process I	8
NRS 105*/105LC*/105LS*	Nursing Process II	9
NRS 201*/201LC*	Nursing Process III	9
NRS 202*/202CA*/202CB*	Nursing Process IV	9
<b>Subtotal</b>		<b>35</b>

### Required Support Courses - A grade of C or better is required for graduation.

BIO 205IN*	Microbiology SUN# BIO 2205	4
ECE 107* or PSY 240*	Human Development and Relations Developmental Psychology	3
NRS 108**	Drug Calculations	1
NRS 155*	Introduction to Pharmacology	3
WRT 101*	Writing I SUN# ENG 1101	3
WRT 102*	Writing II SUN# ENG 1102	3
<b>Subtotal</b>		<b>17</b>
<b>Total credits as displayed with program prerequisites</b>		<b>67-71</b>

† Support or core course(s) fulfill this requirement.

¥ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* NRS 108 requires a grade of A.

## Practical Nursing — Certificate for Direct Employment

Students who are accepted into, and complete the first three semesters of the Associate Degree Nursing program, including the courses listed below, are eligible for the Practical Nursing Certificate and to take the licensure exam to become a Licensed Practical Nurse. All the program admission and clinical requirements are the same for the Associate Degree in Nursing and the Practical Nursing Certificate.

This certificate is offered at the West Campus and earns college credit. A Practical Nursing certificate is also offered at the Center for Training and Development, located at the Desert Vista Campus, but will not earn college credit.

### What can I do with this certificate?

**Career Options:** Take the National Council Licensure Examination (NCLEX-PN) to be eligible to work as a licensed practical nurse.

**Academic Options:** Take courses to qualify as a registered nurse.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-55.html>

**Location:** West Campus

**Department/Contact Information:**

Department Chair: 520-206-6661

Dean: 520-206-6663

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

### Program Prerequisites

Students must have completed the following prerequisites (with grades posted) before they may begin the application process.

REA 112* or appropriate reading assessment score.....	0-4
MAT 097* or Math assessment score into MAT 151* or higher.....	0-3
CHM 130/130LB/130IN* with at least a C or better or appropriate score on the Chemistry assessment.....	0-5
BIO 201IN* and BIO 202IN* with a combined average grade of B or better within the last six years. ....	8-12
Note: The average may be met with a grade of C in one course and a grade of A in the other.	
Complete the BIO 156IN prerequisite as needed.	
PSY 101 Introduction to Psychology .....	4
<b>Subtotal .....</b>	<b>12-28</b>

### General Education Requirements A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	†
WRT 101 fulfills this requirement.	
Analysis and Critical Thinking Requirement .....	†
Program prerequisites fulfill this requirement	
<b>Subtotal .....</b>	<b>0¥</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

NRS 104*/104LC*/104LS*	Nursing Process I .....	8
NRS 105*/105LC*/105LS*	Nursing Process II .....	9
NRS 201*/201LC*	Nursing Process III .....	9
<b>Subtotal .....</b>		<b>26</b>

### Required Support Courses

BIO/FSN 127IN	Human Nutrition and Biology .....	4
BIO 205IN*	Microbiology SUN# BIO 2205 .....	4
ECE 107* or PSY 240*	Human Development and Relations Developmental Psychology .....	3

NRS 108**	Drug Calculations .....	1
NRS 155*	Introduction to Pharmacology .....	3
WRT 101*	Writing I SUN# ENG 1101 .....	3
WRT 102*	Writing II SUN# ENG 1102.....	3
<b>Subtotal</b> .....		<b>21</b>
<b>Total credits as displayed</b> .....		<b>59-75</b>

† Core or support course(s) fulfill this requirement.

¥ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* NRS 108 requires a grade of A.

# Paralegal

Prepare for entry-level paralegal or legal assistant positions with these programs approved by the American Bar Association. Students interested in become a legal secretary should pursue an Office and Administrative Professions associate’s degree.

## Paralegal — Associate of Applied Science Degree for Direct Employment

Learn to investigate legal cases, draft legal documents and perform legal research under the supervision of an attorney. Program includes a paralegal internship.

### What can I do with this degree?

- Career Options:** Become a paralegal or legal assistant, title examiner, trust officer, contract clerk, legal investigator or law firm administrator.
- Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima’s Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.
- Location:** Downtown Campus
- Department/Contact Information:**  
 Dean: 520-206-7134  
 Lead Faculty: 520-206-7298  
 Program/Major Codes: **AASLEGALASST/LAS**

### General Education Requirements - A grade of C or better is required for graduation.

Communication Requirement . . . . .	†
WRT 101 and 102 fulfill this requirement.	
Analysis and Critical Thinking Requirement . . . . .	†
Mathematics and Science support courses fulfill this requirement.	
Humanities and Social Science Requirement . . . . .	†
Humanities and Social Science support courses fulfill this requirement.	
Computer and Information Literacy Requirement . . . . .	†
CIS/CSA 104 fulfills this requirement.	
<b>Subtotal</b> . . . . .	<b>0¥</b>

<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>
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### Required Core Courses - A grade of C or better is required for graduation.

PAR 101	Introduction to Paralegal Careers . . . . .	3
PAR 102*	Civil Litigation Procedures I . . . . .	3
PAR 103*	Legal Research . . . . .	3
PAR 104*	Paralegal Ethics . . . . .	3
PAR 106*	Civil and Criminal Evidence . . . . .	3
PAR 202*	Civil Litigation Procedures II . . . . .	3
PAR 211*	Legal Writing . . . . .	3
PAR 213*	Computer Assisted Legal Research . . . . .	3
<b>Subtotal</b> . . . . .		<b>24</b>
PAR ELEC PAR Specialty Area Electives		
Complete 15 credits from the following PAR specialty area electives course list: (Specialty courses are not offered every semester. Consult with a PAR faculty advisor or counselor to determine class offerings.)		
PAR 203*	Tort Law Procedures . . . . .	3
PAR 204*	Wills, Trusts, and Estates . . . . .	3
PAR 206*	Criminal Law and Procedures I . . . . .	3

PAR 207*	Criminal Law and Procedures II	3
PAR 208*	Domestic Relations and Family Law	3
PAR 209*	Bankruptcy Procedures	3
PAR 212*	Law Office Computerization	3
PAR 215*	Corporate Law Procedures	3
PAR 217*	Real Estate Legal Procedures	3
PAR 218*	Administrative Law: Employment	1
PAR 219*	Administrative Law: Immigration	1
PAR 220*	Administrative Law: Social Security	1
PAR 290*	Paralegal Internship	4
(The internship is designed to give the students work experience at an approved site. For students in their final semester of course work. Application and acceptance required.)		
<b>Subtotal</b>		<b>15</b>

**Required Support Courses**

ACC 100 or ACC 211*	Practical Accounting Procedures Financial Accounting ( <i>was ACC 101</i> ) SUN# ACC 2201	3
CIS/CSA 104*	Computer Fundamentals	3
POS 201 or POS 210	American National Government and Politics SUN# POS 1110 National and State Constitutions	3
CMN 110	Public Speaking	3
WRT 101*	Writing I SUN# ENG 1101	3
WRT 102*	Writing II SUN# ENG 1102	3

**Analysis and Critical Thinking Requirement** ..... 6

Select from the following course lists only.

Mathematics Category

The Mathematics competency requirement must be met by assessment or course work.  
 Any MAT course at the 100 level or higher (except MAT 108).

Science Category

AST 101IN, 102IN, 105IN\*; BIO 100IN or higher (except BIO 296, 299, 299WK);  
 CHM 121IN or higher (except CHM 290, 295LB);  
 GEO 101, 102;  
 GLG 101IN, 102IN;  
 PHY 121/121LB\* or 121IN\*, 122/122LB\* or 122IN\*  
 210/210LB\* or 210IN, 216/216LB\* or 216IN, 221/221LB\*

Critical Thinking Category

PHI 120 SUN# PHI 1103

**Humanities and Social Science Requirement** ..... 3

Select from the following course list only.

Humanities and Fine Arts Category

ANT 112, 148, 205, 206,  
 ART 130, 131,  
 HIS 101, 102, 113, 114, 122, 124, 141, 142, 148, 160, 161,  
 HUM 251, 252, 253, 260,  
 LIT 261, 267,  
 REL 234\*\*

Any AGECE requirement from the "Other Requirements Options:" Second Language list that has a "G" designation.

**Subtotal** ..... **27**

**Total credits as displayed** ..... **66**

† Core or support course(s) fulfill this requirement.

¥ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\*\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* No longer offered, but will fulfill requirement.



## Paralegal - Post-Degree Certificate for Direct Employment

Learn to investigate legal cases, draft legal documents, and perform legal research under the supervision of an attorney. This program includes a paralegal internship.

**Before enrolling in this program,** you must have earned a bachelor's degree or an Associate of Arts or Science from an accredited post-secondary institution and demonstrate an appropriate score on the College reading assessment.

### What can I do with this certificate?

**Career Options:** Seek a position as a paralegal or legal assistant, title examiner, trust officer, contract clerk, legal investigator or law firm administrator.

**Academic Options:** Continue your studies by taking additional professional development courses.

**More Information:** Review program costs, student debt, on-time graduation and more <https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-97.html>

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134; Lead Faculty: 520-206-7352

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
PAR 101	Introduction to Paralegal Careers	3
PAR 102*	Civil Litigation Procedures I	3
PAR 103*	Legal Research	3
PAR 104*	Paralegal Ethics	3
PAR 106*	Civil and Criminal Evidence	3
PAR 202*	Civil Litigation Procedures II	3
PAR 211*	Legal Writing	3
PAR 213*	Computer Assisted Legal Research	3
<b>Subtotal</b>		<b>24</b>
PAR ELEC	PAR Specialty Area Electives	
Complete 15 credits from the following PAR specialty area electives course list: (Specialty courses are not offered every semester. Consult with a PAR faculty advisor to determine class offerings.)		
PAR 203*	Tort Law Procedures	3
PAR 204*	Wills, Trusts, and Estates	3
PAR 206*	Criminal Law and Procedures I	3
PAR 207*	Criminal Law and Procedures II	3
PAR 208*	Domestic Relations and Family Law	3
PAR 209*	Bankruptcy Procedures	3
PAR 212*	Law Office Computerization	3
PAR 215*	Corporate Law Procedures	3
PAR 217*	Real Estate Procedures	3
PAR 218*	Administrative Law: Employment	1
PAR 219*	Administrative Law: Immigration	1
PAR 220*	Administrative Law: Social Security	1
PAR 290*	Paralegal Internship	4
(The internship is designed to give the students work experience at an approved site. For students in their final semester of course work. Application and acceptance is required.)		
<b>Subtotal</b>		<b>15</b>
<b>Required Support Course</b>		
WRT 101* or WRT 102*	Writing I SUN# ENG 1101 Writing II SUN# ENG 1102	3
<b>Subtotal</b>		<b>3</b>
<b>Total credits as displayed</b>		<b>42</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

# Pharmacy Technology

Learn how to assist pharmacists in packaging and distributing medications.

## Pharmacy Technology — Certificate for Direct Employment

**This certificate is currently under review. See the website or advisor for details.**

Learn to work as a pharmacy technician assisting a pharmacist. This program includes training within laboratory and clinical settings.

**Before enrolling in this program,** you must meet the following requirements:

In addition to the program prerequisites listed below, this certificate program requires a Pharmacy Technology application which is available online in two formats. Students may submit a program application when all prerequisites are complete.

### What can I do with this certificate?

**Career Options:** Work in hospitals, nursing care facilities and drug stores and with drug manufacturers, wholesale drug houses and health maintenance organizations.

**Academic Options:** Continue taking classes toward earning a Pharmacy Technology AAS degree.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-50.html>

**Location:** East Campus

**Department/Contact Information:**

Dean: 520-206-7694

Lead Faculty: 520-206-7850

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

### Program Prerequisites

Before enrolling in this program, you must fulfill the following requirements.

REA 091 or Reading assessment score at REA 112 or higher. ....	0-4
MAT 092 with a grade of C or better or Math assessment score at MAT 097 or higher .....	0-3
WRT 090 with a grade of C or better or writing assessment score at WRT 101 .....	0-3
Completion of the following courses with a grade of C or better:	
PHT 170*, PHT 171IN*, PHT 172*, PHT 174IN* .....	5
<b>Subtotal</b> .....	<b>0-10</b>

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	3
Analysis and Critical Thinking Requirement .....	3
<b>Subtotal</b> .....	<b>6</b>

<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>
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### Required Core Courses - A grade of C or better is required for graduation.

PHT 170	Introduction to Pharmacy Technology .....	2
PHT 171IN*	Pharmaceutical Calculations .....	4
PHT 172*	Drug Therapy I .....	4
PHT 174IN*	Pharmacy Operations .....	3
PHT 178IN*	Computer Applications for Pharmacy .....	3
PHT 180IN*	Sterile Products .....	4
PHT 181*	Interprofessional Relations in Pharmacy .....	3
PHT 182*	Drug Therapy II .....	4
PHT 187*	Pharmacy Law and Ethics .....	3

PHT 190LB*	Pharmacy Technician Internship .....	4
PHT 197*	Clinical Seminar .....	2
<b>Subtotal</b> .....		<b>36</b>
<b>Total credits as displayed with program prerequisites</b> .....		<b>42-52</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.  
 § Credits counted below.

## Pharmacy Technology — Associate of Applied Science Degree for Direct Employment

**This degree is currently under review. See the website or advisor for details.**

Learn to work in a pharmacy, including medication dispensing, business administration and supervisory skills. This program includes training within laboratory and clinical settings.

**Before enrolling in this program**, you must meet the following requirements:

In addition to the program prerequisites listed below, this certificate program requires a Pharmacy Technology application which is available online in two formats. Students may submit a program application when all prerequisites are complete.

Prospective students with a criminal background see [www.pima.edu/programs-courses/credit-programs-degrees/health-professions/pharmacy-tech/pharmacy-tech-aas-admission.html](http://www.pima.edu/programs-courses/credit-programs-degrees/health-professions/pharmacy-tech/pharmacy-tech-aas-admission.html) for licensure and clinical practice eligibility.

### What can I do with this degree?

**Career Options:** Work in hospitals, nursing care facilities and drug stores, and with pharmaceutical manufacturers, wholesale pharmaceutical companies and health maintenance organizations.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** East Campus

**Department/Contact Information:**

Dean: 520-206-7694  
 Lead Faculty: 520-206-7850

### Program Prerequisites

Before enrolling in this program, you must fulfill the following requirements.

REA 091 or Reading assessment score at REA 112 or higher .....	0-4
MAT 092 with a grade of C or better or Math assessment score at MAT 097 or higher .....	0-3
WRT 090 with a grade of C or better or Writing assessment score at WRT 090 .....	0-3
Completion of the following courses with a grade of C or better:	
PHT 170*, PHT 171IN*, PHT 172*, PHT 174IN* .....	§
<b>Subtotal</b> .....	<b>0-10</b>

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	6
Analysis and Critical Thinking Requirement .....	†
BIO 100IN (or 181IN*), CHM 130IN* (or 151IN*) and the Math prerequisite fulfill this requirement.	
Humanities and Social Science Requirement .....	6
Computer and Information Literacy Requirement .....	†
Core courses fulfill this requirement	
Special Requirement	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal</b> .....	<b>12†</b>

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
PHT 170	Introduction to Pharmacy Technology .....	2
PHT 171IN*	Pharmaceutical Calculations .....	4
PHT 172*	Drug Therapy I .....	4
PHT 174IN*	Pharmacy Operations .....	3
PHT 178IN*	Computer Applications for Pharmacy .....	3
PHT 180IN*	Sterile Products .....	4
PHT 181*	Interprofessional Relations in Pharmacy .....	3
PHT 182*	Drug Therapy II .....	4
PHT 187*	Pharmacy Law and Ethics .....	3
PHT 190LB*	Pharmacy Technician Internship .....	4
PHT 197*	Clinical Seminar .....	2
<b>Subtotal</b> .....		<b>36</b>
<b>Required Support Courses</b>		
BIO 100IN or BIO 181IN*	Biology Concepts .....	4
	General Biology (Majors) I SUN# BIO 1181	
CHM 130/130LB/ CHM 130IN* or CHM 151/ 151LB/151IN*	Fundamental Chemistry SUN# CHM 1130 .....	5
	General Chemistry I SUN# CHM 1151	
CHM 140/140LB/ 140IN* or CHM 152/ 152LB/152IN*	Fundamental Organic and Biochemistry SUN# CHM 2230 .....	5
	General Chemistry II SUN# CHM 1152	
<b>Subtotal</b> .....		<b>14</b>
<b>Total credits as displayed with program prerequisites</b> .....		<b>62-72</b>

† Core or support course(s) fulfill this requirement.

¥ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

§ Credits counted below.

# Phlebotomy

## Phlebotomy — Certificate for Direct Employment

Learn skills to prepare for employment in the area of phlebotomy and prepare to take exams for national certification. This certificate is offered at the Center for Training and Development, Desert Vista Campus and earns college credit.

**Before enrolling in this program,** students must take the College Reading, Math and Writing assessments and must achieve appropriate placement scores.

### *What can I do with this certificate?*

**Career Options:** Once eligible, students are encouraged to take one of the national certification exams in phlebotomy. Work as a phlebotomist in physician’s offices, medical centers, clinics, and medical laboratories.

**Academic Options:** Take courses in medical laboratory technology, medical assisting, registered nursing or practical nursing.

**Location:** Desert Vista Campus

**Department/Contact Information:**

Dean: 520-206-5142

Lead Faculty: 520-206-5100

Program/Major Codes: **CRTPHB/PHB**

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
PHB 160	Foundations of Phlebotomy .....	3
PHB 162	Safety Standards in Phlebotomy .....	3
PHB 164	Professional Practices in Phlebotomy .....	3
PHB 166LB	Phlebotomy Laboratory Practice .....	2
PHB 190LC	Clinical Internship in Phlebotomy .....	1-3
<b>Total Credits as Displayed .....</b>		<b>12-14</b>

## Physics

Explore the science of energy and motion by taking physics courses that focus on mechanics, electricity and magnetism, waves and heat, relativity to the basics of quantum physics. Students learn through lecture and hands-on lab experiences.

**Physics courses are offered as part of the requirements of the Associate of Science degree**, or may be taken as required or elective courses to complete other degrees. Students interested in pursuing a degree at ASU, NAU or UA should meet with physics faculty or an advisor to plan their course of study using the appropriate major guide.

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### *What can I do with my studies in physics?*

**Career options:** Work as a technician in laboratories, with research and development firms, in the laser or optics industry, or in manufacturing.

**Academic Options:** Continue studies towards a bachelor of science in physics, astrophysics, optical sciences, engineering, or education.

**Location:** All Campuses

# Political Science

## Associate of Arts Degree for Transfer

The political science program is designed to prepare students for transfer to a political science program at a four-year institution. Following a four-year degree, students may also pursue graduate degrees in law, international business communications, political science, public administration, and management. Although it is not intended for direct employment, the political science Associate of Arts Degree for Transfer may be recognized by some employers for entry level positions.

### What can I do with this degree?

**Academic Options:** Transfer to a 4-year university to complete a political science degree.

**Locations:** All campuses

**Program/Major Codes:** AOAPOLITLSCI/POS

### Arizona General Education Curriculum Requirements (AGEC-A) - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

English Composition .....	6
Humanities and Fine Arts.....	6
Biological and Physical Sciences .....	8
Mathematics .....	3
Social and Behavioral Sciences .....	3
POS 100 fulfills 3 credits of this requirement. Complete a non-POS course from this category.	
Other Requirements .....	†
POS 201 and a language course fulfill this requirement.	
Special Requirements	
POS 201 fulfills the C requirement. POS 202 fulfills the G requirement. The I requirement must be fulfilled by a course in the above categories.	
<b>Subtotal .....</b>	<b>26 ¥</b>

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
POS 100	Introduction to Politics .....	3
POS 201	American National Government and Politics SUN# POS 1110.....	3
POS 202	Introduction to International Relations SUN# POS 1120.....	3
POS 203	Introduction to Political Ideas .....	3
POS 204	Introduction to Comparative Politics SUN# POS 2204 .....	3
<b>Subtotal .....</b>		<b>15</b>
<b>Required Support Courses</b>		
Second Language Requirement .....	4-16	
Completion of a language course numbered 202*, fourth-semester level. (Bilingual or international students should consult an advisor or counselor concerning exceptions to this requirement.) If a student satisfies the language requirement in fewer than 16 credits, additional credit hours of transferable electives may be required to meet the minimum associate degree requirement of 60 credit hours.		
Electives .....	3-19	
Complete 3-19 transferable credits so the total credits for the degree are 60-64.		
<b>Subtotal .....</b>		<b>19-23</b>
<b>Total credits as displayed .....</b>		<b>60-64</b>

† Core or support course(s) fulfill this requirement.

¥ AGEC requires 35 credits. This subtotal shows the AGEC credits not fulfilled by core, support, or second language courses.

# Psychology Concentration — Transfer

Students planning to transfer to a university to major in psychology should complete this psychology concentration\*\* as part of completing the **Associate of Arts in Liberal Arts degree**, including an **AGEC-A**. Students should meet with a Psychology faculty member, an advisor, or a counselor to plan their course of study using the appropriate transfer guide.

Please note that one or two of the Psychology concentration courses below may also fulfill AGEC-A general education requirements of the Associate of Arts in Liberal Arts. See an advisor or counselor.

Program/Major/Concentration Codes: **AOALIBRALART/ALA/ALAP**

Course Number	Course Title	Credit Hours
<b>Required Core Courses – A grade of C or better is required for graduation.</b>		
PSY 101 or PSY 100A and PSY 100B	Introduction to Psychology SUN# PSY 1101 .....	4-6
PSY 230*	Psychology I and Psychology II Psychological Measurements and Statistics .....	3
PSY 289*	Research Methods SUN# PSY 2290 .....	4
<b>Subtotal</b> .....		<b>11-13</b>

Select one additional course from the list below.

PSY 132*	Psychology and Culture .....	3
PSY 210	Introduction to Biopsychology .....	3
PSY 214*	Abnormal Psychology .....	3
PSY 215*	Human Sexuality .....	3
PSY 216*	Psychology of Gender .....	3
PSY 218*	Health Psychology .....	3
PSY 220*	Psychology of Death & Loss .....	3
PSY 240*	Developmental Psychology .....	3
PSY 250*	Introduction to Social Psychology .....	3
PSY 254*	Psychology of Love and Compassion .....	3
PSY 262	Positive Psychology .....	3
<b>Subtotal</b> .....		<b>3</b>
<b>Total credits as displayed</b> .....		<b>14-16*</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.  
 \*\* To be awarded this concentration you must complete the course requirements above and the Associate of Arts in Liberal Arts with an AGEC-A.



## Public Safety and Emergency Services Institute

The purpose of the Public Safety and Emergency Services Institute is to provide training and educational opportunities and resources to several career areas including Administration of Justice, Law Enforcement, Emergency Medical Technician, Fire Science and Public Safety Communications. We offer convenient, flexible and immediately useful programs to professionals who seek advancement in their careers as well as courses for the general public. In addition, the Law Enforcement Associate of Applied Science Degree is designed to transfer to NAU's Bachelor of Applied Science Degree in Justice Systems and Policy Planning, and the Fire Science Associate of Applied Science Degree to ASU's Bachelor of Applied Science Degree in Fire Service Management. Both of these programs are offered in Tucson.

Educational opportunities at the Institute reflect contemporary issues, current techniques and technology used in public safety and emergency services. Our programs and services focus on the safety and well being of Southern Arizona and the greater community.

The training and education we offer can give your employees new and improved skills, insight, understanding, and opportunities to learn how to meet a changing agency's environment. We also provide all the academic support services they need: academic advising, computer labs, and information resources.

When your commissioned and non-commissioned employees enroll in courses which are a part of the Institute, your agency gains professionals who have a greater range of skills, and who have the education to meet the expanding role of your agency. The Institute provides a source for management education and leadership development plus targeted opportunities for professional development.

Our partnerships with public safety agencies are based on mutual respect, trust and benefit. We work together to make effective use of the talent, facilities and resources possessed by each partner.

See the following programs in this main program section of the catalog: Administration of Justice and Fire Science. See the following programs in the Workforce Response Programs in the Other Programs section of the catalog: Corrections, Emergency Medical Technology, and Law Enforcement. Also see courses in Community Development (CDE).

### **Public Safety and Emergency Services Institute**

Community Campus  
401 North Bonita Ave.  
Tucson, AZ 85709-5000  
520-206-6350

# Radiologic Technology

Become a technologist in the field of diagnostic medical imaging.

## Radiologic Technology — Associate of Applied Science Degree for Direct Employment

Learn diagnostic medical imaging, equipment operation, radiographic procedures, patient care, and radiation safety and protection. This program is accredited by the Joint Review Committee of Education for Radiologic Technology.

### Before enrolling in this program, you must complete certain requirements:

This degree program requires a special program application. Once all prerequisites are complete students can access the program application on the MyPima Academics tab, in the Degrees and Program section.

Prospective students with misdemeanor or felony convictions see [www.pima.edu/programs-courses/credit-programs-degrees/health-professions/radiologic-technology/admissions.html](http://www.pima.edu/programs-courses/credit-programs-degrees/health-professions/radiologic-technology/admissions.html) for important information on licensure.

### To participate in the program, the students must:

1. Provide and maintain an Arizona DPS Fingerprint Clearance Card.
2. Pass an annual urine toxicology screening exam.
3. 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 Radiologic Technology program 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.
4. Provide own transportation to various clinical facilities throughout the Tucson regional area.
5. Present proof of immunization or immunity for MMR/Varicella/TDaP.
6. Obtain an annual flu shot.
7. Show proof of negative TB skin test or negative chest x-ray for TB.
8. Clinical rotations are at various clinical facilities throughout the Tucson regional area.
9. Maintain health insurance and a current CPR card at the Health Care Provider Level throughout the program.

### What can I do with this degree?

**Career Options:** Eligibility to apply for the medical radiography exam by the American Registry of Radiologic Technologists and qualify to work in hospitals, clinics and doctors' offices.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** West Campus

#### Department/Contact Information:

Dean: 520-206-6663

Lead Faculty: 520-206-3105

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

### Program Prerequisites

Students must have completed the following prerequisites (with grades posted) before they may begin the application process.

International students must obtain an appropriate score on the institutional TOEFL (Test of English as a Second Language.)

REA 112\* or an appropriate score on the Reading assessment ..... 0-4

MAT 097\* with a grade of C or better within the last eight years, or Math assessment score at MAT 151 or higher within the last eight years..... 0-3

BIO 201IN\* and BIO 2021N\* with a combined average of B or better within the last six years.

Note: Minimal course grade requirement can be met with a grade of C in one course and a grade of A in the other. Complete BIO 156IN prerequisite as needed..... 8-12

HIT 105\*\* Medical Terminology ..... 4

**Subtotal** ..... **12-23**

**General Education Requirements - A grade of C or better is required for graduation.**

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	†
WRT 101 and WRT 102 fulfill this requirement.	
Analysis and Critical Thinking Requirement .....	†
BIO 201IN, 202IN and the math prerequisite fulfills this requirement.	
Humanities and Social Science Requirement .....	3
PSY 101 fulfills 4 credits of this requirement. Complete a course from the Humanities & Fine Arts or the Leadership & Ethics category which also meets the cultural diversity (C) or global awareness (G) requirement.	
Computer and Information Literacy Requirement .....	1-3
Special Requirement	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal .....</b>	<b>4-6‡</b>

<b>Course Number</b>	<b>Course Title</b>	<b>Credit Hours</b>
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**Required Core Courses - A grade of C or better is required for graduation.**

RAD 170/170LB*	Medical Imaging Fundamentals .....	3
RAD 171/171LB*	Radiographic Positioning I .....	4.5
RAD 172/172LB*	Medical Imaging Technology I .....	3.5
RAD 173LC*	Clinical Education I .....	6
RAD 174/174LB*	Radiographic Positioning II .....	4.5
RAD 175/175LB*	Medical Imaging Technology II .....	3.5
RAD 176LC*	Clinical Education II .....	6
RAD 177LC*	Clinical Education III .....	6
RAD 181/181LB*	Radiographic Positioning III .....	4
RAD 182*	Medical Imaging Technology III .....	3
RAD 183LC*	Clinical Education IV .....	4
RAD 184/184LB*	Radiographic Positioning IV .....	3.5
RAD 185*	Clinical Seminar .....	2.5
RAD 186LC*	Clinical Education V .....	6
<b>Subtotal .....</b>	<b>60</b>	

**Required Support Courses - A grade of C or better is required for graduation.**

PSY 101	Introduction to Psychology SUN# PSY 1101 .....	4
WRT 101*	Writing I SUN# ENG 1101 .....	3
WRT 102*	Writing II SUN# ENG 1102 .....	3
<b>Subtotal .....</b>	<b>10</b>	

**Total credits as displayed with program prerequisites .....** **86-96**

† Core or support course(s) fulfill this requirement.  
 ‡ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.  
 \* This course has a prerequisite, co-requisite, or recommendation. See course description section.  
 \*\* HIT 162 is no longer offered, but will meet the prerequisite for students that have already taken the course.

# Respiratory Care

## Respiratory Care — Associate of Applied Science Degree for Direct Employment

Develop skills through classroom and clinical experience to become a respiratory therapist. Pima Community College's Respiratory Care program is accredited by the Commission on Accreditation for Respiratory Care ([www.coarc.com](http://www.coarc.com)).

Commission on Accreditation for Respiratory Care  
1248 Harwood Road, Bedford, Texas 76021-4244  
817-283-2835 (telephone), 817-354-8519 (fax)

**Before enrolling in this program**, you must complete certain requirements. This program requires a special Respiratory Care – AAS program application. Once all prerequisites are complete students can access the program application on the MyPima Academics tab in the Degrees and Programs section.

### To participate in the clinical portion of the program, the students must:

1. Provide and maintain an Arizona DPS Fingerprint Clearance Card.
2. Pass a urine toxicology screening exam.
3. 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 without the use of a mechanical device, stand and walk for several hours at a time, perform bending activities, move medical equipment, and perform chest compressions. The clinical Respiratory Care Program 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.
4. Be able to assess and gather information regarding the patient, i.e., color changes in the skin, hearing heart and lung sounds through a stethoscope, feeling pulses, communicate effectively with the patient and health care team, and the ability to synthesize the data obtained to critically think and make emergency decisions.
5. Present proof of immunization or immunity for MMR/Varicella/Hep-B/TDaP.
6. Show proof of negative TB skin test or negative chest x-ray for TB.
7. Maintain health insurance and a CPR card at the Health Care Provider Level throughout enrollment in the program.

Note: The Commission on Accreditation for Respiratory Care requires students to successfully complete an Advanced Cardiac Life Support course prior to graduation. The Respiratory Care program requires successful completion of the Advanced Cardiac Life Support course prior to the third semester of the program.

### Important Information on Licensure

Students should be aware that federal and state law requires documentation that the applicant for Respiratory Care Practitioner licensure is a U.S. citizen, national, or a person described in specific categories, to be eligible for licensure in Arizona.

All applicants applying or renewing a license must also demonstrate U.S. citizenship or lawful presence in the U.S. A statement of Citizenship form with the documents identified in the Evidence of Citizenship attachment must accompany all license applications and renewals.

### What can I do with this degree?

**Career Options:** Apply to take the exam given by the National Board of Respiratory Care to become a certified respiratory therapist. This degree also qualifies graduates to take the registered respiratory therapist exam. Become licensed in Arizona. Work in hospitals, special-care facilities and other settings taking care of cardiopulmonary patients.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** West Campus

#### Department/Contact Information:

Dean: 520-206-6663

Lead Faculty: 520-206-3107

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

**Program Prerequisites**

Students must have completed the following prerequisites (with grades posted) before they may begin the application process.

International students must score higher than 450 on the institutional TOEFL (Test of English as a Second Language)

REA 112 or appropriate reading assessment score.....	0-4
MAT 097 with a grade of C or better within the last eight years, or Math assessment score at MAT 151 or higher within the last eight years.....	0-3
CHM 130/130LB/130IN* with a grade of C or better, or appropriate Chemistry assessment score.....	0-5
Within the last six years with a grade of C or better: BIO 160IN, or all of the following:	
BIO 156IN and 201IN* and 202IN*.....	4-12
BIO 205IN* Microbiology.....	4
PSY 101 Introduction to Psychology.....	4
WRT 101 Writing I with a C or better.....	3
WRT 102 Writing II with a C or better.....	3
<b>Subtotal.....</b>	<b>18-38</b>

**General Education Requirements - A grade of C or better is required for graduation.**

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement.....	†
WRT 101 and WRT 102 program prerequisites fulfill this requirement	
Analysis and Critical Thinking Requirement.....	†
CHM 130IN and BIO 205IN and the math prerequisite fulfills this requirement	
Humanities and Social Science Requirement.....	3
PSY 101 program prerequisite fulfills 4 credits of this requirement. Complete a course from the Humanities or Leadership & Ethics category which also meets the cultural diversity (C) or global awareness (G) requirement.	
Computer and Information Literacy Requirement.....	†
Core courses fulfill this requirement	
Special Requirement	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal.....</b>	<b>3‡</b>

Course Number	Course Title	Credit Hours
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**Required Core Courses - A grade of C or better is required for graduation.**

HCA 152	Advanced Cardiac Life Support.....	2
RTH 110*	Introduction to Respiratory Care.....	4
RTH 112*	Respiratory Physiology.....	4
RTH 121/121LB*	Basic Therapeutics in Respiratory Care.....	5
RTH 123/123LB*	Basic Assessment and Monitoring.....	4
RTH 124*	Pharmacology for Respiratory Care.....	3
RTH 125LC*	Clinical Procedures I.....	1
RTH 135LC*	Clinical Procedures II.....	3
RTH 162*	Principles of Mechanical Ventilation.....	3
RTH 241/241LB*	Critical Care Therapeutics.....	5
RTH 243/243LB*	Advanced Assessment and Monitoring.....	5
RTH 245LC*	Clinical Procedures III.....	4
RTH 246*	Cardiorespiratory Disorders I.....	3
RTH 251/251LB*	Advanced and Specialty Therapeutics.....	5
RTH 255LC*	Clinical Procedures IV.....	4
RTH 256*	Cardiorespiratory Disorders II.....	3
RTH 257LB*	Clinical Applications and Professional Development.....	1
<b>Subtotal.....</b>		<b>59</b>
<b>Total credits as displayed with program prerequisites.....</b>		<b>80-100</b>

† Core or support course(s) fulfill this requirement.

‡ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Social Services

Gain knowledge and skills for employment in social service organizations that provide community services including service delivery, community outreach and intervention.

### Social Services — Associate of Applied Science Degree for Direct Employment

Learn core principles and skills in social work, community services and casework management.

#### What can I do with this degree?

**Career Options:** Entry-level employment in social service positions.

**Academic Options:** Students intending to transfer to a four-year university should pursue the Social Services Associate of Arts degree.

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6996

Lead Faculty: 520-206-6958

Program/Major Codes: **AASSOCIALSRV/SSE**

#### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement	6
Analysis and Critical Thinking Requirement	6
Humanities and Social Science Requirement	3
SSE 110 fulfills 3 credits of the Social Science category. Complete a course from the Humanities & Fine Arts or Leadership & Ethics category.	
Computer and Information Literacy Requirement	1-3
Special Requirement	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal</b>	<b>16-18<sup>¥</sup></b>

Course Number	Course Title	Credit Hours
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#### Required Core Courses - A grade of C or better is required for graduation.

SSE 110	Introduction to Social Welfare	3
SSE 111	Group Work	3
SSE 210*	Community Organization and Development	3
SSE 211*	Group Technique Applications	3
SSE 281*	Social Service Delivery Systems (was SSE 212)	3
SSE 285*	Foundations of Social Work Practice (was SSE 202)	3
SSE 292*	Social Services Field Experience	4
<b>Subtotal</b>		<b>22</b>

#### Required Support Courses

SSE Electives	3
Electives - Complete 17-23 credits so the total credits for the degree are 60-64	17-23
Please see an advisor to select appropriate course work.	
<b>Subtotal</b>	<b>20-26</b>
<b>Total credits as displayed</b>	<b>60-64</b>

<sup>¥</sup> General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Social Services — Associate of Arts Degree for Transfer

Prepare to transfer to a university to complete a degree in social work.

### What can I do with this degree?

**Career Options:** Entry-level employment in social service positions.

**Academic Options:** Transfer to ASU majoring in social work; may also transfer to other BSW programs.

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6996

Lead Faculty: 520-206-6958

Program/Major Codes: **AOASOCIALSRV/SST**

### Arizona General Education Curriculum Requirements (AGEC-A) - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

English Composition .....	6
Humanities and Fine Arts.....	3
PHI 101 or 130 fulfills 3 credits of this requirement. Complete a course from the Art List.	
Biological and Physical Sciences .....	4
BIO 156IN or 160IN fulfill 4 credits of this requirement. Complete another course from this category.	
Mathematics.....	†
MAT 142 or 151 fulfills this requirement	
Social and Behavioral Sciences .....	†
SSE 110 and ECN 202 fulfill this requirement.	
Other Requirements .....	3
PSY 101 or SOC 101 fulfill 3 credits of this requirement. Complete another course from this category.	
Special Requirements	
The I, C, and G requirements should be fulfilled by selecting appropriate courses in the above categories	
<b>Subtotal .....</b>	<b>16‡</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

SSE 110	Introduction to Social Welfare .....	3
SSE 111	Group Work .....	3
SSE 210*	Community Organization and Development .....	3
SSE 211*	Group Technique Applications .....	3
SSE 281*	Social Service Delivery Systems (was SSE 212) .....	3
SSE 285*	Foundations of Social Work Practice (was SSE 202).....	3
SSE Transferable Electives .....		3
<b>Subtotal .....</b>		<b>21</b>

### Required Support Courses

BIO 156IN*	Human Biology for Allied Health .....	4
or BIO 160IN	Introduction to Human Anatomy and Physiology .....	
ECN 202*	Macroeconomic Principles SUN# ECN 2201 .....	3
MAT 142 *	Topics in College Mathematics SUN# MAT 1142.....	3-4
or MAT 151*	College Algebra SUN# MAT 1151 .....	
or any MAT course numbered above 151		
PHI 101	Introduction to Philosophy SUN# PHI 1101 .....	3
or PHI 130	Introductory Studies in Ethics and Social Philosophy SUN# PHI 1105 .....	
PSY 101	Introduction to Psychology SUN# PSY 1101 .....	3-4
or SOC 101	Introduction to Sociology SUN# SOC 1101 .....	
Transferable Electives .....		7-12

See your advisor to select 7 to 12 credits of transferable electives so the program total is 60 to 64 credits.

Language requirement: 4th semester proficiency in a language is required by ASU. This proficiency may be demonstrated through completion of a language course numbered 202 or via assessment at ASU. If more than 64 credits are required to reach fourth-semester proficiency while at PCC, the requirement will be fulfilled but no more than 64 credits will be applied toward the bachelor's degree.

<b>Subtotal</b> .....	<b>23-27</b>
<b>Total credits as displayed</b> .....	<b>60-64</b>
† Support or core course(s) fulfill this requirement.	
* This course has a prerequisite, co-requisite, or recommendation. See course description section.	
‡ AGEC requires 35 credits. This subtotal shows the AGEC credits not fulfilled by core, support, or second language courses.	

## Social Services Substance Use Disorder Specialty — Associate of Applied Science Degree for Direct Employment

Learn principles and skills in social work with an emphasis on drug and alcohol treatment and prevention.

### What can I do with this degree?

**Career Options:** Entry-level employment in positions providing substance use disorder services and related community outreach.

**Academic Options:** Students intending to transfer to a four-year university should pursue the Social Services AA degree.

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6996

Lead Faculty: 520-206-6958

Program/Major Codes: **AASSUBSTABUS/SSS**

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	6
Analysis and Critical Thinking Requirement .....	6
Humanities and Social Science Requirement .....	3
SSE 110 fulfills 3 credits in the Social Science category. Complete a course from the Humanities & Fine Arts or Leadership & Ethics category.	
Computer and Information Literacy Requirement .....	1-3
Special Requirement	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal</b> .....	<b>16-18‡</b>

Course Number	Course Title	Credit Hours
---------------	--------------	--------------

### Required Core Courses - A grade of C or better is required for graduation.

SSE 110	Introduction to Social Welfare .....	3
SSE 111	Group Work .....	3
SSE 121	Study of Substance Use Disorders .....	3
SSE 123	Prevention of Substance Use Disorders .....	3
SSE 210*	Community Organization and Development .....	3
SSE 211*	Group Technique Applications .....	3
SSE 220*	Treatment of Substance Use Disorders .....	3
SSE 222*	Political, Legal and Ethical Aspects of Substance Use .....	3
SSE 281*	Social Service Delivery Systems (was SSE 212) .....	3
SSE 285*	Foundations of Social Work Practice (was SSE 202) .....	3
SSE 292*	Social Services Field Experience .....	4
<b>Subtotal</b> .....		<b>34</b>

### Required Support Courses

SSE 224	Substance Use and Abuse Among Diverse and Special Needs Population .....	3
Electives .....		7 - 9
Please see an advisor to select appropriate course work.		
<b>Subtotal</b> .....		<b>10-12</b>

<b>Total credits as displayed</b> .....	<b>60-64</b>
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‡ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.



## Social Services Substance Use Disorder Specialty — For Transfer

See the Social Services Associate of Arts Degree for Transfer.  
 Use Program Identification Code: **AOASOCIALSRV**

## Social Services Youth Services Specialty — Associate of Applied Science Degree for Direct Employment

Learn principles and skills in social work with an emphasis on crisis intervention and community services for children.

### What can I do with this degree?

**Career Options:** Entry-level employment in youth services agencies.

**Academic Options:** Students intending to transfer to a four-year university should pursue the Social Services AA degree.

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6996

Lead Faculty: 520-206-6958

Program/Major Codes: **AASYOUTHSERV/SSY**

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	6
Analysis and Critical Thinking Requirement .....	6
Humanities and Social Science Requirement .....	3
SSE 110 fulfills 3 credits in the Social Science category. Complete a course from the Humanities & Fine Arts or the Leadership & Ethics category.	
Computer and Information Literacy Requirement .....	1-3
Special Requirement	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal .....</b>	<b>16-18¥</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

AJS 212*	Juvenile Justice Procedures .....	3
ECE 117*	Child Growth and Development .....	3
SSE 110	Introduction to Social Welfare .....	3
SSE 111	Group Work .....	3
SSE 146	Child Abuse Intervention and Protection .....	3
SSE 160	Introduction to Youth Services .....	3
SSE 210*	Community Organization and Development .....	3
SSE 211*	Group Technique Applications .....	3
SSE 242*	Crisis Intervention, Theory and Techniques .....	3
SSE 285*	Foundations of Social Work Practice (was SSE 202) .....	3
SSE 290*	Youth Services Field Experience .....	4
<b>Subtotal .....</b>	<b>34</b>	

### Required Support Courses

Electives .....	10-12
Please see an advisor to select appropriate course work.	
<b>Subtotal .....</b>	<b>10-12</b>
<b>Total credits as displayed .....</b>	<b>60-64</b>

¥ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Social Services Youth Services Specialty — For Transfer

See the Social Services Associate of Arts Degree for Transfer.

Use Program Identification Code: **AOASOCIALSRV**

## Basic Social Services Certificate for Direct Employment

Gain skills and knowledge in dealing with social welfare, service agencies and community groups and the needs of individual clients.

### What can I do with this certificate?

**Career Options:** Enhance employment and promotion opportunities in industry, business and human services.

**Academic Options:** Pursue other Social Services certificates or a Social Services degree.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-29.html>

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6996

Lead Faculty: 520-206-6958

Program/Major Codes: **CRTSOCIALSRV/SSC**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
SSE 110	Introduction to Social Welfare .....	3
SSE 111	Group Work .....	3
SSE 210*	Community Organization and Development .....	3
SSE 211*	Group Technique Applications .....	3
SSE 281*	Social Service Delivery Systems (was SSE 212) .....	3
SSE 285*	Foundations of Social Work Practice (was SSE 202) .....	3
<b>Total credits as displayed .....</b>		<b>18</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Social Services Substance Use Disorder Certificate for Direct Employment

Understand drug and alcohol abuse and treatment methods.

### What can I do with this certificate?

**Career Options:** Seek employment or promotion in agencies that provide substance abuse intervention for substance use disorders.

**Academic Options:** Pursue other Social Services certificates or a Social Services degree.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-26.html>

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6996

Lead Faculty: 520-206-6958

Program/Major Codes: **CRTSUBSTABUS/SSA**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
SSE 110	Introduction to Social Welfare .....	3
SSE 121	Study of Substance Use Disorders .....	3
SSE 123	Prevention of Substance Use Disorders .....	3
SSE 220*	Treatment of the Substance Use Disorders .....	3
SSE 222*	Political, Legal and Ethical Aspects of Substance Use .....	3
SSE 285*	Foundations of Social Work Practice (was SSE 202) .....	3
<b>Total credits as displayed .....</b>		<b>18</b>

\* This course has a prerequisite, co-requisite or recommendation. See course description section.

## Social Services Domestic Violence Intervention Certificate for Direct Employment

Understand the dynamics of domestic violence including crisis intervention and treatment methods.

### What can I do with this certificate?

**Career Options:** Seek employment or promotion in agencies providing domestic violence intervention.

**Academic Options:** Pursue other Social Services certificates or a Social Services degree.

**More Information:** Review program costs, student debt, on-time graduation and more <https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-27.html>

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6996

Lead Faculty: 520-206-6958

Program/Major Codes: CRTDOMESVIOL/SSD

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
SOC 127	Marriage and the Family .....	3
SSE 110	Introduction to Social Welfare .....	3
SSE 140	Domestic Violence: Causes and Cures .....	3
SSE 146	Child Abuse Intervention and Protection .....	3
SSE 242*	Crisis Intervention, Theory and Techniques (was SSE 202) .....	3
SSE 285*	Foundations of Social Work Practice .....	3
<b>Total credits as displayed .....</b>		<b>18</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Social Services Community Health Advisor — Certificate for Direct Employment

Learn how to promote health in a community context and provide direct services to clients.

### What can I do with this certificate?

**Career Options:** Seek employment or promotion in health agencies and disease prevention education services.

**Academic Options:** Pursue other Social Services certificates or a Social Services degree.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-28.html>

**Location:** West Campus

**Department/Contact Information:**

Dean: 520-206-6996

Lead Faculty: 520-206-6958

Program/Major Codes: **CRTHEALTHADV/CHA**

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
SSE 110	Introduction to Social Welfare .....	3
SSE 170	Community Health Advising .....	3
SSE 205	Case Report Writing .....	3
SSE 293*	Community Health and Development Field Experience .....	4
Social Services Elective: Select one course below for 3 credit hours:		
	SSE 121, 140, 146, 160, or 210* .....	3
<b>Total credits as displayed .....</b>		<b>16</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

# Sociology

## Sociology — Associate of Arts Degree for Transfer

Complete general education requirements to transfer to a college or university while learning the principles of sociology. Students interested in social services should complete a degree or certificate in that discipline.

### What can I do with this degree?

**Career Options:** Apply for an entry-level position in a social agency or non-profit organization.

**Academic Options:** Transfer to a 4-year university to complete a sociology degree.

**Locations:** All campuses

Program/Major Codes: **AOASOCIOLOGY/SOC**

### Arizona General Education Curriculum Requirements (AGEC-A) - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

English Composition .....	6
Humanities and Fine Arts.....	6
Biological and Physical Sciences .....	8
Mathematics .....	3
Social and Behavioral Sciences .....	3
SOC 101 fulfills 3 credits of this requirement. Complete a non-SOC course from this category.	
Other Requirements .....	†
SOC 120 and 201 fulfill this requirement.	
Special Requirements	
SOC 120 fulfills the C and G requirements. The I requirement can be fulfilled by selecting appropriate courses in the above categories or by selecting SOC 203 as an elective.	
<b>Subtotal .....</b>	<b>26</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

SOC 101	Introduction to Sociology SUN# SOC 1101 .....	3
SOC 120*	Current Social Problems SUN# SOC 2250 .....	3
SOC 127	Marriage and the Family .....	3
SOC 201	Race, Ethnicity, Minority Groups and Social Justice SUN# SOC 2215 .....	3
SOC 204	Gender Identities, Interactions and Relations .....	3
<b>Subtotal .....</b>		<b>15</b>

### Sociology Electives

Select three credits from the following courses:

SOC 110	Introduction to Cities and Global Society .....	3
SOC 130*	Social World of Drugs .....	3
SOC 140	Sociology of Religion .....	3
SOC 166	Social Gerontology .....	3
SOC 203	Sociology of Utopia .....	3
SOC 215*	Human Sexuality .....	3
SOC 280	Sociology of Education .....	3
SOC 289*	Topics in Community Involvement .....	3
SOC 296*	Independent Study in Sociology .....	3
<b>Subtotal .....</b>		<b>3</b>

**Required Support Courses**

Second Language Requirement .....	16
Completion of a language course numbered 202, fourth semester level. (Bilingual or International students should consult an advisor or counselor concerning exceptions to this requirement.) If a student satisfies the language requirement in fewer than 16 credits, additional credit hours of transferable electives must be completed to meet the minimum Associate degree requirement of 60 credit hours.	
<b>Subtotal</b> .....	<b>16</b>
<b>Total credits as displayed</b> .....	<b>60</b>

† Core or support course(s) fulfill this requirement.

‡ The AGEC requires 35 credits. This subtotal shows the AGEC credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Spanish

A student planning to obtain a degree with an option in Spanish should follow the **Associate of Arts Degree for Transfer in Liberal Arts**. See an advisor or counselor and to plan a course of study using the appropriate major guide.

Program Identification Code: **AOALIBRALART**

# Technical Writing and Communication

## Technical Writing and Communication – Post-degree Certificate for Direct Employment

Master the essential skills needed for a career in technical writing and communication. Technical writers communicate ideas clearly and concisely in manuals, reports, journal articles, web pages and other forms of print and electronic communication.

### What can I do with this certificate?

**Career Options:** Obtain employment or further your career as a technical writer in business or industry, or begin a career as a freelance writer.

**Academic Options:** Continue your studies by taking additional related coursework in writing and/or web development.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-34.html>

**Locations:** Downtown Campus and West Campus

**Department/Contact Information:**

Dean – Downtown: 520-206-7045

Dean – West: 520-206-6690

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

### Program Prerequisites

**Before enrolling in this program, you must fulfill the following requirements.**

Associate or bachelor's degree in a related field from an accredited institution.

WRT 101*	Writing I SUN# ENG 1101 .....	3
WRT 102*	Writing II SUN# ENG 1102.....	3
	or Equivalent coursework that will transfer.	
CIS 120	Computer Applications for Business.....	4
	or Comparable knowledge and skills in computer applications.	
<b>Subtotal</b>	.....	<b>6-10</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

DAR 103	Introduction to Digital Arts .....	3
DAR 120	Applied Computer Graphics .....	4
WRT 140*	Writing and Editing Technical Communications .....	3
WRT 254*	Advanced Professional Communication .....	3
Technical Elective – Complete one course from the following: .....		3-4
CSA 120*	Word Processing: Word	
CIS 121*	Web Publishing	
DAR 256*	Web Design I	
<b>Subtotal</b>	.....	<b>16-17</b>
<b>Total credits as displayed with program prerequisites</b>	.....	<b>22-27</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.



# Therapeutic Massage

## Therapeutic Massage — Certificate for Direct Employment

Learn techniques to alleviate chronic pain, reduce stress, strengthen the immune system, and promote healing through therapeutic massage. Program includes clinical practice in a professional atmosphere and prepares students for the national therapeutic massage and bodywork exam and state licensure.

**Before enrolling in this program, you must meet certain requirements.**

- Program prerequisites must be completed as described in the AAS or Certificate Program Requirements with grades and/or assessment scores posted on PCC transcripts before applying to the program.
- Be at least eighteen years old.
- Must have a high school diploma or GED.
- Attend a Therapeutic Massage Program orientation session.
- Complete advising session with Therapeutic Massage faculty.
- Submit application form by due date.
- Complete health declaration, immunizations, drug screening and fingerprinting.
- Complete prerequisite coursework with a grade of C or better prior to entry into the Massage Therapy Practice classes.

**To participate in the clinical portion of the program, the students must:**

1. Obtain an Arizona DPS Fingerprint Clearance Card.
2. Pass a urine toxicology screening exam.
3. 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. Students must be able to lift, carry, set up and take down massage tables and chairs. The clinical experience also places students under considerable mental and emotional stress as they undertake responsibilities and duties impacting clients' wellness. Students must be able to demonstrate rational and appropriate behavior in day-to-day situations and under stressful conditions. Students will be required to receive massage which results in increased local and systemic circulation, increased venous return, relaxed muscles and overall relaxation. Individuals should give careful consideration to the mental and physical demands of the program prior to making application.
4. Present proof of immunization or immunity for MMR/Varicella/Hep-B.
5. Show proof of negative TB skin test or negative chest x-ray for TB.
6. Maintain health insurance and a CPR card at the Health Care Provider Level throughout the program.

**What can I do with this certificate?**

**Career Options:** Work as a massage therapist in a variety of wellness, medical and corporate facilities, on cruise ships or as a private practitioner.

**Academic Options:** Continue your studies and earn an associate's degree in therapeutic massage.

**More Information:** Review program costs, student debt, on-time graduation and more <https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-54.html>

**Location:** Northwest Campus

**Department/Contact Information:**

Dean: 520-206-2216  
Lead Faculty: 520-206-2263

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

**Program Prerequisites**

Before enrolling in TMA 202IN (or higher), you must fulfill the following requirements with a grade of C or better.	
BIO 160IN, TMA 101, TMA 120, TMA 210, WED 110, WED 111, WRT 101 .....	\$
<b>Subtotal</b> .....	<b>\$</b>

**General Education Requirements A grade of C or better is required for graduation.**

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	†
WRT 101 fulfills this requirement.	
Analysis and Critical Thinking Requirement .....	†
BIO 160IN fulfills the credit requirement for this category, but students must still meet math competency.**	
<b>Subtotal .....</b>	<b>0-3‡</b>

Course Number	Course Title	Credit Hours
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**Required Core Courses - A grade of C or better is required for graduation.**

BIO 160IN	Introduction to Human Anatomy and Physiology .....	4
TMA 101*	Introduction to Massage Therapy .....	3
TMA 120	Professionalism and Ethics for Massage Therapists .....	2
TMA 201IN*	Therapeutic Massage Practice I .....	6
TMA 202IN*	Therapeutic Massage Practice II .....	6
TMA 202LC*	Therapeutic Massage Practice Clinical Lab I .....	1
TMA 203IN*	Therapeutic Massage Practice III .....	6
TMA 203LC*	Therapeutic Massage Practice Clinical Lab II .....	1
TMA 210*	Fundamentals of Kinesiology .....	3
TMA 215*	Introduction to Pathology for Massage and Bodywork .....	3
TMA 222*	Business Management for Massage and Bodywork .....	3
TMA 290LC*	Therapeutic Massage Clinical .....	3
TMA 291*	Internship in Therapeutic Massage .....	1
WED 110	Introduction to Complementary and Alternative Medicine .....	3
WED 111	Self Care for Personal Wellness .....	2
<b>Subtotal .....</b>		<b>46</b>

**Required Support Courses**

WRT 101*	Writing I SUN# ENG 1101 .....	3
<b>Subtotal .....</b>		<b>3</b>
<b>Total credits as displayed with program prerequisites .....</b>		<b>49-52</b>

† Core or support course(s) fulfill this requirement.

‡ General Education requires 6 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

\*\* The math competency can be met by assessment or math coursework. See the General Education section of the catalog for details.

§ Credits counted below.

## Therapeutic Massage — Associate of Applied Science Degree for Direct Employment

Learn techniques to alleviate chronic pain, reduce stress, strengthen the immune system, and promote healing through therapeutic massage while earning an Associate Degree. Program includes clinical practice in a professional atmosphere and prepares students for the national therapeutic massage and bodywork exam and state licensure.

### Before enrolling in this program, you must meet certain requirements.

- Program prerequisites must be completed as describes in the AAS or Certificate Program Requirements with grades and/or assessment scores posted on PCC transcripts before applying to the program.
- Be at least eighteen years old
- Must have a high school diploma or GED
- Attend a Therapeutic Massage Program orientation session
- Complete advising session with Therapeutic Massage faculty
- Submit application form by due date
- Complete health declaration, immunizations, drug screening and fingerprinting
- Complete prerequisite coursework with a grade of C or better prior to entry into the Massage Therapy Practice classes.

### To participate in the clinical portion of the program, the students must:

1. Obtain an Arizona DPS Fingerprint Clearance Card.
2. Pass a urine toxicology screening exam.
3. 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. Students must be able to lift, carry, set up and take down massage tables and chairs. The clinical experience also places students under considerable mental and emotional stress as they undertake responsibilities and duties impacting clients' wellness. Students must be able to demonstrate rational and appropriate behavior in day-to-day situations and under stressful conditions. Students will be required to receive massage which results in increased local and systemic circulation, increased venous return, relaxed muscles and overall relaxation. Individuals should give careful consideration to the mental and physical demands of the program prior to making application.
4. Present proof of immunization or immunity for MMR/Varicella/Hep-B.
5. Show proof of negative TB skin test or negative chest x-ray for TB.
6. Maintain health insurance and a CPR card at the Health Care Provider Level throughout the program.

### What can I do with this degree?

**Career Options:** Work as a massage therapist in a variety of wellness, medical and corporate facilities.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** Northwest Campus

#### Department/Contact Information:

Dean: 520-206-2216

Lead Faculty: 206-2263

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

### Program Prerequisites

Before enrolling in TMA 202IN (or higher), you must fulfill the following requirements with a grade of C or better.

BIO 160IN, TMA 101, TMA 120, TMA 210, WED 110, WED 111, WRT 101 .....	\$
<b>Subtotal</b> .....	<b>\$</b>

### General Education Requirements A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	†
WRT 101 and either WRT 102 or CMN 120 fulfill this requirement.	
Analysis and Critical Thinking Requirement .....	2
BIO 160IN fulfills 4 credits of this requirement, but students must still meet math competency. If math competency is met by assessment, students will need to complete 2 or more credits in Analysis and Critical Thinking category.	

Humanities and Social Science Requirement . . . . .	2
PSY 101 fulfills the Social Science requirement. Complete a course from the Humanities & Fine Arts or the Leadership & Ethics category.	
Computer and Information Literacy . . . . .	1
(CSA 100 or 104 is recommended)	
Special Requirement	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal</b> . . . . .	<b>5¥</b>

Course Number	Course Title	Credit Hours
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**Required Core Courses - A grade of C or better is required for graduation.**

BIO 160IN	Introduction to Human Anatomy and Physiology . . . . .	4
TMA 101*	Introduction to Massage Therapy . . . . .	3
TMA 120	Professionalism and Ethics for Massage Therapists . . . . .	2
TMA 201IN*	Therapeutic Massage Practice I . . . . .	6
TMA 202IN*	Therapeutic Massage Practice II . . . . .	6
TMA 202LC*	Therapeutic Massage Practice Clinical Lab I . . . . .	1
TMA 203IN*	Therapeutic Massage Practice III . . . . .	6
TMA 203LC*	Therapeutic Massage Practice Clinical Lab II . . . . .	1
TMA 210*	Fundamentals of Kinesiology . . . . .	3
TMA 215*	Introduction to Pathology for Massage and Bodywork . . . . .	3
TMA 222*	Business Management for Massage and Bodywork Practitioners . . . . .	2
TMA 290LC*	Therapeutic Massage Clinical . . . . .	3
TMA 291*	Internship in Therapeutic Massage . . . . .	1
WED 110	Introduction to Complementary and Alternative Medicine . . . . .	3
WED 111	Self Care for Personal Wellness . . . . .	2
<b>Subtotal</b> . . . . .		<b>46</b>

**Required Support Courses**

ACC 100	Practical Accounting Procedures . . . . .	3
PSY 101	Introduction to Psychology SUN# PSY 1101 . . . . .	4
WRT 101*	Writing I SUN# ENG 1101 . . . . .	3
WRT 102*	Writing II SUN# ENG 1102 . . . . .	3
or CMN 120	Business and Professional Communication	
<b>Subtotal</b> . . . . .		<b>13</b>
<b>Total credits as displayed with program prerequisites</b> . . . . .		<b>64</b>

† Core or support course(s) fulfill this requirement

¥ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

§ Credits counted below.

# Translation and Interpretation

## Translation and Interpretation Studies — Certificate for Direct Employment

Improve your skills in Spanish-English and English-Spanish written translation in the health care, legal, literary and business fields. Courses include both hands-on and theoretical classes, as well as internship opportunities. Students are successful in this program with a minimum score of 520 on the Spanish Computerized Adaptive Placement Exam (SCAPE), see <http://www.perpetualworks.com/webscape/overview>.

### What can I do with this certificate?

**Career Options:** Translate written documents between English and Spanish.

**Academic Options:** Continue your studies by completing the Associate of Applied Science degree.

**More Information:** Review program costs, student debt, on-time graduation and more  
<https://www.pima.edu/programs-courses/gainful-employment/2016/gedt-17.html>

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7045

Lead Faculty: 520-206-7274

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

Course Number	Course Title	Credit Hours
<b>Program Prerequisites</b>		
Before enrolling in this program (TRS 102 or higher) you must fulfill the following requirements.		
WRT 101* or WRT 107*	Writing I ..... Writing I for Non-Native Speakers of English	3
WRT 102* or WRT 108*	Writing II ..... Writing II for Non-Native Speakers of English	3
Pass a proficiency test or completion of the following:		
SPA 103*	Beginning Spanish for Heritage and Bilingual Learners .....	0-4
SPA 203*	Writing and Oral Skills for Heritage and Bilingual Learners .....	0-4
SPA 253*	Intermediate Spanish for Heritage and Bilingual Learners .....	0-4
SPA 254*	Intermediate Grammar and Writing for Heritage and Bilingual Learners .....	0-3
Demonstrate 50 percent competency translating a document without aid.		
<b>Subtotal</b> .....		<b>6-21</b>
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
TRS 101	Introduction to Translation and Interpretation .....	3
TRS 102*	English and Spanish for Translation .....	4
TRS 120IN	Technology for Translation and Interpretation .....	2
TRS 150 or TRS 203	Survey of Translation Specialty Areas ..... Consecutive Interpretation and Sight Translation	4
TRS 160 or TRS 270	Translation in Specialty Areas ..... Simultaneous Interpretation	4
TRS 161 or TRS 162	Medical Spanish/English Interpreting ..... Introduction to Legal Spanish/English Interpretation	3
TRS 202	Interpretation Techniques .....	3
TRS 282	Advanced Project in Translation .....	4
<b>Subtotal</b> .....		<b>27</b>
<b>Total credits as displayed with program prerequisites</b> .....		<b>33-48</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Translation and Interpretation Studies—Associate of Applied Science Degree for Direct Employment

This program is designed to prepare students for entry level employment in translation or interpretation. The Associate of Applied Science degree has course work to develop skills specific to the translation of written documents and the interpretation of oral passages from a source language into a target language. Through a combination of theory and practice, students will gain experience in translating or interpreting in specialty areas such as health care, legal, literary, and business. Students are successful in this program with a minimum score of 520 on the Spanish Computerized Adaptive Placement Exam (SCAPE), see <http://www.perpetualworks.com/webscape/overview>.

### What can I do with this certificate?

**Career Options:** Translate written documents and/or interpret oral passages from a source language into a target language between English and Spanish

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7045

Lead Faculty: 520-206-7274

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

### Program Prerequisites

Before enrolling in this program (TRS 102 or higher) you must fulfill the following requirements.

WRT 101*	Writing I .....	\$
or WRT 107*	Writing I for Non-Native Speakers of English	
WRT 102*	Writing II .....	\$
or WRT 108*	Writing II for Non-Native Speakers of English	

Pass a proficiency test or completion of the following:

SPA 103*	Beginning Spanish for Heritage and Bilingual Learners .....	0-4
SPA 203*	Writing and Oral Skills for Heritage and Bilingual Learners .....	0-4
SPA 253*	Intermediate Spanish for Heritage and Bilingual Learners .....	\$
SPA 254*	Intermediate Grammar and Writing for Heritage and Bilingual Learners .....	0-3

Demonstrate 50 percent competency translating a document without aid and interpreting an oral presentation.

**Subtotal .....** **0-11**

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement .....	†
WRT 101 and 102 or WRT 107 and 108 fulfill this requirement.	
Analysis and Critical Thinking Requirement .....	6
Humanities and Social Science Requirement .....	†
ANT 112 and SPA 253 complete this requirement.	
Computer and Information Literacy Requirement .....	†
CSA 100 or CIS/CSA 104 fulfill this requirement.	
Special Requirements	
ANT 112 fulfills this requirement	

**Subtotal .....** **6¥**

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

TRS 101	Introduction to Translation and Interpretation .....	3
TRS 102	English and Spanish for Translation .....	4
TRS 120IN	Technology for Translation and Interpretation .....	2
TRS 150	Survey of Translation Specialty Areas .....	4
TRS 160	Translation in Specialty Areas .....	4

TRS 161	Medical Spanish/English Interpreting .....	3
or TRS 162	Introduction to Legal Spanish/English Interpretation	
TRS 202	Interpretation Techniques .....	3
TRS 282*	Advanced Project in Translation .....	4
<b>Subtotal</b> .....		<b>27</b>

**Required Support Courses - A grade of C or better is required for graduation.**

ANT 112	Exploring Non-Western Cultures .....	3
CSA 100*	Computer Literacy .....	1-3
or CIS/CSA 104*	Computer Fundamentals	
SPA 103	Beginning Spanish for Heritage and Bilingual Learners.....	4
SPA 203*	Writing and Oral Skills for Heritage and Bilingual Learners .....	4
SPA 253*	Intermediate Spanish for Spanish Speakers .....	4
SPA 254*	Intermediate Grammar and Writing for Heritage and Bilingual Learners .....	3
WRT 101*	Writing I SUN# ENG 1101 .....	3
or WRT 107*	Writing I for Non-Native Speakers of English	
WRT 102*	Writing II SUN# ENG 1102.....	3
or WRT 108*	Writing II for Non-Native Speakers of English	
<b>Subtotal</b> .....		<b>27-28</b>
<b>Total credits as displayed with program prerequisites</b> .....		<b>60-61</b>

† Core or support course(s) fulfill this requirement.

‡ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

# Truck Driver Training

Become a professional truck driver and prepare for commercial license tests.

## Class A Vehicle Driver — Certificate for Direct Employment

Learn the basics of vehicle operation, commercial driver's license requirements, and driving maneuvers. Classes include driving time.

**Before you enroll you must:** meet admission requirements as outlined by the Truck Driver Training Program

### What can I do with this certificate?

**Career Options:** Driver trainee or co-driver

**Location:** Community Campus

**Department/Contact Information:**

Dean: 520-206-6424

Lead Faculty: 520-206-2744

**Prerequisite(s):** Meet admission requirements as outlined by the Truck Driver Training Program.

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
TDT 118*	Basic Vehicle Operations – Class A Commercial Driver's License .....	5
TDT 119*	Basic Driving Maneuvers – Class A Commercial Driver's License .....	3.5
<b>Total credits as displayed .....</b>		<b>8.5</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Coach/Transit Bus Driver — Certificate for Direct Employment

Gain basic knowledge of coach and transit bus driving. Classes include driving time. Complete this program by taking classes exclusively on weekdays, exclusively on evenings/weekends, or in a combination of day, evening and weekend classes.

**Before you enroll you must:** meet admission requirements as outlined by the Truck Driver Training Program

### What can I do with this certificate?

**Career Options:** Coach/Transit Bus driver

**Location:** Community Campus

**Department/Contact Information:**

Division Dean: 520-206-6321

Lead Faculty: 520-206-2744

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
TDT 116*	Basic Vehicle Operations - Coach/Transit Bus .....	3
TDT 117*	Basic Driving Maneuvers - Coach/Transit Bus .....	3
<b>Total credits as displayed .....</b>		<b>6</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.



# Veterinary Technology

Learn to provide veterinary care to animals and how to work in the front office area of veterinary practices.

## Veterinary Practice Assistant — Certificate of Direct Employment

Learn how to work in the front office area of veterinary practices. This certificate focuses on medical concepts and communication skills in a veterinary practice.

### What can I do with this certificate?

- Career Options:** Work in the front office area of veterinary practices.
- Academic Options:** Transfer 6 credits of this certificate to the Associate of Applied Science Degree in Veterinary Technology.
- Location:** East Campus
- Department/Contact Information:**  
 Dean: 520-206-7694  
 Lead Faculty: 520-206-7414
- Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed below. See the website or an advisor for details.

Course Number	Course Title	Credit Hours
<b>Required Core Course - A grade of C or better is required for graduation.</b>		
VET 106*	Veterinary Practice Assistant I .....	3
VET 107*	Veterinary Practice Assistant II .....	3
VET 108*	Introduction to Veterinary Facility Practices** .....	6
<b>Total credits as displayed .....</b>		<b>12</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.  
 \*\* VET 108 with a grade of C or better may be substituted for VET 100 and 225 in the AAS Veterinary Technician Program.

## Veterinary Technician — Associate of Applied Science Degree for Direct Employment

Learn to provide veterinary care to animals, including nutrition, nursing, anesthesiology, radiography and clinical laboratory procedures. Gain practical experience in clinic settings. This program is accredited by the American Veterinary Medical Association.

**Before enrolling in this program,** you must meet certain requirements, in addition to the program prerequisites listed below:

- Meet the requirements for admission as a credit student at Pima Community College.
- Have prerequisite coursework completed with the grade of C or higher.
- Have proof of personal medical insurance. Student health insurance is available through Pima. If you are not able to obtain insurance under your parents' or an employer's policy, student insurance coverage may be available to you from various carriers.
- Have proof of immunizations: pre-exposure rabies vaccination series and tetanus toxoid. Proof of tetanus toxoid in the last 8 years. Proof of an MMR vaccination series. Rabies immunizations will also be needed to be completed while in the program.
- Complete program admissions procedures. Submit a Program Admission Form.
- Be able to meet physical requirements of lifting at least forty pound animals; restraining dogs, cats, exotic animals, horses, cows, birds, etc.; standing for long periods of time; bending and lifting; having manual dexterity to assist in surgery and having ability to communicate with veterinarians and clients. This is a physically demanding occupational field.

### What can I do with this degree?

**Career Options:** Work as a certified veterinary technician for veterinarians, biological research workers, scientists and business or organizations that provide care for animals. After completion of the program, students apply to take state and national board exams for certification.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** East Campus

**Department/Contact Information:**

Dean: 520-206-7694

Lead Faculty: 520-206-7414

**Selective Admissions Program:** You are not fully admitted to this program until you have fulfilled the requirements listed above. See the website or an advisor for details.

### Program Prerequisites

Reading assessment score into REA 112 or completion of REA 091* . . . . .	0-4
MAT 097* or Higher with a grade of C or better. . . . .	3
BIO 156IN or BIO 181IN with a grade of C or better. . . . .	§
CHM 130/130LB/130IN or CHM 151/151LB/151IN with a grade of C or better. . . . .	§
CSA 100** with a grade of C or better. . . . .	§
<b>Subtotal</b> . . . . .	<b>0-7</b>

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement . . . . .	6
Analysis and Critical Thinking Requirement . . . . .	†
BIO, CHM and MAT program prerequisites fulfill this requirement.	
Humanities and Social Science Requirement . . . . .	6
Computer and Information Literacy Requirement . . . . .	†
CSA 100** fulfills this requirement.	
Special Requirement	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal</b> . . . . .	<b>12</b>

Course Number	Course Title	Credit Hours
<b>Required Core Courses - A grade of C or better is required for graduation.</b>		
VET 100‡	Introduction to Veterinary Technology	3
VET 110*	Veterinary Nursing Procedures I	3
VET 111*	Veterinary Nursing Procedures II	3
VET 120*	Clinical Pathology I	3
VET 121*	Clinical Pathology II	3
VET 130*	Animal Anatomy and Physiology I	4
VET 131*	Animal Anatomy and Physiology II	3
VET 150*	Pharmacology	3
VET 191*	Veterinary Technician Clinical Experience I	3
VET 200*	Anesthetic and Surgical Nursing	3
VET 205*	Radiology and Imaging Techniques	2
VET 205LB*	Radiology and Imaging Techniques Lab	1
VET 210*	Veterinary Nursing Procedures: Large Animal Care	2
VET 211*	Veterinary Nursing Procedures: Avian, Exotic, and Lab Animals	2
VET 220*	Clinical Pathology III	3
VET 225‡	Veterinary Hospital Procedures	3
VET 291*	Veterinary Technician Clinical Experience	3
<b>Subtotal</b>		<b>47</b>
<b>Required Support Courses</b>		
BIO 156IN	Intro Biology Allied Health	4
or BIO 181IN	General Biology I: Majors SUN# BIO1181	
CHM 130/130LB/130IN*	Fundamental Chemistry SUN# CHM 1130	5
or CHM 151/151LB/151IN*	General Chemistry I SUN# CHM 1151	
CSA 100**	Computer Literacy	1
<b>Subtotal</b>		<b>10</b>
<b>Total credits as displayed with program prerequisites</b>		<b>72-76</b>

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

§ Credits counted below.

\*\* CIS/CSA 104 may be substituted for CSA 100.

† Core or support course(s) fulfill this requirement.

¥ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

‡ VET 108 with a grade of C or better may be substituted for VET 100 and 225.

# Welding

## Welding and Fabrication— Associate of Applied Science Degree for Direct Employment

Learn various welding and pipe fabrication techniques.

### What can I do with this degree?

**Career Options:** Entry-level employment as a welder.

**Academic Options:** While this program was not designed to transfer to a 4-year university, it may apply toward Bachelor of Applied Science (BAS) or other programs. See Pima's Transfer Partnerships ([www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html](http://www.pima.edu/current-students/transferring-from-pima/transfer-partnerships.html)) page to determine which universities offer BAS programs, and research how the universities may accept this program in transfer.

**Location:** Downtown Campus

**Department/Contact Information:**

Dean: 520-206-7134

Lead Faculty: 520-206-7159

Program/Major Codes: **AASWELDING/WLD**

### General Education Requirements - A grade of C or better is required for graduation.

Course lists for each General Education category listed below can be found starting on page 74.

Communication Requirement	6
Analysis and Critical Thinking Requirement	†
GTM 105 and MAC 275 fulfill this requirement.	
Humanities and Social Science Requirement	6
Computer and Information Literacy Requirement	†
CAD 101 fulfills this requirement.	
Special Requirement	
The C or G requirement should be fulfilled by completing an appropriate course in the above categories.	
<b>Subtotal</b>	<b>12¥</b>

Course Number	Course Title	Credit Hours
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### Required Core Courses - A grade of C or better is required for graduation.

MAC 275	Applied Metallurgy	4
WLD 110	Basic Arc and Oxyacetylene Welding	4
WLD 115*	Blueprint Reading/Estimating	4
WLD 160*	Arc Welding	4
WLD 250*	Pipe Welding	4
WLD 261*	Gas Metal Arc Welding	4
WLD 262*	Gas Tungsten Arc Welding	4
WLD 263*	Layout and Fabrication Welding	4
<b>Subtotal</b>		<b>32</b>

### Required Support Courses

CAD 101	Computer-Aided Drafting	4
GTM 105*	Applied Technical Mathematics	3
Technical Electives		9
Complete 9 credit hours from the following: BCT, CAD, CSA, MGT, MAC, WLD.		
<b>Subtotal</b>		<b>16</b>
<b>Total credits as displayed</b>		<b>60</b>

† Core or support course(s) fulfill this requirement.

¥ General Education requires 19-21 credits. This subtotal shows the Gen Ed credits not fulfilled by core, support, or second language courses.

\* This course has a prerequisite, co-requisite, or recommendation. See course description section.

## Writing

Learn to communicate effectively through the written word by taking courses that focus on grammar, poetry and short story writing, business writing, research skills, creative nonfiction, critical analysis of literature and more. Writing courses are also offered for those who are not native speakers of English.

Writing courses are offered as part of the requirements of the **AGEC** and the **Associate of Arts degree**, may be taken as an **AA Creative Writing Emphasis**, or may be taken as required or elective courses to complete other degrees. Students interested in pursuing a degree at ASU, NAU or UA should meet with the writing faculty or an advisor to plan their course of study using the appropriate major guide.

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### What can I do with my studies in writing?

**Academic Options:** Continue studies towards a bachelor of arts in English, journalism, education or other humanities disciplines.

**Location:** All campuses