

ACADEMIC PROGRAM REVIEW DATA SHEET 2019-2020

PROGRAM NAME Aviation Maintenance Technology

PROGRAM CATALOG DESCRIPTION

No Description Posted in Catalog

PROGRAM CIP CODE 47.0607

IES PROGRAM CIP DESCRIPTION (<https://nces.ed.gov/ipeds/cipcode>)

Airframe Mechanics and Aircraft Maintenance Technology/Technician. A program that prepares individuals to apply technical knowledge and skills to repair, service, and maintain all aircraft components other than engines, propellers, avionics, and instruments. Includes instruction in layout and fabrication of sheet metal, fabric, wood, and other materials into structural members, parts, and fittings, and replacement of damaged or worn parts such as control cables and hydraulic units.

PROGRAM LEARNING OUTCOMES AS POSTED IN CURRENT CATALOG

Program Learning Outcomes

In addition to supporting institutional learning outcomes and building upon the foundational general education outcomes, upon completion of this program students will be able to:

1. Students will develop the skills and knowledge necessary to complete the Federal Aviation Administration written, oral, and practical examination.
2. This program will prepare graduates to enter the workforce as trained aviation maintenance technicians and enjoy successful careers in general aviation, the aviation production industry, the airline industry, or the United States armed forces.
3. Students will develop general technical knowledge applicable to a broad range of aircraft and the specific information necessary to properly diagnose and understand specific powerplants, airframe designs, hydraulic systems, brake systems, and other attendant aircraft systems. Students will also develop an understanding of stated and printed technical information and blueprints related to the aviation industry.
4. Successful students will develop a professional work ethic, cooperative attitude, and leadership qualities needed as a conscientious and productive employee.

PROGRAM LEARNING OUTCOME DATA

Please review your current collected data related to your specific program

PROGRAM SUMMARY SNAPSHOT

RAASAMT 47.0607	AAS_Aviation Maintenance Tech	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
	Head Count	159	160	145	117	86
	SCH Generated	1,612	1,823	1,475	1,131	1,143
	Course Completion Pct	83	88	87	85	87
	Awarded Certificates/Degrees	71	87	80	52	20

RCCAMT 47.0607	***CC_Aviation Maintenance Tec					
		<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Head Count		4	7	3	10	9
SCH Generated		51	68	57	156	264
Course Completion Pct		97	77	85	88	87
Awarded Certificates/Degrees		2	2	1	3	2

STUDENT DEMOGRAPHICS

Select Comparison Year: 2018 ▼	Select Major(s):	HOCP - HS (Private/GED/Hm Sch) CC Enr HSCP - Public HS Concurnt Enroll Prog HSDC - High School Dual Credit Prog RAC - Animal Healthcare Core 1 RACT - Accounting RAG - Agriculture RAMT - Aviation Maintenance Technolog RATL - Automotive Technology-Level I RATT - Automotive Technology				
Race / Ethnicity	2014	2015	2016	2017	2018	
Hispanic or Latino	39	29	25	33	26	
American Indian or Alaska Nati...	0	1	1	0	1	
Asian	2	1	5	7	4	
Black or African American	19	18	9	7	7	
White	89	103	95	74	51	
Two or More Races	3	5	5	2	1	
Race and Ethnicity Unknown	12	10	8	4	3	
	164	167	148	127	93	
Gender	2014	2015	2016	2017	2018	
Female	9	13	10	10	/	
Male	154	154	138	117	86	
Unknown	1	0	0	0	0	
	164	167	148	127	93	
Average Age	2014	2015	2016	2017	2018	
Average Age	36	37	36	35	34	
Overall GPA	2014	2015	2016	2017	2018	
1.99 or Lower	23	18	12	12	11	
2.00 - 2.49	9	8	14	10	10	
2.50 - 2.99	9	6	13	12	10	
3.00 - 3.49	27	32	25	27	20	
3.500 and Above	94	99	83	64	42	
No GPA	2	4	1	2	0	
	164	167	148	127	93	
Average GPA	2014	2015	2016	2017	2018	
Average GPA	3.10	3.29	3.22	3.15	3.04	

COURSE FREQUENCY

Course	Title	Face to Face Terms	No Online Courses
AFRM 101	Aircraft Electrical Systems	201411; 201511; 201611; 201711; 201811	
AFRM 102	Assembly and Rigging	201411; 201511; 201611; 201621; 201711; 201721; 201811	
AFRM 103	Sheet Metal Structures	201411; 201511; 201611; 201711; 201811	
AFRM 104	Welding	201411; 201421; 201521; 201621; 201721; 201741; 201821	
AFRM 105	Wood, Fabric, and Finishes	201411; 201421; 201521; 201621; 201721; 201821	
AFRM 106	Composite Structures	201421; 201521; 201621; 201721; 201821	
AFRM 107	Instrument & Navi/Comm Systems	201421; 201521; 201621; 201721; 201821	
AFRM 108	Hydraulic Pneumatic & Fuel Sys	201421; 201521; 201621; 201721; 201821	
AFRM 109	Landing Gear Systems	201421; 201521; 201621; 201721; 201821	
AFRM 110	Aircraft Auxiliary Systems	201421; 201521; 201621; 201721; 201741; 201821	
AFRM 111	Aircraft Inspection	201421; 201521; 201621; 201721; 201821	
GAMT 101	Aviation Science	201411; 201511; 201611; 201621; 201711; 201721; 201811	
GAMT 102	Shop Practices	201411; 201511; 201611; 201621; 201711; 201721; 201811	
GAMT 103	Ground Operations	201411; 201511; 201611; 201621; 201711; 201721; 201811	
GAMT 104	Federal Regulations	201411; 201511; 201611; 201621; 201711; 201721; 201811	
GAMT 105	Weight and Balance	201411; 201511; 201611; 201621; 201711; 201721; 201811	
GAMT 106	Basic Electricity	201411; 201511; 201611; 201621; 201711; 201721; 201811	
PWPL 101	Fuel Metering & Induction Sys	201421; 201521; 201621; 201721; 201821	
PWPL 102	Aircraft Propellers	201441; 201541; 201641; 201741; 201841	
PWPL 103	Aircraft Powerplant Elect Sys	201441; 201541; 201641; 201741; 201841	
PWPL 104	Aircraft Reciprocating Engines	201441; 201541; 201641; 201741; 201841	
PWPL 105	Aircraft Recipro Engine Overha	201411; 201511; 201611; 201711; 201811	

PWPL 106	Aircraft Turbine Engine Theory	201411; 201511; 201611; 201711; 201811			
PWPL 107	Turbine Engine Overhaul	201411; 201511; 201611; 201711; 201811			
PWPL 108	Aircraft Powerplant Inspection	201411; 201511; 201611; 201711; 201811			
PWPL 193	Special Topics in Powerplant	201821			

GRADE DISTRIBUTION

Fall

Term		201611			201711			201811			Total by ROWS
Completion (2)		Count	Successful	Unsuccessful	Count	Successful	Unsuccessful	Count	Successful	Unsuccessful	Count
Subject	COURSE	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value
AFRM		42.00	34.00	8.00	66.00	50.00	16.00	45.00	37.00	8.00	153.00
	101 R	15.00	11.00	4.00	34.00	26.00	8.00	16.00	16.00	0.00	65.00
	102 R	14.00	12.00	2.00	14.00	11.00	3.00	12.00	9.00	3.00	40.00
	103 R	13.00	11.00	2.00	16.00	13.00	3.00	17.00	12.00	5.00	46.00
	104 R	0.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00	0.00	2.00
GAMT		93.00	79.00	14.00	84.00	69.00	15.00	78.00	76.00	2.00	255.00
	101 R	16.00	12.00	4.00	14.00	13.00	1.00	11.00	11.00	0.00	41.00
	102 R	16.00	13.00	3.00	14.00	13.00	1.00	11.00	11.00	0.00	41.00
	103 R	16.00	14.00	2.00	14.00	12.00	2.00	22.00	22.00	0.00	52.00
	104 R	15.00	13.00	2.00	14.00	10.00	4.00	11.00	10.00	1.00	40.00
	105 R	15.00	14.00	1.00	14.00	10.00	4.00	12.00	11.00	1.00	41.00
	106 R	15.00	13.00	2.00	14.00	11.00	3.00	11.00	11.00	0.00	40.00
PWPL		64.00	62.00	2.00	53.00	51.00	2.00	48.00	48.00	0.00	165.00
	105 R	16.00	15.00	1.00	13.00	13.00	0.00	12.00	12.00	0.00	41.00
	106 R	16.00	15.00	1.00	14.00	12.00	2.00	12.00	12.00	0.00	42.00
	107 R	16.00	16.00	0.00	13.00	13.00	0.00	12.00	12.00	0.00	41.00
	108 R	16.00	16.00	0.00	13.00	13.00	0.00	12.00	12.00	0.00	41.00
Total by COLUMNS		199.00	175.00	24.00	203.00	170.00	33.00	171.00	161.00	10.00	573.00

Spring

Term		201621			201721			201821			Total by ROWS
Completion (2)		Count	Successful	Unsuccessful	Count	Successful	Unsuccessful	Count	Successful	Unsuccessful	Count
Subject	COURSE	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value
AFRM		112.00	105.00	7.00	112.00	103.00	9.00	123.00	114.00	9.00	347.00
	102 R	4.00	3.00	1.00	6.00	4.00	2.00	0.00	0.00	0.00	10.00
	104 R	24.00	24.00	0.00	11.00	10.00	1.00	15.00	15.00	0.00	50.00
	105 R	12.00	11.00	1.00	12.00	11.00	1.00	15.00	15.00	0.00	39.00
	106 R	12.00	11.00	1.00	12.00	11.00	1.00	15.00	13.00	2.00	39.00
	107 R	12.00	12.00	0.00	12.00	12.00	0.00	15.00	14.00	1.00	39.00
	108 R	12.00	11.00	1.00	24.00	22.00	2.00	15.00	13.00	2.00	51.00
	109 R	12.00	11.00	1.00	12.00	12.00	0.00	16.00	15.00	1.00	40.00
	110 R	12.00	11.00	1.00	11.00	9.00	2.00	16.00	15.00	1.00	39.00
	111 R	12.00	11.00	1.00	12.00	12.00	0.00	16.00	14.00	2.00	40.00
GAMT		28.00	28.00	0.00	32.00	25.00	7.00	5.00	4.00	1.00	65.00
	101 R	8.00	8.00	0.00	5.00	4.00	1.00	0.00	0.00	0.00	13.00
	102 R	4.00	4.00	0.00	5.00	4.00	1.00	0.00	0.00	0.00	9.00
	103 R	4.00	4.00	0.00	5.00	5.00	0.00	0.00	0.00	0.00	9.00
	104 R	4.00	4.00	0.00	5.00	5.00	0.00	0.00	0.00	0.00	9.00
	105 R	4.00	4.00	0.00	6.00	4.00	2.00	0.00	0.00	0.00	10.00
	106 R	4.00	4.00	0.00	6.00	3.00	3.00	0.00	0.00	0.00	10.00
	201 R	0.00	0.00	0.00	0.00	0.00	0.00	5.00	4.00	1.00	5.00
PWPL		16.00	11.00	5.00	32.00	24.00	8.00	17.00	12.00	5.00	65.00
	101 R	16.00	11.00	5.00	32.00	24.00	8.00	12.00	10.00	2.00	60.00
	193 R	0.00	0.00	0.00	0.00	0.00	0.00	5.00	2.00	3.00	5.00
Total by COLUMNS		156.00	144.00	12.00	176.00	152.00	24.00	145.00	130.00	15.00	477.00

Summer

Term		201641			201741			201841			Total by ROWS
Completion (2)		Count	Successful	Unsuccessful	Count	Successful	Unsuccessful	Count	Successful	Unsuccessful	Count
Subject	COURSE	Value	Value	Value	Value	Value	Value	Value	Value	Value	Value
PWPL		52.00	50.00	2.00	33.00	33.00	0.00	39.00	33.00	6.00	124.00
	102 R	13.00	13.00	0.00	11.00	11.00	0.00	13.00	12.00	1.00	37.00
	103 R	26.00	24.00	2.00	11.00	11.00	0.00	13.00	9.00	4.00	50.00
	104 R	13.00	13.00	0.00	11.00	11.00	0.00	13.00	12.00	1.00	37.00
Total by COLUMNS		52.00	50.00	2.00	33.00	33.00	0.00	39.00	33.00	6.00	124.00

COMPLETION/GRADUATION INFORMATION

Certifications Awarded - Program Length Two or More Years

Race / Ethnicity	2014	2015	2016	2017	2018
Hispanic or Latino	3	8	4	6	5
Asian	0	0	0	2	0
Black or African American	1	1	1	0	0
White	6	5	8	4	3
Race and Ethnicity Unknown	2	0	2	0	1
	12	14	15	12	9

Gender	2014	2015	2016	2017	2018
Female	0	3	3	0	2
Male	12	11	12	12	7
	12	14	15	12	9

Average Age	2014	2015	2016	2017	2018
	32	29	27	27	26

Associate Degrees Awarded

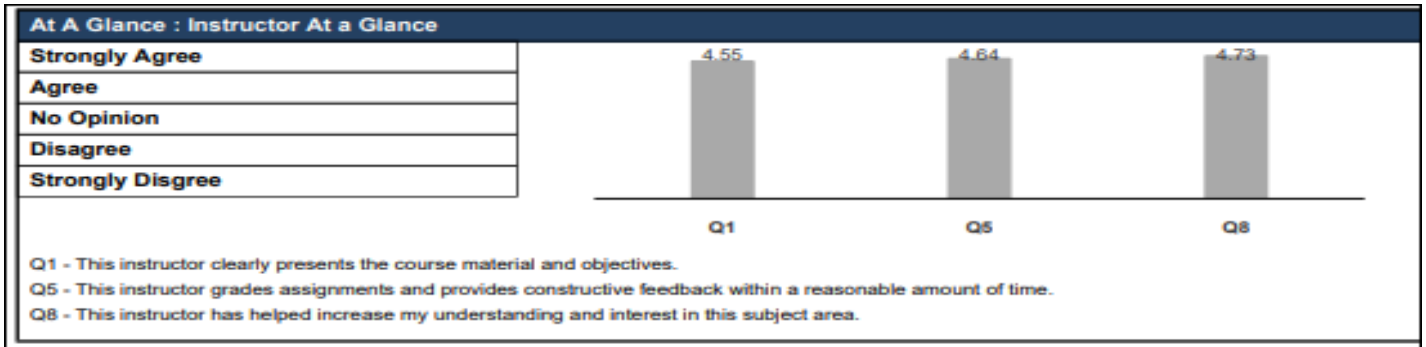
Race / Ethnicity	2014	2015	2016	2017	2018
Hispanic or Latino	3	7	5	3	6
American Indian or Alaska Nati...	0	0	0	1	1
Asian	1	0	1	2	0
Black or African American	5	5	2	1	0
White	27	31	33	30	16
Two or More Races	1	0	3	0	0
Race and Ethnicity Unknown	3	6	3	3	0
	40	49	47	40	23

Gender	2014	2015	2016	2017	2018
Female	0	5	2	2	2
Male	40	44	45	38	21
	40	49	47	40	23

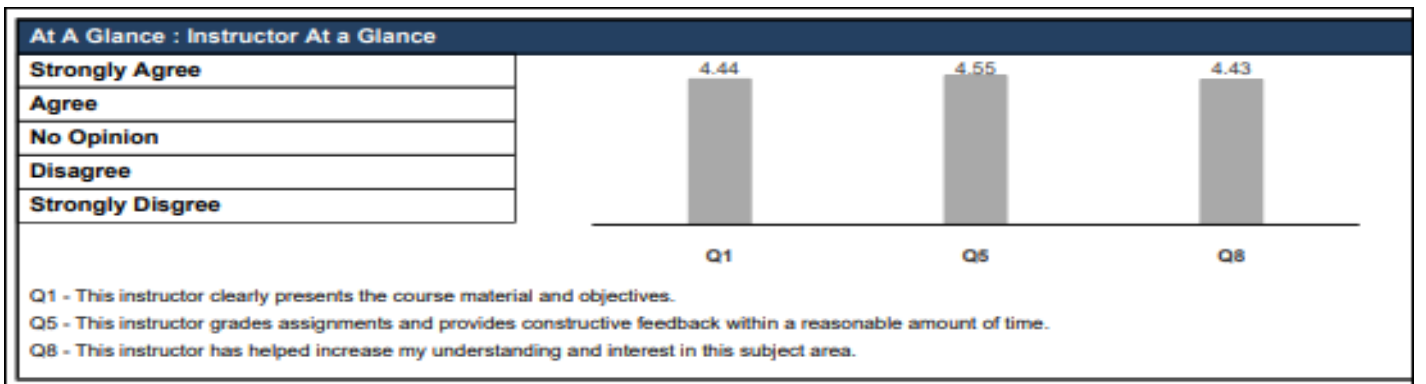
Average Age	2014	2015	2016	2017	2018
	36	40	37	39	36

AGGREGATE End-of-Course (EOC) Program Area Data

Fall 2017



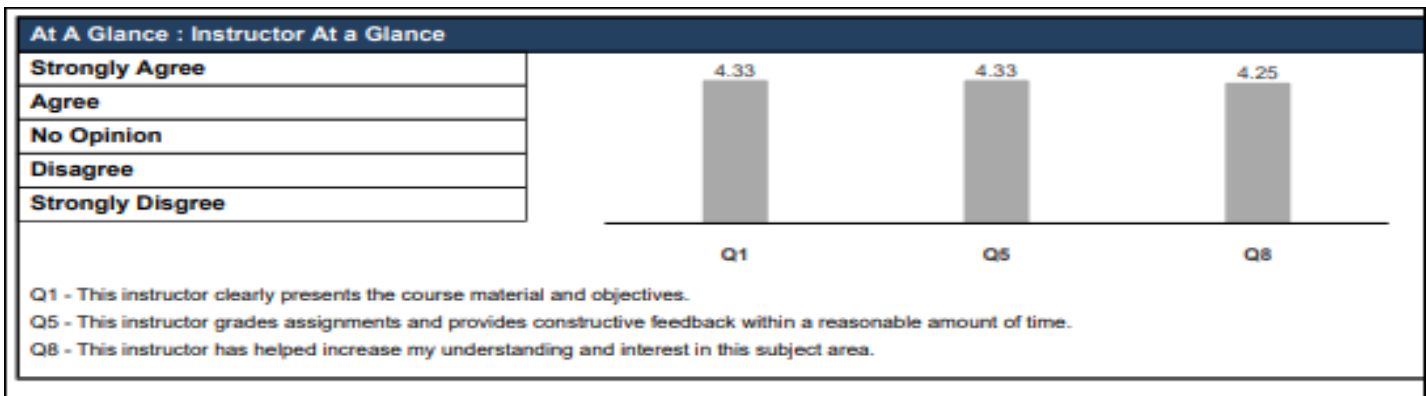
Fall 2018



Spring 2018—At A Glance Report Break-out not run. Scores for those questions listed below

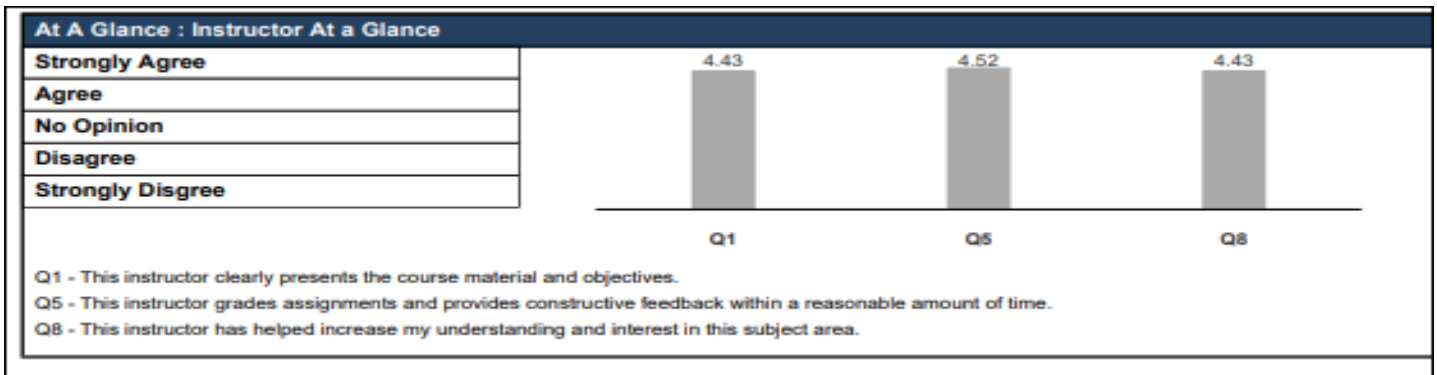
Q1 = 4.21, Q5 = 4.39, Q8 = 4.30

Spring 2019



Summer 2018

N/A



FACULTY MATRIX

Course Prefix	Minimum Teaching Requirements	Qualifying Fields/Majors (Bolded) or Content-specific Courses within other Majors Listed	Alternative Qualifications for Specified Types of Courses
AFRM	FAA mechanic's certificate with both Airframe and Powerplant ratings AND a Bachelor's degree.	Aviation Maintenance Aviation Science Aeronautics Sheet Metal Technician Avionics Electronics Welding	An FAA mechanic's certificate with both Airframe and Powerplant ratings or other certification, licensure, or specialized training obviously corresponding to the course. The instructor must also have a combination of formal education, work experience, and specialized training equivalent to a Bachelor's degree.
GAMT	FAA mechanic's certificate with both Airframe and Powerplant ratings AND a Bachelor's degree.	Aviation Maintenance Aviation Science Aeronautics Electricity Drafting Pilot's Certificate—Ground Instructor and/or CFI	An FAA mechanic's certificate with both Airframe and Powerplant ratings or other certification, licensure, or specialized training obviously corresponding to the course. The instructor must also have a combination of formal education, work experience, and specialized training equivalent to a Bachelor's degree.

LABOR MARKET INFORMATION (LMI) (www.edeps.org)

SUPPLY

OCCUPATIONAL SUPPLY DEMAND											
Unit of Analysis: 4719A Aircraft Mechanics											
United States ▼											
Program Completers by Degree Level (2016 - 2017)											United States
CIP Code	Program Title	Cert1	Cert2	Assc	Assc+	Bach	CertB	Mast	CertM	Doct	Total
47.0608	Aircraft Powerplant Technology/Technician	347	1,155	474	524	96	0	0	0	0	2,596
47.0607	Airframe Mechanics and Aircraft Maintenance Technology/Technician	676	1,424	1,024	2,149	47	0	0	0	0	5,320
47.0609	Avionics Maintenance Technology/Technician	126	62	260	3	67	0	0	0	0	518
Total		1,149	2,641	1,758	2,676	210	0	0	0	0	8,434

Cert1 = Postsecondary award, certificate, or diploma of (less than 1 academic year)
 Cert2 = Postsecondary award, certificate, or diploma of (at least 1 but less than 2 academic years)
 Assc = Associate's degree
 Assc+ = Postsecondary award, certificate, or diploma of (at least 2 but less than 4 academic years)
 Bach = Bachelor's degree or equivalent
 CertB = Post-baccalaureate certificate
 Mast = Master's degree
 CertM = Post-master's certificate
 Doct = Doctor's degree

Source: National Center for Educational Statistics, Degrees Conferred 2016-17 (provisional data)
 An individual with a double-major (receiving two degrees) is counted as a completer for their primary degree program.

47.0607 Airframe Mechanics and Aircraft Maintenance Technology/Technician (New Mexico)																	
Market Share			Program Completers														
			2012-13			2013-14			2014-15			2015-16			2016-17		
Institution			M	W	Total	M	W	Total	M	W	Total	M	W	Total	M	W	Total
Award at least 1 but less than 2 academic years																	
1	Eastern New Mexico University-Roswell Campus		9	2	11	20	1	21	13	0	13	12	3	15	13	2	15
Associate's degree																	
1	Central New Mexico Community College		15	0	15	18	1	19	3	0	3	15	5	20	3	0	3
2	Eastern New Mexico University-Roswell Campus		53	1	54	49	4	53	47	0	47	35	2	37	49	4	53
Subtotal			68	1	69	67	5	72	50	0	50	50	7	57	52	4	56
Award at least 2 but less than 4 academic years																	
1	Central New Mexico Community College		29	1	30	12	0	12	21	5	26	2	2	4	14	2	16
Program Completer Total			106	4	110	99	6	105	84	5	89	64	12	76	79	8	87
Institution			Metropolitan/Micropolitan Statistical Area														
Central New Mexico Community College			Albuquerque, NM														
Eastern New Mexico University-Roswell Campus			Roswell, NM														

Source: National Center for Educational Statistics, Degrees Conferred 2013-17 (provisional data)

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DEMAND

OCCUPATIONAL SUPPLY DEMAND
Unit of Analysis: 4719A Aircraft Mechanics

United States ▾

National ▾

Licensing

Occupational Characteristics United States

SOC Code	Occupation	Growth Rate 2016-26	Median Annual Wage	Typical Education	Work Experience	Typical Training	Pct Self Empl
49-3011	Aircraft Mechanics and Service Technicians	As fast as the average	\$62,920	Postsecondary nondegree award	None	None	0.7%
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	Decline	\$53,340	High school diploma or equivalent	None	Moderate-term on-the-job training	N/A
49-2091	Avionics Technicians	As fast as the average	\$64,140	Associate's degree	None	None	N/A

• Long-term OJT (on-the-job training): more than 1 year • Moderate-term OJT: 1-12 months • Short-term OJT: 1 month or less

Occupational Projections United States

SOC Code	Occupation	Employment		Change 2016-26		Average
		Base 2016	Proj 2026	Number	Percent	Annual Openings
49-3011	Aircraft Mechanics and Service Technicians	132,000	138,500	6,500	4.9%	10,900
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	41,800	34,500	-7,300	-17.5%	3,200
49-2091	Avionics Technicians	17,500	18,600	1,100	6.3%	1,500



Wage Trends (Median) United States

SOC Code	Occupation	Median Annual Wage					Change
		2014	2015	2016	2017	2018	2014 to 2018
49-3011	Aircraft Mechanics and Service Technicians	\$56,990	\$58,370	\$60,170	\$61,020	\$62,920	10.4%
51-2011	Aircraft Structure, Surfaces, Rigging, and Systems Assemblers	\$48,340	\$48,970	\$50,050	\$53,510	\$53,340	10.3%
49-2091	Avionics Technicians	\$56,910	\$58,540	\$60,760	\$62,650	\$64,140	12.7%
Benchmarks for Wage Trends (all occupations)		2014	2015	2016	2017	2018	Change 2014 to 2018
National Median Wage		\$35,540	\$36,200	\$37,040	\$37,690	\$38,640	8.7%
National Mean Wage		\$47,230	\$48,320	\$49,630	\$50,620	\$51,960	10.0%
National Mean Wage RSE		0.1%	0.1%	0.1%	0.1%	0.1%	
National Consumer Price Index C-CPI-U		135.5	135.4	136.7	139.0	141.9	4.7%

OCCUPATIONAL SUPPLY DEMAND
Unit of Analysis: 4719A Aircraft Mechanics

New Mexico Statewide

Occupational Characteristics New Mexico/United States							
SOC Code	Occupation	New Mexico		United States			
		Growth Rate 2016-26	Median Annual Wage	Typical Education	Work Experience	Typical Training	Pct Self Empl
49-3011	Aircraft Mechanics and Service Technicians	Slower than the average	\$57,920	Postsecondary nondegree award	None	None	0.7%
49-2091	Avionics Technicians	As fast as the average	\$60,570	Associate's degree	None	None	N/A

• Long-term OJT (on-the-job training): more than 1 year • Moderate-term OJT: 1-12 months • Short-term OJT: 1 month or less

Occupational Projections New Mexico						
SOC Code	Occupation	Employment		Change 2016-26		Average
		Base 2016	Proj 2026	Number	Percent	Annual Openings
49-3011	Aircraft Mechanics and Service Technicians	420	440	20	3.8%	30
49-2091	Avionics Technicians	30	30		6.3%	



Wage Trends (Median) New Mexico							
SOC Code	Occupation	Median Annual Wage					Change
		2014	2015	2016	2017	2018	2014 to 2018
49-3011	Aircraft Mechanics and Service Technicians	\$49,330	\$50,340	\$52,900	\$58,400	\$57,920	17.4%
49-2091	Avionics Technicians	\$57,460	N/A	\$63,350	\$63,740	\$60,570	5.4%
Benchmarks for Wage Trends (all occupations)		2014	2015	2016	2017	2018	Change 2014 to 2018
New Mexico Median Wage		\$31,810	\$32,320	\$32,900	\$33,450	\$34,120	7.3%
New Mexico Mean Wage		\$42,230	\$43,170	\$44,160	\$44,840	\$45,400	7.5%
New Mexico Mean Wage RSE		1.6%	1.8%	1.8%	1.9%	2%	
National Median Wage		\$35,540	\$36,200	\$37,040	\$37,690	\$38,640	8.7%
National Mean Wage		\$47,230	\$48,320	\$49,630	\$50,620	\$51,960	10.0%
National Mean Wage RSE		0.1%	0.1%	0.1%	0.1%	0.1%	
National Consumer Price Index C-CPI-U		135.5	135.4	136.7	139.0	141.9	4.7%

REVENUE

Information is being compiled

EXPENSES

Information is being compiled