



**ARIZONA DEPARTMENT OF EDUCATION  
JOINT TECHNICAL EDUCATION DISTRICT (JTED)  
SCHOOL YEAR 2010-2011**

**Pursuant to ARS § 15-393.M**

**Submitted by the Arizona Department of Education  
Career and Technical Education Section**

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Ed. D, Associate Superintendent Highly Effective Schools Division**

**May 2012**



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**CD:** Contains a folder for each question. Within each “question” folder there is a sub-folder containing: source data submitted by each JTED; data extracted from the ADE database that was used to respond to each question; other supporting documentation.



## FOREWORD

Under the provisions of ARS §15-393.M the ADE CTE Section is required to review and analyze information submitted by each JTED and report back to the individual or governmental groups named per Arizona statute –

ARS §15-393.M- On or before December 31 of each year, each joint technical education district shall submit a detailed report to the career and technical education division of the department of education. The career and technical education division of the department of education shall collect, summarize and analyze the data submitted by the joint districts, shall submit an annual report that summarizes the data submitted by the joint districts to the governor, the speaker of the house of representatives, the president of the senate and the state board of education and shall submit a copy of this report to the secretary of state. The data submitted by each joint technical education district shall include the following:

1. The average daily membership of the joint district.
2. The program listings and program descriptions of programs offered by the joint district, including the course sequences for each program.
3. The costs associated with each program offered by the joint district.
4. The completion rate for each program offered by the joint district. For the purposes of this paragraph, "completion rate" means the completion rate for students who are designated as concentrators in that program by the department of education under the career and technology approved plan.
5. The graduation rate from the school district of residence of students who have completed a program in the joint district.
6. A detailed description of the career opportunities available to students after completion of the program offered by the joint district.
7. A detailed description of the career placement of students who have completed the program offered by the joint district.
8. Any other data deemed necessary by the department of education to carry out its duties under this subsection.

The following information is submitted in compliance with ARS §15-393.M by the ADE CTE Section. The information is summary in nature.

In the event that more detailed information is required, source data and/or supporting information are included on the enclosed CD with printed copies of this report. Additional information is included as a sub-folder within the digital versions of this report.

## **Background**

Data directly collected by the Arizona Department of Education (ADE) Career and Technical Education (CTE) Section are required to meet federal and state grant reporting requirements and to facilitate state formula grant allocations. Average Daily Membership (ADM) is reported directly to the ADE School Finance Division. The CTE Section does not process Average Daily Membership (ADM) data. Information for this report is generated by Career and Technical Education Section staff, since there are no positions specifically funded for Joint Technical Education District (JTED) activities. Data required for this report related to ADM is generated from reports on the ADE School Finance Website. Other JTED data, such as the programs/courses approved, are developed by the ADE CTE Section.

## **Joint Technical Education Districts**

Arizona currently has 13 JTEDs. Most Arizona public school districts are JTED member districts, with the exception of several urban districts (Phoenix UHSD, Tolleson UHSD, Yuma UHSD and some districts located in Santa Cruz County). The formation of a fourteenth JTED in Yuma County was under consideration but was placed on hold by the group exploring the issue.

A listing of each JTED and its member districts (excluding elementary school districts) can be found on pages 5-6. Currently, 92 unified or union high school districts are JTED members. Voters in the Mammoth-San Manuel Unified School District voted in November 2011 to join the Pima County JTED starting in school year 2012-2013.

Charter school students may participate in JTED courses, but charter schools cannot participate as JTED member districts.

## **Methodology**

The ADE CTE Section utilizes data already reported by individual JTEDs and/or their member districts to answer as many of the ARS §15-393.M questions as possible to eliminate duplication and reduce reporting costs.

- Existing data were used to answer questions one, two, four, five, six and seven including data already being reported to the ADE for purposes of ADM reporting; the program and course approval procedures developed to comply with ARS §15-391.3; federal Carl D. Perkins Act performance measurement reporting requirements (graduation and placement); and information related to Arizona career opportunities.
- Question three was answered by utilizing JTED self-reported data on “costs associated with each program offered.” Costs are summarized by program.

Cost data at the program or course level have historically not been collected nor reported to the ADE. All 13 JTEDs operating in SY 2011 reported program cost information to the ADE CTE Section for purposes of this report.

In response to “the costs associated with each program” and the absence of a specific definition of “cost,” the ADE CTE Section continues to request course expenditure information based on existing Uniform System of Financial Reporting (USFR) and Chart of Account expenditure codes (salaries, benefits, supplies).

In October 2011, eleven JTED Business Managers met with an ADE representative in an effort to standardize the cost reporting method utilized to meet the reporting requirements (question 3) of

ARS § 15-393.M. Earlier efforts to standardize the cost reporting were less structured and therefore had limited success.

Any discussion of cost is complicated by the fact that member districts typically receive state and federal grants as well as utilize non-JTED local funding for costs such as instructor salaries supported by the member districts. This year's cost data attempts to provide some cost information from all primary sources.

However, the actual cost data reported varies from detailed to summary, depending on the source. For example, only the total cost information reported by each member district in response to the USFR requirements in Memorandum 219 (non-supplanting) is reported on each member district's submitted worksheet as an aggregate amount. The cost of allocating such cost by JTED CTE program would be more difficult and therefore presumably costly.

Finally, it should be noted that this report focuses on the 2011 school year and reflects none of the legislative changes made in 2011 such as the elimination of state aid revenues based on 9<sup>th</sup> grade JTED enrollments.

- Historically, Question 4 asked for “the completion rate of each *course*” offered by a JTED. The reporting requirement now requests the “completion rate” by *program*.

For CTE federal reporting purposes, “program completion” is based on a student's earning of a minimum of two or more Carnegie Units in a single program area, who also passed the end-of-program technical skill state assessment based on industry standards. Currently, assessments are available for 51 of the 72 Programs/Options, based on Arizona Labor Market Information and other research on emerging occupations. CTE Program Options have been approved by the Arizona State Board of Vocational and Technological Education. Additional assessments, based on industry standards, are being developed annually.

For those programs for which an assessment has not yet been developed, program completion is based on the issuing of course credits for the minimum number of Carnegie Units identified as required for the delivery of a program's minimum competency content. The federal program completion rate reported reflects performance information only for those programs with a written assessment. The intent is to have assessments for every CTE Program/Option for Arizona high school CTE programs.

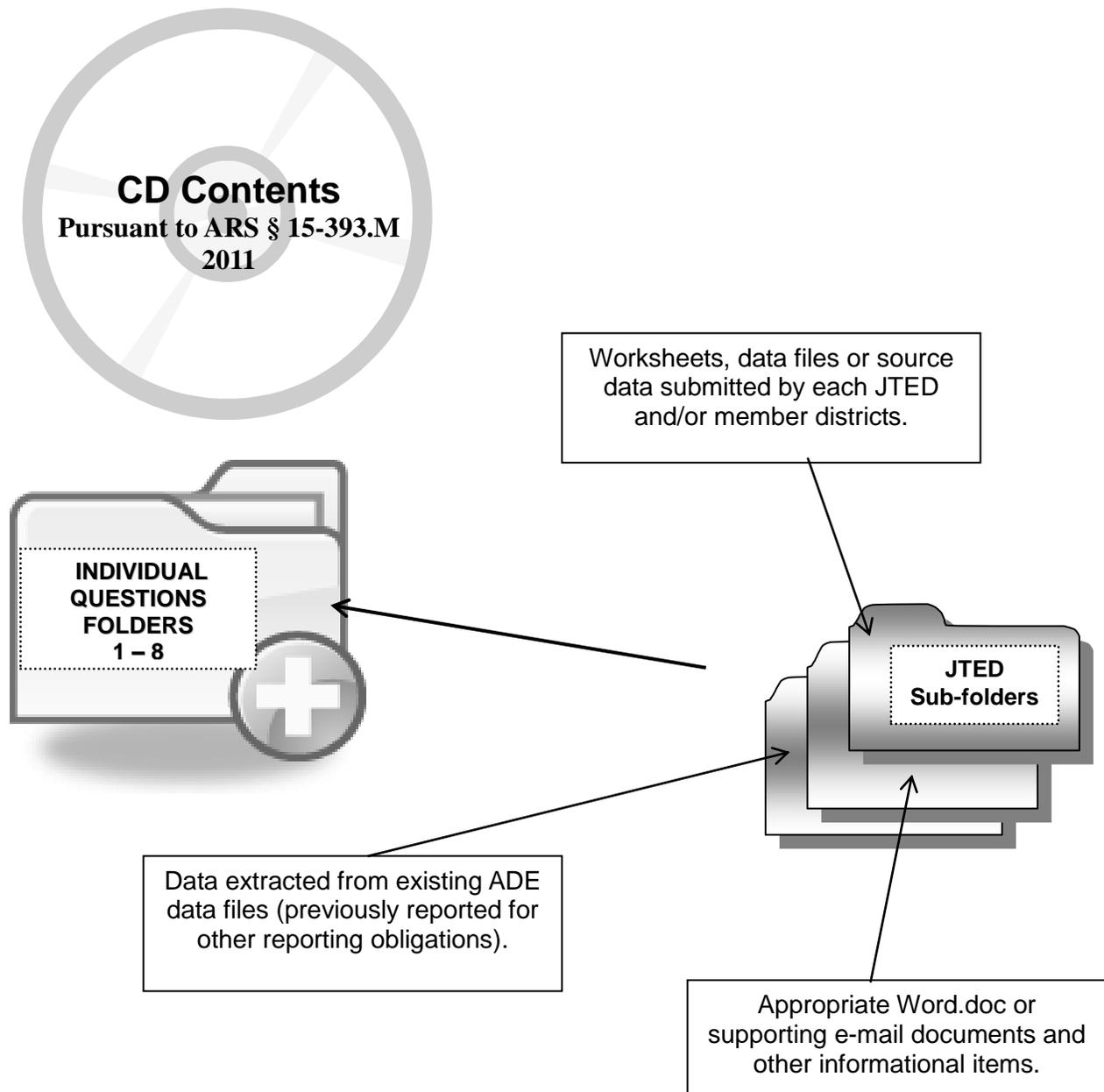
### **Report Layout**

Each question has its own section. Each section will include:

- a restatement of the question
- a description of the methodology used to collect data used to respond to the question
- issues, challenges or problems encountered relative to answering or responding to the question
- results from any analysis conducted, relative to the question; and
- additional comments

## CD

Detailed information is included on the enclosed CD. On the CD, there is a folder for each question. Within each “question” folder there is a sub-folder containing: source data submitted by each JTED; data extracted from the ADE database that was used to respond to each question; other supporting documentation.



**ARIZONA JOINT TECHNICAL EDUCATION DISTRICTS**  
(JTED Member Districts- Unified and Union High School Districts\*)

CAVIAT – Coconino Association for Vocations, Industry & Technology

- Flagstaff Unified SD
- Fredonia-Mocasin Unified SD
- Grand Canyon Unified SD
- Page Unified SD
- Williams Unified SD

CAVIT – Central Arizona Valley Institute of Technology

- Casa Grande Union HSD
- Coolidge Unified SD
- Florence Unified SD
- Maricopa Unified SD
- Santa Cruz Valley Union HSD

CTD – Cochise Technology District

- Benson Unified SD
- Bowie Unified SD
- Douglas Unified SD
- San Simon Unified SD
- St. David Unified SD
- Tombstone Unified SD
- Valley Union HSD
- Willcox Unified SD

CVIT – Cobre Valley Institute of Technology

- Globe Unified SD
- Hayden-Winkelman Unified SD
- Miami Unified SD
- San Carlos Unified SD
- Superior Unified SD

EVIT – East Valley Institute of Technology

- Apache Junction Unified SD
- Chandler Unified SD
- Fountain Hills Unified SD
- Gilbert Unified SD
- Higley Unified SD
- J.O. Combs Unified SD
- Mesa Unified SD
- Queen Creek Unified SD
- Scottsdale Unified SD
- Tempe Union HSD

GIFT – Gila Institute for Technology

- Duncan Unified SD
- Ft. Thomas Unified SD
- Morenci Unified SD
- Pima Unified SD
- Safford Unified SD
- Thatcher Unified SD

MIJTED – Mountain Institute Joint Technical Education District

- Ash Fork Unified SD
- Bagdad Unified SD
- Chino Valley Unified SD
- Humboldt Unified SD
- Mayer Unified SD
- Prescott Unified SD
- Seligman Unified SD

NATIVE – Northeast Arizona Technological Institute of Vocational Education

- Chinle Unified SD
- Ganado Unified SD
- Kayenta Unified SD
- Pinon Unified SD
- Red Mesa Unified SD
- Sanders Unified SD
- Tuba City Unified SD
- Window Rock Unified SD

NAVIT– Northern Arizona Vocational Institute of Technology

- Blue Ridge Unified SD
- Heber-Overgaard Unified SD
- Holbrook Unified SD
- Joseph City Unified SD
- Payson Unified SD
- Round Valley Unified SD
- Show Low Unified SD
- Snowflake Unified SD
- St. Johns Unified SD
- Whiteriver Unified SD
- Winslow Unified SD

Pima County JTED

- Ajo Unified SD
- Amphitheater Unified SD
- Catalina Foothills Unified SD
- Flowing Wells Unified SD
- Indian Oasis-Baboquivari Unified SD
- Marana Unified SD
- Sahuarita Unified SD
- Santa Cruz Valley Unified SD
- Sunnyside Unified SD
- Tanque Verde Unified SD
- Tucson Unified SD
- Vail Unified SD

VACTE – Valley Academy of Career and Technology Education

- Camp Verde Unified SD
- Mingus Union HSD
- Sedona-Oak Creek Unified SD

WAVE – Western Arizona Vocational Education

- Colorado River Union HSD
- Lake Havasu Unified SD
- Kingman Unified SD
- Parker Unified SD

West-MEC – Western Maricopa Education Center

- Agua Fria Union HSD
- Buckeye Union HSD
- Deer Valley Unified SD
- Dysart Unified SD
- Glendale Union HSD
- Paradise Valley Unified SD
- Peoria Unified SD
- Saddle Mountain Unified SD
- Wickenburg Unified SD

\* Some JTED member districts include elementary districts. Typically, this includes elementary districts located within the geographical boundaries of a JTED member union high school district.

## **QUESTION 1: The Average Daily Membership of the Joint District**

ARS § 15-393.M.1 “The Average Daily Membership of the Joint District”

### **Methodology Used**

The methodology used to provide information regarding the Average Daily Membership (ADM) of the Joint Technical Education Districts (JTEDs) is to compare the final 2009-2010 JTED ADM counts with the final 2010-2011 JTED ADM counts to determine if the ADM for the districts has increased or decreased. This data, which is collected through SAIS, was retrieved from the Arizona Department of Education’s School Finance website.

### **JTED ADM Data**

The JTED final ADM figures for both school years are included on page 8.

### **Analysis**

During the 2010-2011 school year, thirteen JTEDs were operating in Arizona. These included:

- Coconino Association for Vocations, Industry and Technology (CAVIAT)
- Central Arizona Valley Institute of Technology (CAVIT)
- Cobre Valley Institute of Technology District (CVIT)
- Cochise Technology District (CTD)
- East Valley Institute of Technology (EVIT)
- Gila Institute for Technology (GIFT)
- Mountain Institute Joint Technical Education District (MIJTED)
- Northeast Arizona Technological Institute of Vocational Education (NATIVE)
- Northern Arizona Vocational Institute of Technology (NAVIT)
- Pima County JTED
- Valley Academy for Career and Technology Education (VACTE)
- Western Arizona Vocational Education (WAVE)
- Western Maricopa Education Center (West-MEC)

During school year 2009-2010, the thirteen districts’ total JTED ADM was 24,514. During the school year 2010-2011, the total JTED ADM increased slightly to 26,150, which is an increase of a little more than 6.5%. The ADM reported for both years includes the ninth-grade JTED students.

The following is an overview of JTED 2010 final ADM as of October 18, 2010 and JTED 2011 final ADM as of September 28, 2011.

<b>Joint Technological Education District</b>	<b>ADM 2009-2010 Final</b>	<b>ADM 2010-2011 Final</b>
Coconino (CAVIAT)	656.8640	647.2500
Central Arizona Valley (CAVIT)	799.7675	970.0700
Cobre Valley (CVIT)	194.6675	234.7925
Cochise Technology District (CTD)	579.8125	571.2775
East Valley (EVIT)	7927.1850	8119.2425
Gila Institute (GIFT)	389.7575	380.5599
Mountain Institute (MIJTED)	288.6575	556.66
Northeast (NATIVE)	759.0375	794.4825
Northern Arizona (NAVIT)	1175.4425	1125.1125
Pima County JTED	4537.8550	4892.5405
Valley Academy (VACTE)	337.2875	362.415
Western Arizona (WAVE)	421.1765	849.2975
Western Maricopa (West-MEC)	6445.5000	6646.7775
<b>TOTALS</b>	<b>24,514.01</b>	<b>26,150.48</b>

In examining the JTED member districts' data for SY 2009-2010 and SY 2010-2011 a few things stand out. Four JTED districts had a lower ADM for SY10-11 than for SY 09-10, but for the most part it was a negligible amount. All of the remaining JTED districts had growth in membership, but with the exception of two, it was unremarkable in comparison to the prior year. However, MIJTED and WAVE basically doubled their membership between SY 2009-2010 and SY 2010-2011. The Superintendent of MIJTED explained that this growth is attributed to the fact that SY09-10 was the first year of these JTEDs' operations, and the second year of the JTEDs' existence (SY10-11) logically attracted more students to its programs and caused the jump in ADM. WAVE's Superintendent explained that the ADM of one of its largest member districts was not reported for SY 2009-2010 and that accounted for the large increase in membership for SY 2010-2011 when it was included in the count. It is expected that these spikes in membership will level out as these JTEDs become more established and experienced.

### **Recommendations**

It is recommended that JTED's continue to report their ninth grade ADM and Absences. This reporting will allow the continuation of yearly analysis of the JTEDs' ADM and enrollment reporting in order to provide information related to JTED costs and to bolster accountability.

Source: School Finance On-Line ADMS Reports  
As of September 28, 2011

JTED FINAL ADM SY 2010-2011 (FY2011)

CTDS	JTED & Member Districts	Final 2011 ADM				Totals
		9th	10th	11th	12th	
<b>020801000</b>	<b>Cochise Technology District (CTD)</b>					
020801002	Willcox High School	25.2525	14.0150	12.4475	9.9050	61.6200
020801003	Valley Union High School	7.5050	6.2650	7.0825	6.4950	27.3475
020801004	Tombstone High School	19.4500	14.7625	15.2800	12.8800	62.3725
020801005	St. David High School	6.5425	7.2300	7.9775	6.0075	27.7575
020801006	San Simon High School	1.0800	2.2500	2.0000	1.2700	6.6000
020801007	Bowie High School	2.0000	1.0550	1.3500	1.1275	5.5325
020801008	Benson High School	27.2450	27.0625	20.3125	17.1000	91.7200
020801009	Douglas High School	80.1725	81.8575	69.0575	57.2400	288.3275
	<b>CTD Total</b>	<b>169.2475</b>	<b>154.4975</b>	<b>135.5075</b>	<b>112.0250</b>	<b>571.2775</b>
<b>030801000</b>	<b>Coconino Assoc for Vocation Industry and Technology (CAVIAT)</b>					
030801001	Grand Canyon High School	0.0000	0.2075	1.6250	3.1275	4.9600
030801002	Page High School	50.2925	43.0375	51.5100	52.5650	197.4050
030801003	Fredonia High School	4.5675	3.4200	3.6975	3.6625	15.3475
030801004	Williams High School	9.0725	3.7300	8.3875	6.2700	27.4600
030801005	Coconino High School	53.6700	42.9350	45.3725	20.3200	162.2975
030801006	Flagstaff High School	68.3550	54.1200	43.3175	37.1250	202.9175
030801007	Sinagua High School	0.0000	0.0000	0.0000	0.0000	0.0000
030801009	CC Central Campus	0.0000	0.0000	14.0650	21.8650	35.9300
030801010	Page Central Campus	0.0000	0.0000	0.0000	0.0000	0.0000
	SWETC - 4th St Campus	0.0000	0.0000	0.0000	0.9325	0.9325
	<b>CAVIAT Total</b>	<b>185.9575</b>	<b>147.4500</b>	<b>167.9750</b>	<b>145.8675</b>	<b>647.2500</b>
<b>050802000</b>	<b>Gila Institute for Technology (GIFT)</b>					0.0000
050802001	Gila Institute for Technology	0.0000	1.6025	40.8375	48.2675	90.7075
050802002	Ft. Thomas High School	8.9375	8.7600	4.5174	5.4925	27.7074
050802003	Pima High School	12.4800	10.8350	11.3225	9.1425	43.7800
050802004	Safford High School	43.9575	38.6975	24.2200	11.4100	118.2850
050802005	Thatcher High School	18.5400	12.9600	17.1475	12.0325	60.6800
050802006	Mt. Graham High School	1.9100	3.4150	5.2650	6.0425	16.6325
050802007	Duncan High School	8.0600	7.3225	4.9650	2.4200	22.7675
	<b>GIFT Total</b>	<b>93.8850</b>	<b>83.5925</b>	<b>108.2749</b>	<b>94.8075</b>	<b>380.5599</b>

Source: School Finance On-Line ADMS Reports  
As of September 28, 2011

**JTED FINAL ADM SY 2010-2011 (FY2011)**

<b>070801000 East Valley Institute of Technology (EVIT)</b>							0.0000
070801001	East Valley Institute of Technology (Main)	0.0000	35.8800	889.7600	1068.3875	1994.0275	
070801003	EVIT Chandler High	69.6500	96.0650	86.1575	53.5125	305.3850	
070801005	EVIT Apache Junction	82.6275	33.0000	16.9200	8.3075	140.8550	
070801007	EVIT Fountain Hills Voc Center	21.6600	29.1675	26.5700	22.5175	99.9150	
070801009	EVIT Higley	29.4925	19.0550	23.5850	9.0400	81.1725	
070801010	EVIT Hamilton	36.5400	83.0775	80.4375	58.8800	258.9350	
070801011	EVIT Basha	46.6875	56.9500	55.4025	39.6925	198.7325	
070801012	EVIT Queen Creek	83.7975	46.7075	33.7600	49.6100	213.8750	
070801091	EVIT Tempe High School	59.4350	24.8575	27.6500	28.3700	140.3125	
070801092	EVIT McClintock High School	64.0750	30.7775	45.7175	58.6150	199.1850	
070801093	EVIT Marcos de Niza High School	95.4325	37.3850	60.6700	75.0975	268.5850	
070801094	EVIT Corona del Sol High School	76.3625	42.0000	57.5625	119.0575	294.9825	
070801095	EVIT Mountain Pointe High School	124.6550	47.5550	71.2475	110.0075	353.4650	
070801096	EVIT Desert Vista High School	141.4750	58.7800	80.6725	112.3475	393.2750	
070801097	EVIT Compadre High School	0.7325	3.0475	12.0075	19.0825	34.8700	
070801210	EVIT Gilbert High School	118.9549	85.2774	101.7750	65.9900	371.9973	
070801211	EVIT Highland High School	139.5625	102.9426	119.4075	64.7550	426.6676	
070801212	EVIT Mesquite High School	119.0850	65.6950	84.5325	52.5401	321.8526	
070801213	EVIT Desert Ridge High School	140.9050	88.0525	83.7875	62.1100	374.8550	
070801214	EVIT Campo Verde High School	120.6450	65.7875	50.6250	0.5000	237.5575	
070801251	EVIT Mesa Jr. High	10.8075	0.0000	0.0000	0.0000	10.8075	
070801254	EVIT Fremont Jr. High	9.5875	0.0000	0.0000	0.0000	9.5875	
070801256	EVIT Poston Jr. High	7.6975	0.0000	0.0000	0.0000	7.6975	
070801258	EVIT Taylor Jr. High	2.2600	0.0000	0.0000	0.0000	2.2600	
070801260	EVIT Shepherd Jr. High	4.2500	0.0000	0.0000	0.0000	4.2500	
070801262	EVIT Stapley Jr. High	3.0600	0.0000	0.0000	0.0000	3.0600	
070801271	EVIT Mesa High School	16.2900	93.1600	38.4675	36.4075	184.3250	
070801272	EVIT Westwood High School	22.9450	47.4375	24.1125	31.6625	126.1575	
070801273	EVIT Mountain View High School	0.2700	32.4675	30.6600	23.7450	87.1425	
070801274	EVIT Dobson High School	21.5000	37.2175	27.5250	22.3425	108.5850	
070801275	EVIT Red Mountain High School	0.0000	33.2750	31.8100	35.3000	100.3850	
070801276	EVIT Skyline High School	25.4400	38.3775	21.4800	16.7725	102.0700	
070801292	EVIT Arcadia High School	17.1200	31.6475	24.3875	24.5775	97.7325	
070801293	EVIT Coronado High School	20.5400	16.6425	12.6550	12.5400	62.3775	
070801294	EVIT Saguaro High School	5.0675	8.0475	8.2425	17.0025	38.3600	
070801295	EVIT Caparral High School	5.6575	29.7475	29.7425	17.8650	83.0125	
070801296	EVIT Desert Mountain High School	6.7650	25.7900	27.3125	33.2550	93.1225	
070801297	EVIT Perry High School	22.8175	40.1175	40.7725	35.0850	138.7925	
070801298	EVIT Williams Field High School	40.6550	35.6400	12.2350	6.0250	94.5550	
070801299	EVIT Combs High School	20.9700	19.1100	13.6525	0.7275	54.4600	
	<b>EVIT Total</b>	<b>1835.4749</b>	<b>1540.7375</b>	<b>2351.3025</b>	<b>2391.7276</b>	<b>8119.2425</b>	

Source: School Finance On-Line ADMS Reports  
As of September 28, 2011

**JTED FINAL ADM SY 2010-2011 (FY2011)**

<b>070802000 Western Maricopa Education Center (West MEC)</b>						
070802201	Centennial High School	29.8950	52.6450	75.6700	38.7625	196.9725
070802202	Ironwood High School	71.3975	69.3875	59.4400	41.8300	242.0550
070802203	Cactus High School	31.2300	37.5850	42.8100	35.1225	146.7475
070802204	Peoria High School	94.5750	57.0750	54.5075	38.4425	244.6000
070802205	Sunrise Mountain High School	32.3025	43.9650	62.6550	17.7350	156.6575
070802206	Dysart High School	72.2200	44.2450	41.7325	28.4675	186.6650
070802207	Willow Canyon High School	79.1000	56.0575	46.5650	25.1475	206.8700
070802208	Millennium High School	23.2700	18.8525	42.1875	48.5425	132.8525
070802209	Desert Edge High School	34.0925	10.2075	21.9375	26.4275	92.6650
070802210	Agua Fria High School	3.9400	15.4450	34.7025	30.5425	84.6300
070802211	Buckeye Union High School	11.2925	21.9225	30.5375	23.3925	87.1450
070802212	Estrella Foothills High School	7.5025	38.5450	21.4200	22.5350	90.0025
070802213	Tonopah Valley High School	14.6450	14.4450	10.0100	8.4875	47.5875
070802215	Raymond S. Kellis	62.8175	42.2600	59.8975	29.6625	194.6375
070802217	Washington High School	40.5900	33.3600	37.8025	42.4700	154.2225
070802218	Thunderbird High School	43.5550	26.4250	29.5275	33.4675	132.9750
070802219	Sunnyslope High School	89.3150	24.0150	24.0850	34.5800	171.9950
070802220	Moon Valley High School	42.8475	32.6350	38.1725	49.0575	162.7125
070802221	Independence High School	40.4150	43.2050	42.5475	32.9675	159.1350
070802222	Greenway High School	27.5150	26.1200	34.2050	34.8175	122.6575
070802223	Glendale High School	57.7025	35.8325	39.6425	45.2425	178.4200
070802224	Cortez High School	22.0775	22.9225	15.2725	21.6150	81.8875
070802225	Apollo High School	48.1750	42.2250	49.0675	50.2050	189.6725
070802226	Boulder Creek High School	72.6225	43.7825	37.0125	16.7675	170.1850
070802227	Barry Goldwater High School	58.8775	39.8550	44.4650	28.6175	171.8150
070802228	Deer Valley High School	39.7675	26.0525	28.5575	16.1050	110.4825
070802229	Mountain Ridge High School	74.1500	36.8350	41.3350	17.0550	169.3750
070802230	Sandra Day O'Connor High School	69.6200	43.7975	46.9875	21.5025	181.9075
070802231	Wickenburg High School	21.1975	25.9925	20.3050	13.5325	81.0275
070802234	Western Maricopa Education Center	0.0000	0.0000	206.4025	308.0550	514.4575
070802235	Liberty High School	68.9900	51.9925	42.0600	17.6600	180.7025
070802236	Verrado High School	31.6750	20.3525	33.5150	28.4600	114.0025
070802237	Paradise Valley High School	58.4150	58.0675	40.9225	27.9825	185.3875
070802238	North Canyon High School	84.9025	92.9450	64.7725	43.0575	285.6775
070802239	Horizon High School	64.5675	37.3150	49.4375	19.2350	170.5550
070802240	Pinnacle High School	86.0125	68.7400	59.9150	29.4525	244.1200
070802241	Shadow Mountain High School	50.7650	40.4325	35.3400	22.9650	149.5025
070802242	Valley Vista High School	96.3975	67.6050	71.8425	35.7675	271.6125
070802243	Youngker High School	15.2325	20.1575	22.5475	22.9050	80.8425
070802245	Shadow Ridge High School	50.2000	29.1075	22.0525	0.0000	101.3600
	<b>West MEC Total</b>	<b>1923.8650</b>	<b>1512.4075</b>	<b>1781.8650</b>	<b>1428.6400</b>	<b>6646.7775</b>

Source: School Finance On-Line ADMS Reports  
As of September 28, 2011

**JTED FINAL ADM SY 2010-2011 (FY2011)**

<b>Western Arizona Vocational Education (WAVE)</b>						
080850001	Lake Havasu High School	100.5250	70.0375	69.5875	58.5975	298.7475
080850002	Mohave High School	19.1750	40.3575	39.9900	25.1450	124.6675
080850003	River Valley High School	18.1650	21.3575	19.4025	26.0100	84.9350
080850004	Kingman High School	90.4975	74.8900	67.6000	50.2700	283.2575
080850005	Parker High School	19.0450	11.9375	11.0250	14.5100	56.5175
080850007	WAVE Central Campus	0.0000	0.0000	0.3500	0.8225	1.1725
	<b>WAVE Total</b>	<b>247.4075</b>	<b>218.5800</b>	<b>207.9550</b>	<b>175.3550</b>	<b>849.2975</b>
<b>Northern Arizona Vocational Institute of Technology (NAVIT)</b>						
090835201	Snowflake High School	37.0825	31.7925	16.8125	12.7775	98.4650
090835202	Show Low High School	27.6075	28.7100	29.3950	18.9075	104.6200
090835203	Blue Ridge High School	36.9675	21.2525	22.9225	16.5125	97.6550
090835204	Round Valley High School	16.2225	15.0275	7.7525	2.7450	41.7475
090835205	Mogollon HS (Heber-Overgaard)	10.2900	9.4250	3.7600	3.4075	26.8825
090835206	NAVIT Central Campus	0.0000	0.0000	154.8950	134.6675	289.5625
090835207	St. Johns High School	17.8175	12.2750	11.5050	8.9225	50.5200
090835208	Holbrook High School	35.8825	26.5425	18.7800	18.6875	99.8925
090835209	Joseph City High School	3.7125	5.4125	3.9150	1.1450	14.1850
090835210	Winslow High School	52.3625	23.6375	23.1900	24.1150	123.3050
090835211	Alchesay High School (Whiteriver)	18.4225	13.8350	15.3600	12.8850	60.5025
090835225	Payson High School	42.5925	37.4250	19.1125	18.6450	117.7750
	<b>NAVIT Total</b>	<b>298.9600</b>	<b>225.3350</b>	<b>327.4000</b>	<b>273.4175</b>	<b>1125.1125</b>
<b>090836000 Northeast Arizona Technological Institute of Vocational Education (NATIVE)</b>						
090836101	Monument Valley High School	37.7125	39.0650	27.6250	31.4325	135.8350
090836102	Pinon High School	14.7375	16.5750	8.5150	12.5575	52.3850
090836103	Chinle High School	21.6700	51.2550	50.0225	38.8400	161.7875
090836104	Ganado High School	26.0400	24.9525	17.7050	24.5300	93.2275
090836105	Red Mesa High School	0.5725	5.9000	12.3025	9.7525	28.5275
090836106	Window Rock High School	30.5375	41.1650	38.3825	35.2775	145.3625
090836107	Sanders Valley High School	16.8800	16.3775	18.3650	12.2500	63.8725
090836108	Tuba City High School	7.6375	40.5775	31.2825	33.9875	113.4850
	<b>NATIVE Total</b>	<b>155.7875</b>	<b>235.8675</b>	<b>204.2000</b>	<b>198.6275</b>	<b>794.4825</b>

Source: School Finance On-Line ADMS Reports  
As of September 28, 2011

**JTED FINAL ADM SY 2010-2011 (FY2011)**

<b>100811000 Pima County JTED - Pima County Joint Technical Education District</b>						
100811201	Catalina High School	66.1275	36.9050	36.4450	30.8900	170.3675
100811202	Cholla High School	116.0075	56.4125	49.9975	27.3500	249.7675
100811203	Howenstine High School	4.5525	8.9525	4.9950	6.5900	25.0900
100811204	Palo Verde High School	51.2025	37.2425	39.0250	37.5600	165.0300
100811205	Pueblo High School	104.6525	56.1925	44.0875	32.1575	237.0900
100811206	Rincon High School	60.6400	28.9275	32.1025	16.0675	137.7375
100811207	University High School	10.3200	7.2700	3.3625	10.6700	31.6225
100811208	Sabino High School	47.4075	23.5075	32.3300	9.2300	112.4750
100811209	Sahuaro High School	102.3175	29.6475	39.2100	16.8900	188.0650
100811210	Santa Rita High School	77.0450	48.0600	42.7800	25.1900	193.0750
100811211	Tucson High School	142.6725	132.2900	87.3775	36.1625	398.5025
100811212	Project More	2.1375	4.8875	4.7025	0.9825	12.7100
100811213	Aztec Middle College East	0.0000	0.2225	1.7125	2.6850	4.6200
100811214	Aztec Middle Collge NW	0.0000	0.1250	1.2725	4.0575	5.4550
100811215	Aztec Middle College Desert Vista	0.0000	0.1775	1.9425	3.2925	5.4125
100811216	Aztec Middle College	0.0000	0.4750	1.2875	2.0925	3.8550
100811220	Amphitheater High School	25.8975	29.2175	24.0725	20.4325	99.6200
100811221	Canyon Del Oro High School	81.5050	42.1800	46.3250	42.1025	212.1125
100811222	Ironwood Ridge High School	59.2000	33.2450	35.8325	21.9725	150.2500
100811230	Ajo High School	5.1800	7.4475	3.5600	5.8950	22.0825
100811235	Pima County JTED Annex	13.5775	7.6775	1.7350	0.7550	23.7450
100811240	Catalina Foothills High School	61.0700	41.1275	42.5150	52.6550	197.3675
100811244	Pima County JTED at Flowing Wells	7.7755	5.3800	4.7600	7.0525	24.9680
100811245	Pima County JTED Cosmotology	0.0000	0.0000	40.5650	68.1925	108.7575
100811246	Pima County JTED at Camino Seco	0.0000	0.5475	14.5600	33.8925	49.0000
100811249	Pima County JTED at Empire	1.9450	1.2375	15.3700	15.1650	33.7175
100811250	Flowing Wells High School	31.2275	25.7700	31.5750	34.8200	123.3925
100811251	Pima County JTED NW Campus	21.4150	26.7275	15.8000	9.5550	73.4975
100811260	Baboquivari High School	10.5725	7.3900	7.9350	4.7075	30.6050
100811265	Rio Rico High School	66.4825	19.0825	36.8875	33.8050	156.2575
100811270	Marana High School	79.6150	71.3475	64.9725	43.3350	259.2700
100811271	Mountain View High School	62.8925	60.5750	58.3925	25.3100	207.1700
100811285	Sahuarita High School	72.0025	41.4150	35.0775	16.3275	164.8225
100811281	Pima JTED Central Campus	0.0000	0.8025	28.8625	83.0850	112.7500
100811287	Cienega High School	57.8925	54.6500	62.1000	41.0500	215.6925
100811288	Empire High School	24.9075	22.9300	21.6850	11.0150	80.5375
100811289	Vail High School	7.5025	6.3325	7.1700	5.8275	26.8325
100811290	Desert View High School	108.5425	60.3825	41.9700	56.3025	267.1975
100811291	Sunnyside High School	95.0725	64.2175	57.8275	44.8900	262.0075
100811299	Tanque Verde High School	16.1725	13.7850	12.4600	7.5950	50.0125
	<b>Pima County JTED - Total</b>	<b>1695.5305</b>	<b>1114.7625</b>	<b>1134.6400</b>	<b>947.6075</b>	<b>4892.5405</b>

Source: School Finance On-Line ADMS Reports  
As of September 28, 2011

**JTED FINAL ADM SY 2010-2011 (FY2011)**

**110801000 Central Arizona Valley Institute of Technology (CAVIT)**

110801001	Central Arizona Valley Institute of Technology	0.0000	0.0000	106.5300	71.8100	178.3400
110801002	Santa Cruz Valley Union High School	0.7800	7.7850	8.9625	4.6300	22.1575
110801003	Maricopa Unified	0.0650	50.1600	65.9750	48.4175	164.6175
110801004	Florence Unified	4.3275	13.9750	6.3475	20.5550	45.2050
110801005	Coolidge High School	34.6400	28.5100	9.4775	17.2075	89.8350
110801008	Casa Grande Union High School	65.6225	47.6725	51.5150	83.5850	248.3950
110801007	San Tan Foothills High School	17.5275	9.1025	13.2750	13.1325	53.0375
110801009	Poston Butte Hight School	7.9075	17.3700	10.8775	0.0000	36.1550
110801010	Vista Grande High School	40.7300	56.6700	34.9275	0.0000	132.3275
	<b>CAVIT Total</b>	<b>171.6000</b>	<b>231.2450</b>	<b>307.8875</b>	<b>259.3375</b>	<b>970.0700</b>

**110802000 Cobre Valley Institute of Technology District (CVIT)**

110802002	Miami High School	6.5225	13.0200	12.5175	7.1700	39.2300
110802003	Hayden High School	0.2500	3.9975	3.7350	4.7350	12.7175
110802004	Superior High School	3.3050	6.6125	7.0175	7.6375	24.5725
110802005	San Carlos High School	8.1525	16.7700	14.6725	10.5650	50.1600
110802006	Globe High School	17.9150	16.0950	14.2925	11.5850	59.8875
110802007	CVIT - Central Programs	0.0000	0.5000	26.4625	21.2625	48.2250
	<b>CVIT Total</b>	<b>36.1450</b>	<b>56.9950</b>	<b>78.6975</b>	<b>62.9550</b>	<b>234.7925</b>

**130801000 Valley Academy for Career and Technology Education**

130801001	Mingus Union High School	65.8800	47.9575	40.7825	21.1600	175.7800
130801002	Camp Verde Unified School District	30.8300	24.1100	25.4275	16.2825	96.6500
130801003	Sedona-Oak Creek Joint Unified School District	29.4200	18.1575	19.9375	16.7650	84.2800
130801006	VACTE	0.0000	0.0000	0.5050	5.2000	5.7050
	<b>VACTE Total</b>	<b>126.1300</b>	<b>90.2250</b>	<b>86.6525</b>	<b>59.4075</b>	<b>362.4150</b>

**130802000 Mountain Institute Joint Technical Education District (MIJTED)**

130802001	Bradshaw Mountain High School	113.4975	42.5250	36.9325	24.7625	217.7175
130802002	Ashfork High School	5.7850	0.4525	2.0225	1.5725	9.8325
130802003	Bagdad High School	7.2200	9.0400	3.8175	2.5200	22.5975
130802004	Chino Valley High School	47.0800	29.6500	26.8525	10.2875	113.8700
130802005	Prescott High School	64.3400	28.2800	27.8125	11.8900	132.3225
130802006	Seligman High School	2.9250	2.4725	2.4900	0.5950	8.4825
130802007	Mayer High School	9.1375	7.5575	6.3850	4.0925	27.1725
130802008	Mountain Institute Central Campus	0.3550	5.3325	10.4625	8.5150	24.6650
	<b>MIJTED Total</b>	<b>250.3400</b>	<b>125.3100</b>	<b>116.7750</b>	<b>64.2350</b>	<b>556.6600</b>

**JTED TOTAL**

**7190.3304 5737.0050 7009.1324 6214.0101 26150.4779**

## **QUESTION 2: JTED Program and Course Listings & Descriptions**

ARS § 15-393.M.1 “The program and course listings and course descriptions of courses offered by joint districts.”

### **Methodology Used**

Criteria for course approval were enacted with HB2700, which became law in August 2006 and amended with HB 2128 April 2010. HB2700, HB2128 and subsequent ARS 15-391 and 393 require that, after December 31, 2006, JTEDs submit to the Arizona Department of Education Career and Technical Education (ADE CTE) Section the programs and sequence of courses for the following school year and allow 120 days, after the submission of all required documents, for ADE CTE to review and notify the JTEDs of their status.

During the fall of 2006, processes were developed for approval, non-approval, or conditional approval. During spring 2007, 2008, 2009, 2010 and again spring of 2011, the processes were conducted. However, a number of programs and course sequences had to be reviewed on-site by the State Program Supervisor before final approval or disapproval could be determined. Several of these programs were placed in a conditional approval status until either on-site reviews were completed or deficiencies identified in the written review were either rectified or deemed as unacceptable.

Below, the criteria, the process and the results of the SY 2011-2012 are identified. The appendix (A, C, D, E, F and G) provides additional exhibits of the criteria, process and results.

### **2011-2012 JTED Program/Course Approval Process**

ARS 15-391.3 defined courses that are to be considered “JTED courses” by outlining the required components of such courses. Two crucial components outlined in the statute are: the course must “meet the standards of a career preparatory vocational program as determined by the career and technical education division of the department of education” and “is approved by the career and technical division of the department of education.” In compliance with ARS 15-391 and 393, the ADE CTE section developed a process by which to review and approve “JTED courses.” The process is as follows:

- A 2011-2012 Application for Program/Course Approval was developed (see appendix A) with components listed below:
  - Cover page  
Requirements:
    - JTED contact information;
    - superintendent signature assuring the JTED will comply with all reporting requirements as identified by ADE and cited in HB2700 and related statutes including:
      - assurance that the course is certified by the joint technical education district governing board as having met all the requirements in article 15-391;
      - assurance that an IGA or written contract with participating educational institutions will be written, approved and signed by the local governing board and the JTED governing board;
      - assurance that the IGA will be submitted to the JLBC for review
    - a list of all participating educational institutions for which the IGA or contract will be completed.
  - Program and Course Information sheet

Requirements:

- be submitted for each program indicating the program Classification of Instructional Program (CIP) code;
  - identify the industry-validated standards used for instruction;
  - indicate the program will lead to industry-validated assessment or certification;
  - list each course taught in the program and each site where the course is taught; and
  - indicate that the instructor holds appropriate certification to teach the course.
- Specialized Equipment and Instructional Materials List
    - lists specialized equipment or instructional materials required to teach each course within the program.
  - Program/Course Approval Check List
    - addresses each required element of a JTED program and course(s); and
    - allows for the courses within the program to be “approved,” “conditionally approved” or “not approved.” The “conditionally approved” status was established to provide adequate time for ADE CTE program State Supervisors to visit and evaluate programs by examining each course within the program before granting permanent approval status.
- As required in ARS 15-391.3, all JTED programs/courses had to be submitted to the ADE.
  - The ADE received 33 new program submissions consisting of 98 courses in the format described above prior to the 2011-2012 deadline.
  - CTE State Supervisors, each with expertise within their content area, reviewed each program submission and each course within the program. State Supervisors granted approval, conditional approval or did not approve in accordance with the elements of a CTE Career Preparation Program and the legislative requirements outlined in ARS 15-391 & 393. A CTE Career Preparation Program is a coherent sequence of instruction determined through the use of state labor market data to be a high-skill, high-wage and/or high-demand career opportunity for students that delivers a set of prescribed state standards (see appendix B for CTE Program List Ranked by formula). The JTEDs submit their applications listing the program and each course contained within the program’s sequence of instruction. (See appendix C for CTE program sequence, program and course descriptions)
  - Some programs and courses were granted “conditional approval” and the action needed to receive full approval was described on the Approval Checklist.
  - In compliance with the 120 days allowed for program review, on April 30, 2011 a log with each course submitted and a letter explaining the approval process and the status was sent to each JTED (see appendix D and E).
  - Follow up and technical assistance continued during the fall 2010 semester and into spring semester 2011. However, due the amount of time it takes state staff to conduct on-site reviews for each course, as well as the time it takes for a school to implement the changes identified during the reviews, a number of programs and courses are still in “conditionally approved” status. State staff continues to work with programs to move the courses with “conditional approval” status to either an “approved status” or “not approved status.” (See appendix F) CTE State Supervisors work with both the program instructors and JTED superintendents to offer technical assistance including on-site assistance in addressing deficiencies in the program. This technical assistance time is crucial to ensure that courses meet the requirements of the legislation prior to receiving an approved status, since there is no provision for further remediation after programs are approved. If the program is unable to bring courses into compliance with

the legislative requirements, the program (including the courses within the sequence of instruction) is designated “unapproved” and is not eligible for funding.

- An appeals process was established and approved by the Arizona State Board of Career and Technological Education, for JTEDs that would like consideration for their unapproved courses. To date, no courses have been appealed. (See appendix G)

**Total number of JTED Program Applications Received**  
**Approval Status as of January 18, 2012**

Following is the number of program applications received from each of the thirteen JTEDs and the approval status as of January 18, 2012.

**2011-2012 JTED program application submissions and approval status:**

<b>JTED</b>	<b>Number of Programs Approved</b>	<b>Number of Programs Conditionally Approved</b>	<b>Number of Programs Unapproved</b>	<b>Total Number of Programs Requested</b>
CAVIAT	4	5	0	9
CAVIT	2	5	0	7
CTD	0	0	0	0
CVIT	0	2	0	2
EVIT	0	4	0	4
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	1	1	2
PIMA	1	1	0	2
VACTE	0	0	0	0
WAVE	1	4	0	5
WEST-MEC	0	2	0	2
<b>TOTAL</b>	<b>8</b>	<b>24</b>	<b>1</b>	<b>33</b>

A program must have a minimum of two courses in the instructional sequence. However, many programs consist of three or more courses in the instructional sequence. In order to make comparisons of JTED program offerings in 2011-2012 and courses submitted, approved, conditionally approved, and unapproved in previous years, an additional chart illustrating the courses is included below.

**2011-2012 new JTED course submissions and approval status:**

<b>JTED</b>	<b>Number of Courses Approved</b>	<b>Number of Courses Conditionally Approved</b>	<b>Number of Courses Unapproved</b>	<b>Total Number of Courses Requested</b>
CAVIAT	21	18	0	39
CAVIT	5	12	0	17
CTD	0	0	0	0
CVIT	0	8	0	8
EVIT	0	9	0	9
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	3	2	5
PIMA	2	3	0	5
VACTE	0	0	0	0
WAVE	3	5	0	8
WEST-MEC	0	7	0	7
<b>TOTAL</b>	<b>31</b>	<b>65</b>	<b>2</b>	<b>98</b>

The data below represents past years for which JTED Reports have been submitted to the Legislature. The total numbers below vary from previous years' reports due primarily to two reasons. The first is the removal of duplicated courses submitted and secondly, the revision of ARS 15-391(5) (d) "Requires work-based learning components....." Previously, internships were not approved due to the specialized equipment requirement. Upon implementation of the revised statute internship programs were moved from an unapproved status to an approved or conditionally approved status depending on the specifics of the internship.

**2010-2011 new program/course submissions and approval status:**

<b>JTED</b>	<b>Number of Programs/Courses Approved</b>
CAVIAT	4/9
CAVIT	8/20
CTD	0/0
CVIT	0/0
EVIT	0/0
GIFT	1/2
MIJTED	4/11
NATIVE	5/14
NAVIT	2/4
PIMA	8/25
VACTE	1/1
WAVE	5/11
WEST-MEC	1/1
<b>TOTAL</b>	<b>39/98</b>

**2009-2010 new program/course submissions and approval status:**

<b>JTED</b>	<b>Number of Programs/Courses Approved</b>
CAVIAT	3/12
CAVIT	10/27
CTD	3/7
CVIT	5/14
EVIT	20/56
GIFT	0/0
MIJTED	15/50
NATIVE	4/18
NAVIT	3/10
PIMA	21/61
VACTE	2/13
WAVE	31/145
WEST-MEC	0/0
<b>TOTAL</b>	<b>117/413</b>

**2008-2009 new program/course submissions and approval status:**

<b>JTED</b>	<b>Number of Programs/Courses Approved</b>
CAVIAT	29/112
CAVIT	0/0
CTD	16/53
CVIT	11/26
EVIT	167/895
GIFT	23/92
NATIVE	52/135
NAVIT	58/151
PIMA	65/231
VACTE	11/55
WEST-MEC	18/58
<b>TOTAL</b>	<b>450/1808</b>

**2007-2008 new program/course submissions and approval status:**

<b>JTED</b>	<b>Number of Programs/Courses Approved</b>
CAVIAT	21/89
CAVIT	21/67
CTD	30/120
CVIT	13/38
EVIT	102/609
GIFT	13/57
NATIVE	27/78
NAVIT	68/214
PIMA	91/330
VACTE	10/54
WEST-MEC	250/784
<b>TOTAL</b>	<b>646/2440</b>

The summary below provides a composite of all JTED program/course approval status by year. It should be noted that many of the conditionally approved courses from previous years may be part of the approved or unapproved courses for the next year or two. Occasionally, conditionally approved courses may remain for more than one year, until the program has had an on-site visitation and brought identified deficiencies into compliance.

**JTED Data on Eligible Programs/Courses**

Approved programs SY 2007-2008	646
Approved programs SY 2008-2009	450
Approved programs SY 2009-2010	117
Approved programs SY2010-2011	39
Approved programs SY2011-2012	8
Approved courses SY 2007-2008	2440
Approved courses SY 2008-2009	1808
Approved courses SY 2009-2010	413
Approved courses SY2010-2011	98
Approved courses SY2011-2012	31

Conditionally approved programs/courses (all years) 373/1016

**JTED Data on Programs/Courses Not Approved:**

Unapproved courses SY 2007-2008	15/79
Unapproved courses SY 2008-2009	31/122
Unapproved courses SY 2009-2010	6/18
Unapproved courses SY 2010-2011	0/0
Unapproved courses SY 2011-2012	1/2

Total Programs/Courses eligible for funding (all years) 1635/5806

The following are lists of the State Board of Career and Technological Education approved Career and Technical Education Programs and Course Sequences. Each JTED's courses submitted for SY2011-2012 approval are shown below for each CTE Program. Summary data for all reporting years is shown for comparison at the end of each Program.

**Accounting and Related Services**  
**Program CIP Code: 52.0300**

The following lists the recommended Career Preparation courses developed from industry-validated skills for initial employment or continued related education. All the state-designated Accounting and Related Services standards are addressed in this instructional sequence. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 52.0300.10 Introduction to Business & Accounting**  
-and-  
**52.0300.20 Basic Accounting**

**And one or more of the following courses will be included in the coherent sequence of courses for this instructional program:**

- 52.0300.30 Advanced Accounting**  
**And program may elect to add:**  
**52.0300.75 Accounting – Internship**  
-or-  
**52.0300.80 Accounting – Cooperative Education**

**JTED Program Applications submitted for Accounting and Related Services for the 2011-2012 school year:**

<b>JTED</b>	<b>Number of Programs Approved</b>	<b>Number of Programs Conditionally Approved</b>	<b>Number of Programs Unapproved</b>	<b>Total Number of Programs Requested</b>
CAVIAT	0	0	0	0
CAVIT	0	0	0	0
CTD	0	0	0	0
CVIT	0	0	0	0
EVIT	0	0	0	0
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	0	0	0
PIMA	0	0	0	0
VACTE	0	0	0	0
WAVE	0	1	0	1
WEST-MEC	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>

**Accounting and Related Services programs/courses JTED eligible:**

Approved programs SY 2007-2008	1
Approved programs SY 2008-2009	8
Approved programs SY 2009-2010	2
Approved programs SY2010-2011	1
Approved programs SY2011-2012	0
Approved courses SY 2007-2008:	3
Approved courses SY 2008-2009:	33
Approved courses SY 2009-2010	8
Approved courses SY2010-2011	3
Approved courses SY2011-2012	0

Conditionally approved programs/courses (all years) 6/19

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	1/30
Unapproved programs/courses SY 2008-2009	4/15
Unapproved programs/courses SY 2009-2010	2/6
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Agricultural Business Management – Agriscience**

**Program CIP Code: 01.0100**

The following lists the recommended Career Preparation courses developed from industry-validated skills for initial employment or continued related education. All the state-designated standards are addressed in this instructional sequence. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 01.0100.10 Agricultural Business**  
-and-  
**01.0100.12 Agricultural Business Management**  
-and-  
**01.0100.14 Agricultural Business Management – Agriscience**  
-and-

**Option A**

- 01.0100.20 Food Products and Processing Systems**  
-or-

**Option B**

- 01.0100.30 Plant Systems**  
-or-

**Option C**

- 01.0100.40 Animal Systems**  
-or-

**Option D**

- 01.0100.50 Natural Resources Systems**  
-or-

**Option E**

- 01.0100.60 Power, Structural and Technical Systems**  
-or-

**Option F**

- 01.0100.90 Agribusiness Systems**

-or

**Option G**

**01.0100.00 Environmental Service Systems**  
**And program may elect to add:**

**01.0100.75 Agricultural Business Management – Agriscience – Internship**

-or-

**01.0100.80 Agricultural Business Management – Agriscience – Cooperative Education**

**JTED Program Applications submitted for Agricultural Business Management - Agriscience for the 2011-2012 school year:**

JTED	Number of Programs Approved	Number of Programs Conditionally Approved	Number of Programs Unapproved	Total Number of Programs Requested
CAVIAT	0	1	0	1
CAVIT	1	0	0	1
CTD	0	0	0	0
CVIT	0	0	0	0
EVIT	0	0	0	0
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	0	0	0
PIMA	0	0	0	0
VACTE	0	0	0	0
WAVE	0	0	0	0
WEST-MEC	0	0	0	0
<b>TOTAL</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>2</b>

**Agricultural Business Management – Agriscience programs/courses JTED eligible:**

Approved programs SY 2007-2008	50
Approved programs SY 2008-2009	10
Approved programs SY 2009-2010	7
Approved programs SY2010-2011	2
Approved programs SY2011-2012	1
Approved courses SY 2007-2008	357
Approved courses SY 2008-2009	44
Approved courses SY 2009-2010	34
Approved courses SY2010-2011	9
Approved courses SY2011-2012	3

Conditionally approved programs/courses (all years) 8/40

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	2/17
Unapproved programs/courses SY 2008-2009	1/5
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Air Transportation**  
**Program CIP Code: 49.0100**

The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All of the state-mandated Career Preparation standards are addressed in this instructional sequence. Air Transportation is a new program added to the 2010 CTE Program List based on Arizona Labor Market Data.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 49.0100.10**      **Air Transportation I**  
                         **-and-**
- 49.0100.20**      **Air Transportation II**  
                         **-and-**
- 49.0100.30**      **Air Transportation III**
- And program may elect to add:**
- 49.0100.75**      **Air Transportation – Internship**  
                         **-or-**
- 49.0100.80**      **Air Transportation – Cooperative Education**

**No JTED Program Applications submitted for Air Transportation for 2011-2012 school year.**

**Air Transportation courses JTED eligible:**

Approved programs SY 2009-2010	1
Approved programs SY2010-2011	0
Approved programs SY2011-2012	0
Approved courses SY 2009-2010	3
Approved courses SY2010-2011	0
Approved courses SY2011-2012	0

Conditionally approved programs/courses (all years)    0/0

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Allied Health Services**  
**Program CIP Code: 51.0800**

The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All of the state-mandated Career Preparation standards are addressed in this instructional sequence. Allied Health Services consists of five program options, each with its own set of Career Preparation standards. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 51.0800.10**      **Fundamentals of Allied Health**
- Option A**
- 51.0800.20**      **Pharmacy Support Services**  
                         **-or-**
- Option B**
- 51.0800.30**      **Laboratory Assisting**  
                         **-or-**
- Option C**
- 51.0800.40**      **Medical Imaging Support Services**

-or-

**Option D**

**51.0800.50 Sports Medicine & Rehabilitation Therapies.**

-or-

**Option E**

**51.0800.60 Medical Assisting Services**

**And program may elect to add:**

**51.0800.75 Allied Health – Internship**

-or-

**51.0800.80 Allied Health Services – Cooperative Education**

**JTED Program Applications submitted for Allied Health for 2011-2012 school year:**

<b>JTED</b>	<b>Number of Programs Approved</b>	<b>Number of Programs Conditionally Approved</b>	<b>Number of Programs Unapproved</b>	<b>Total Number of Programs Requested</b>
CAVIAT	0	2	0	2
CAVIT	0	0	0	0
CTD	0	0	0	0
CVIT	0	0	0	0
EVIT	0	0	0	0
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	0	0	0
PIMA	0	0	0	0
VACTE	0	0	0	0
WAVE	0	0	0	0
WEST-MEC	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>

**Allied Health courses JTED eligible:**

Approved programs SY 2007-2008	22
Approved programs SY 2008-2009	1
Approved programs SY 2009-2010	0
Approved programs SY 2010-2011	0
Approved programs SY 2011-2012	0
Approved courses SY 2007-2008	129
Approved courses SY 2008-2009	1
Approved courses SY 2009-2010	0
Approved courses SY 2010-2011	0
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 38/92

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Audio/Visual Technology – name changed to Multimedia Technologies in 2011-2012  
**Program CIP Code: 10.0200****

Audio/Visual Technology 10.0200 program name changed to Multimedia as a result of Arizona Labor Market Data and reflected on the *2012 CTE Program List*.

**Bioscience**

**Program CIP Code: 41.0100**

Biomedical Health Technologies 51.1000 program name and CIP Code changed to Bioscience 41.0100 as a result of Arizona Labor Market Data and reflected on the *2010 CTE Program List*. The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All of the state-mandated Career Preparation standards are addressed in this instructional sequence.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 41.0100.10 Introduction to Bioscience**  
**-and-**  
Option A  
**41.0100.20 Bio-medical**  
**-or-**  
Option B  
**41.0100.30 Bio-environmental**  
**-or-**  
Option C  
**41.0100.40 Bio-innovations**  
**And program may elect to add:**  
**41.0100.75 Bioscience – Internship**  
**-or-**  
**41.0100.80 Bioscience- Cooperative Education**

**JTED Program Applications for Bioscience for the 2011-2012 school year:**

<b>JTED</b>	<b>Number of Programs Approved</b>	<b>Number of Programs Conditionally Approved</b>	<b>Number of Programs Unapproved</b>	<b>Total Number of Programs Requested</b>
CAVIAT	0	0	0	0
CAVIT	0	1	0	1
CTD	0	0	0	0
CVIT	0	0	0	0
EVIT	0	1	0	1
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	0	0	0
PIMA	0	0	0	0
VACTE	0	0	0	0
WAVE	0	0	0	0
WEST-MEC	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>

**Bioscience courses JTED eligible:**

Approved programs SY 2007-2008	3
Approved programs SY 2008-2009	7
Approved programs SY 2009-2010	0
Approved programs SY 2010-2011	0
Approved programs SY 2011-2012	0

Approved courses SY 2007-2008	10
Approved courses SY 2008-2009	18
Approved courses SY 2009-2010	0
Approved courses SY 2010-2011	0
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 21/51

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	1/1
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Business Management and Administrative Services**

**Program CIP Code: 52.0200**

The following lists the recommended Career Preparation courses developed from industry-validated skills for initial employment or continued related education. All the state-designated Business Management and Administrative Services standards are addressed in this instructional sequence. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**52.0200.10 Introduction to Business Management and Administrative Services**

**-and-**

**52.0200.20 Basic Business Management and Administrative Services**

**-and-**

**One or more of the following courses will be included in the coherent sequence of courses for this instructional program:**

**52.0200.30 Advanced Business Management and Administrative Services**

**-or-**

**52.0200.75 Business Management and Administrative Services – Internship**

**-or-**

**52.0200.80 Business Management and Administrative Services – Cooperative Education**

**No JTED Program Applications submitted for Business Management and Administrative Services for the 2011-2012 school year.**

**Business Management and Administrative Services courses JTED eligible:**

Approved programs SY 2007-2008	2
Approved programs SY 2008-2009	39
Approved programs SY 2009-2010	7
Approved programs SY 2010-2011	1
Approved programs SY 2011-2012	0
Approved courses SY 2007-2008	5
Approved courses SY 2008-2009	225
Approved courses SY 2009-2010	32
Approved courses SY 2010-2011	3
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 4/21

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	1/3
Unapproved programs/courses SY 2008-2009	13/51
Unapproved programs/courses SY 2009-2010	2/6
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Business Operations Support and Assistant Services**  
**Program CIP Code: 52.0400**

The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All of the state-mandated Career Preparation standards are addressed in this instructional sequence. Business Operations Support and Assistant Services, is a new program added to the 2010 CTE Program List based on Arizona Labor Market Data.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 52.0400.10 Business Operations Support and Assistant Services**  
**-and-**  
**52.0400.20 Advanced Business Operations Support and Assistant Services**  
And program may elect to add:  
**52.0400.75 Business Operations Support and Assistant Services – Internship**  
**-or-**  
**52.0400.80 Business Operations Support and Assistant Services – Cooperative Education**

**JTED Program Applications submitted for Business Operations Support and Assistant Services  
for 2011-2012 school year:**

<b>JTED</b>	<b>Number of Programs Approved</b>	<b>Number of Programs Conditionally Approved</b>	<b>Number of Programs Unapproved</b>	<b>Total Number of Programs Requested</b>
CAVIAT	0	0	0	0
CAVIT	0	0	0	0
CTD	0	0	0	0
CVIT	0	0	0	0
EVIT	0	0	0	0
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	0	0	0
PIMA	0	0	0	0
VACTE	0	0	0	0
WAVE	1	0	0	1
WEST-MEC	0	0	0	0
<b>TOTAL</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>

**Business Operations Support and Assistant Services courses JTED eligible:**

Approved programs SY 2009-2010	3
Approved programs SY2010-2011	6
Approved programs SY2011-2012	1
Approved courses SY 2009-2010	7
Approved courses SY 2010-2011	12
Approved courses SY 2011-2012	1

Conditionally approved programs/courses (all years) 2/8

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Construction Technologies**  
**Program CIP CODE: 46.0400**

The following lists the recommended courses developed from industry-validated skills necessary for initial employment or continued related education. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**46.0400.10 Construction Technologies Core Curriculum**  
**-and-**

**Option A**      **Advanced Construction Technologies**  
**46.0400.20**

**-or -**

**Option B**  
**46.0400.30 Carpentry**  
**-or-**

**Option C**  
**46.0400.40 Cabinet Making**

**And program may elect to add:**

**46.0400.75 Construction Technologies – Internship**  
**-or-**

**46.0400.80 Construction Technologies – Cooperative Education**

**No JTED Program Applications submitted for Construction Technologies for 2011-2012 school year.**

**Construction Technologies courses JTED eligible:**

Approved programs SY 2007-2008	51
Approved programs SY 2008-2009	32
Approved programs SY 2009-2010	11
Approved programs SY 2010-2011	2
Approved programs SY 2011-2012	0
Approved courses SY 2007-2008	90
Approved courses SY 2008-2009	27
Approved courses SY 2009-2010	39
Approved courses SY 2010-2011	4
Approved courses SY 2011-2012	0

**Conditionally approved programs/courses (all years) 2/3**

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	1/2
Unapproved programs/courses SY 2008-2009	1/3
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Cosmetology**  
**Program CIP: 12.0400**

The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All of the Career Preparation state-designated Cosmetology standards are addressed in this instructional sequence. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**12.0400.10 Fundamentals of Cosmetology**  
**-and-**

**12.0400.20 Cosmetology – Advanced Applications**

- And program may elect to add:**
- 12.0400.75 Cosmetology – Internship**
- or-**
- 12.0400.80 Cosmetology – Cooperative Education**

**No JTED Program Applications submitted for Cosmetology for 2011-2012 school year.**

**Cosmetology courses JTED eligible:**

Approved programs SY 2007-2008	14
Approved programs SY 2008-2009	2
Approved programs SY 2009-2010	0
Approved programs SY 2010-2011	0
Approved programs SY 2011-2012	0
Approved courses SY 2007-2008	20
Approved courses SY 2008-2009	8
Approved courses SY 2009-2010	0
Approved courses SY 2010-2011	0
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 19/55

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Culinary Arts**

**Program CIP Code: 12.0500**

The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the state-designated Culinary Arts standards are addressed in this instructional sequence. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**12.0500.10 Fundamentals of Culinary Arts**

**-and-**

**12.0500.20 Culinary Arts Applications**

**And program may elect to add:**

**12.0500.75 Culinary Arts – Internship**

**-or-**

**12.0500.80 Culinary Arts – Cooperative Education**

**JTED Program Applications for Culinary Arts for the 2011-2012 school year:**

<b>JTED</b>	<b>Number of Programs Approved</b>	<b>Number of Programs Conditionally Approved</b>	<b>Number of Programs Unapproved</b>	<b>Total Number of Programs Requested</b>
CAVIAT	0	0	0	0
CAVIT	0	0	0	0
CTD	0	0	0	0
CVIT	0	0	0	0
EVIT	0	0	0	0
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	0	0	0
PIMA	1	0	0	1
VACTE	0	0	0	0
WAVE	0	0	0	0
WEST-MEC	0	0	0	0
<b>TOTAL</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>

**Culinary Arts courses JTED eligible:**

Approved programs SY 2007-2008	25
Approved programs SY 2008-2009	48
Approved programs SY 2009-2010	7
Approved programs SY 2010-2011	6
Approved programs SY 2011-2012	1

Approved courses SY 2007-2008:	70
Approved courses SY 2008-2009:	182
Approved courses SY 2009-2010	20
Approved courses SY 2010-2011	10
Approved courses SY 2011-2012	2

Conditionally approved programs/courses (all years) 4/11

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Dental Assisting**

**Program CIP Code: 51.0600**

The following lists the recommended sequence of courses that are necessary for initial employment or continued related education. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 51.0600.10 Fundamentals of Dental Assisting**
- and-**
- 51.0600.20 Dental Assisting – Advanced Applications**
- And program may elect to add:**
- 51.0600.75 Dental Assisting – Internship**
- or-**
- 51.0600.80 Dental Assisting – Cooperative Education**

**No JTED Program Applications submitted for Dental Assisting for the 2011-2012 school year.**

**Dental Assisting courses JTED eligible:**

Approved programs SY 2009-2010	0
Approved programs SY 2010-2011	0
Approved programs SY 2011-2012	0

Approved courses SY 2009-2010	0
Approved courses SY 2010-2011	0
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 15/30

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Design and Merchandising**

**Program CIP Code: 52.1900**

The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the state-designated Design and Merchandising standards are addressed in this instructional sequence. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**52.1900.10 Fundamentals of Design and Merchandising**  
**-and-**

**Option A**

**52.1900.20 Fashion Design and Merchandising Applications**  
**-or-**

**Option B**

**52.1900.30 Interior Design and Merchandising Applications**  
**And program may elect to add:**

**52.1900.75 Design and Merchandising – Internship**  
**-or-**

**52.1900.80 Design and Merchandising – Cooperative Education**

**No JTED Program Applications submitted for Design and Merchandising for the 2011-2012 school year.**

**Design and Merchandising courses JTED eligible:**

Approved programs SY 2007-2008	10
Approved programs SY 2008-2009	26
Approved programs SY 2009-2010	4
Approved programs SY 2010-2011	1
Approved programs SY 2011-2012	0

Approved courses SY 2007-2008	29
Approved courses SY 2008-2009	141
Approved courses SY 2009-2010	11
Approved courses SY 2010-2011	2
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 0/0

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0



**Drafting and Design Technologies**  
**Program CIP Code: 15.1300**

The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Career Preparation state-designated Drafting and Design Technologies standards are addressed in this instructional sequence. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**15.1300.10 Drafting and Design Technologies Fundamentals**

**-and-**

**One of the following Career Preparation courses (.20, .30, .40 or .50) will be included as part of the instructional sequence for this program:**

**Option A**

**15.1300.20 Architectural Drafting**

**-or-**

**Option B**

**15.1300.40 Electronics Drafting**

**-or-**

**Option C**

**15.1300.50 Mechanical Drafting**

**And program may elect to add:**

**-or-**

**15.1300.75 Drafting and Design Technologies – Internship**

**-or-**

**15.1300.80 Drafting and Design Technologies – Cooperative Education**

**No JTED Program Applications submitted for Drafting and Design Technologies for the 2011-2012 school year:**

**Drafting and Design Technologies courses JTED eligible:**

Approved programs SY 2007-2008	50
Approved programs SY 2008-2009	18
Approved programs SY 2009-2010	4
Approved programs SY 2010-2011	0
Approved programs SY 2011-2012	0
Approved courses SY 2007-2008	166
Approved courses SY 2008-2009	77
Approved courses SY 2009-2010	23
Approved courses SY 2010-2011	0
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 4/9

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Early Childhood Education**  
**Program CIP Code: 13.1210**

The following lists the recommended sequence of courses organized on the basis of industry-recognized skills necessary for initial employment or continued related education. All the state-designated Early Childhood Education standards are addressed in this instructional sequence. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 13.1210.10**     **Fundamentals of Early Childhood Education**  
**-and-**  
**13.1210.20**     **Early Childhood Education Applications**  
**And program may elect to add:**  
**13.1210.75**     **Early Childhood Education – Internship**  
**-or-**  
**13.1210.80**     **Early Childhood Education – Cooperative Education**

**JTED Program Applications submitted for Early Childhood Education for the 2011-2012 school year:**

<b>JTED</b>	<b>Number of Programs Approved</b>	<b>Number of Programs Conditionally Approved</b>	<b>Number of Programs Unapproved</b>	<b>Total Number of Programs Requested</b>
CAVIAT	0	1	0	1
CAVIT	0	0	0	0
CTD	0	0	0	0
CVIT	0	0	0	0
EVIT	0	0	0	0
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	0	0	0
PIMA	0	0	0	0
VACTE	0	0	0	0
WAVE	0	0	0	0
WEST-MEC	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>

**Early Childhood Education courses JTED eligible:**

Approved programs SY 2007-2008	45
Approved programs SY 2008-2009	19
Approved programs SY 2009-2010	3
Approved programs SY 2010-2011	3
Approved programs SY 2011-2012	0
Approved courses SY 2007-2008	143
Approved courses SY 2008-2009	91
Approved courses SY 2009-2010	13
Approved courses SY 2010-2011	7
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 8/20

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Education Professions**  
**Program CIP Code: 13.1200**

The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Career Preparation state-designated Education Professions standards are addressed in this instructional program. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 13.1200.10**     **Education Professions Fundamentals**  
                  **-and-**  
**13.1200.20**     **Education Professions Applications**  
                  **And program may elect to add:**  
**13.1200.75**     **Education Professions – Internship**  
  
                  **-or-**  
**13.1200.80**     **Education Professions – Cooperative Education**

**No JTED Program Applications submitted for Education Professions for the 2011-2012 school year.**

**Education Professions courses JTED eligible:**

Approved programs SY 2007-2008	43
Approved programs SY 2008-2009	24
Approved programs SY 2009-2010	0
Approved programs SY 2010-2011	2
Approved programs SY 2011-2012	2
Approved courses SY 2007-2008	130
Approved courses SY 2008-2009	42
Approved courses SY 2009-2010	0
Approved courses SY 2010-2011	5
Approved courses SY 2011-2012	2

Conditionally approved programs/courses (all years) 4/8

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	2/5
Unapproved programs/courses SY 2008-2009	2/5
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Electrical and Power Transmission Technologies**  
**Program CIP Code: 46.0300**

The program is comprised of a core curriculum and two options: Option A (Residential Electrician) and Option B (Industrial Electrician). The following lists the recommended courses developed from industry-validated skills necessary for initial employment or continued related education. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 46.0300.10**     **Electrical Fundamentals**  
                  **-and-**

**At least one option must be included as part of the instructional sequence for this program:**

**Option A**

- 46.0300.20**     **Residential Electrician**

**Option B**

- 46.0300.30**     **Industrial Electrician I**  
                  **And program may elect to add:**

**46.0300.75 Electrical and Power Transmission Technologies – Internship**

**-or-**

**46.0300.80 Electrical and Power Transmission Technologies – Cooperative Education**

**No JTED Program Applications submitted for Electrical and Power Transmission Technologies for the 2011-2012 school year.**

**Electrical and Power Transmission Technologies courses JTED eligible:**

Approved programs SY 2007-2008:	3
Approved programs SY 2008-2009	21
Approved programs SY 2009-2010	1
Approved programs SY 2010-2011	0
Approved programs SY 2011-2012	0
Approved courses SY 2007-2008:	12
Approved courses SY 2008-2009:	78
Approved courses SY 2009-2010	2
Approved courses SY 2010-2011	0
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 1/2

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Electrical Systems Installation and Maintenance Technologies**

**Program CIP Code: 47.0100**

The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. The state-mandated Career Preparation standards are to be developed. Electrical Systems Installation and Maintenance Technologies is a new program added to the 2010 CTE Program List based on Arizona Labor Market Data. The program name changed from Telecommunication Maintenance Installers to Electrical Systems Installation and Maintenance Technologies. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**47.0100.10 Electrical Systems Installation and Maintenance Technologies Fundamentals**

**-and-**

**47.0100.20 Electrical Systems Installation and Maintenance Technologies I**

**-and-**

**47.0100.25 Electrical Systems Installation and Maintenance Technologies II**

**And program may elect to add:**

**47.0100.75 Electrical Systems Installation and Maintenance Technologies – Internship**

**-or-**

**47.0100.80 Electrical Systems Installation and Maintenance Technologies – Cooperative Education**

**No JTED Program Applications submitted for Electrical Systems Installation and Maintenance Technologies for the 2011-2012 school year.**

**Electrical Systems Installation and Maintenance Technologies program/courses JTED eligible:**

Approved programs SY 2009-2010	1
Approved programs SY 2010-2011	0
Approved programs SY 2011-2012	0
Approved courses SY 2009-2010	2
Approved courses SY 2010-2011	0
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 2/6

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Electronic Technologies**

**Program CIP Code: 15.0300**

The following lists the recommended courses developed from industry-validated skills necessary for initial employment or continued related education. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 15.0300.10      Electronic Technologies Core Curriculum**
- and-**
- 15.0300.20      Basic Electricity Principles and Applications**
- and-**
- 15.0300.25      Basic Electronic Principles and Applications**
- And program may elect to add:**
- 15.0300.75      Electronic Technologies – Internship**
- or-**
- 15.0300.80      Electronic Technologies – Cooperative Education**

**No JTED Program Applications submitted for Electronic Technologies for the 2011-2012 school year.**

**Electronic Technologies courses JTED eligible:**

Approved programs SY 2007-2008	1
Approved programs SY 2008-2009	3
Approved programs SY 2009-2010	0
Approved programs SY 2010-2011	0
Approved programs SY 2011-2012	0
Approved courses SY 2007-2008	3
Approved courses SY 2008-2009	14
Approved courses SY 2009-2010	0
Approved courses SY 2010-2011	0
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 3/5

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	3/9
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Engineering Sciences**  
**Program CIP Code: 15.0000**

The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. The state-mandated Career Preparation standards are to be developed. Engineering Sciences is a new program added to the 2009 CTE Program List based on Arizona Labor Market Data. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 15.0000.10**      **Fundamentals to Explore Engineering Sciences**  
 -and-  
**15.0000.20**      **Applications of Problem Solving in Engineering Sciences**  
 -and-  
**15.0000.30**      **Advanced Engineering Sciences**  
**And program may elect to add:**  
**15.0000.75**      **Engineering Sciences – Internship**  
 -or-  
**15.0000.80**      **Engineering Sciences – Cooperative Education**

**JTED Program Applications submitted for Engineering Sciences for the 2011-2012 school year:**

<b>JTED</b>	<b>Number of Programs Approved</b>	<b>Number of Programs Conditionally Approved</b>	<b>Number of Programs Unapproved</b>	<b>Total Number of Programs Requested</b>
CAVIAT	2	0	0	2
CAVIT	0	1	0	1
CTD	0	0	0	0
CVIT	0	0	0	0
EVIT	0	0	0	0
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	1	0	1
PIMA	0	0	0	0
VACTE	0	0	0	0
WAVE	0	0	0	0
WEST-MEC	0	0	0	0
<b>TOTAL</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>4</b>

**Engineering Sciences courses JTED eligible:**

Approved programs SY 2008-2009	11
Approved programs SY 2009-2010	4
Approved programs SY 2010-2011	0
Approved programs SY 2011-2012	2
Approved courses SY 2008-2009	45
Approved courses SY 2009-2010	16
Approved courses SY 2010-2011	0
Approved courses SY 2011-2012	2

Conditionally approved programs/courses (all years) 26/95

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Financial Services**  
**Program CIP Code: 52.0800**

The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All Career Preparation state-designated Financial Services standards are addressed in this instructional sequence. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 52.0800.10 Introduction to Business and Financial Services**  
**-and-**  
**52.0800.20 Basic Financial Services**  
**-and-**

**One or more of the following courses will be included as part of the instructional sequence for this program:**

- 52.0800.30 Advanced Financial Services**  
**-or-**  
**52.0800.75 Financial Services – Internship**  
**-or-**  
**52.0800.80 Financial Services – Cooperative Education**

**No JTED Program Applications submitted for Financial Services for the 2011-2012 school year.**

**Financial Services courses JTED eligible:**

Approved programs SY 2008-2009	0
Approved programs SY 2009-2010	3
Approved programs SY 2010-2011	4
Approved programs SY 2011-2012	0
Approved courses SY 2008-2009	0
Approved courses SY 2009-2010	8
Approved courses SY 2010-2011	11
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 1/2

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2008-2009	1/3
Unapproved programs/courses SY 2009-2010	1/3
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Fire Service**  
**Program CIP Code: 43.0200**

The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All of the Career Preparation state-designated Fire Science standards are addressed in this instructional sequence. The program name changed from Fire Science to Fire Service for school year 2010-2011. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 43.0200.10 Fundamentals of Fire Service**  
**-and-**  
**43.0200.20 Fire Service – Advanced Applications**  
**And program may elect to add:**  
**43.0200.75 Fire Service – Internship**  
**-or-**  
**43.0200.80 Fire Service – Cooperative Education**

**JTED Program Applications submitted for Fire Service for the 2011-2012 school year:**

<b>JTED</b>	<b>Number of Programs Approved</b>	<b>Number of Programs Conditionally Approved</b>	<b>Number of Programs Unapproved</b>	<b>Total Number of Programs Requested</b>
CAVIAT	0	0	0	0
CAVIT	0	0	0	0
CTD	0	0	0	0
CVIT	0	0	0	0
EVIT	0	0	0	0
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	0	0	0
PIMA	0	0	0	0
VACTE	0	0	0	0
WAVE	0	1	0	1
WEST-MEC	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>

**Fire Service courses JTED eligible:**

Approved programs SY 2007-2008	8
Approved programs SY 2008-2009	17
Approved programs SY 2009-2010	1
Approved programs SY 2010-2011	0
Approved programs SY 2011-2012	0
Approved courses SY 2007-2008	22
Approved courses SY 2008-2009	34
Approved courses SY 2009-2010	2
Approved courses SY 2010-2011	0
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 16/30

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Graphic Communications**  
**Program CIP Code: 10.0300**

The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Career Preparation state-designated Graphic Communications standards are addressed in this instructional sequence. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**10.0300.10 Graphic Communications Fundamentals**

**-and-**

**The following course can be added, if necessary, to the Coherent Sequence of Instruction.**

**10.0300.12 Graphic Communication Fundamentals II**

**-and-**

**Two of the following Career Preparation courses (.20 and .25 or .30 and .35 or .40 and .45) will be included as part of the instructional sequence for this program:**

**Option A**

**10.0300.20 Graphic Arts I.**

**-and-**

- 10.0300.25 Graphic Arts II  
-or-  
Option B  
10.0300.30 Graphic Design I  
-and-  
10.0300.35 Graphic Design II  
-or-  
Option C  
10.0300.40 Photo Imaging I  
-and-  
10.0300.45 Photo Imaging II  
And program may elect to add:  
10.0300.75 Graphic Communications – Internship  
-or-  
10.0300.80 Graphic Communications – Cooperative Education

**JTED Program Applications submitted Graphic Communications for the 2011-2012 school year:**

JTED	Number of Programs Approved	Number of Programs Conditionally Approved	Number of Programs Unapproved	Total Number of Programs Requested
CAVIAT	2	0	0	2
CAVIT	0	0	0	0
CTD	0	0	0	0
CVIT	0	1	0	1
EVIT	0	0	0	0
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	0	0	0
PIMA	0	0	0	0
VACTE	0	0	0	0
WAVE	0	0	0	0
WEST-MEC	0	0	0	0
<b>TOTAL</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>3</b>

**Graphic Communications courses JTED eligible:**

Approved programs SY 2007-2008	35
Approved programs SY 2008-2009	27
Approved programs SY 2009-2010	8
Approved programs SY 2010-2011	4
Approved programs SY 2011-2012	2
Approved courses SY 2007-2008	179
Approved courses SY 2008-2009	198
Approved courses SY 2009-2010	39
Approved courses SY 2010-2011	9
Approved courses SY 2011-2012	10

Conditionally approved programs/courses (all years) 16/70

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Heating, Ventilation and Air Conditioning**  
**Program CIP Code: 47.0200**

The following lists the recommended courses from industry-validated skills necessary for initial employment or continued related education. The state-mandated Career Preparation standards are to be developed. The program name changed from Heating/Air Conditioning Maintenance to Heating, Ventilation and Air Conditioning in school year 2010-2011. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 47.0200.10 Heating, Ventilation and Air Conditioning I**  
-and-  
**47.0200.20 Heating, Ventilation and Air Conditioning II**  
And program may elect to add:  
**47.0200.75 Heating, Ventilation and Air Conditioning – Internship**  
-or-  
**47.0200.80 Heating, Ventilation and Air Conditioning – Cooperative Education**

**No JTED Program Applications submitted for Heating/Air Conditioning Maintenance for the 2011-2012 school year.**

**Heating/Air Conditioning Maintenance courses JTED eligible:**

Approved programs SY 2007-2008	3
Approved programs SY 2008-2009	0
Approved programs SY 2009-2010	0
Approved programs SY2010-2011	0
Approved programs SY2011-2012	0
Approved courses SY 2007-2008	6
Approved courses SY 2008-2009	0
Approved courses SY 2009-2010	0
Approved courses SY2010-2011	0
Approved courses SY2011-2012	0

Conditionally approved programs/courses (all years) 4/6

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Heavy Equipment Operations**  
**Program CIP Code: 49.0200**

The following lists the recommended courses to be developed from industry-validated skills necessary for initial employment or continued related education. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 49.0200.10 Heavy Equipment Operations I**  
-and-  
**49.0200.20 Heavy Equipment Operations II**  
**And program may elect to add:**  
**49.0200.75 Heavy Equipment Operations – Internship**  
-or-  
**49.0200.80 Heavy Equipment Operations – Cooperative Education**

**No JTED Program Applications submitted for Heavy Equipment Operations for 2011-2012 school year.**

**Heavy Equipment Operation courses JTED eligible:**

Approved programs SY 2007-2008	1
Approved programs SY 2008-2009	1
Approved programs SY 2009-2010	0
Approved programs SY 2010-2011	0
Approved programs SY 2011-2012	0
Approved courses SY 2007-2008:	2
Approved courses SY 2008-2009:	2
Approved courses SY 2009-2010	0
Approved courses SY 2010-2011	0
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 1/2

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Heavy/Industrial Equipment Maintenance Technologies**

**Program CIP Code: 47.0300**

The following lists the recommended courses to be developed from industry-validated skills necessary for initial employment or continued related education. Heavy/Industrial Equipment Maintenance Technologies is a new program for school year 2009-2010. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 47.0300.10 Heavy/Industrial Equipment Maintenance Tech Core Curriculum**
- and-
- 47.0300.20 Heavy/Industrial Equipment Maintenance Tech I**
- and-
- 47.0300.25 Heavy/Industrial Equipment Maintenance Tech II**
- And program may elect to add:**
- 47.0300.75 Heavy/Industrial Equipment Maintenance Tech – Internship**
- or-**
- 47.0300.80 Heavy/Industrial Equipment Maintenance Tech – Cooperative Education**

**JTED Program Applications submitted for Heavy/Industrial Equipment Maintenance Technologies  
for 2011-2012 school year:**

<b>JTED</b>	<b>Number of Programs Approved</b>	<b>Number of Programs Conditionally Approved</b>	<b>Number of Programs Unapproved</b>	<b>Total Number of Programs Requested</b>
CAVIAT	0	0	0	0
CAVIT	0	0	0	0
CTD	0	0	0	0
CVIT	0	1	0	1
EVIT	0	0	0	0
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	0	0	0
PIMA	0	0	0	0
VACTE	0	0	0	0
WAVE	0	0	0	0
WEST-MEC	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>

**Heavy/Industrial Equipment Maintenance Technologies courses JTED eligible:**

Approved programs SY 2009-2010	0
Approved programs SY 2010-2011	0
Approved programs SY 2011-2012	0
Approved courses SY 2009-2010	0
Approved courses SY 2010-2011	0
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 3/7

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Hospitality Management**  
**Program CIP Code: 52.0900**

The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the state-designated Hospitality Management standards are addressed in this instructional sequence. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 52.0900.10**      **Fundamentals of Hospitality Management**
- and-**
- 52.0900.20**      **Hospitality Management Applications**
- And program may elect to add:**
- 52.0900.75**      **Hospitality Management – Internship**
- or-**
- 52.0900.80**      **Hospitality Management – Cooperative Education**

**JTED Program Applications submitted for Hospitality Management for the 2011-2012 school year:**

<b>JTED</b>	<b>Number of Programs Approved</b>	<b>Number of Programs Conditionally Approved</b>	<b>Number of Programs Unapproved</b>	<b>Total Number of Programs Requested</b>
CAVIAT	0	0	0	0
CAVIT	0	1	0	1
CTD	0	0	0	0
CVIT	0	0	0	0
EVIT	0	0	0	0
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	0	0	0
PIMA	0	0	0	0
VACTE	0	0	0	0
WAVE	0	0	0	0
WEST-MEC	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>

**Hospitality Management courses JTED eligible:**

Approved programs SY 2007-2008	0
Approved programs SY 2008-2009	8
Approved programs SY 2009-2010	6
Approved programs SY 2010-2011	1
Approved programs SY 2011-2012	0
Approved courses SY 2007-2008:	0
Approved courses SY 2008-2009:	24
Approved courses SY 2009-2010	13
Approved courses SY 2010-2011	3
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 3/7

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Information Technology**

**Program CIP Code: 15.1200**

The Information Technology program consists of a core curriculum and four areas of specialization for a student to choose from: Option A) Computer Maintenance; Option B) Network Technology; Option C) Software Development or Option D) Web Page Development. The following lists the recommended courses developed from industry-validated skills necessary for initial employment or continued related education. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**15.1200.10 Information Technology Fundamentals**

**-and-**

**One of the four Career Preparation options (.20 or .30 or .40 or .50) will be included as part of the instructional sequence for this program:**

**Option A**

**15.1200.20 Computer Maintenance**

**-or-**

**Option B**

**15.1200.30 Network Technology**  
**-or-**

**Option C**

**15.1200.40 Software Development**  
**-or-**

**Option D**

**15.1200.50 Web Page Development**  
**And program may elect to add:**  
**15.1200.75 Information Technology – Internship**  
**-or-**  
**15.1200.80 Information Technology – Cooperative Education**

**JTED Program Applications submitted for Information Technology for the 2011-2012 school year:**

<b>JTED</b>	<b>Number of Programs Approved</b>	<b>Number of Programs Conditionally Approved</b>	<b>Number of Programs Unapproved</b>	<b>Total Number of Programs Requested</b>
CAVIAT	0	0	0	0
CAVIT	1	1	0	2
CTD	0	0	0	0
CVIT	0	0	0	0
EVIT	0	0	0	0
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	0	0	0
PIMA	0	0	0	0
VACTE	0	0	0	0
WAVE	0	0	0	0
WEST-MEC	0	0	0	0
<b>TOTAL</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>2</b>

**Information Technologies courses JTED eligible:**

Approved programs SY 2007-2008	53
Approved programs SY 2008-2009	20
Approved programs SY 2009-2010	9
Approved programs SY 2010-2011	1
Approved programs SY 2011-2012	1
Approved courses SY 2007-2008:	278
Approved courses SY 2008-2009:	61
Approved courses SY 2009-2010	35
Approved courses SY 2010-2011	5
Approved courses SY 2011-2012	2

Conditionally approved programs/courses (all years) 14/37

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	1/5
Unapproved programs/courses SY 2008-2009	1/1
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Law, Public Safety and Security**  
**Program CIP Code: 43.0100**

The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All Career Preparation state-designated Law, Public Safety and Security standards are addressed in this instructional sequence. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 43.0100.10**     **Fundamentals of Law, Public Safety and Security**  
                  -and-  
**43.0100.20**     **Law, Public Safety and Security – Advanced Applications**  
                  **And program may elect to add:**  
**43.0100.75**     **Law, Public Safety & Security – Internship**  
                  -or-  
**43.0100.80**     **Law, Public Safety & Security – Cooperative Education**

**No JTED Program Applications submitted for Law, Public Safety and Security for the 2011-2012 school year.**

**Law, Public Safety and Security courses JTED eligible:**

Approved programs SY 2007-2008:	9
Approved programs SY 2008-2009:	15
Approved programs SY 2009-2010	1
Approved programs SY 2010-2011	0
Approved programs SY 2011-2012	0
Approved courses SY 2007-2008:	27
Approved courses SY 2008-2009:	96
Approved courses SY 2009-2010	3
Approved courses SY 2010-2011	0
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 15/32

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Marketing, Management, and Entrepreneurship**  
**Program CIP Code: 52.1800**

The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Career Preparation state-designated Marketing, Management and Entrepreneurship standards are addressed in this instructional sequence. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 52.1800.10**     **Marketing, Management and Entrepreneurship Fundamentals**  
                  -and-

**One of the five Career Preparation options (.20, .30, .40, 50 or .60) will be included as part of the instructional sequence for this program:**

**Option A**

- 52.1800.20**     **Professional Sales and Marketing**  
                  -or-

**Option B**

- 52.1800.30**     **E-Commerce Marketing**  
                  -or-

**Option C**

**52.1800.40 Entertainment Marketing**

**-or-**

**Option D**

**52.1800.50 Entrepreneurship**

**-or-**

**Option E**

**52.1800.60 Advertising**

**And program may elect to add:**

**52.1800.75 Marketing, Management and Entrepreneurship – Internship**

**-or-**

**52.1800.80 Marketing, Management and Entrepreneurship – Cooperative Education**

**JTED Program Applications submitted for Marketing, Management and Entrepreneurship for the 2011-2012 school year:**

<b>JTED</b>	<b>Number of Programs Approved</b>	<b>Number of Programs Conditionally Approved</b>	<b>Number of Programs Unapproved</b>	<b>Total Number of Programs Requested</b>
CAVIAT	0	0	0	0
CAVIT	0	0	0	0
CTD	0	0	0	0
CVIT	0	0	0	0
EVIT	0	0	0	0
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	0	1	1
PIMA	0	0	0	0
VACTE	0	0	0	0
WAVE	0	0	0	0
WEST-MEC	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>

**Marketing, Management and Entrepreneurship courses JTED eligible:**

Approved programs SY 2007-2008	58
Approved programs SY 2008-2009	35
Approved programs SY 2009-2010	6
Approved programs SY 2010-2011	3
Approved programs SY 2011-2012	0
Approved courses SY 2007-2008:	166
Approved courses SY 2008-2009:	130
Approved courses SY 2009-2010	16
Approved courses SY 2010-2011	8
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 2/4

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	2/4
Unapproved programs/courses SY 2008-2009	8/39
Unapproved programs/courses SY 2009-2010	2/6
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	1/2

**Mental and Social Health Services**  
**Program CIP Code: 51.1500**

The following lists the recommended sequence of courses that will help prepare students to complete successfully a postsecondary program in mental and social health services. All the Career Preparation state-designated Mental and Social Health Services standards are to be developed. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 51.1500.10**      **Fundamentals of Mental and Social Health Services**  
-and-  
**51.1500.20**      **Mental and Social Health Services – Advanced Applications**  
**And program may elect to add:**  
**51.1500.75**      **Mental and Social Health Services – Internship**  
-or-  
**51.1500.80**      **Mental and Social Health Services – Cooperative Education:**

**No JTED Program Applications submitted for Mental and Social Health Services for 2011-2012 school year:**

**Mental and Social Health Services courses JTED eligible:**

Approved programs SY 2007-2008	0
Approved programs SY 2008-2009	0
Approved programs SY 2009-2010	0
Approved programs SY 2010-2011	0
Approved programs SY 2011-2012	0
Approved courses SY 2007-2008	0
Approved courses SY 2008-2009	0
Approved courses SY 2009-2010	0
Approved courses SY 2010-2011	0
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 5/12

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Multimedia Technologies – previously Audio/Visual Technology**  
**Program CIP Code: 10.0200**

The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Career Preparation state-designated Multimedia Technology standards are addressed in this instructional sequence. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 10.0200.10**      **Fundamentals of Multimedia Technologies**
- 10.0200.20**      **Applications of Multimedia Technologies I**  
-and-  
**10.0200.30**      **Applications of Multimedia Technologies II**  
-or-  
**And program may elect to add:**  
**10.0200.75**      **Multimedia Technologies – Internship**  
-or-  
**10.0200.80**      **Multimedia Technologies – Cooperative Education**

**JTED Program Applications submitted for Multimedia Technologies for 2011-2012 school year:**

<b>JTED</b>	<b>Number of Programs Approved</b>	<b>Number of Programs Conditionally Approved</b>	<b>Number of Programs Unapproved</b>	<b>Total Number of Programs Requested</b>
CAVIAT	0	0	0	0
CAVIT	0	0	0	0
CTD	0	0	0	0
CVIT	0	0	0	0
EVIT	0	0	0	0
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	0	0	0
PIMA	0	1	0	1
VACTE	0	0	0	0
WAVE	0	0	0	0
WEST-MEC	0	1	0	1
<b>TOTAL</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>

**Multimedia Technologies courses JTED eligible:**

Approved programs SY 2007-2008	52
Approved programs SY 2008-2009	19
Approved programs SY 2009-2010	11
Approved programs SY 2010-2011	0
Approved programs SY 2011-2012	0
Approved courses SY 2007-2008:	174
Approved courses SY 2008-2009:	67
Approved courses SY 2009-2010	30
Approved courses SY 2010-2011	0
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 7/19

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Nursing Services**

**Program CIP Code: 51.1600**

The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Career Preparation state-designated Nursing Services standards are addressed in this instructional sequence. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 51.1600.10**      **Fundamentals of Nursing Services**  
**-and-**  
**51.1600.20**      **Nursing Services – Advanced Applications**  
**And program may elect to add:**  
**51.1600.75**      **Nursing Services – Internship**  
**-or-**

**51.1600.80 Nursing Services – Cooperative Education**

**JTED Program Applications submitted for Nursing Services for the 2011-2012 school year:**

<b>JTED</b>	<b>Number of Programs Approved</b>	<b>Number of Programs Conditionally Approved</b>	<b>Number of Programs Unapproved</b>	<b>Total Number of Programs Requested</b>
CAVIAT	0	0	0	0
CAVIT	0	0	0	0
CTD	0	0	0	0
CVIT	0	0	0	0
EVIT	0	1	0	1
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	0	0	0
PIMA	0	0	0	0
VACTE	0	0	0	0
WAVE	0	0	0	0
WEST-MEC	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>

**Nursing Services courses JTED eligible:**

Approved programs SY 2007-2008	43
Approved programs SY 2008-2009	1
Approved programs SY 2009-2010	1
Approved programs SY 2010-2011	2
Approved programs SY 2011-2012	0

Approved courses SY 2007-2008	99
Approved courses SY 2008-2009	2
Approved courses SY 2009-2010	2
Approved courses SY 2010-2011	5
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 48/119

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Performing Arts and Entertainment Industry**

**Program CIP Code: 50.0100**

The following lists the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Career Preparation state-designated standards are addressed in this instructional sequence. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Option A**

**50.0100.20 Fundamentals of Performing Arts and Entertainment Industry – Technical Theatre  
-and-**

**50.0100.25 Performing Arts and Entertainment Industry – Technical Theater I**  
Option may elect to add:

- 50.0100.26 Performing Arts and Entertainment Industry – Technical Theater II  
-or-  
Option B  
50.0100.30 Fundamentals of Performing Arts and Entertainment Industry – Arts Management  
-and-  
50.0100.35 Performing Arts and Entertainment Industry – Arts Management I  
Option may elect to add:  
50.0100.36 Performing Arts and Entertainment Industry – Arts Management II
- And program may elect to add:  
50.0100.75 Performing Arts and Entertainment Industry – Internship  
-or-  
50.0100.80 Performing Arts and Entertainment Industry – Cooperative Education

**JTED Program Applications submitted for Performing Arts for the 2011-2012 school year:**

JTED	Number of Programs Approved	Number of Programs Conditionally Approved	Number of Programs Unapproved	Total Number of Programs Requested
CAVIAT	0	0	0	0
CAVIT	0	0	0	0
CTD	0	0	0	0
CVIT	0	0	0	0
EVIT	0	1	0	1
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	0	0	0
PIMA	0	0	0	0
VACTE	0	0	0	0
WAVE	0	2	0	2
WEST-MEC	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>

**Performing Arts courses JTED eligible:**

Approved programs SY 2007-2008	0
Approved programs SY 2008-2009	2
Approved programs SY 2009-2010	1
Approved programs SY 2010-2011	0
Approved programs SY 2011-2012	0

Approved courses SY 2007-2008:	0
Approved courses SY 2008-2009:	7
Approved courses SY 2009-2010	3
Approved courses SY 2010-2011	0
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 19/60

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Precision Manufacturing**  
**Program CIP Code:48.0500**

The Precision Manufacturing program is comprised of two core curriculums and two options: Option A (Automation/Robotics); Option B (Precision Machining – formerly Computer Controlled Fabrication.) The following lists the recommended courses developed from industry-validated skills necessary for initial employment or continued related education. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**48.0500.10 Fundamentals of Precision Manufacturing**

**-and-**

**48.0500.12 Applications of Precision Machining**

**-and-**

**One of the following Career Preparation options will be included as part of the instructional sequence for this program:**

**Option A**

**48.0500.20 Automation/Robotics**

**-or-**

**Option B**

**48.0500.30 Precision Machining**

**And program may elect to add:**

**48.0500.75 Precision Manufacturing – Internship**

**-or-**

**48.0500.80 Precision Manufacturing – Cooperative Education**

**No JTED Program Applications submitted for Precision Manufacturing for the 2011-2012 school year.**

**Precision/Industrial Manufacturing courses JTED eligible:**

Approved programs SY 2007-2008	0
Approved programs SY 2008-2009	7
Approved programs SY 2009-2010	4
Approved programs SY 2010-2011	1
Approved programs SY 2011-2012	0
Approved courses SY 2007-2008	0
Approved courses SY 2008-2009	33
Approved courses SY 2009-2010	17
Approved courses SY 2010-2011	3
Approved courses SY 2011-2012	0

**Conditionally approved programs/courses (all years) 1/3**

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Therapeutic Massage**  
**Program CIP Code: 51.3500**

The following lists the recommended courses to be developed from industry-validated skills necessary for initial employment or continued related education. All the Career Preparation state-designated standards for Therapeutic Massage are to be developed. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 51.3500.10     **Fundamentals of Therapeutic Massage**
- and-
- 51.3500.20     **Therapeutic Massage – Advanced Applications**
- And program may elect to add:**
- 51.3500.75     **Therapeutic Massage – Internship**
- or-
- 51.3500.80     **Therapeutic Massage – Cooperative Education**

**No JTED Program Applications submitted for Therapeutic Massage for the 2011-2012 school year.**

**Therapeutic Massage courses JTED eligible:**

Approved programs SY 2007-2008	0
Approved programs SY 2008-2009	0
Approved programs SY 2009-2010	0
Approved programs SY 2010-2011	0
Approved programs SY 2011-2012	0
Approved courses SY 2007-2008	0
Approved courses SY 2008-2009	0
Approved courses SY 2009-2010	0
Approved courses SY 2010-2011	0
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 2/5

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Transportation Technologies**

**Program CIP Code: 47.0600**

The following lists the recommended courses developed from industry-validated skills necessary for initial employment or continued related education. Program name was changed from Automotive Technologies to Transportation Technologies. An additional option “General Services Technician was added to the 2010 CTE Program List (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 47.0600.10     **Automotive Technologies Core Curriculum**
- and-

**At least one option must be included as part of the instructional sequence for this program:**

**Option A**

- 47.0600.20     **Automotive Technology I**
- and-
- 47.0600.25     **Automotive Technology II**
- or-

**Option B**

- 47.0600.30     **Automotive Collision Repair I:**
- and-
- 47.0600.35     **Automotive Collision Repair II:**
- or-

**Option C**

- 47.0600.40     **Diesel Engine Repair Technology I**
- and-

47.0600.45 Diesel Engine Repair Technology II

-or-

Option D

47.0600.50 Aircraft Mechanics I

-and-

47.0600.55 Aircraft Mechanics II

-or-

Option E

47.0600.60 General Services Technician I

-and-

47.0600.65 General Services Technician II

And program may elect to add:

47.0600.75 Automotive Technologies – Internship

-or-

47.0600.80 Automotive Technologies – Cooperative Education

**JTED Program Applications submitted for Transportation Technologies for 2011-2012 school year:**

JTED	Number of Programs Approved	Number of Programs Conditionally Approved	Number of Programs Unapproved	Total Number of Programs Requested
CAVIAT	0	0	0	0
CAVIT	0	1	0	1
CTD	0	0	0	0
CVIT	0	0	0	0
EVIT	0	1	0	1
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	0	0	0
PIMA	0	0	0	0
VACTE	0	0	0	0
WAVE	0	0	0	0
WEST-MEC	0	1	0	1
<b>TOTAL</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>

**Transportation Technologies courses JTED eligible:**

Approved programs SY 2007-2008	488
Approved programs SY 2008-2009	15
Approved programs SY 2009-2010	8
Approved programs SY 2010-2011	2
Approved programs SY 2011-2012	0

Approved courses SY 2007-2008	188
Approved courses SY 2008-2009	50
Approved courses SY 2009-2010	31
Approved courses SY 2010-2011	8
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 8/22

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

**Welding Technologies**  
**Program CIP Code: 48.0508**

The following lists the recommended courses developed from industry-validated skills necessary for initial employment or continued related education. (See appendix C for complete program and course descriptions.)

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 48.0508.10**     **Welding Technologies Core Curriculum**  
**-and-**  
**48.0508.20**     **Welding Technologies**  
**And program may elect to add:**  
**48.0508.75**     **Welding Technologies - Internship**  
**-or-**  
**48.0508.80**     **Welding Technologies - Cooperative Education**

**JTED Program Applications submitted for Welding Technology for the 2011-2012 school year:**

<b>JTED</b>	<b>Number of Programs Approved</b>	<b>Number of Programs s Conditionally Approved</b>	<b>Number of Programs Unapproved</b>	<b>Total Number of Programs Requested</b>
CAVIAT	0	1	0	1
CAVIT	0	0	0	0
CTD	0	0	0	0
CVIT	0	0	0	0
EVIT	0	0	0	0
GIFT	0	0	0	0
MIJTED	0	0	0	0
NATIVE	0	0	0	0
NAVIT	0	0	0	0
PIMA	0	0	0	0
VACTE	0	0	0	0
WAVE	0	0	0	0
WEST-MEC	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>

**Welding Technologies courses JTED eligible:**

Approved programs SY 2007-2008	15
Approved programs SY 2008-2009	14
Approved programs SY 2009-2010	1
Approved programs SY 2010-2011	0
Approved programs SY 2011-2012	0
Approved courses SY 2007-2008	45
Approved courses SY 2008-2009	43
Approved courses SY 2009-2010	1
Approved courses SY 2010-2011	0
Approved courses SY 2011-2012	0

Conditionally approved programs/courses (all years) 33/78

**JTED Data on Programs/Courses Not Approved:**

Unapproved programs/courses SY 2007-2008	0/0
Unapproved programs/courses SY 2008-2009	0/0
Unapproved programs/courses SY 2009-2010	0/0
Unapproved programs/courses SY 2010-2011	0/0
Unapproved programs/courses SY 2011-2012	0/0

## CTE Technical Skills Assessment

The online CTE Assessment System is designed to lead students toward certification that is accepted by a vocation or industry as a demonstration of skill in that industry per the definition in ARS §15-391(3)(d)(e). The Arizona Skill Standards Commission oversees the Career and Technical Education (CTE) Assessment System. The CTE standards for each of the CTE occupational programs are industry-based and industry-validated. The online assessment items are aligned to the CTE program standards.

The chart below lists 51 CTE Programs/Program Options in the Arizona CTE Assessment System with technical skill assessments available during the Spring 2011 assessment window. Arizona plans to annually increase the number of assessments.

CIP	Program/Option	CIP	Program/Option
52.0300.0	Accounting and Related Services	52.1800.4	Entertainment Marketing Option C
46.0400.2	Advanced Construction Technologies Option A	52.1800.5	Entrepreneurship Option D
52.1800.3	Advertising and Public Relations Option B	01.0100.0	Environmental Service Systems Option G
01.0100.9	Agribusiness Systems Option F	52.1900.2	Fashion Design and Merchandising Option A
47.0600.5	Aircraft Mechanics Option D	52.0800.0	Financial Services
01.0100.4	Animal Systems Option C	43.0200.0	Fire Service
15.1300.2	Architectural Drafting Option A	52.0900.0	Hospitality Management
50.0100.3	Arts Management Option B	52.1900.3	Interior Design and Merchandising Option B
48.0500.2	Automation/Robotics Option A	51.0800.3	Laboratory Assisting Option B
47.0600.3	Automotive Collision Repair Option B	43.0100.0	Law, Public Safety and Security
47.0600.2	Automotive Technologies Option A	15.1300.4	Mechanical Drafting Option C
41.0100.3	Bio-environmental Option B	51.0800.6	Medical Assisting Services Option E
41.0100.4	Bio-innovations Option C	01.0100.5	Natural Resources Systems Option D
41.0100.2	Bio-medical Option A	15.1200.3	Network Technologies Option B
52.0200.0	Business Management and Administrative Services	51.1600.0	Nursing Services
52.0400.0	Business Operations Support and Assistant Services	51.0800.2	Pharmacy Support Services Option A
46.0400.4	Cabinetmaking Option C	01.0100.3	Plant Systems Option B
46.0400.3	Carpentry Option B	48.0500.3	Precision Machining Option B
15.1200.2	Computer Maintenance Option A	52.1800.2	Professional Sales and Marketing Option A
12.0500.0	Culinary Arts	15.1200.4	Software Development Option C
13.1210.0	Early Childhood Education	51.0800.5	Sports Medicine and Rehabilitation Services Option D
13.1200.0	Education Professions	51.0900.4	Surgical Technician Option C
15.1300.3	Electronics Drafting Option B	50.0100.2	Technical Theatre Option A
51.0900.3	Emergency Medical Services Option B	51.3500.0	Therapeutic Massage
15.0000.0	Engineering Sciences	15.1200.5	Web Page Development Option D
		48.0508.0	Welding Technologies

Students are provided the opportunity to take a **practice assessment** prior to the completion of their CTE program. The practice assessment serves as a diagnostic tool for CTE teachers and students to use to demonstrate their readiness to pass the assessment prior to the **final assessment**. Students who pass their assessment are awarded a Certificate and Transcript by the Arizona Skill Standards Commission.

The CTE Assessment System is working effectively to improve JTED-funded Career and Technical Education programs in Arizona. Some of the comments received in the Spring 2011 Zoomerang survey were:

*The State should replace AIMS paper test with an online test following the CTE department lead with online assessments.*

*The district office is impressed with CTE programs' accountability. Assessments have added value and status to the CTE courses.*

*Kids are getting excited about doing well!*

*The students getting their immediate scores meant a lot to them.*

*The CTE Assessment System is a powerful tool for teachers to modify curriculum as needed to help students be successful.*

*Our students use their certificate and transcript for employment reference.*

The chart below lists participation in the **final assessment** and pass rates for Spring 2011. Many of the students' scores reflected in this chart may still be enrolled in school. As a result, these data are not identical to the data used for federal reporting purposes.

<b>Joint Technical Education Districts</b>	<b>Students Passing Assessments (Numerator)</b>	<b>Student Participation in Assessments (Denominator)</b>	<b>% Passing</b>
<b>CAVIAT – Coconino Association for Vocation Industry &amp; Technology</b>	391	470	83.19%
Flagstaff Unified SD	197	246	80.08%
Fredonia-Moccasin Unified SD	18	21	85.71%
Grand Canyon Unified SD	4	4	100.00%
Page Unified SD	134	158	84.81%
Williams Unified SD	38	41	92.68%
<b>CAVIT – Central Arizona Valley Institute of Technology</b>	357	387	92.25%
Central Arizona Valley Institute of Technology	5	6	83.33%
Casa Grande Union HSD	195	216	90.28%
Coolidge Unified SD	53	56	94.64%
Florence Unified SD	44	44	100.00%
Maricopa Unified SD	60	65	92.31%
Santa Cruz Valley Union HSD (No eligible students)	0	0	0.00%
<b>CTD – Cochise Technology District</b>	494	668	73.95%
Benson Unified SD	70	83	84.34%
Bowie Unified SD	7	7	100.00%
Douglas Unified SD	244	379	64.38%
San Simon Unified SD	0	0	0.00%
St. David Unified SD	62	64	96.88%
Tombstone Unified SD	74	93	79.57%
Valley Union HSD	30	31	96.77%
Willcox Unified SD	7	11	63.64%
<b>CVIT – Cobre Valley Institute of Technology</b>	94	130	72.31%
Globe Unified SD	31	33	93.94%
Hayden-Winkelman Unified SD	4	7	57.14%
Miami Unified SD	16	24	66.67%
San Carlos Unified SD	19	38	50.00%
Superior Unified SD	24	28	85.71%
<b>EVIT – East Valley Institute of Technology</b>	2408	2772	86.87%
EVIT-Main	736	825	89.21%
EVIT- Apache Junction Unified SD	47	63	74.60%

<b>Joint Technical Education Districts</b>	<b>Students Passing Assessments (Numerator)</b>	<b>Student Participation in Assessments (Denominator)</b>	<b>% Passing</b>
EVIT- Chandler Unified SD	373	450	82.89%
EVIT- Fountain Hills Unified SD	33	33	100.00%
EVIT- Gilbert Unified SD	390	440	88.64%
EVIT- Higley Unified SD	35	44	79.55%
EVIT- J O Combs Unified SD (No eligible students)	0	0	0.00%
EVIT- Mesa Unified SD	139	152	91.45%
EVIT- Queen Creek Unified SD	105	122	86.07%
EVIT- Scottsdale Unified SD	172	203	84.73%
EVIT- Tempe Union HSD	378	440	85.91%
<b>GIFT – Gila Institute for Technology</b>	<b>251</b>	<b>294</b>	<b>85.37%</b>
Gila Institute for Technology	60	63	95.24%
Duncan Unified SD (Took final assessments during Fall 2010)	0	0	0.00%
Ft. Thomas Unified SD	19	23	82.61%
Pima Unified SD	36	42	85.71%
Safford Unified SD	100	127	78.74%
Thatcher Unified SD	36	39	92.31%
<b>MIJTED – Mountain Institute Joint Technical Education District</b>	<b>214</b>	<b>244</b>	<b>87.70%</b>
Mountain Institute Central Campus	34	44	77.27%
Ash Fork Unified SD	5	7	71.43%
Bagdad Unified SD	34	37	91.89%
Chino Valley Unified SD	71	78	91.03%
Humboldt Unified SD	33	34	97.06%
Mayer Unified SD	6	8	75.00%
Prescott Unified SD	28	31	90.32%
Seligman Unified SD	3	5	60.00%
<b>NATIVE – Northeast Arizona Technological Institute of Vocational Education</b>	<b>321</b>	<b>470</b>	<b>68.30%</b>
Chinle Unified SD	49	82	59.76%
Ganado Unified SD	95	126	75.40%
Kayenta Unified SD	80	115	69.57%
Pinon Unified SD	0	0	0.00%
Red Mesa Unified SD	15	30	50.00%
Sanders Unified SD	28	42	66.67%
Tuba City Unified SD	27	37	72.97%
Window Rock Unified SD	27	38	71.05%
<b>NAVIT– Northern Arizona Vocational Institute of Technology</b>	<b>337</b>	<b>394</b>	<b>85.53%</b>
NAVIT Courses	65	70	92.86%
Blue Ridge Unified SD	43	49	87.76%
Heber-Overgaard Unified SD	5	5	100.00%
Holbrook Unified SD	51	63	80.95%
Joseph City Unified SD	6	6	100.00%
Payson Unified SD	28	31	90.32%
Round Valley Unified SD	21	26	80.77%

<b>Joint Technical Education Districts</b>	<b>Students Passing Assessments (Numerator)</b>	<b>Student Participation in Assessments (Denominator)</b>	<b>% Passing</b>
Show Low Unified SD	45	47	95.74%
Snowflake Unified SD	10	11	90.91%
St. Johns Unified SD	12	13	92.31%
Whiteriver Unified SD	15	21	71.43%
Winslow Unified SD	36	52	69.23%
<b>Pima County JTED</b>	<b>1904</b>	<b>2405</b>	<b>79.17%</b>
Pima JTED	165	176	93.75%
Ajo Unified SD	9	30	30.00%
Amphitheater Unified SD	178	200	89.00%
Catalina Foothills Unified SD	79	79	100.00%
Flowing Wells Unified SD	93	96	96.88%
Indian Oasis Unified SD	7	15	46.67%
Marana Unified SD	306	347	88.18%
Sahuarita Unified SD	85	120	70.83%
Santa Cruz Valley Unified SD	99	142	69.72%
Sunnyside Unified SD	201	299	67.22%
Tanque Verde Unified SD	21	26	80.77%
Tucson Unified SD	522	698	74.79%
Vail Unified SD	139	177	78.53%
<b>VACTE – Valley Academy for Career and Technology Education</b>	<b>183</b>	<b>238</b>	<b>76.89%</b>
Camp Verde Unified SD	61	73	83.56%
Mingus Union HSD	60	78	76.92%
Sedona-Oak Creek Unified SD	62	87	71.26%
<b>WAVE – Western Arizona Vocational Education</b>	<b>400</b>	<b>458</b>	<b>87.34%</b>
Colorado River Union HSD	60	73	82.19%
Lake Havasu Unified SD	108	113	95.58%
Kingman Unified SD	215	236	91.10%
Parker Unified SD	17	36	47.22%
<b>West-MEC – Western Maricopa Education Center</b>	<b>3657</b>	<b>4582</b>	<b>79.81%</b>
Aqua Fria Union HSD	221	327	67.58%
Buckeye Union HSD	188	265	70.94%
Deer Valley Unified SD	355	406	87.44%
Dysart Unified SD	265	334	79.34%
Glendale Union HSD	642	757	84.81%
Paradise Valley Unified SD	418	520	80.38%
Peoria Unified SD	1490	1879	79.30%
Saddle Mountain Unified SD	11	15	73.33%
Wickenburg Unified SD	67	79	84.81%
Source --- Spring 2011 Total Results Report	11,011	13,512	81.49%

### **QUESTION 3: JTED Course Cost**

ARS § 15-393.M.3 “The costs associated with each course offered by the joint district.”

Historically, the term “cost”, as it relates to the requirements in ARS § 15-393.M.3, was never defined, either specifically or in terms of the Legislature’s intent.

Cost data at the program or course level is not collected nor reported to the ADE in a format usable for purposes of this report. All 13 JTEDs operating in SY 2011 reported separate program cost information to the ADE CTE Section in a format developed cooperatively among the ADE and JTED representatives. The ADE CTE Section requested course expenditure information based on existing Uniform System of Financial Reporting (USFR) and Chart of Account expenditure codes (cost items such as salaries, benefits, supplies).

Any discussion of cost is complicated by the fact that member districts typically also receive state and federal grants, as well as utilize non-JTED local funding for instructor salaries, costs often supported by the member districts. This year’s cost data attempts to provide cost information from all primary sources. Formats vary from detailed (596 AFR Expenditure Code) to aggregate/total cost information for all other sources.

In October 2011, eleven JTED Business Managers met with an ADE representative in an effort to standardize the cost reporting method utilized to meet the reporting requirements (question 3) of ARS § 15-393.M. Earlier efforts to standardize the cost reporting had only limited success.

The detail of cost data available varies. There are several primary sources of CTE funding. They overlap in their use at the district and school level. They are:

- Local tax levy revenues and State Aid (Funding Account 596) which are reported by each JTED, each JTED member district. At this level, costs are reported at the USFR Expenditure Code level.
- The total amount of JTED costs covered and reported for purposes of ARS §15-393.D.9 and USFR Memorandum 219 (non-supplanting) purposes. Cost detail is not available.
- State Vocational Block Grant funding. Typically, these funds are awarded directly to the JTED member districts and are not considered JTED funds. Total award and fiscal completion report expenditure information is included as a sub-folder. The information is included on a CD with the paper copies of this report and as digital sub-folders with the digital copies of this report.
- Carl D. Perkins federal CTE grant funds. As with the state grant funds, these funds are also awarded directly to the JTED member districts and are not considered JTED funds. Total award and fiscal completion report expenditure information is included as a sub-folder. The information is included on a CD with the paper copies of this report and as digital sub-folders with the digital copies of this report.

Additional funding sources can include the following, but are not viewed as major sources of revenues:

- Contributions under the provisions of ARS § 43-1089.01 (Tax Credits)
- Gifts of equipment or supplies, and
- Other (such as National Forest fees or Taylor Grazing fees)

With the exception of EVIT, state and federal grant funds are typically only applied for by JTED member districts. Districts are given the high cost of offering approved CTE program courses and must rely on and coordinate all sources of revenues to support their CTE programs. Management of both the state and federal grant funds falls outside of the JTED's normal control. Therefore, grant expenditures are not reported with the same level of detail as state and local support received under the provisions of ARS §15-393.

Certain challenges still exist relative to the cost data received from JTEDs which include:

- The failure of some member districts to supply cost data in a timely manner to their central JTED offices for further review before it is transferred to ADE CTE. As of February 23, 2012 not all districts had submitted their data in compliance with ARS §15-393.M. (Due December 31 annually).

The receipt of late data by a JTED district office leads to late submission to the ADE CTE Section with the result of having limited time to review the data submitted, ask questions, resolve conflicting data, etc.

- Lack of an agreed method of JTED costs reporting.

Some costs could be easily identified in the comments section of the worksheets submitted. An example for this would be, unique equipment purchases or new facilities cost. While easily identified, including them in an annual statement of a program's maintenance and operating costs would skew a program's annual costs as reported.

Only one JTED, Mountain Institute JTED, utilized the comment section of the worksheets submitted for FY 2011, reporting \$313,654 in upgrades to their Welding facilities at their Ash Fork and Seligman member district campuses.

The ADE CTE office will continue to work with JTED districts to improve cost reporting practices. However, a major challenge is the fact that the JTED cost reporting practices topic is basically dealt with only once a year and it is only when the data begins to come in that the ADE CTE Section and the JTED business managers know how successful a proposed change was.

The primary reason for the *central JTED* cost data differences relative to a JTED's AFR report could simply be due to the question –

*“What central program costs should be included in the instructional cost of the programs being offered by a JTED or JTED member district?”*

For example, “Do you allocate the cost of the JTED Board back to individual instructional programs? What about the cost of JTED elections?”

On the positive side, *member districts'* AFR expenditure information tied back to the Account 596 expenditures on the member districts' AFRs for approximately half of the reports sampled. Expenditure data for the other half did not exactly match the AFR reports, but in most cases did not vary greatly from their AFR reports.

Finally, it should be noted that the exclusion of JTED 9<sup>th</sup> grade ADM amended into statute during the 2010-2011 legislative cycle did not affect state fiscal year 2011 JTED

funding and costs. The impact of reduced JTED revenues and expenditures will be heavily evident in next year's JTED Report.

## **Methodology**

Program course expenditure information is reported for the following categories (object codes) identified in the Joint Career and Technical Education and Vocational Center Supplement to Annual Financial Report (AFR)

- Salaries
- Employee Benefits
- Purchased Services
- Supplies, including textbooks & instructional aids
- Property, including land, building & equipment
- Other

Relative to the 2011 JTED Report, a number of expenditure categories were combined to bring the report format more in line with the expenditure codes utilized for other USFR reporting purposes based on discussions with the JTED business managers. For example, supplies and textbooks were combined rather than being reported separately as they were reported in the past years' reports.

Historically, school districts do not track expenditures at the course or program level. While the USFR does permit cost recording at the program or course level, cost reporting is typically less detailed. Normally, expenditures are recorded at the revenue source level. For instance, a district's salary cost would be recorded against a grant, IGA or the revenue code to which the salary is being charged at the budget or aggregate level and *not* by the program or course.

The cost reporting requirements in ARS § 15-393 placed new requirements on school districts participating in a JTED, requiring a level of detail that is unique and significantly more complex than traditional USFR reporting requirements. Based on input from JTED business managers and superintendents, ARS § 15-393.M.3 was changed to allow cost reporting at the program level beginning with the 2009-2010 school year.

Only funds received under local tax levy revenues and State Aid (Funding Account 596) are reported and compared *in detail* for purposes of this report. These funds are considered to be those *most* under the control of a JTED, subject to the approved conditions of the Intergovernmental Agency Agreement (IGA) between each JTED and its member districts.

Currently, the data are collected via a linked Excel application (Appendix I; also included on the enclosed CD) developed by the ADE to facilitate reporting by JTED member districts to their JTED central offices.

The cost information reviewed was for the 2010-2011 school year (SY11) only. Changes made in cooperation with the JTED business managers seek to standardize data reporting across the 13 unique JTEDs.

It was the intent of the JTEDs to align their report Funding Account 596 expenditure information to their Annual Financial Reports (AFRs). As indicated previously, there are still differences. ADE CTE staff will be meeting again with the JTED business managers in March. One of the items to be addressed are the apparent differences between the data reported, for purposes of this report, and the AFRs. It may be a matter of timing.

The ADE CTE staff's historical focus is grant-based funding. The ADE CTE staff is not experienced or trained in ADM reporting and state funding issues; typically this is School Finance's area of expertise.

On a positive note, the JTED business managers have expressed their intent to make an effort to improve the quality of data reported and to standardize what is reported annually.

One additional reporting decision that needs to be discussed again relates to costing out JTED member district costs under the non-supplanting language in ARS § 15-393.B.9 and USFR Program Memorandum 219.

A joint decision was made to report only the *total* FY 2011 maintenance costs for each member district rather than requesting the districts to report these monies in detail by program and expenditure category (salaries, benefits, etc.).

It is assumed that most of these funds are used to support CTE salaries and some historical asset replacement. Reporting these funds costs by program was considered to be costly in terms of personnel cost.

For example, a district might easily identify the cost of an agriculture instructor by identifying salary and benefit costs. However, if the instructor teaches three different agricultural programs, it would be quite difficult to allocate such costs by program and determine an actual cost for each unique agricultural program.

At the same time, the absence of any salary costs for the agriculture programs offered on a district's 596 detailed worksheets raises questions relative to the accuracy of any detailed cost data for a course being offered.

We may need to reconsider expecting actual program costs relative to those JTED programs offered at satellite sites and if necessary, accept some sort of reasonable allocations of 219 costs for the purposes of this report.

Appendix J contains a summary of total "program course cost" by program code/title and by JTED and their member districts. It includes mode, median and maximum cost expenditure percent information for the "salary" through "other" costs categories listed on pages 137-162.

If the reader wishes to see each member district's reported expenditures by member district, including M & O expenditures, Perkins expenditures, and state grant expenditures information, it can be found in the JTED's cost workbook on the enclosed CD.

When reviewing Appendix J, please note the use of the term “mode” differs from the statistical definition of a “mode”.

A mode is traditionally defined as the value that occurs the most frequently in a data set or a probability distribution.

A data set may contain more than one mode. In the event more than one modal group was identified, the mode with the largest value (in this case percent of aggregate course cost by expenditure category – such as salaries, etc.) is shown. Also, the percent of aggregate cost calculated was rounded to the nearest whole percent. For example 97.1 % and 97.2% were rounded to 97.0%. Values greater than 0.0% to 1.49% are shown as 1.0%. The use of rounded values affects the value shown as an expenditure category's “mode” for the purposes of this report.

## **Challenges**

**Volume:** Currently, the CTE Section identifies 38 broad program areas with 72 program options. Given that the number of potential program options per broad program can vary, allocating costs can prove challenging.

For example, “Transportation Technologies” is listed as a single program cluster. Under “Transportation Technologies,” there are five program options that range from “Automotive Technology I” (course number 47.0600.20) to “Aircraft Mechanics II” (course number 47.0600.55).

The decision to group course costs for reporting purposes by program cluster has lessened the administrative cost associated with allocating such costs and is expected to be more accurate. To some degree this challenge can also span programs, such as programs in the business and marketing areas.

**Reporting Big “Ticket Items”:** Any JTED that constructs a new facility or retrofits an existing facility to improve a program, or introduces a new program, may have enormous initial program/course costs unless the costs were amortized over time or excluded from data reported as part of a program’s cost.

ADE CTE requested that they exclude such costs from their reported program costs and report the information separately. As indicated previously, only one JTED identified such a cost separately this year. Additional follow-up is required to determine if such costs were under-reported and to make such costs more easily identified and reported in the future within the process of working with the JTED business managers.

**Federal & State Grant Expenditures:** It is recognized that CTE programs are expensive and that districts must coordinate all funds received in order to effectively support effective CTE programs. State and federal grant award information as well as individual member district federal and state completion reports (reflects aggregate expenditure information by category, not program) are included on the CD supplied with the written version of this report or in digital folders included with the on-line or digital copies of this report for informational purposes.

**Increased Administrative Cost:** Tracking of costs at the program course level requires a level of detail not required by the USFR or federal and state grant purposes. As a result, JTEDs and their

member districts incur the added cost of tracking and recording the more detailed expenditures/costs.

***JTED Satellite Issues:*** Communication challenges are common. All JTED business managers work with multiple satellite districts and their business managers. Confusion related to the information being requested and reporting requirements is common. Reasons can include changes in the statute, report format changes, staff turnover, etc.

Current statutory language does not address what actions a JTED may take if a member district fails to provide expenditure-related data to the JTED to insure the JTEDs' compliance with the reporting requirements of ARS §15-393.M.

It is recommended that compliance with the statutory reporting requirements and remedies to deal with non-performance be included in each JTED operating IGA with their member districts.

***JTED Staffing Issues:*** Annually JTEDs and/or their member districts have staff turnover. As a result, new staff lack the benefit of historical knowledge of the prior year's process and could not readily answer questions or offer an opinion as to why a specific change in expenditure categories or levels had occurred.

***CTE Staffing Issues:*** The CTE Section does not have full-time staff dedicated to the support or for administration of JTEDs and requirements of ARS § 15-391 through 393.

***Legislative Intent:*** Relative to the "program cost" reporting question, what did the Legislature wish to see?

Traditional possibilities could include:

- the cost of implementing a new JTED program;
- the cost of maintaining an existing JTED program, and
- the ability to compare the cost of a JTED program/course from one JTED to another.

If the Legislature's goal is a formal cost analysis of the JTED educational delivery system, a *cost study* may be required in order to provide more qualified answers.

### **Analysis-Conclusions**

Limiting detailed analysis to only those monies referred to as "596" funds, hopefully, will improve the ability to compare multiple year costs in the future, while unfortunately preventing the comparison of FY 2011 data to the FY 2010 data; with the exception of rough comparison such as a stronger correlation between salary and benefit costs to a program's total cost.

An effort was made to analyze 596 cost data supplied for several selected satellite districts:

- EVIT - EVIT Main
- EVIT - Tempe UHSD
- NAVIT - Blue Ridge USD
- NAVIT - Winslow USD
- VACTE - Mingus UHSD
- VACTE - Camp Verde USD

Per the first JTED report to the Legislature in 2008, “*The CTE staff fully expected to see courses with high start-up expenses and highly specialized facilities cost more than those with less specialized equipment and facility requirements did*”, but that was not the case.

The cost data reflects how most districts expend their JTED revenues to *maintain* on-going programs, not necessarily create new programs.

*Teacher salaries and benefits* are still the strongest indicator of total program costs based on the correlation coefficients results.

### **Recommendations**

- In the event of statutory changes, provide the JTEDs sufficient notice and time to modify their accounting systems in order to gather and report the information sought if significant changes are made.
- Consider a *cost study* to replace the cost reporting requirement in ARS 15-383.M.3.
- Review other options, such as “cost per desired outcome,” for the purpose of meeting the course/program cost reporting requirement in ARS 15-383.M.3.
- The CTE Section will continue to work with the JTED business managers for the purposes of meeting the reporting requirements in ARS §15-393.M.3.
- The ADE CTE Section does not recommend requiring JTEDs to report detailed costs by program for member district’s Maintenance Funds (219), State Vocational Block Grant funds or Carl D. Perkins funds. The cost of doing so outweighs any apparent benefit in our opinion at this time.

### Selected Expenses to Total Program Costs Correlation Coefficients

	Salary & ERE Correlation	Purchased <sup>1</sup> Services Correlation	Supplies <sup>2</sup> Correlation	Property <sup>3</sup> Correlation	Other Correlation	Program Enrollment Correlation
<b>EVIT Main Campus</b>	0.961	0.630	0.318	0.048	-0.162	0.789
<b>EVIT- Member District Mesa USD</b>	0.934	-0.375	0.151	-0.147	-0.016	0.837
<b>EVIT - Member District Tempe UHSD</b>	0.936	-0.040	0.869	0.920	-	0.554
<b>NAVIT - Member District Blue Ridge USD</b>	0.997	0.646	0.277	0.577	-	0.203
<b>NAVIT - Member District Winslow USD</b>	0.994	-	-0.141	-	-	0.195
<b>VACTE - Member District Camp Verde USD</b>	0.853	-0.788	-	-	0.982	0.138
<b>VACTE - Member District Mingus UHSD</b>	0.834	0.165	0.829	0.37	0.967	0.554

-	Cost data not reported or only a single data element reported or no variance reported
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<sup>1</sup>USFR Codes 63XX, 64XX, 65XX

<sup>2</sup>USFR Codes 66XX - Textbooks & Instructional Aids

<sup>3</sup>USFR Codes 67XX - Land and Equipment

Other - USFR Codes 68XX

#### **QUESTION 4: Program Completion Rates**

ARS § 15-393.M 4 “The completion rate for each program offered by the joint district.”

#### **Methodology**

For JTED reporting purposes, the formula used to calculate program completion is as follows:

**Numerator:** Number of CTE concentrators who completed the state-designated sequence of instruction in a JTED program and *took and passed* the technical skills assessment and left secondary education in the reporting year.

**Denominator:** Number of CTE concentrators who completed the state-designated sequence of instruction in a JTED program and took the technical skills assessment and left secondary education in the reporting year.

The term CTE concentrator is used frequently in the narrative and the charts in this section. A CTE concentrator is a JTED student who has earned two (2) Carnegie Units in a state-designated-sequence of instruction in an approved CTE program. In specific programs the concentrator may need to take an additional Carnegie Unit to complete the industry standards for that program.

During 2010-11, there were 38 programs with 72 program options available. Of these 72 options, there were 51 options that had assessments. Approved JTED programs were expected to assess all concentrators who were in the final course of a coherent sequence of instruction if there was an assessment available. Concentrators are only included in the count when they leave school because they graduated or dropped out, and are unduplicated.

Included in this report is the program completion data which shows the number of students who completed the minimum number of Carnegie Units in each program. If the number of students who completed the minimum number of Carnegie Units does not equal the number of students assessed, it could be because some of the students may be enrolled in an option that does not yet have an assessment, or these students were not ready to take the assessment. This data shows the numerator, the denominator, and percentage of concentrators that took the assessment and passed in each approved program for the JTED, district and school. This data also indicates approved programs that do not have an assessment available but have concentrators who completed the coherent sequence of courses.

#### **2011 JTED Program Completion Data**

The data used in this analysis of program completion in all JTED programs comes from the online system where districts report concentrators. Districts report School, Program, SAIS ID, Birthdate and Number of Carnegie Units earned in the program in each concentrator record. Each program and option has a designated number of courses in the coherent sequence of either two or three courses. Once a concentrator record indicates the student has completed the minimum number of Carnegie Units, assessment results are expected. Included in this report is the JTED program completion data including: CTE program name, number of concentrators who have completed the coherent sequence of courses, number of

eligible concentrators who could take an assessment and the number of students who took and passed the assessment. The data is confirmed by each district using the Concentrator Verification Report.

### **2011 JTED Program Completion Data Issues**

Challenges and issues related to data reporting include the following:

- Additional assessments are being developed annually. Once all programs and options have an assessment in place, the data will be more comprehensive.
- There are CTE programs with options; some options have assessments while others do not. Students cannot assess in a CTE program where the assessment for the option has yet to be developed. It is difficult in the state level data to determine if a student had the opportunity to assess, since data is collected by program.
- For a variety of reasons, not all students who qualify to take an assessment are being assessed.
- Due to the increase in state level percentages, fewer students are qualifying to meet state rates.

### **Concentrator Charts**

Data included in the charts list all secondary CTE programs in Arizona by JTED, by school district, assessment availability, concentrators who completed a sequence of courses, concentrators who passed, percent who passed, and percent of concentrators who assessed.

Data are displayed by member districts for each JTED statewide. The data is used to calculate program completion.

### **Results**

- 12,233 concentrators completed the coherent sequence of courses in a JTED program.
- 10,428 concentrators who completed the coherent sequence of courses in a program with an assessment.
- 5736 or 55.01 percent of all eligible concentrators took an assessment.
- 4871 or 84.92 percent of all eligible concentrators passed an assessment.
- 1,805 concentrators completed a program that did not have an assessment available.

### **Recommendations**

- ADE CTE continues to provide technical assistance to JTEDs to access eligible students.
- Recommend that only students who complete the coherent sequence of courses be allowed to take an assessment, where available.
- Recommend research and analysis of the economic benefit and return on investment from JTED programs to include longitudinal post-program outcomes.

SY 2011 Program Completion Data

CONCENTRATORS WHO COMPLETED THE COHERENT SEQUENCE IN A PROGRAM WITH AN ASSESSMENT							
Program Number	Program Name	Assessment Available?	Concentrator Completed Coherent Seq of Courses	Program Completion Passed	Program Completion Assessed	Percent Passed	Percent of Completers Assessed
<b>CAVIAT</b>							
510800	Allied Health Services	Yes	1	1	1	100.00%	100.00%
520200	Business Mgmt & Admin Services	Yes	2	2	2	100.00%	100.00%
460400	Construction Technologies	Yes	59	9	11	81.82%	18.64%
120500	Culinary Arts	Yes	125	48	49	97.96%	39.20%
521900	Design and Merchandising	Yes	20	3	3	100.00%	15.00%
151300	Drafting and Design Technologies	Yes	23	9	11	81.82%	47.83%
131210	Early Childhood Education	Yes	16	1	2	50.00%	12.50%
131200	Education Professions	Yes	6	4	6	66.67%	100.00%
151200	Information Technologies	Yes	19	5	7	71.43%	36.84%
511600	Nursing Services	Yes	28	18	18	100.00%	64.29%
470600	Transportation Technologies	Yes	36	8	10	80.00%	27.78%
480508	Welding Technologies	Yes	64	23	24	95.83%	37.50%
<b>CAVIT</b>							
010100	Agricultural Business Management - Agriscience	Yes	21	13	15	86.67%	71.43%
510800	Allied Health Services	Yes	57	4	7	57.14%	12.28%
520200	Business Mgmt & Admin Services	Yes	4	4	4	100.00%	100.00%
460400	Construction Technologies	Yes	40	20	21	95.24%	52.50%
120500	Culinary Arts	Yes	77	43	43	100.00%	55.84%
131210	Early Childhood Education	Yes	40	25	32	78.13%	80.00%
131200	Education Professions	Yes	7	4	4	100.00%	57.14%
150000	Engineering Sciences	Yes	1	1	1	100.00%	100.00%
520900	Hospitality Management	Yes	1	1	1	100.00%	100.00%
151200	Information Technologies	Yes	3	1	1	100.00%	33.33%
521800	Marketing Management and Entrepreneurship	Yes	73	17	18	94.44%	24.66%
511600	Nursing Services	Yes	32	3	3	100.00%	9.38%
513500	Therapeutic Massage	Yes	12	5	5	100.00%	41.67%
470600	Transportation Technologies	Yes	11	1	1	100.00%	9.09%
480508	Welding Technologies	Yes	12	7	11	63.64%	91.67%

SY 2011 Program Completion Data

CTD							
520300	Accounting and Related Services	Yes	5	5	5	100.00%	100.00%
010100	Agricultural Business Management - Agriscience	Yes	46	27	33	81.82%	71.74%
510800	Allied Health Services	Yes	13	8	12	66.67%	92.31%
410100	Bioscience	Yes	9	4	7	57.14%	77.78%
520200	Business Mgmt & Admin Services	Yes	31	7	11	63.64%	35.48%
460400	Construction Technologies	Yes	28	15	16	93.75%	57.14%
120500	Culinary Arts	Yes	56	32	44	72.73%	78.57%
151300	Drafting and Design Technologies	Yes	16	12	15	80.00%	93.75%
131210	Early Childhood Education	Yes	14	8	13	61.54%	92.86%
131200	Education Professions	Yes	10	7	7	100.00%	70.00%
430200	Fire Service	Yes	7	2	5	40.00%	71.43%
520900	Hospitality Management	Yes	5	1	1	100.00%	20.00%
151200	Information Technologies	Yes	15	8	12	66.67%	80.00%
430100	Law Public Safety and Security	Yes	14	3	4	75.00%	28.57%
521800	Marketing Management and Entrepreneurship	Yes	47	26	35	74.29%	74.47%
511600	Nursing Services	Yes	6	4	5	80.00%	83.33%
470600	Transportation Technologies	Yes	2	2	2	100.00%	100.00%
CVIT							
010100	Agricultural Business Management - Agriscience	Yes	3	2	3	66.67%	100.00%
520200	Business Mgmt & Admin Services	Yes	3	3	3	100.00%	100.00%
460400	Construction Technologies	Yes	11	3	4	75.00%	36.36%
120500	Culinary Arts	Yes	25	17	19	89.47%	76.00%
151300	Drafting and Design Technologies	Yes	3	2	3	66.67%	100.00%
131210	Early Childhood Education	Yes	9	3	5	60.00%	55.56%
131200	Education Professions	Yes	1	1	1	100.00%	100.00%
520900	Hospitality Management	Yes	11	7	7	100.00%	63.64%
521800	Marketing Management and Entrepreneurship	Yes	6	4	6	66.67%	100.00%
511600	Nursing Services	Yes	26	7	9	77.78%	34.62%
470600	Transportation Technologies	Yes	2	1	1	100.00%	50.00%
480508	Welding Technologies	Yes	3	1	2	50.00%	66.67%

SY 2011 Program Completion Data

EVIT							
010100	Agricultural Business Management - Agriscience	Yes	127	76	95	80.00%	74.80%
510800	Allied Health Services	Yes	170	110	123	89.43%	72.35%
410100	Bioscience	Yes	42	34	35	97.14%	83.33%
520200	Business Mgmt & Admin Services	Yes	86	60	66	90.91%	76.74%
460400	Construction Technologies	Yes	106	43	58	74.14%	54.72%
120500	Culinary Arts	Yes	347	198	216	91.67%	62.25%
521900	Design and Merchandising	Yes	126	67	77	87.01%	61.11%
510900	Diagnostic and Intervention Technologies	Yes	32	32	32	100.00%	100.00%
151300	Drafting and Design Technologies	Yes	77	34	40	85.00%	51.95%
131210	Early Childhood Education	Yes	147	78	90	86.67%	61.22%
131200	Education Professions	Yes	28	20	20	100.00%	71.43%
150000	Engineering Sciences	Yes	31	28	28	100.00%	90.32%
430200	Fire Service	Yes	52	52	52	100.00%	100.00%
520900	Hospitality Management	Yes	53	22	22	100.00%	41.51%
151200	Information Technologies	Yes	135	48	60	80.00%	44.44%
430100	Law Public Safety and Security	Yes	158	125	144	86.81%	91.14%
521800	Marketing Management and Entrepreneurship	Yes	141	67	72	93.06%	51.06%
511600	Nursing Services	Yes	182	157	160	98.13%	87.91%
500100	Performing Arts and Entertainment Industry	Yes	50	5	7	71.43%	14.00%
480500	Precision Manufacturing	Yes	5	4	4	100.00%	80.00%
513500	Therapeutic Massage	Yes	81	47	72	65.28%	88.89%
470600	Transportation Technologies	Yes	156	117	127	92.13%	81.41%
480508	Welding Technologies	Yes	88	48	51	94.12%	57.95%
GIFT							
520300	Accounting and Related Services	Yes	3	3	3	100.00%	100.00%
010100	Agricultural Business Management - Agriscience	Yes	19	10	11	90.91%	57.89%
510800	Allied Health Services	Yes	12	4	6	66.67%	50.00%
520200	Business Mgmt & Admin Services	Yes	53	41	44	93.18%	83.02%
520400	Business Operations Support and Assistant Services	Yes	3	2	2	100.00%	66.67%
460400	Construction Technologies	Yes	17	14	16	87.50%	94.12%
120500	Culinary Arts	Yes	29	19	21	90.48%	72.41%
151300	Drafting and Design Technologies	Yes	12	4	4	100.00%	33.33%
131210	Early Childhood Education	Yes	6	1	2	50.00%	33.33%
521800	Marketing Management and Entrepreneurship	Yes	4	1	1	100.00%	25.00%
511600	Nursing Services	Yes	11	10	10	100.00%	90.91%
470600	Transportation Technologies	Yes	4	3	3	100.00%	75.00%
480508	Welding Technologies	Yes	14	6	8	75.00%	57.14%

SY 2011 Program Completion Data

MIJTED							
010100	Agricultural Business Management - Agriscience	Yes	30	6	9	66.67%	30.00%
410100	Bioscience	Yes	3	2	2	100.00%	66.67%
520200	Business Mgmt & Admin Services	Yes	9	6	6	100.00%	66.67%
460400	Construction Technologies	Yes	13	3	3	100.00%	23.08%
120500	Culinary Arts	Yes	29	9	9	100.00%	31.03%
151200	Information Technologies	Yes	18	4	6	66.67%	33.33%
521800	Marketing Management and Entrepreneurship	Yes	1	1	1	100.00%	100.00%
511600	Nursing Services	Yes	38	16	16	100.00%	42.11%
470600	Transportation Technologies	Yes	6	4	4	100.00%	66.67%
480508	Welding Technologies	Yes	16	6	7	85.71%	43.75%
NATIVE							
010100	Agricultural Business Management - Agriscience	Yes	39	16	23	69.57%	58.97%
520200	Business Mgmt & Admin Services	Yes	3	1	1	100.00%	33.33%
520400	Business Operations Support and Assistant Services	Yes	5	2	3	66.67%	60.00%
460400	Construction Technologies	Yes	85	22	30	73.33%	35.29%
120500	Culinary Arts	Yes	42	20	22	90.91%	52.38%
151300	Drafting and Design Technologies	Yes	33	14	20	70.00%	60.61%
131210	Early Childhood Education	Yes	27	10	17	58.82%	62.96%
151200	Information Technologies	Yes	6	1	3	33.33%	50.00%
430100	Law Public Safety and Security	Yes	7	2	4	50.00%	57.14%
521800	Marketing Management and Entrepreneurship	Yes	20	8	14	57.14%	70.00%
511600	Nursing Services	Yes	56	30	39	76.92%	69.64%
470600	Transportation Technologies	Yes	14	4	8	50.00%	57.14%
480508	Welding Technologies	Yes	153	56	79	70.89%	51.63%

SY 2011 Program Completion Data

NAVIT							
520300	Accounting and Related Services	Yes	3	3	3	100.00%	100.00%
010100	Agricultural Business Management - Agriscience	Yes	19	12	12	100.00%	63.16%
510800	Allied Health Services	Yes	11	2	6	33.33%	54.55%
520200	Business Mgmt & Admin Services	Yes	31	27	28	96.43%	90.32%
460400	Construction Technologies	Yes	79	33	39	84.62%	49.37%
120500	Culinary Arts	Yes	43	25	26	96.15%	60.47%
521900	Design and Merchandising	Yes	15	12	12	100.00%	80.00%
151300	Drafting and Design Technologies	Yes	26	21	21	100.00%	80.77%
131210	Early Childhood Education	Yes	55	36	46	78.26%	83.64%
430200	Fire Service	Yes	15	11	11	100.00%	73.33%
151200	Information Technologies	Yes	20	15	18	83.33%	90.00%
430100	Law Public Safety and Security	Yes	4	1	4	25.00%	100.00%
521800	Marketing Management and Entrepreneurship	Yes	8	4	4	100.00%	50.00%
511600	Nursing Services	Yes	70	39	43	90.70%	61.43%
480500	Precision Manufacturing	Yes	5	1	2	50.00%	40.00%
470600	Transportation Technologies	Yes	36	25	26	96.15%	72.22%
480508	Welding Technologies	Yes	54	37	39	94.87%	72.22%
PCITED							
010100	Agricultural Business Management - Agriscience	Yes	83	29	32	90.63%	38.55%
510800	Allied Health Services	Yes	89	32	44	72.73%	49.44%
410100	Bioscience	Yes	60	29	29	100.00%	48.33%
520200	Business Mgmt & Admin Services	Yes	75	42	50	84.00%	66.67%
520400	Business Operations Support and Assistant Services	Yes	16	7	8	87.50%	50.00%
460400	Construction Technologies	Yes	90	36	43	83.72%	47.78%
120500	Culinary Arts	Yes	164	81	95	85.26%	57.93%
521900	Design and Merchandising	Yes	34	22	23	95.65%	67.65%
510900	Diagnostic and Intervention Technologies	Yes	1	1	1	100.00%	100.00%
151300	Drafting and Design Technologies	Yes	47	27	27	100.00%	57.45%
131210	Early Childhood Education	Yes	42	22	24	91.67%	57.14%
131200	Education Professions	Yes	22	16	17	94.12%	77.27%
150000	Engineering Sciences	Yes	36	18	21	85.71%	58.33%
430200	Fire Service	Yes	36	17	27	62.96%	75.00%
520900	Hospitality Management	Yes	14	5	5	100.00%	35.71%
151200	Information Technologies	Yes	91	39	49	79.59%	53.85%
430100	Law Public Safety and Security	Yes	45	13	22	59.09%	48.89%
521800	Marketing Management and Entrepreneurship	Yes	182	115	136	84.56%	74.73%
511600	Nursing Services	Yes	92	41	50	82.00%	54.35%
500100	Performing Arts and Entertainment Industry	Yes	39	24	24	100.00%	61.54%
480500	Precision Manufacturing	Yes	9	1	1	100.00%	11.11%
470600	Transportation Technologies	Yes	131	40	57	70.18%	43.51%
480508	Welding Technologies	Yes	56	14	23	60.87%	41.07%

SY 2011 Program Completion Data

VACTE							
010100	Agricultural Business Management - Agriscience	Yes	7	1	2	50.00%	28.57%
510800	Allied Health Services	Yes	8	3	4	75.00%	50.00%
520200	Business Mgmt & Admin Services	Yes	25	14	15	93.33%	60.00%
460400	Construction Technologies	Yes	5	1	1	100.00%	20.00%
120500	Culinary Arts	Yes	3	1	1	100.00%	33.33%
151300	Drafting and Design Technologies	Yes	6	4	4	100.00%	66.67%
131200	Education Professions	Yes	14	3	8	37.50%	57.14%
430200	Fire Service	Yes	4	4	4	100.00%	100.00%
511600	Nursing Services	Yes	14	13	13	100.00%	92.86%
500100	Performing Arts and Entertainment Industry	Yes	3	3	3	100.00%	100.00%
470600	Transportation Technologies	Yes	16	7	9	77.78%	56.25%
480508	Welding Technologies	Yes	9	1	1	100.00%	11.11%
WAVE							
010100	Agricultural Business Management - Agriscience	Yes	12	5	5	100.00%	41.67%
510800	Allied Health Services	Yes	14	8	8	100.00%	57.14%
520200	Business Mgmt & Admin Services	Yes	38	32	32	100.00%	84.21%
460400	Construction Technologies	Yes	15	8	8	100.00%	53.33%
120500	Culinary Arts	Yes	55	30	30	100.00%	54.55%
521900	Design and Merchandising	Yes	5	1	1	100.00%	20.00%
151300	Drafting and Design Technologies	Yes	14	11	11	100.00%	78.57%
131210	Early Childhood Education	Yes	42	20	20	100.00%	47.62%
430200	Fire Service	Yes	2	1	1	100.00%	50.00%
151200	Information Technologies	Yes	18	9	9	100.00%	50.00%
430100	Law Public Safety and Security	Yes	8	7	7	100.00%	87.50%
521800	Marketing Management and Entrepreneurship	Yes	8	6	6	100.00%	75.00%
470600	Transportation Technologies	Yes	31	12	12	100.00%	38.71%
480508	Welding Technologies	Yes	4	1	1	100.00%	25.00%

SY 2011 Program Completion Data

West-MEC							
520300	Accounting and Related Services	Yes	31	11	19	57.89%	61.29%
010100	Agricultural Business Management - Agriscience	Yes	75	27	36	75.00%	48.00%
510800	Allied Health Services	Yes	470	149	207	71.98%	44.04%
520200	Business Mgmt & Admin Services	Yes	39	20	26	76.92%	66.67%
460400	Construction Technologies	Yes	221	52	82	63.41%	37.10%
120500	Culinary Arts	Yes	1036	423	466	90.77%	44.98%
521900	Design and Merchandising	Yes	50	17	21	80.95%	42.00%
510900	Diagnostic and Intervention Technologies	Yes	67	50	54	92.59%	80.60%
151300	Drafting and Design Technologies	Yes	135	37	59	62.71%	43.70%
131210	Early Childhood Education	Yes	213	74	97	76.29%	45.54%
131200	Education Professions	Yes	123	39	50	78.00%	40.65%
150000	Engineering Sciences	Yes	64	32	36	88.89%	56.25%
430200	Fire Service	Yes	37	14	19	73.68%	51.35%
520900	Hospitality Management	Yes	1	1	1	100.00%	100.00%
151200	Information Technologies	Yes	315	78	109	71.56%	34.60%
430100	Law Public Safety and Security	Yes	100	36	46	78.26%	46.00%
521800	Marketing Management and Entrepreneurship	Yes	301	98	115	85.22%	38.21%
511600	Nursing Services	Yes	223	152	167	91.02%	74.89%
480500	Precision Manufacturing	Yes	10	8	8	100.00%	80.00%
470600	Transportation Technologies	Yes	86	26	32	81.25%	37.21%
480508	Welding Technologies	Yes	26	11	13	84.62%	50.00%
<b>TOTAL CONCENTRATORS IN PROGRAMS WITH ASSESSMENTS</b>			<b>10,397</b>	<b>4,852</b>	<b>5,788</b>	<b>83.33%</b>	<b>55.67%</b>

SY 2011 Program Completion Data

CONCENTRATORS WHO COMPLETED THE COHERENT SEQUENCE IN A PROGRAM WITH NO ASSESSMENT							
Program Number	Program Name	Assessment Available?	Concentrator Completed Coherent Seq of Courses	Program Completion Passed	Program Completion Assessed	Percent Passed	Percent of Completers Assessed
<b>CAVIAT</b>							
100200	Audio/Visual Technologies	NO	7		0		0.00%
460300	Electrical and Power Transmission Technologies	NO	2		0		0.00%
100300	Graphic Communications	NO	15		0		0.00%
<b>CAVIT</b>							
100200	Audio/Visual Technologies	NO	12		0		0.00%
120400	Cosmetology	NO	14		0		0.00%
100300	Graphic Communications	NO	15		0		0.00%
<b>CTD</b>							
100200	Audio/Visual Technologies	NO	13		0		0.00%
100300	Graphic Communications	NO	6		0		0.00%
<b>CVIT</b>							
100300	Graphic Communications	NO	10		0		0.00%
<b>EVIT</b>							
100200	Audio/Visual Technologies	NO	202		0		0.00%
120400	Cosmetology	NO	177		0		0.00%
510600	Dental Assisting	NO	29		0		0.00%
150300	Electronic Technologies	NO	5		0		0.00%
100300	Graphic Communications	NO	180		0		0.00%
<b>GIFT</b>							
120400	Cosmetology	NO	11		0		0.00%
100300	Graphic Communications	NO	7		0		0.00%
<b>MIJTED</b>							
100200	Audio/Visual Technologies	NO	8		0		0.00%

SY 2011 Program Completion Data

NATIVE							
100200	Audio/Visual Technologies	NO	1		0		0.00%
120400	Cosmetology	NO	4		0		0.00%
100300	Graphic Communications	NO	20		0		0.00%
490200	Heavy Equipment Operations	NO	7		0		0.00%
NAVIT							
100200	Audio/Visual Technologies	NO	53		0		0.00%
120400	Cosmetology	NO	18		0		0.00%
460300	Electrical and Power Transmission Technologies	NO	9		0		0.00%
100300	Graphic Communications	NO	54		0		0.00%
490200	Heavy Equipment Operations	NO	9		0		0.00%
PCJTED							
100200	Audio/Visual Technologies	NO	130		0		0.00%
120400	Cosmetology	NO	46		0		0.00%
460300	Electrical and Power Transmission Technologies	NO	1		0		0.00%
150300	Electronic Technologies	NO	5		0		0.00%
100300	Graphic Communications	NO	111		0		0.00%
470200	Heating, Ventilation and Air Conditioning	NO	1		0		0.00%
VACTE							
100200	Audio/Visual Technologies	NO	23		0		0.00%
100300	Graphic Communications	NO	40		0		0.00%
WAVE							
100200	Audio/Visual Technologies	NO	32		0		0.00%
100300	Graphic Communications	NO	20		0		0.00%
West-MEC							
100200	Audio/Visual Technologies	NO	230		0		0.00%
120400	Cosmetology	NO	114		0		0.00%
510600	Dental Assisting	NO	25		0		0.00%
100300	Graphic Communications	NO	139		0		0.00%
<b>TOTAL CONCENTRATORS IN PROGRAMS WITHOUT ASSESSMENTS</b>			<b>1,805</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00%</b>
<b>TOTAL CONCENTRATORS COMPLETED PROGRAMS</b>			<b>12,202</b>	<b>4,852</b>	<b>5,788</b>		

**QUESTION 5: The Graduation Rate of Students Enrolled in the Joint District**

ARS § 15-393.M.5 “The graduation rate of students enrolled in the joint district.”

**Methodology**

For the purposes of this report, the definition of graduation rate for federal performance measures has been used. It is as follows:

**Numerator:** Number of CTE concentrators who graduated in secondary education in the reporting year and were included as graduated in the state’s computation of its graduation rate using 2011 cohort year.

**Denominator:** Number of CTE concentrators who did not meet the requirements for graduation and left secondary education in the reporting year, *plus* those concentrators that did graduate from secondary education in the 2011 cohort year.

Schools report concentrators who have completed at least two Carnegie Units in a program. The SAIS database is used to extract leave codes for these students. All SAIS IDs that were reported as having left secondary education for one of the following reasons in FY2011 were used in the graduation calculation:

<b>Leave Codes</b>	<b>Status</b>
G, S7 and W7	Graduated
A, C, W2, S2 W3, S3, W4, S4, W5, S5, W10, S10, W11, S11, W12, S12, W13, S13	Left school, did not meet requirements for graduation

All students who left school for any of the above reasons were included in the denominator. Only students who graduated with either a Year End Code of W7—mid-year graduate, S7—summer graduate or G—end-of-year graduate are counted as graduated in the numerator. Students graduate from their school of residence (member school of a JTED), and do not graduate from a JTED.

**2011 JTED Graduation Data Issues**

Students who are reported as concentrators and have a cohort year of 2011 (students are assigned a cohort year based on a four-year high school career; in this case the year they would normally graduate) are included in the graduation rate calculation for the purpose of this report. This is done so the CTE graduation rates are comparable to the published graduation rates in the School Report Card. This graduation rate is calculated for those concentrators who were reported as attending a JTED program.

**Analysis**

Within the parameters identified above, the Career and Technical Education graduation rate for Arizona for FY2011 was 98.46% as evidenced in the FY2011 Consolidated Annual Report submitted to The Office of Vocational and Adult Education. The statewide JTED graduation rate is 97.52%. The JTED graduation rate calculation is the same calculation used for the CTE graduation rate and is calculated using approved JTED programs offered at both JTED onsite and offsite campuses.

## FY2011 JTED Graduation Rates

JTED	Numerator	Denominator	Graduation_Rate
CAVIAT	489	520	94.04%
CAVIT	561	565	99.29%
CTD	373	384	97.14%
CVIT	148	150	98.67%
EVIT	3722	3782	98.41%
GIFT	239	243	98.35%
MIJTED	205	212	96.70%
NATIVE	578	638	90.60%
NAVIT	707	729	96.98%
PCJTED	2417	2504	96.53%
VACTE	219	229	95.63%
WAVE	406	425	95.53%
WestMEC	4708	4766	98.78%

non-Evit Mesa	94	103	91.26%
non-JTED	3189	3282	97.17%

Overall 2011 Graduation Rates 97.43%  
 (concentrators, >= 2 units)

### **Recommendations**

- Review annually data to be reported and processes utilized to ensure consistency and accountability.
- Continue to use the student cohort year to ensure the data are comparable to the general population of graduates.
- Provide additional technical assistance to JTEDs related to graduation reporting.
- Compare current year's results with the prior year's results.
- Modify the method used to collect and analyze graduation results should changes occur to the SAIS reporting system. (Currently, and in the prior year, CTE has used the leave codes from SAIS for each concentrator record in an effort to mirror the data used in the Arizona School Report Card).

**QUESTION 6: JTED Career Opportunities**

ARS § 15-393.M.6 “A detailed description of the career opportunities available to students after completion of the program offered by the joint district.”

**Methodology for CTE Program List**

The ADE CTE Section identifies CTE programs with the greatest career potential and opportunities, on a statewide basis, for Arizona’s high school and community college students. These programs are linked to classroom offerings via the FY 2011 Arizona CTE Program List (see Appendix B). The list reflects those programs that offer opportunities for Arizona students to earn a livable wage in gainful employment in Arizona. The list takes three primary factors into consideration:

- High demand occupations: current openings by specific occupation including projected occupation growth
- High skills occupations: job knowledge, skill and ability including academic abilities
- High wage occupations

The list includes two emerging occupational areas for which insufficient information is available from Labor Market Information Statistics for Arizona. However, several statewide reports were used to identify these critical emerging occupational areas in Arizona. The occupational areas that were determined to be new and emerging for Arizona include:

- Bioscience including bio-medical, bio-environmental and bio-innovations and
- Engineering Sciences

The CTE Program List provides guidance for JTEDs in planning and implementing CTE programs based on the information developed by the Arizona Department of Commerce, Research Administration, in cooperation with the U.S. Department of Labor Bureau of Labor Statistics. The Detailed Occupational Data for all Available Classification of Instructional Programs (CIP) List (see enclosed CD) provides specific wage and occupational detail on hundreds of occupations. JTED districts use this specific data to develop CTE programs. The highest skills, highest wages and highest demand fields of employment were prioritized for the FY 2011 Arizona CTE Program List.

The Research Administration staff at the Arizona Department of Commerce use wage data, projected job openings data, and the O\*NET score to formulate the ranked list of CTE Programs. The O\*NET is a comprehensive database of worker attributes and job characteristics as well as knowledge, skills and abilities scores for all occupations. The O\*NET score is a measure of the skills and knowledge required for the occupations within the Classification of Instructional Programs (CIP), weighted by the number of openings in each occupation. The score provides a comprehensive picture aligning with high skills. The occupations with O\*NET scores in the bottom three percent were not included in the formula.

The State Board of Vocational and Technological Education approved the formula for the CTE Program List. The Arizona CTE Program List is updated every two years. The formula for the Arizona CTE Program List is listed below:

- 2 x projected annual job openings for all occupations related to a CIP

- 1 x average wages for all occupations related to a CIP
- 1.5 O\*NET Descriptor knowledge, skills and abilities scores for occupations related to a CIP

The calculation method for the CTE Program List:

- Use current nationally validated crosswalk between all occupations (SOC codes) and CIP
- The field of occupations was restricted to those occupations with an education training level 11-6 that goes up through Associate Degree Level. Each occupation has a training level assigned to it by the Bureau of Labor Statistics.
- Use O\*NET Descriptor knowledge, skills and abilities scores when calculating the O\*NET scores for each occupation.

A JTED may request to have consideration given to specific local needs that are not reflected on the overall state list. These may be highly specialized local employment opportunities i.e., Mining Occupations, Power Plant Maintenance, and others.

### **Implementation of Career Information/Opportunities**

Career opportunities are emphasized through various classroom experiences within the CTE program. JTED students have a variety of resources available in order for them to increase awareness of career opportunities within the state and in their own communities. JTED students have access to an online career and educational planning tool called AzCIS (Arizona Career Information System), which provides current career and educational information for appropriate decision making. The data within the Arizona Career Information System are updated annually to reflect current market information, programs of study, Arizona postsecondary schools information, scholarships, and other related information.

**QUESTION 7: Career Placement of Students who have Completed the Program offered by the Joint District**

ARS § 15-393.M.4 “A detailed description of the career placement of students who have completed the program offered by the joint district.”

**Methodology**

The definition of placement for state CTE funding is as follows:

**Numerator:** Number of CTE concentrators who graduated and were placed in a related placement in postsecondary education or advanced training, in military service, or employment in the second quarter following the program year in which they left secondary education (i.e., placement status for CTE concentrators who graduated in the prior year will be surveyed and reported as placed if they were employed, in postsecondary education or advanced training, or in the military between October 1, 2010 and December 31, 2010)

**Denominator:** Number of CTE concentrators who graduated in the reporting year.

The **placement survey** is reported for graduates from the prior year and is reported by April 15 of the year following graduation. This report includes names, placement information and other relevant information for CTE concentrators reported as high school graduates the previous year. The placement information is the data used to calculate local and state performance on Arizona’s Performance Measure for Secondary Placement. The placement survey reports three types of placement:

- Postsecondary Education or Advanced Training
- Military
- Employment

A student may be a concentrator in one or more programs, and may have placement information in one or more of the above categories. A student may be reported in as many placements as are applicable to the student’s circumstances at the time the student completes the survey. Only one of these placements can be “related” to the student’s high school CTE occupational standards.

An example of related placement would be: A student completed a business program in high school then elected to pursue a college business degree or was employed in a business occupation such as an office assistant. State funding is awarded only if the student’s data/records reflect that the student participated in a CTE program, was reported as a concentrator in the same CTE program, graduated and was placed in a related placement in school (continuing education), military field, or work/job.

**JTED Placements**

The Numerator in the attached tables contains the total number of CTE placements per program where a JTED member school has actual placements in that program. These are students of a JTED member school where the student has matching JTED ADM on SAIS.

The Denominator in the attached table contains the total number of graduated concentrators in an approved JTED program. These are students of a JTED member school where the student has matching JTED ADM on SAIS.

The student data are reported by program per JTED. All of the JTED approved programs that a JTED is offering are listed in each Program Profile Table at the school of residence. Not all CTE programs are offered at every JTED.

**All JTED 2010-2011 Related Placement-Graduate Totals**

<b>All JTED 2010-2011 Placement-Graduate Totals</b>			
<b>JTED Name</b>	<b>Number of related placements</b>	<b>Number of graduated concentrators</b>	<b>Percent of related placements</b>
CAVIAT	218	365	59.73%
CAVIT	179	321	55.76%
CTD	204	387	52.71%
CVIT	39	101	38.61%
EVIT	2064	2616	78.90%
GIFT	130	171	76.02%
MIJTED	38	66	57.58%
NATIVE	216	449	48.11%
NAVIT	390	709	55.01%
PCJTED	1135	1781	63.73%
VACTE	146	257	56.81%
WAVE	59	129	45.74%
WESTMEC	2299	3606	63.75%
<b>Total</b>	<b>7117</b>	<b>10958</b>	<b>64.95%</b>

**FY 2011 JTED Placement Data Issues**

FY 2011 is the first year that the MIJTED and WAVE JTEDs reported placement data, given that FY 2010 was their first year of operation.

A placement survey is completed on all students who were reported as concentrators who graduated in the prior year. The survey is done by the home school and because the program is identified as a JTED program, the placement data could be identified as a JTED record. There are districts that are members of a JTED and offer some programs that are JTED approved, and some that are not JTED approved programs. Concentrators reported are only counted in the placement calculation if they were actually enrolled in a JTED approved program at the member school or in an offsite facility that is managed by the JTED.

## **Analysis**

The placement analysis includes only prior-year graduates who were placed in a postsecondary or advanced training facility, in the military or work, using the skills they were taught in their JTED approved program. The analysis that is done is on a per-student (unduplicated) related placement basis. *The average related placement rate for all JTED students was 64.95 percent, down from 66.44 percent the previous year.* Concentrators used in this calculation are students who have completed at least two Carnegie Units in a program.

Because JTEDs are regional, the economy and more specifically the unemployment rate, can affect placement in some regions. Higher unemployment rates and socioeconomic levels can have an effect on the ability for students to remain in school or find jobs.

Placement can be dependent on the age of a program. A new program may not have placements for at least two or three years, depending on the coherent sequence of courses required to teach all standards.

Not unique to the Mountain Institute and WAVE JTEDs that are reporting placements for the first time, we would expect their placement numbers to increase as programs are added then level off, depending on the annual enrollments of their member districts.

Several factors appear to contribute to annual changes in a JTED's placement percents -

- One factor that caused initial changes was related to the quality of concentrator data being received.

Historically, many schools incorrectly reported one semester as 0.5 of a Carnegie Unit and two semesters as one Carnegie Units, when in fact in other than a "block" delivery mode, three semesters utilizing a traditional instruction period is required to equal one Carnegie Unit. As a result, we are seeing fewer concentrators reported in some districts. As everyone "comes on board" relative to a Carnegie Unit being 120 hours, fluctuations due to improvements in data quality should level off.

- A second factor is the size of the JTED member districts. In a small district a small increase or decrease in graduation numbers, due to population changes, can cause percentage outcomes to appear to be significant when in fact the driving reason for change is district size.

In a district with 60 concentrators, a change of 6 students can result in a 10% change, relative to the change being only half this amount for a district with 120 concentrators.

- In addition, adding new programs can result in students migrating from existing program offerings to new program; and lower concentrator numbers for at least the new programs and a member district's overall rates. New programs take several years to produce concentrators and in turn, placements.

## **Recommendations**

None at this time.

## **APPENDIX**

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## **2011-2012 Course Approval Application Process Instruction Page Joint Technological Education Districts**

**Each Joint Technological Education District (JTED) must submit a “*Course Approval Application*” for all new courses to be offered school year 2011-2012 by February 25, 2011.**

### **1. Complete “Signature Page.” The Signature Page:**

- Identifies the JTED, provides address and contact information
- Assures the Arizona Department of Education that the JTED has completed the required Intergovernmental Agreement (IGA) or other written contract with member districts in compliance with A.R.S. 15-393 (L)(1-10). The IGA or other written contract must completely and accurately specify the following:
  - *Financial provisions and the format for the billing of all services*
  - *Accountability provisions.*
  - *Responsibilities of each JTED, each school district, each charter school and each community college that is a party to the IGA or other written contract.*
  - *Type of instruction that will be provided.*
  - *Quality of instruction that will be provided*
  - *Transportation services that will be provided and the manner in which transportation costs will be paid.*
  - *Amount the JTED will contribute to a course, and the amount of support required by the school district or community college.*
  - *Services provided by the JTED, the school district, the charter school or the community college district be proportionally calculated in the cost of delivering the service.*
  - *Payment for services shall not exceed the cost of the services provided.*
  - *Initial IGA or written contract and any addendums between the governing board of a JTED and another JTED, a school district, a charter school, or a community college district be submitted by the JTED to the Joint Legislative Budget Committee (JLBC) for review.*
- Requires a list of all member districts for which an IGA or other written contract has been completed, approved by the governing board and submitted to the JLBC for review.
- Requires the signature of the JTED Superintendent assuring that all information contained in the Application for Course Approval is accurate.
- The “signature page” must be printed out, signed by the JTED Superintendent and a hard copy mailed to:

Career Pathways

Career and Technical Education

**Arizona Department of Education  
1535 W. Jefferson,  
Phoenix, AZ 85007  
Attention: Jan Brite**

- This page is the only portion of the Application for Course Approval that has to be mailed hardcopy. The Program and Course Information portion can be emailed. See “Submit by email” icon on the document.

**2. Complete a “Program and Course Information” page for each new program that will be offered 2011-2012 through the JTED:**

- Only one Program and Course Information page needs to be completed for each new program, even if the program or courses are offered at multiple sites.
- Select the new program name and CIP code from the drop down table.
- Make appropriate selections for the proceeding information.
  - If program is using either postsecondary standards or standards other than ADE Career and Technical Education state-designated standards, a copy of the standards must be submitted via email or regular mail.
- In the bottom table of this page please enter the sequence of courses taught in this program by selecting the course and CIP Code from the drop down table.
- Each course must be entered for approval.
- If the local course title is different from the state title, enter the local course title in the designated cell.
- Enter location where course is taught (i.e. name of high school, name of community college or central site).
- If course is taught at multiple locations, please enter course information for each site. Table will expand to accommodate multiple entries.
- Check appropriate box for the remaining information for each site listed.
- Print copy for local record. This form will save as a data file only. The form format will not save.

**3. Confirm Specialized Equipment and Instructional Materials List Statement:**

- ARS 15-391(3)(c) requires that all courses approved for JTED funding must require “Specialized equipment or instructional materials above and beyond the scope and cost of a standard educational course.”
- Indicate in the last cell of the course table if each course meets this requirement.
- Specialized Equipment and Instructional Materials lists must be on file at the local site and available for review as part of the course approval process.

**4. Submit completed Course Approval Application by clicking the “Submit by Email” icon:**

- Submissions are due **February 25, 2011**

**5. Upon receipt of the Course Approval Application, the assigned area State Supervisor will review within 90-days.**

<b>2011-2012 Course Approval Application</b> <b>Joint Technical Education Districts</b>																															
<p><b>Course Approval Application is due February 25, 2011</b></p> <p>Name of JTED / CTDS: _____</p> <p>JTED Mailing Address / City / ZIP: _____</p> <p>JTED Physical Address (if different): _____</p> <p>JTED Superintendent / Phone / Email: _____</p> <p>Contact: _____ Phone: _____ Email: _____</p>																															
<p><b>The Joint Technical Education District identified above assures the Arizona Department of Education Career and Technical Education Division that they comply with the following:</b></p> <p><input type="checkbox"/> All reporting requirements as identified by the Arizona Department of Education and cited in HB2700 and related statutes.</p> <p><input type="checkbox"/> Intergovernmental Agreement (IGA) with participating educational institutions will be written, approved and signed by the local governing board and the JTED governing board.</p> <p><input type="checkbox"/> IGA will be submitted to the Joint Legislative Budget Committee (JLBC) for review.</p> <p><input type="checkbox"/> All information contained in this Application for Course Approval is complete and accurate.</p> <p style="text-align: center;">_____</p> <p style="text-align: center;"><b>Signature of Joint Technical District Superintendent</b> <span style="float: right;"><b>Date of Signature</b></span></p>																															
<p><b>List below all participating education institutions for which an IGA will be completed:</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%; text-align: left;">Education Institution Name</th> <th style="width: 15%; text-align: left;">CTDS Number</th> <th style="width: 25%; text-align: left;">Education Institution Name</th> <th style="width: 15%; text-align: left;">CTDS Number</th> </tr> </thead> <tbody> <tr><td>_____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>_____</td><td>_____</td><td>_____</td><td>_____</td></tr> </tbody> </table>				Education Institution Name	CTDS Number	Education Institution Name	CTDS Number	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
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<p><b>Important Notes:</b></p> <ul style="list-style-type: none"> <li>* This signature page <b>must be signed and mailed to:</b>                      Career and Technical Education - Arizona Department of Education,                      Attn: Jan Brite                      1535 W Jefferson Avenue, Bin #42,                      Phoenix, AZ 85007</li> <li>* This application is for JTED ADM funding purposes only.</li> <li>* For programs to be eligible to use Carl Perkins Basic Grant funds and generate State Block (Priority) funds, a "Notification of Intent" or "Notification of Participation" form must be submitted by each participating high school district.</li> </ul>																															

**ARIZONA CAREER AND TECHNICAL EDUCATION  
FY 2011 PROGRAM LIST**

<b>Rank</b>	<b>CIP</b>	<b>2011 CTE Program List</b>	<b>Funding Weight</b>
<b>E</b>	15.0000	Engineering Sciences	1.25
<b>E</b>	41.0100	Bioscience	1.25
<b>1</b>	51.1600	Nursing Services	<b>1.0</b>
<b>2</b>	52.0200	Business Management and Administration Services	
<b>3</b>	51.0900	Diagnostic and Intervention Technologies	
<b>4</b>	43.0100	Law, Public Safety and Security	
<b>5</b>	46.0300	Electrical and Power Transmission Technologies	
<b>6</b>	43.0200	Fire Science	
<b>7</b>	51.0600	Dental Assisting	
<b>8</b>	47.0600	Transportation Technologies	
<b>9</b>	49.0100	Air Transportation	
<b>10</b>	52.1900	Design and Merchandising	
<b>11</b>	47.0300	Heavy/Industrial Equipment Maintenance Technologies	
<b>12</b>	01.0100	Agricultural Business Management - Agriscience	<b>0.90</b>
<b>13</b>	15.1300	Drafting and Design Technologies	
<b>14</b>	15.1200	Information Technologies	
<b>15</b>	47.0200	Heating, Ventilation and Air Conditioning	
<b>16</b>	52.0900	Hospitality Management	
<b>17</b>	49.0200	Heavy Equipment Operations	
<b>18</b>	15.0300	Electronic Technologies	
<b>19</b>	46.0400	Construction Technologies	
<b>20</b>	51.0800	Allied Health Services	
<b>21</b>	51.1500	Mental and Social Health Services	
<b>22</b>	47.0100	Electrical Systems Installation and Maintenance Technologies	
<b>23</b>	52.0300	Accounting and Related Services	<b>0.80</b>
<b>24</b>	52.1800	Marketing, Management and Entrepreneurship	
<b>25</b>	52.0400	Business Operations Support and Assistant Services	
<b>26</b>	52.0800	Financial Services	
<b>27</b>	12.0500	Culinary Arts	
<b>28</b>	13.1200	Education and Training: Education Professions	
<b>29</b>	13.1210	Education and Training: Early Childhood Education	
<b>30</b>	48.0508	Welding Technologies	
<b>31</b>	48.0500	Precision Manufacturing	
<b>32</b>	12.0400	Cosmetology	
<b>33</b>	10.0200	Audio/Visual Technologies	
<b>34</b>	50.0100	Performing Arts and Entertainment Industry	
<b>35</b>	51.3500	Therapeutic Massage	
<b>36</b>	10.0300	Graphic Communications	

Purple= Emerging Program

Blue= Existing Program with Option Change

Green= Existing Program with Name change

Orange= Existing Program Name and Option change

Yellow= Existing Program with CIP Change

Gray= Existing Program CIP, Name and Option Change

Gold= New Programs Under Development

**Accounting and Related Services****52.0300**

The **Accounting and Related Services** instructional program prepares students to provide technical support to professional accountants and other financial management personnel. In addition, students will possess the foundation skills needed for postsecondary studies in any area of business. Instruction includes general accounting principles and practices, posting transactions to accounts, record keeping systems and accounting software operation. An integrated approach to teaching and learning is recommended as students develop interpersonal relations, career development skills and technical knowledge and skills associated with functions essential for a business operation. Students completing this program will be prepared to participate in teams and implement effective solutions to problems and business-related issues. The program is designed and delivered as a coherent sequence of school-based and work-based supervised learning. Students learn leadership skills and develop their leadership abilities through participation in the state-recognized Career and Technical Student Organization, FBLA.

The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All Career Preparation state-designated Accounting and Related Services standards are addressed in this instructional sequence. Schools with ADE approved Accounting and Related Services programs will utilize all of the industry-validated state standards for Accounting and Related Services in the design and delivery of the following recommended sequence of courses.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**52.0300.10 Introduction to Business & Accounting:** This course is recommended for students who have an interest in business and a desire to understand the financial aspects of business organizations. Students will be introduced to general accounting principles and practices. A computer with business applications software is used by students to perform business tasks.

**-and-**

**52.0300.20 Basic Accounting:** Students enrolled in this course will develop skills and knowledge required to compute, classify and record numerical data, to keep accurate financial records for corporations and other forms of business. A computer with business applications and accounting software is used by students to perform accounting and related business tasks.

**-and-**

**One or more of the following courses will be included in the coherent sequence of courses for this instructional program:**

**52.0300.30 Advanced Accounting:** Students will apply their knowledge of accounting to integrated learning experiences allowing students to demonstrate the full range of Accounting and Related Services State standards through projects/simulations/school-based enterprise experiences. A computer is an essential tool for students in this class to effectively complete accounting tasks and financial analysis activities.

**And program may elect to add:**

**52.0300.80 Accounting and Related Services - Cooperative Education:** This experience is designed to provide students with both school-based and work-based learning. Training plans and training agreements are based on previously developed accounting knowledge and skills. Students generally work a minimum of 15 hours a week.

**Agricultural Business Management – Agriscience**  
**01.0100**

The **Agricultural Business Management - Agriscience** program is designed to prepare students for employment in the Agriculture, Food and Natural Resources career cluster as defined by the USDE Office of Vocational and Adult Education. Students completing this program will possess the appropriate cluster technical knowledge and skills associated with the production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources. In addition to the required technical skills, students will also develop leadership, advanced employability, critical thinking, applied academic, and life management skills. The program utilizes a delivery system made up of three essential and required components: formal instruction, experiential education through Supervised Agricultural Experiences (SAE), leadership and personal development through the Career and Technical Student Organization, FFA. A model for this delivery system appears in the approved Curriculum Framework booklet. The Agricultural Business Management-Agriscience program is a three Carnegie Unit program. Three courses must be shown in the program sequence of instruction for program approval.

The following describes the recommended Career Preparation courses developed from industry-validated skills for initial employment or continued related education. All the state-designated Agricultural Business Management - Agriscience standards are addressed in this instructional sequence.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**01.0100.10 Agricultural Business Management - Introduction to Applied Biological Systems:** Students must attain these standards in a coherent sequence of courses 01.0100.10 and 01.0100.12. Biology credit for college entrance and secondary graduation is available if these standards are met and a Program Review has been completed. It is required that these standards are covered in a two-course sequence during the 9th and 10th grades.

**-and-**

**01.0100.12 Agricultural Business Management - Applied Biological Systems:** Students must attain these standards in a coherent sequence of courses 01.0100.10 and 01.0100.12. Biology credit for college entrance and secondary graduation is available if these standards are met and a Program Review has been completed. It is required that these standards are covered in a two-course sequence during the 9th and 10th grades.

**-and-**

**01.0100.14 Agricultural Business Management - Agriscience:** These standards are designed to deliver the lab science standards associated with the Agriculture, Food and Natural Resources career cluster. Lab science credit for college entrance and secondary graduation is available if these standards are met and a Program Review has been completed. It is recommended that these standards be covered in course sequences during the 10th through 12th grades. This specific course is the 11th grade course.

**-and-**

**Option A**

**01.0100.20 Food Products and Processing Systems:** Prepares students for careers in food processing and preserving, packaging, distribution, government monitoring & regulation.

**-or-**

**Option B**

**01.0100.30 Plant Systems:** Prepares students for careers in Agronomic, Horticulture, Forestry, Turf, Viticulture, Soils, etc.

**-or-**

**Option C**

**01.0100.40 Animal Systems:** Prepares students for careers in large animals, small animals, wildlife animals, and research animals.

**-or-**

**Option D**

**01.0100.50** **Natural Resources Systems:** Prepares students for careers in Habitat Conservation, Forest Products, Parks and Recreation, Mining, Environmental Services, Fisheries, Soil Conservation, etc.  
**-or-**

**Option E**

**01.0100.60** **Power, Structural and Technical Systems:** Prepares students for careers in Power, Structures, Controls, Geospatial Technology, Computer Systems, Electronics, Hydraulics, Pneumatics, etc.  
**-or-**

**Option F**

**01.0100.90** **Agribusiness Systems:** Prepares students for careers in Sales, Service, Farm and Ranch Management, Entrepreneurship, Economics, etc.  
**-or-**

**Option G**

**01.0100.00** **Environmental Service Systems:** Prepares students for careers in Pollution Prevention, Water & Air Quality, Hazardous Materials, Solid Waste Management, Health & Safety Sanitation, etc.

**And program may elect to add:**

**01.0100.80** **Agricultural Business Management - Agriscience - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards identified for the Agricultural Business Management - Agriscience program.

**Air Transportation**

**49.0100**

The **Air Transportation** program description and certification requirements are under development.

**Allied Health Services**

**51.0800**

The **Allied Health Services** program prepares students to perform technical services involved with planning, organizing, researching, directing and controlling functions and processes related to the provision of select healthcare services. An integrated approach to teaching and learning is provided as students develop interpersonal relations, career development skills and technical knowledge and skills associated with a core curriculum and pathway options of Option A) Pharmacy Support Services, Option B) Laboratory Assisting, Option C) Medical Imaging Support Services, Option D) Sports Medicine and Rehabilitation Therapies, or a new Option E) Medical Assisting (to be developed). Students completing one of these options will be prepared to participate in teams, solve problems, think critically and implement effective solutions. The program is designed and delivered as a coherent sequence of experiences using technical instruction, academic foundations, experiential learning, supervised occupational experience, leadership and personal development through the Career and Technical Student Organization, HOSA.

The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All of the state-mandated Career Preparation standards are addressed in this instructional sequence. Allied Health Services consists of five program options, each with its own set of Career Preparation standards. In the new delivery system, at least two Carnegie Units will be earned in the Career Preparation sequence of courses.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Option A**

**51.0800.20** **Fundamentals of Pharmacy Support Services:** This course prepares students to apply academic and technical knowledge and skills of the Pharmacy Technician in a clinical, medical or retail setting or to continue into postsecondary education.

Appendix C

**-and-**

**51.0800.25 Pharmacy Support Services - Advanced Applications:** This course prepares students to apply academic and technical knowledge and skills of the Pharmacy Technician in a clinical, medical or retail setting or to continue into postsecondary education.

**-or-**

**Option B**

**51.0800.30 Fundamentals of Laboratory Assisting:** This course prepares students to apply academic and technical knowledge and skills of Laboratory Assisting in a clinical, medical or retail setting or to continue into postsecondary education.

**-and-**

**51.0800.35 Laboratory Assisting - Advanced Applications:** This course prepares students to apply academic and technical knowledge and skills of the Laboratory Assisting in a clinical, medical or retail setting or to continue into postsecondary education.

**-or-**

**Option C**

**51.0800.40 Fundamentals of Medical Imaging Support Services:** This course prepares students to apply academic and technical knowledge and skills of the Medical Imaging Technical Assistant in a clinical or medical setting or to continue into postsecondary education.

**-and-**

**51.0800.45 Medical Imaging Support Services - Advanced Applications:** This course prepares students to apply academic and technical knowledge and skills of the Medical Imaging Technical Assistant in a clinical or medical setting or to continue into postsecondary education.

**-or-**

**Option D**

**51.0800.50 Fundamentals of Sports Medicine & Rehabilitation Therapies:** This course prepares students to apply academic and technical knowledge and skills of Fitness Trainer or Physical Therapy Aide in a clinical, medical or retail setting or to continue into postsecondary education.

**-and-**

**51.0800.55 Sports Medicine & Rehabilitation Therapies - Advanced Applications:** This course prepares students to apply academic and technical knowledge and skills of Fitness Trainer or Physical Therapy Aide in a clinical, medical or retail setting or to continue into postsecondary education.

**-or-**

**Option E**

**(Standards to be developed)**

**51.0800.60 Fundamentals of Medical Assisting Services:** This course, when developed, will prepare students to apply academic and technical knowledge and skills of Medical Assistant in a clinical or medical setting or to continue into postsecondary education.

**-and-**

**51.0800.65 Medical Assisting Services - Advanced Applications:** This course, when developed, will prepare students to apply academic and technical knowledge and skills of Medical Assistant in a clinical or medical setting or to continue into postsecondary education.

**And program may elect to add:**

**51.0800.80 Allied Health Services - Cooperative Education:** This course utilizes cooperative education methodology to combine school-based and supervised work-based learning identified for students within the specific option they have studied.

**Audio/Visual Technology****10.0200**

The **Audio/Visual Technology** program is designed to prepare students to apply technical knowledge and skill in the:

- Writing, directing, production and performance of broadcast journalism for television and radio.
- Communication of dramatic information, ideas, moods and feelings through the making, producing and editing of films and video.
- Production of sound recording as finished products or as components of film/video, broadcast, live or mixed media productions.

An integrated approach of teaching and learning is provided as students enhance their technical knowledge and skills that are associated with functions within Audio/Visual Technology occupations. In addition to the occupation related skills, students completing this program will develop advanced critical thinking, applied academics, interpersonal relations, life management, business, economic and leadership skills required for the 21st century workplace. The Audio/Visual Technology program consists of a core curriculum and three areas of specialization for a student to choose from: Option A) Electronic Journalism, Option B) Interactive Digital Media, or Option C) Radio/Audio Technologies. The program uses a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience and the Career and Technical Student Organization, SkillsUSA.

The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Career Preparation state-designated Audio/Visual Technology standards are addressed in this instructional sequence.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**10.0200.10 Audio/Visual Technology Fundamentals:** This course prepares the students to apply technical knowledge and skills in the production of Audio/Visual Technology programs and related operations. Included in the core curriculum is basic instruction in sound, lighting and camera operation/maintenance, power feed control, studio operations, production preparation, sound/video editing, broadcast engineering, related computer applications, and specialized applications such as news, entertainment, live talk, sports, commercials, PSA's, documentaries and short films/animations.

**One of the following Career Preparation courses (.20, .30 or .40) will be included as part of the instructional sequence for this program:**

**Option A**

**10.0200.20 Electronic Journalism:** This course offers the students advanced skills and knowledge to write broadcast media, produce, direct and perform a television broadcast. (This code is appropriate for courses that are producing school announcements and/or weekly news/magazine shows.)

**-or-**

**Option B**

**10.0200.30 Interactive Digital Media:** This course offers the students advanced skills and knowledge to produce and edit digital images and video/animation, develop interactive media and manage digital media. (This code is appropriate for courses that are producing music videos, short films/animation and documentary pieces.)

**-or-**

**Option C**

**10.0200.40 Radio/Audio Technologies:** This course offers the students advanced skills and knowledge to write, produce, direct and perform a radio broadcast as well as to produce sound recordings, digitize/mix/edit audio and the development of sound effects. (This code is appropriate for courses that are producing daily radio broadcasts and/or providing audio services to the community and/or school EJ or IDM courses.)

**And program may elect to add:**

**10.0200.80 Audio/Visual Technology - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards identified for the Audio/Visual Technology program.

**Bioscience****41.0100**

The **Bioscience** program prepares individuals to apply scientific principals and technical skills in support of biologists and biotechnologists in research, industrial, and government settings. Program includes instruction in: fermentation technology, cell culturing, protein purification, biologic synthesis, assaying and testing, quality control, industrial microbiology, bio-processing, chromatography and bio-separation, genetic technology, laboratory and hazardous materials safety, and computer applications and test equipment operation and maintenance. The program is designed and delivered as a coherent sequence of experiences using technical instruction, academic foundations, experiential learning, supervised occupational experience and leadership and personal development through the Career and Technical Student Organization, Health Occupations Students of America (HOSA).. The following describes the recommended Career Preparation courses developed from industry-validated skills for initial employment or continued related education. All the state-designated Bioscience standards are addressed in this instructional sequence.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**41.0100.10 Introduction to Bioscience:** Students must attain these standards in a coherent sequence.

**-and-**

**Option A**

**41.0100.20 Bio-medical:** Prepares students for careers in hospital, clinical, and private laboratories dealing with the medical field.

**-or-**

**Option B**

**41.0100.30 Bio-environmental:** Prepares students for careers in biochemistry, biophysics and molecular biology.

**-or-**

**Option C**

**41.0100.40 Bio-innovations:** Prepares students for careers in anything not covered in the previous two options.

**And program may elect to add:**

**41.0100.80 Bioscience - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards identified for the Bioscience program.

**Business Management and Administrative Services****52.0200**

The **Business Management and Administrative Services** instructional program prepares students to perform technical support services involved with planning, organizing, researching, directing and controlling functions related to the production, buying and selling of goods and services in domestic and international markets. In addition students will possess the foundation skills needed for postsecondary studies in any area of business. An integrated approach to teaching and learning is recommended as students develop interpersonal relations, career development skills and technical knowledge and skills associated with functions essential for a business operation. Students completing this program will be prepared to participate in teams to solve problems and make decisions about business related issues. The program is designed and delivered as a coherent sequence of school-based and work-based experiences. Leadership skills are developed through the state recognized Career and Technical Student Organizations, FBLA or DECA.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**52.0200.10 Introduction to Business Management and Administrative Services:** This course is recommended for students who have an interest in business and a desire to understand how business works in today's global economy. This course prepares students with technical skills and knowledge related to the economics, management and administrative support functions of business, which cut across industries. A computer with business applications software is used by students as a tool to perform business tasks.

**-and-**

**52.0200.20 Basic Business Management and Administrative Services:** Students enrolled in this course will develop knowledge and skills in applied research, business communications, principles of business law, public relations, information management, meeting planning and office supervisory skills. A computer with business applications software is used by students to perform project management and other business tasks.

**-and-**

**One or more of the following courses will be included in the coherent sequence of courses for this instructional program:**

**52.0200.30 Advanced Business Management and Administrative Services:** This course includes instruction in business planning and operations. Computer software applications are applied to the technical support functions essential to the operation of an enterprise and buying and selling of goods and services.

**-or-**

**52.0200.80 Business Management and Administrative Services - Cooperative Education:** This experience is designed to provide students with both school-based and work-based learning. Training plans and training agreements are based on previously developed business management and administrative knowledge and skills. Students generally work a minimum of 15 hours a week.

**Business Operations Support and Assistant Services**

**52.0400**

The **Business Operations Support and Assistant Services** program is designed to prepare students for instruction in business communications, principles of business law, word processing, data entry, office machine operations, office procedures, public relations, filing, records management and report preparation.

An integrated approach of teaching and learning is provided as students enhance their technical knowledge and skills that are associated with functions within Business Operations Support and Assistant Service occupations including Administrative Assistant, Executive Assistant, Office Manager, Information Assistant, Desktop Publisher, Customer Service Assistant, Data Entry Specialist, Receptionist, Computer Operator or Word Processor. In addition to the occupation related skills, students completing this program will also develop advanced critical thinking, applied academic, interpersonal relations, life management, business, economic, and leadership skills required for the 21st century workplace.

The Business Operations Support and Assistant Services program consists of a core curriculum, with a two Carnegie Unit curriculum framework. The program uses a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experiences, and the Career and Technical Student Organization, FBLA.

The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment continued or continued related education. All Career Preparation state-designated Business Operations Support and Assistant Service standards are addressed in the instructional sequence. Schools with ADE approved Business Operations Support and Assistant Services programs will utilize all of the industry-validated state standards and measurement criteria for this program in the design and delivery of the following recommended sequence of courses.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 52.0400.10 Introduction to Business Operations Support and Assistant Services:** This course is recommended for students who have an interest in Administration and Information Support to learn how to utilize technology to perform and coordinate the administrative activities of an office and to ensure that information is collected and disseminated to staff and clients effectively and efficiently.
- and-**
- 52.0400.20 Advanced Business Operations Support and Assistant Services:** Students enrolled in this course will develop advanced knowledge and skills in desktop publishing, office procedures, transcription, public relations, records management and customer service while integrating the skills attained in the Introduction to Business Operations Support and Assistant Services course.
- And program may elect to add:**
- 52.0400.80 Business Operations Support and Assistant Services - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards identified for the Marketing, Management, and Entrepreneurship program. Students generally work a minimum of 15 hours a week.

**Construction Technologies**

**46.0400**

The **Construction Technologies** program is designed to prepare individuals to apply technical knowledge and skills in the building industry which include units of instruction in carpentry, electrical, masonry/brick laying, concrete finishing, HVAC and plumbing, floor systems, wall and ceiling framing, roof framing, site layout, exterior finish, cabinetry and roofing applications. The program is designed and delivered as a coherent sequence of experiences using technical instruction, academic foundations, experiential learning, supervised occupational experience and leadership and personal development through the Career and Technical Student Organization, SkillsUSA. The following describes the recommended courses developed from industry-validated skills necessary for initial employment or continued related education.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 46.0400.10 Construction Technologies Core Curriculum:** This foundation course will prepare students to use a wide variety of construction tools and equipment and maintain a safe work environment. The student will develop an understanding of construction math, financial operations, reading blueprints, basic rigging and basic construction techniques. The student will develop skills in oral and written communication as they relate to the construction industry. This course is designed to help students develop an enhanced understanding of teamwork, employability skills and career opportunities in the construction field.
- and-**

**Option A**

- 46.0400.20 Advanced Construction Technologies:** This course prepares the individual to apply and demonstrate advanced technical knowledge and skills in various types of construction. This lab-based course will provide the students an opportunity to participate in the planning, design and completion of project-based activities, i.e., electrical, masonry/brick laying, concrete finishing, HVAC, plumbing, floor systems, wall and ceiling framing, site layout, interior and exterior finish and roof applications.

**-or-**

**Option B**

- 46.0400.30 Carpentry I:** This course prepares the individual to apply and demonstrate advanced technical knowledge and skills to lay out, cut, fabricate, erect, install and repair wooden structures and fixtures, using hand and power tools. Includes instruction in technical mathematics, framing, construction materials and selection, job estimating, blueprint reading, foundations and roughing-in, finish carpentry techniques and applicable codes and standards.

-or-

**Option C**

- 46.0400.40 Cabinetmaking I:** This course prepares the individual to apply and demonstrate advanced technical knowledge and skills. This lab-based course will provide the students an opportunity to participate in the planning, design and completion of project-based activities. This course prepares students for advanced technical knowledge and skills using a variety of cabinetmaking techniques and equipment.  
**And program may elect to add:**
- 46.0400.80 Construction Technologies - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences, directly related to the standards identified for the Construction Technologies program.

**Cosmetology**  
**12.0400**

The **Cosmetology** instructional program prepares students to perform technical services involved with planning, organizing, researching, directing and controlling functions and processes related to the provision of cosmetology services. An integrated approach to teaching and learning is provided as students develop interpersonal relations, career development skills and technical knowledge and skills associated with careers in this field. Students completing this program will be prepared to participate in teams, solve problems, think critically and implement effective solutions. The program is designed and delivered as a coherent sequence of experiences using technical instruction, academic foundations, experiential learning, supervised occupational experience and personal development through the Career and Technical Student Organization, SkillsUSA.

The following describes a recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All of the Career Preparation state-designated Cosmetology standards are addressed in this instructional sequence.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 12.0400.10 Fundamentals of Cosmetology:** This course introduces students to careers in Cosmetology by preparing them to apply academic, employability and technical knowledge and skills related to common industry standards and practices.
- and-**
- 12.0400.20 Cosmetology - Advanced Applications:** This course introduces students to careers in Cosmetology by preparing them to apply academic, employability and technical knowledge and skills related to common industry standards and practices.  
**And program may elect to add:**
- 12.0400.80 Cosmetology - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards for the Cosmetology program.

**Culinary Arts**  
**12.0500**

The **Culinary Arts** program is designed to prepare students to apply technical knowledge and skills required for food production and service occupations in institutional and commercial food establishments. Students completing this program will possess the technical knowledge and skills required for planning, selecting, storing, purchasing, preparing and serving quality food products. Nutritive values, safety and sanitation procedures, use of commercial equipment, serving techniques, special diets and management of food establishments will also be studied. In addition to technical skills, students completing this program will also develop advanced critical thinking, applied academic, career development, life and employability skills, business, economic, and leadership skills required for culinary arts occupations. The program utilizes a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the Career and Technical Student Organizations, FCCLA and SkillsUSA.

The following describes a recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the state-designated Culinary Arts standards are addressed in this instructional sequence.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 12.0500.10 Fundamentals of Culinary Arts:** This course prepares students to serve under the supervision of food service professionals as kitchen support staff and commercial food preparation workers. It includes instruction in kitchen equipment, organization and operations, sanitation, quality control, quantity food preparation and cooking skills.
- and-**
- 12.0500.20 Culinary Arts Applications:** This course prepares students with advanced applications in kitchen equipment, organization and operations, sanitation, quality control, quantity food preparation and cooking skills. Additionally, students have training in business operations of a food and beverage operation.
- And program may elect to add:**
- 12.0500.80 Culinary Arts - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards for the Culinary Arts program.

**Dental Assisting**  
**51.0600**

The **Dental Assisting** program prepares students to perform technical services involved with planning, organizing, researching, directing and controlling functions and processes related to the provision of medical assisting healthcare services - both front office and clinical responsibilities. An integrated approach to teaching and learning is provided as students develop interpersonal relations, career development skills and technical knowledge and skills associated with a dental assistant. Students completing this program will be prepared to participate in teams, solve problems, think critically, and implement effective solutions. The program will be designed and delivered as a coherent sequence of experiences using technical instruction, experiential learning, supervised clinical experience, and leadership and personal development through the career and technical student organization, HOSA.

The following describes the recommended sequence of courses yet to be developed that will be necessary for initial employment or continued related education.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 51.0600.10 Fundamentals of Dental Assisting:** This course prepares students to apply academic, technical knowledge and skills of the Dental Assistant in a clinical or dental office setting or to continue into postsecondary education.
- and-**
- 51.0600.20 Dental Assisting - Advanced Applications:** This course prepares students to apply academic, technical knowledge and skills of the Dental Assistant in a clinical or dental office setting or to continue into postsecondary education.
- And program may elect to add:**
- 51.0600.80 Dental Assisting - Cooperative Education:** This course utilizes cooperative education methodology to combine school-based and supervised work-based learning identified for students within the specific program they have studied.

## Design and Merchandising

### 52.1900

The **Design and Merchandising** program is designed to prepare students for employment or advanced postsecondary coursework in design production; apparel or home furnishings sales and manufacturing; custom fashion or interior design; supervisory positions in home furnishings and apparel manufacturing; and as buyers for retail establishments. A student completing this program will possess the technical knowledge and skills associated with fashion or interior design/production and selection, wholesale purchasing, sales and promotion. In addition to technical skills, students completing this program will also develop advanced critical thinking, career development, applied academic, life and employability skills, basic business practices and leadership skills required for entry into fashion or interior design and merchandising occupations. The program utilizes a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience and the Career and Technical Student Organization, FCCLA.

The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the state-designated Design and Merchandising standards are addressed in this instructional sequence.

#### **RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**52.1900.10 Fundamentals of Design and Merchandising:** This course introduces students to the technical knowledge and skills associated with design principles, production, selection, marketing principles, display, purchase, sales, promotion, construction, textile science and business practices.

-and-

#### **Option A**

**52.1900.20 Fashion Design and Merchandising Applications:** This course is designed for students to apply advanced occupational skills in fashion design, production, selection, marketing, display, purchase, sales, promotion and materials selection.

-or-

#### **Option B**

**52.1900.30 Interior Design and Merchandising Applications:** This course is designed for students to apply advanced occupational skills in interior design plans and drawings, furnishings and materials selection, marketing, display, purchasing, sales, promotion and business practices.

**And program may elect to add:**

**52.1900.80 Design and Merchandising - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards identified for the Design and Merchandising program option.

## Diagnostic and Intervention Technologies

### 51.0900

The **Diagnostic and Intervention Technologies** program is composed of three options: Respiratory Therapy Technician, Emergency Medical Paramedics and Surgical Technician. Students completing this program will be prepared to participate in teams, solve problems, think critically and implement effective solutions. The program will be designed and delivered as a coherent sequence of experiences using technical instruction, academic foundations, experiential learning, supervised occupational experience, leadership and personal development through the Career and Technical Student Organization, HOSA.

These options will be designed to prepare high school students with the foundations in knowledge and technical skills needed to help prepare them to continue their education toward their chosen option by successfully completing an appropriate postsecondary program. Affiliations with local community college programs can provide high school students with dual or concurrent credit that can be applied toward their postsecondary certificate or degree. The following describes a recommended sequence of courses. All the state-mandated Career Preparation standards are yet to be developed.

The Diagnostic and Intervention Technologies program consists of three options, each of which will have its own set of Career Preparation standards (standards to be developed). In the new delivery system, at least two

Carnegie Units will be earned in the Career Preparation sequence of courses.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**Option A**

**51.0900.20 Fundamentals of Respiratory Therapy:** This course, when developed, will help prepare students to continue their education toward becoming a Respiratory Therapy Technician by completing an appropriate postsecondary program.

**-and-**

**51.0900.25 Respiratory Therapy - Advanced Applications:** This course, when developed, will help prepare students to continue their education toward becoming a Respiratory Therapy Technician by completing an appropriate postsecondary program.

**-or-**

**Option B**

**51.0900.30 Fundamentals of Emergency Medical Paramedics:** This course, when developed, will help prepare students to continue their education toward becoming an Emergency Medical Paramedic by completing an appropriate postsecondary program.

**-and-**

**51.0900.35 Emergency Medical Paramedics - Advanced Applications:** This course, when developed, will help prepare students to continue their education toward becoming an Emergency Medical Paramedic by completing an appropriate postsecondary program.

**-or-**

**Option C**

**51.0900.40 Fundamentals of Surgical Technicians:** This course, when developed, will help prepare students to continue their education toward becoming a Surgical Technician by completing an appropriate postsecondary program.

**-and-**

**51.0900.45 Surgical Technicians - Advance Applications:** This course, when developed, will help prepare students to continue their education toward becoming a Surgical Technician by completing an appropriate postsecondary program.

**And program may elect to add:**

**51.0900.80 Diagnostic & Intervention Technologies - Cooperative Education:** This course utilizes cooperative education methodology to combine school-based and supervised work-based learning identified for students within the specific option they have studied.

**Drafting and Design Technology**

**15.1300**

The **Drafting and Design Technology** program is designed to prepare students to apply technical skills via computer assisted design and drafting to create two-dimensional and three-dimensional engineering designs. It includes instruction in specification interpretation, dimensioning techniques, drafting calculations, material estimation, technical communications, and computer applications. In addition to the occupation related skills, students completing this program will develop advanced critical thinking, applied academics, interpersonal relations, life management, and business, economic, and leadership skills required for the 21st century workplace. The Drafting and Design Technology program consists of a core curriculum and four areas of specialization for a student to choose from: Option A) Architectural Drafting, Option B) Civil Drafting, Option C) Electronics Drafting, and Option D) Mechanical Drafting. The program uses a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the Career and Technical Student Organization, SkillsUSA.

The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Career Preparation state-designated Drafting and Design Technology standards are addressed in this instructional sequence.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**15.1300.10 Drafting and Design Technology Fundamentals:** This course prepares students to apply technical knowledge and skills to plan and prepare scale interpretations of engineering, design and architectural projects. It includes instruction in creating layouts and designs, blueprints and renderings and in the use of computer-assisted design programs. In addition to knowledge of drafting technologies, students will have the opportunity to place special emphasis on more specific services and/or industries in which they have an interest.  
**-and-**

**One of the following Career Preparation courses (.20, .30, .40 or .50) will be included as part of the instructional sequence for this program:**

**Option A**

**15.1300.20 Architectural Drafting:** This course prepares students to apply technical knowledge and skills to develop working drawings and electronic simulations for architectural and related construction projects. Includes instruction in basic construction and structural design, architectural rendering, layout and designs, blueprint interpretation, building materials and basic structural wiring diagramming.  
**-or-**

**Option B**

**15.1300.40 Electronics Drafting:** This course prepares students to apply technical knowledge and skills to develop working schematics and representations in support of electrical/electronic and computer engineers. Includes instruction in basic electronics, electrical systems and computer layouts, electronic circuitry and electrical systems specification interpretation.  
**-or-**

**Option D**

**15.1300.50 Mechanical Drafting:** This course prepares students to apply technical knowledge and skills to develop working drawings and electronic simulations in support of mechanical and industrial engineers. Includes instruction in manufacturing materials and processes, mechanical drafting, basic metallurgy, geometric dimensioning and tolerance, blueprint reading and technical communications.  
**And program may elect to add:**

**15.1300.80 Drafting and Design Technology - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards identified for the Drafting and Design Technology program.

**Early Childhood Education**

**13.1210**

The **Early Childhood Education** program is designed to prepare students for employment in early childhood settings. The program includes instruction in child growth and development, child health, nutrition, safety, planning and supervision of developmentally-appropriate play and learning activities. Child guidance, family relationships, parenting and applicable legal and administrative requirements are addressed as well. Preparation for the development and management of effective early childhood programs and facilities is included. In addition to technical skills, students completing this program will also develop advanced critical thinking, applied academic, career development, life and employability skills, business, economic and leadership skills required for entry into Early Childhood Education occupations. The program utilizes a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience and the Career and Technical Student Organization, FCCLA.

The following describes the recommended sequence of courses organized on the basis of industry-recognized skills necessary for initial employment or continued related education. All the state-designated Early Childhood Education standards are addressed in this instructional sequence.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 13.1210.10 Fundamentals of Early Childhood Education:** This course prepares occupational students to understand the physical, mental, emotional and social growth and development of children. It is recommended that a portion of class time be spent observing young children.
- 13.1210.20 Early Childhood Education Applications:** This course prepares students for occupations in Early Childhood Education in both the public and private sector. At least 50% of students time should be spent working with children below grade three. High school students may receive certifications such as the Child Development Association (CDA) upon completion of the program.
- And program may elect to add:**
- 13.1210.80 Early Childhood Education - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards for the Early Childhood Education program.

**Education Professions**  
**13.1200**

The **Education Professions** program is designed to prepare students for employment or postsecondary opportunities in the education field. The program provides instruction in education career choices, education structure and systems, theory, pedagogy, developmental stages, learning styles and methodology. The program also provides interactive experiences with students at different age levels, in a variety of content areas in educational environments. Education Professions is designed to articulate with the Introduction to Education courses at the community college and para-professional preparation programs. In addition to technical skills, students completing this program will develop advanced critical thinking skills, enhanced academic skills, develop civic responsibility, understand education as a consumer, and develop employability and leadership skills. The program utilizes a delivery system made up of four integral parts: formal/technical instruction, experiential/service learning, supervised work-based learning and the student organization, FEA.

The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Career Preparation state-designated Education Professions standards are addressed in this instructional program.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 13.1200.10 Education Professions Fundamentals:** This course provides students with instruction in education career choices, education structure and systems, legal and ethical responsibility of educators. It provides instruction in developmental stages of children, education theory, pedagogy and methodology. It is recommended that observation and interactive field experience be a significant part of this course.
- and-**
- 13.1200.20 Education Professions Applications:** This course prepares students to work in an educational environment. The course should expound on learning styles, interactions with students, use of equipment and resources, methodology in both preparation and presentation in the classroom as a workplace.
- And program may elect to add:**
- 13.1200.80 Education Professions - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based learning and supervised work-based learning experiences directly related to the standards for the Education Professions program.

**Electrical and Power Transmission Technology****46.0300**

The **Electrical and Power Transmission Technology** program generally prepares individuals to apply technical knowledge and skills to install indoor and outdoor residential, commercial, and industrial electrical systems and associated power transmission lines. Includes instruction in electricity, safety procedures, wiring, insulation and grounding, schematic blueprint interpretation, equipment operation and maintenance, and applicable codes and standards designed to prepare students for careers in the Construction Industries. The occupational standards for both options are aligned with the National Center for Construction Education and Research (NCCER) standards. Construction Technologies I includes units of instruction in electrical, masonry, concrete finishing and plumbing. Construction Technologies II includes units of instruction in floor systems, wall and ceiling framing, roof framing, site layout, exterior finish and roofing applications. The program is comprised of a core curriculum and two options: Option A (Residential Electrician) and Option B (Industrial Electrician). The following describes the recommended courses developed from industry-validated skills necessary for initial employment or continued related education.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**46.0300.10 Electrical Fundamentals:** This course includes units of instruction in career planning, oral and written communications, understanding financial operations, teamwork, human relations, basic safety, construction math, hand tools, power tools, reading blueprints, basic rigging and exploring careers in construction.  
-and-

**At least one option must be included as part of the instructional sequence for this program:**

**Option A**

**46.0300.20 Residential Electrician I:** Course description is under development.

-and-

**46.0300.25 Residential Electrician II:** Course description is under development.

-or-

**Option B**

**46.0300.30 Industrial Electrician I:** This course prepares the individual to apply basic knowledge and skills in electrical theory and applications in industrial settings by performing preventive maintenance tasks and making minor repairs.

-and-

**46.0300.35 Industrial Electrician II:** This course prepares the individual to apply advanced technical knowledge and skills to repair electrical machinery and equipment and delivery systems.

**And program may elect to add:**

**46.0300.80 Electrical and Power Transmission Technology - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences, directly related to the standards identified for the Electrical and Power Transmission Technology program.

**Electronic Technology****15.0300**

The **Electronic Technology** program is designed to prepare students to apply basic engineering principles and technical skills in support of electrical, electronics and communication engineers. Includes instruction in electrical circuitry, prototype development and testing, systems analysis and testing, systems maintenance, instrument calibration and report preparation. In addition to technical skills, students completing this program will also develop advanced critical thinking, applied academic, career development, life management, business, economic and leadership skills required for Electronic Technology occupations.

The following describes the recommended courses developed from industry-validated skills necessary for initial employment or continued related education.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 15.0300.10 Electronic Technology Core Curriculum:** Students will learn basic safety principles and practices used in electronic manufacturing industries and/or repairing electronic equipment. Students will learn how to use basic hand tools, test equipment and troubleshooting techniques. Other units of instruction include basic math through trigonometry, reading and interpreting schematic diagrams and technical drawings, soldering/desoldering techniques and other basic assembly skills.
- and-**
- 15.0300.20 Basic Electricity Principles and Applications:** This course includes units of instruction in basic concepts, electrical quantities and units, basic circuits, laws and measurements, circuit components, multiple-load circuits, complex-circuit analysis, magnetism, alternating current and voltage, power in AC circuits, capacitance, inductance, transformers, RCL circuits, electric motors, and test equipment.
- and-**
- 15.0300.25 Basic Electronic Principles and Applications:** This course includes units of instruction in semiconductors, diodes, power supplies, transistors, small-signal amplifiers, large-signal amplifiers, operational amplifiers, oscillators, communications theory, integrated circuits, silicon-controlled rectifiers, regulated power supplies and digital signal processing.
- And program may elect to add:**
- 15.0300.80 Electronic Technology - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards identified for the Electronic Technology program.

**Engineering Sciences**  
**15.0000**

The **Engineering Sciences** program is designed to prepare students to apply basic engineering principles and new product development applications for commercial and industrial products. Students will be prepared in the following instructional areas:

fundamental principles included in problem solving techniques, creativity with product design, principles of processing, energy sources, available materials, environmental issues, industrial demands, and costs.

The following describes the recommended courses developed from industry-validated skills necessary for continued related education.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 15.0000.10 Fundamentals of Engineering Sciences:** This course will take students with a background of algebra and teach the basic knowledge of engineering principles and systems of the engineering process, system analysis and control. Core concepts and understandings will be explored through the use of the tools used to create processes as they relate to the development of a system. Students will learn to research, experiment, plan, to organize, and manage such systems through problem-solving, creating efficient engineering processes used in science and industry. Additional units include career planning, communication skills, team work, work-based learning experiences, safety and business planning.
- and-**
- 15.0000.20 Applications of Problem Solving in Engineering Sciences:** This course provides an opportunity for students with a physics background to apply fundamentals in the world of new technologies emerging from engineering research such as nanotechnology, chemical, environmental or mechanical engineering. This includes the use of hand machine tools, computer aided tools and measurement systems from the oscilloscope to the nano-meter for nano-manufacturing. Students will learn how to link theory to hands-on real-world applications. This class is modeled to the University criterion covering engineering theory through a hands-on approach. Additional units are provided for further integration of general engineering principles in the manufacturing of a product.
- and-**

**15.0000.30** **Advanced Engineering Sciences** prepares students to use their critical thinking skills and to apply formulations from pre-calculus to basic innovative engineering job functions: research, design development, testing and analysis when preparing product processes to the manufacturing or aerospace engineering. Students will apply concepts of math and science, and problem solving skills to the different systems using input, process, output and feedback. Students will further demonstrate the fundamentals of engineering and mechanics using scientific principles from materials to to construct a project with consideration to environmental factors; economics and safety which impacts these processes on natural resources and society.

**And program may elect to add:**

**15.0000.75** **Engineering Sciences - Internship:** This course provides CTE students an opportunity to engage in learning through participation in a structured work experience that can either be paid or unpaid and does not necessarily require classroom instruction that involves the application of previously developed Engineering Sciences knowledge and skills.

**-or-**

**15.0000.80** **Engineering Sciences - Cooperative Education:** This course utilizes cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards identified for the Engineering Sciences program.

## **Financial Services** **52.0800**

The Financial Services instructional program prepares students to provide a wide variety of customer services and technical support in investments and securities, financial planning, credit management, insurance, real estate and banking and other financial related areas. Development of leadership skills is integral to the students' success in the program. The Career and Technical Student Organizations, FBLA or DECA students who complete this program will be prepared to participate in teams to solve problems and think critically about managing their personal finances and those of a business organization. In addition, students will possess the academic and foundation occupational skills and knowledge needed to pursue specialized postsecondary studies in finance. Instruction is designed and planned utilizing the state standards for the program. The program is designed and delivered as a coherent sequence of courses utilizing technical instruction, experiential learning, and supervised work-based experience.

The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All Career Preparation state-designated Financial Services standards are addressed in this instructional sequence.

### **RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**52.0800.10** **Introduction to Business and Financial Services:** Students enrolled in this course will receive instruction in a variety of customer services provided by banks, insurance agencies, investment brokers, credit unions and related enterprises. General knowledge of budgeting and credit management are outcomes of this course. A computer with business applications software is used by students to perform business and finance related tasks.

**-and-**

**52.0800.20** **Basic Financial Services:** Students enrolled in this course will receive instruction in principles of economics and accounting, financial instruments, economic and monetary systems. A computer with business applications software is used by students to perform basic financial management tasks.

**-and-**

**One or more of the following courses will be included as part of the instructional sequence for this program:**

**52.0800.30** **Advanced Financial Services:** The outcomes of this course are integrated into learning experiences allowing students to demonstrate their knowledge and skills in the full range of Financial Services state standards through projects and simulations.

**-or-**

**52.0800.80**

**Financial Services - Cooperative Education:** This course is designed to provide students with both school-based and work-based learning. Training plans and training agreements are based on previously developed financial services knowledge and skills. Students generally work a minimum of 15 hours a week.

## Fire Science

### 43.0200

The Fire Science program prepares students to perform technical services involved with planning, organizing, researching, directing and controlling functions and processes related to the provision of Fire Science services. An integrated approach to teaching and learning is provided as students develop interpersonal relations, career development skills and technical knowledge, and skills associated with careers in this field. Students completing this program will be prepared to participate in teams, solve problems, think critically and implement effective solutions. The program is designed and delivered as a coherent sequence of experiences using technical instruction, academic foundations, experiential learning, supervised occupational experience and leadership and personal development through the Career and Technical Student Organization, SkillsUSA

The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All of the Career Preparation state-designated Fire Science standards are addressed in this instructional sequence.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**43.0200.10 Fundamentals of Fire Science:** This course introduces students to careers in Fire Science and prepares students to apply academic, employability and technical knowledge and skills related to common industry standards and practices of Fire Science.

**-and-**

**43.0200.20 Fire Science - Advanced Applications:** This course prepares students to apply advanced academic and technical knowledge and skills in a variety of settings within Fire Science.

**And program may elect to add:**

**43.0200.80 Fire Science - Cooperative Education:** This course utilizes cooperate education methodology to combine school-based and supervised work-based learning identified for students within the specific option they have studied.

## Graphic Communications

### 10.0300

The Graphic Communications program is designed to prepare students for employment/postsecondary education related to the fields of Graphic Arts, Graphic Design, or Photo-Imaging. An integrated approach of teaching and learning is provided as students enhance their technical knowledge and skills that are associated with functions within Graphic Communications occupations. In addition to the occupation related skills, students completing this program will develop advanced critical thinking, applied academics, interpersonal relations, life management, business, economic, and leadership skills required for the 21st century workplace. The Graphic Communications program consists of a core curriculum and three areas of specialization for a student to choose from: Option A) Graphic Arts, Option B) Graphic Design, or Option C) Photo-Imaging. The program uses a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the Career and Technical Student Organization, SkillsUSA.

The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Career Preparation state-designated Graphic Communications standards are addressed in this instructional sequence.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**10.0300.10 Graphic Communications Fundamentals:** This course includes units of instruction in all aspects of the industry, career development, applied math, safety, legal issues, customer service, basic computer and design skills, color management and preparing a portfolio for Graphic Communications occupations.

**-and-**

**The following course can be added, if necessary, to the Coherent Sequence of Instruction.**

**10.0300.12 Graphic Communications Fundamentals II:** This course is a continuation of Graphic Communications Fundamentals if necessary. Instruction will include all aspects of the industry, career development, applied math, safety, legal issues, customer service, basic computer and design skills, color management and preparing a portfolio for Graphic Communications occupations.

**-and-**

**Two of the following Career Preparation courses (.20 and .25 or .30 and .35 or .40 and .45) will be included as part of the instructional sequence for this program:**

**Option A**

**10.0300.20 Graphic Arts I:** This course prepares the individual to apply basic artistic and computer techniques to the interpretation of technical and commercial concepts of press operations. Includes instruction in computer assisted art and design, printmaking, color theory, plate making, image assembly, press operations and print finishing/distribution.

**-and-**

**10.0300.25 Graphic Arts II:** This course prepares the individual to apply advanced technical knowledge and skills to the layout, design, and typographic arrangements of printed and electronic media. Includes theory and hands-on instruction in offset and digital printing equipment and operations, lithography, screen-printing, digital imaging, print preparation, desktop publishing, and will provide a distinct understanding of the printing industry and its business operations.

**-or-**

**Option B**

**10.0300.30 Graphic Design I:** This course includes units of instruction in applied visual arts that prepares the individual to use basic artistic techniques to communicate effectively ideas and information to business and customer audiences via illustrations and other forms of digital or printed media. Students will continue the development of the electronic and traditional portfolio.

**-and-**

**10.0300.35 Graphic Design II:** This course prepares the individual to apply advance knowledge and skills to prepare customer documents. The course includes units of instruction in concept and layout, paste-up techniques such as drawing, cartooning, and computer graphics. Students will complete the electronic and traditional portfolio.

**-or-**

**Option C**

**10.0300.40 Photo Imaging I:** This course includes units of instruction in applied visual arts that prepares the individual to use basic artistic techniques to communicate effectively ideas and information to business and customer audiences through the recording of events and people, via digital photography.

**-and-**

**10.0300.45 Photo Imaging II:** This course prepares the individual to apply advanced knowledge and skills to produce quality photographs through the use of digital photography. The course includes units of instruction in specialized camera and equipment operation and maintenance, applications to commercial and industrial needs and photography business operations.

**And program may elect to add:**

**10.0300.80 Graphic Communications - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards identified for the Graphic Communications program.

## **Heating/Air Conditioning Maintenance**

### **47.0200**

The Heating/Air Conditioning Maintenance program prepares students to apply technical knowledge and skills to repair, install, service and maintain the operating conditions of heating and air conditioning systems. Includes instruction in diagnostic techniques, the use of testing equipment and the principles of mechanics, electricity and electronics as they relate to the repair of heating and air conditioning systems.

The following describes the recommended courses developed from industry-validated skills necessary for initial employment or continued related education.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 47.0200.10 Heating/Air Conditioning Maintenance I:** Course description is under development.  
-and-  
**47.0200.20 Heating/Air Conditioning Maintenance II:** Course description is under development.  
And program may elect to add:  
**47.0200.80 Heating/Air Conditioning Maintenance - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences, directly related to the standards identified for the Heating/Air Conditioning Maintenance program.

**Heavy Equipment Operations**  
**49.0200**

The Heavy Equipment Operations program prepares students to apply technical knowledge and skills to operate and maintain a variety of heavy equipment such as a crawler tractor, motor graders and scrapers, shovels, rigging devices, hoists, and jacks. Includes instruction in digging, ditching, sloping, stripping, grading and backfilling, clearing and excavating.

The following describes the recommended courses developed from industry-validated skills necessary for initial employment or continued related education.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 49.0200.10 Heavy Equipment Operations I:** Course description is under development.  
-and-  
**49.0200.20 Heavy Equipment Operations II:** Course description is under development.  
**And program may elect to add:**  
**49.0200.80 Heavy Equipment Operations - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences, directly related to the standards identified for the Heavy Equipment Operations program.

**Hospitality Management**  
**52.0900**

The Hospitality Management program is designed to prepare students for employment in positions that provide customer-focused services in such facilities as hotels, resorts, convention centers, National parks, RV parks, travel agencies and cruise lines. A student completing this program will possess the knowledge and skills associated with reservations and front desk operations, meeting and banquet room support services, food and beverage support services, housekeeping, laundry operations, supervisory functions, and environmental functions. In addition to these skills, students will possess advanced employability skills including critical and conceptual thinking, communications, applied academics, life and employability skills, and technology. This program utilizes a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the Career and Technical Student Organization, FCCLA and DECA.

The following describes a recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the state-designated Hospitality Management standards are addressed in this instructional sequence.

- 52.0900.10 Fundamentals of Hospitality Management:** This course prepares students for occupations in a variety of hospitality services and facilities including: hotels, resorts, convention centers, National parks, RV parks, travel agencies and cruise lines.  
-and-

- 52.0900.20 Hospitality Management Applications:** The outcomes of this course are integrated into learning projects and simulations to demonstrate the full range of Hospitality Management standards. Work-based learning activities such as internships, school-based enterprises, or job shadowing are considered a component of Hospitality Management application activities.
- And program may elect to add:**
- 52.0900.80 Hospitality Management - Cooperative Education:** This course utilizes a cooperative education methodology by providing supervised work-based learning experiences directly related to the standards identified for the Hospitality Management program.

## Information Technology

### 15.1200

The Information Technology program is designed to prepare students for employment/postsecondary education related to the design, development, installation, implementation, use and management of computers and networks. An integrated approach of teaching and learning is provided to enhance the technical knowledge and skills associated with functions within IT occupations. In addition to the occupation related skills, students completing this program will develop advanced critical thinking, applied academics, interpersonal relations, life management, business, economic, and leadership skills required for the 21st century workplace. The Information Technology program consists of a core curriculum and four areas of specialization for a student to choose from: Option A) Computer Maintenance, Option B) Network Technology, Option C) Software Development, or Option D) Web Page Development. The program uses a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the Career and Technical Student Organization, SkillsUSA or FBLA.

The Information Technology program is designed to prepare students for employment/postsecondary education related to the design, development, installation, implementation, use and management of computers and networks. An integrated approach of teaching and learning is provided to enhance the technical knowledge and skills associated with functions within IT occupations. In addition to the occupation related skills, students completing this program will develop advanced critical thinking, applied academics, interpersonal relations, life management, business, economic, and leadership skills required for the 21st century workplace. The Information Technology program consists of a core curriculum and four areas of specialization for a student to choose from: Option A) Computer Maintenance, Option B) Network Technology, Option C) Software Development, or Option D) Web Page Development. The program uses a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the Career and Technical Student Organization, SkillsUSA or FBLA.

#### **RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 15.1200.10 Information Technology Fundamentals:** This course introduces principles of computers with an emphasis on basic concepts of computer maintenance, network technology, software development and web page development. While also providing an understanding of the IT industry, computer mathematics and the evolution of the computer.

-and-

**One of the four Career Preparation options (.20 or .30 or .40 or .50) will be included as part of the instructional sequence for this program:**

#### **Option A**

- 15.1200.20 Computer Maintenance:** This option prepares students to apply technical knowledge and skill in PC hardware and software systems with an emphasis on PC repair and maintenance. This option will offer skills necessary to competently perform in the industrial environment, as well as pass the necessary exams to obtain certification.

-or-

#### **Option B**

- 15.1200.30 Network Technology:** This option prepares students to apply technical knowledge and skills to install, configure and troubleshoot basic networking hardware, protocols, and services. This option will offer the skills necessary to competently perform in the industrial environment, as well as pass the necessary exams to obtain certification.

-or-

#### **Option C**

**15.1200.40**

**Software Development:** This option prepares students to apply software theory and programming methods to the solution of business data problems. This option will offer the skills necessary to competently perform in the industrial environment, as well as pass the necessary exams to obtain certification.

**-or-**

**Option D**

**15.1200.50**

**Web Page Development:** This option prepares students to become familiar with the foundational and basic skills of Internet Technologies, writing code manually, using graphical user interface authoring tools and learning basic infrastructure networking. This option will offer the skills necessary to competently perform in the industrial environment, as well as pass the necessary exams to obtain certification.

**And program may elect to add:**

**15.1200.80**

**Information Technology - Cooperative Education:** This course utilizes cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards identified for the Information Technology program.

**Law, Public Safety and Security**

**43.0100**

The Law, Public Safety and Security instructional program prepares students to perform technical services involved with planning, organizing, researching, directing and controlling functions and processes related to the provision of Law, Public Safety and Security services. An integrated approach to teaching and learning is provided as students develop interpersonal relations, career development skills and technical knowledge and skills associated with careers in this growing field. Students completing this program will be prepared to participate in teams, solve problems, think critically, and implement effective solutions. The program is designed and delivered as a coherent sequence of experiences using technical instruction, experiential learning, supervised occupational experience, and leadership and personal development through the Career and Technical Student Organization, SkillsUSA.

The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All Career Preparation state-designated Law, Public Safety and Security standards are addressed in this instructional sequence.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**43.0100.10**

**Fundamentals of Law, Public Safety and Security:** This course introduces students to careers in Law, Public Safety and Security and prepares students to apply academic and technical knowledge and skills related to common industry standards and practices.

**-and-**

**43.0100.20**

**Law, Public Safety and Security - Advanced Applications:** This course prepares students to apply advanced academic and technical knowledge and skills to a variety of settings within Law, Public Safety and Security.

**And program may elect to add:**

**43.0100.80**

**Law, Public Safety & Security - Cooperative Education:** This course utilizes cooperative education methodology to combine school-based and supervised work-based learning identified for students within the specific program of studies.

**Marketing, Management, and Entrepreneurship**

**52.1800**

The Marketing, Management and Entrepreneurship program is designed to prepare students for employment in various sales, customer service, first-line supervisory positions, web page design, e-retailing, sports marketing, hospitality and tourism, small business ownership, advertising/promotion and/or postsecondary education related to the fields of Professional Sales and Marketing, E-Commerce Marketing, Entertainment Marketing, Entrepreneurship and Advertising. An integrated approach of teaching and learning is provided as students

## Appendix C

enhance their technical knowledge and skills that are associated with functions within Marketing, Management and Entrepreneurship occupations. In addition to the occupation related skills, students completing this program will also develop advanced critical thinking, applied academic, interpersonal relations, life management, business, economic, and leadership skills required for the 21st century workplace. The Marketing, Management and Entrepreneurship program consists of a core curriculum and five areas of specialization for a student to choose from: Option A) Professional Sales and Marketing, Option B) E-Commerce Marketing, Option C) Entertainment Marketing, Option D) Entrepreneurship, or Option E) Advertising. The program uses a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experiences, and the Career and Technical Student Organization, DECA.

The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Career Preparation state-designated Marketing, Management and Entrepreneurship standards are addressed in this instructional sequence.

### **RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

**52.1800.10 Marketing, Management and Entrepreneurship Fundamentals:** This course is designed to introduce the students to basic marketing concepts and principles as they relate to Professional Sales and Marketing, E-Commerce, Entertainment Marketing, Entrepreneurship and Advertising.

**-and-**

**One of the five Career Preparation options (.20, .30, .40, 50 or .60) will be included as part of the instructional sequence for this program:**

#### **Option A**

**52.1800.20 Professional Sales and Marketing:** This course prepares students to perform marketing functions and tasks as they relate to selling and retailing. (This code is appropriate for courses utilizing a marketing lab/student-operated store.)

**-or-**

#### **Option B**

**52.1800.30 Advertising and Public Relations:** This course prepares students to create and market communication strategies utilizing multiple media mediums. Includes instruction in the elements of advertising, design and graphics as well as copyright to effectively plan, integrate and implement successful advertising campaigns.

**-or-**

#### **Option C**

**52.1800.40 Entertainment Marketing:** This course prepares students to perform marketing and management functions and tasks that can be applied to amateur or professional sports or sporting events and entertainment or entertainment services. It also prepares students to perform marketing and management functions and tasks that can be applied to attracting and serving the traveling public, and other services incidental to the travel and tourism industry.

**-or-**

#### **Option D**

**52.1800.50 Entrepreneurship:** This course prepares students for small business ownership through the development of a business plan, marketing strategies and a financial plan while also gaining an understanding of HR and Management functions within a small business.

**-or-**

**52.1800.80 And program may elect to add:**

**Marketing, Management and Entrepreneurship - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards identified for the Marketing, Management, and Entrepreneurship program.

## **Mental and Social Health Services**

### **51.1500**

The Mental and Social Health Services program prepares students to participate in teams, solve problems, think critically and implement effective solutions. The program will be designed and delivered as a coherent sequence of experiences using technical instruction, academic foundations, experiential learning, supervised clinical experience, leadership and personal development through the Career and Technical Student Organization, HOSA.

This program will be designed to prepare high school students with the foundations in knowledge and technical skills needed to help prepare them to continue their education by successfully completing an appropriate postsecondary program. Affiliations with local community college programs can provide high school students with dual or concurrent credit that can be applied toward their postsecondary certificate or degree.

The following describes the recommended sequence of courses yet to be developed that will help prepare students to complete successfully a postsecondary program in mental and social health services.

#### **RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 51.1500.10**     **Fundamentals of Mental and Social Health Services:** This course, when developed, will help prepare students to continue their education toward becoming Mental and Social Health Services personnel by completing an appropriate postsecondary program.
- and-
- 51.1500.20**     **Mental and Social Health Services - Advanced Applications:** This course, when developed, will help prepare students to continue their education toward becoming Mental and Social Health Services personnel by completing an appropriate postsecondary program.
- And program may elect to add:**
- 51.1500.80**     Mental and Social Health Services - Cooperative Education: **This course utilizes cooperative education methodology to combine school-based and supervised work-based learning identified for students within the specific program they have studied.**

## **Nursing Services**

### **51.1600**

The Nursing Services instructional program prepares students to perform technical services involved with planning, organizing, researching, directing and controlling functions and processes related to the provision of nursing assisting services. The Arizona State Board of Nursing must approve Certified Nursing Assistant programs. An integrated approach to teaching and learning is provided as students develop interpersonal relations, career development skills and technical knowledge and skills associated with nursing assisting and the pathway into other careers in nursing. Students completing this program will have the opportunity to take the Arizona examination to become a Certified Nursing Assistant (I), and be prepared to participate in teams, solve problems, think critically and implement effective solutions. The program is designed and delivered as a coherent sequence of experiences using technical instruction, academic foundations, experiential learning, supervised occupational experience and leadership and personal development through the Career and Technical Student Organization. HOSA will be available as the Career and Technical Student Organization serving Health Careers Education.

The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Career Preparation state-designated Nursing Services standards are addressed in this instructional sequence.

#### **RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 51.1600.10**     **Fundamentals of Nursing Services:** This course prepares students to apply academic, employability and technical knowledge and skills related to common industry standards and practices of nursing assisting within the nursing profession.
- and-

- 51.1600.20** **Nursing Services - Advanced Applications:** This course prepares students to apply advanced academic and technical knowledge and skills related to nursing assisting in a variety of settings within the nursing profession.  
**And program may elect to add:**
- 51.1600.80** **Nursing Services - Cooperative Education:** This course utilizes cooperative education methodology to combine school-based and supervised work-based learning identified for students within the specific program of studies.

## Performing Arts and Entertainment Industry

### 50.0100

The Performing Arts and Entertainment Industry instructional program prepares students to participate in the technical and management areas of the performing arts and entertainment industry. In addition, students will possess the foundation skills needed for postsecondary studies in technical theatre or arts management. An integrated approach to teaching and learning is recommended as students develop interpersonal relations, career development skills and technical knowledge and skills associated with the performing arts and entertainment industry.

Leadership skills are developed through the state recognized Career and Technical Student Organizations, Skills USA. Performing Arts and Entertainment Industry students are also encouraged to be active members of the Arizona State Thespians.

#### **RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

##### Option A

- 50.0100.20** Fundamentals of Performing Arts and Entertainment Industry - Technical Theatre: This course prepares students to apply knowledge and skills to artistic, technical, and dramatic principles to communicate through theatrical methods. This program includes instruction in set design, lighting design, sound design and audio engineering, make-up design, scene painting, property management, production management, video design, costume design, technical direction and production, and digital applications.

*A recommended pre-requisite of a fine arts class in theatre, music or dance is not funded through CTE.*

**-and-**

- 50.0100.25** Performing Arts and Entertainment Industry - Technical Theatre I: Prepares individuals to manage the planning, design, preparation, and application of theatrical production as described above.

And program may elect to add:

- 50.0100.26** Performing Arts and Entertainment Industry - Technical Theatre II: This third optional course continues the work of Technical Theatre I, with students managing the planning, design, preparation and application of theatrical production as described above.

**-or-**

##### Option B

- 50.0100.30** Performing Arts and Entertainment Industry - Fundamentals: Arts Management: This course prepares students to apply knowledge and skills from the world of business to the management of non-profit performing arts and for-profit entertainment companies. This program includes instruction in financial management practices for performing arts businesses, legal and ethical behaviors in the entertainment industry, safety rules and procedures, marketing, administrative management and leadership, human resource management, information systems and technology, fundraising and development, and operations (front and back of house) management.

*Recommended Pre-Requisite: a fine arts class in theatre, music or dance or a business fundamentals course.*

**-and-**

- 50.0100.35** Performing Arts and Entertainment Industry - Arts Management I: Prepares individuals to manage the planning, preparation, and application of arts management practices to performing arts and entertainment businesses as described above.

- And program may elect to add:
- 50.0100.36** Performing Arts and Entertainment Industry - Arts Management II: This third optional course continues the work of Arts Management I, with students managing the planning, preparation, and application of arts management practices to performing arts and entertainment businesses as described above.
- And program may elect to add:
- 50.0100.80** Performing Arts and Entertainment Industry - Cooperative Education: This course utilizes a cooperative education methodology to combine school-based learning and supervised work-based learning experiences directly related to the standards for the Performing Arts and Entertainment Industry program.

## **Precision Manufacturing**

### **48.0500**

The **Precision Manufacturing** program is designed to introduce students to basic precision manufacturing principals and technical skills. Students will be prepared in the following instructional areas: manufacturing systems, production planning and quality control, documentation, technical problem-solving, management information systems, predictive/preventive maintenance and automated manufacturing. Students will have the opportunity to earn an industry recognized NIMS level 1 certification. The program is comprised of one core course and three options: Option A (Automation/Robotics); Option B (Computer Controlled Fabrication). The program uses a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience, and the Career and Technical Student Organization, SkillsUSA.

- 48.0500.10** **Fundamentals of Precision Manufacturing:** This course includes units of instruction in computer control and power systems used in manufacturing. Units also include set up and change-over techniques, using industrial instruments and utilizing technical skills. Instruction also includes careers opportunities in manufacturing, communications skills, work-based learning experiences, teamwork, safety, creative thinking and problem solving.

**-and-**

**One of the following Career Preparation options will be included as part of the instructional sequence for this program:**

#### **Option A**

- 48.0500.20** **Automation/ Robotics:** Students in this course will learn how automation reduces the need for human labor. Students will understand the math, science and technology of robots, their design, and application in industrial automation for manufacturing. Students will learn control systems, robotics and computer applications and how they are used to control machinery in industry. Students will gain a working knowledge of electronics, programming, mechanics and applicable software through technical skills in support of technicians and other personnel engaged with robotics.

**-or-**

#### **Option B**

- 48.0500.30** **Precision Mechining:** in this course students develop a clear understanding of mechanical systems including engines, pumps, medical devices; as well as the need for highly accurate parts via modern CAD-CAM systems to produce 3-D developed components. Students will learn how tighter tolerances require ultrahigh precision machining to be competitive in the aerospace industry. Students will have the opportunity to earn an industry recognized certificate verifying the student's practice of machine geometry, motion control and machining strategy.

**And program may elect to add:**

**-or-**

**Precision Manufacturing - Cooperative Education:** This course utilizes cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards identified for the Precision Manufacturing program.

## **Electrical Systems Installation and Maintenance Technologies**

### **47.0100**

The Telecommunications Maintenance and Installation program is designed to prepare students to apply technical knowledge and skills to assemble, install, operate, maintain and repair one and two way communications equipment and systems, including television cable systems and mobile or stationary communication devices. An integrated approach of teaching and learning is provided as students enhance their technical knowledge and skills that are associated with functions within Telecommunications Maintenance and Installation occupations. In addition to the occupation related skills, students completing this program will develop advanced critical thinking, applied academics, interpersonal relations, life management, business, economic and leadership skills required for the 21st century workplace. The program uses a delivery system made up of four integral parts: formal/technical instruction, experiential learning, supervised occupational experience and the Career and Technical Student Organization, SkillsUSA.

The following describes the recommended sequence of courses developed from industry-validated skills necessary for initial employment or continued related education. All the Career Preparation state-designated Telecommunications Maintenance and Installers standards are addressed in this instructional sequence.

#### **RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 47.0100.10 Telecommunications Maintenance and Installation Fundamentals:** This course will introduce the basic components and principles involved in the assembly, operation, maintenance, repair, and installation of communications equipment and systems.
- and-**
- 47.0100.20 Telecommunications Maintenance and Installation I:** This course offers the students the basics in diagnostic techniques, the use of testing equipment and the principles of mechanics, electricity and electronics as they relate to the repair and installation of communications systems.
- and-**
- 47.0100.25 Telecommunications Maintenance and Installation II:** This course offers the students advanced knowledge, skill and instruction in diagnostic techniques, the use of testing equipment and the principles of mechanics, electricity and electronics as they relate to the repair and installation of communications systems.
- And program may elect to add:**
- 47.0100.80 Telecommunications Maintenance and Installation - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards identified for the Telecommunications Maintenance and Installation program.

## **Therapeutic Massage**

### **51.3500**

The Therapeutic Massage instructional program prepares students to perform technical and clinical services involved with planning, organizing, researching, directing and controlling functions and processes related to the provision of therapeutic massage. An integrated approach to teaching and learning is provided as students develop interpersonal relations, career development skills and technical knowledge and skills associated with careers in this growing field. Students completing this program will be prepared to participate in teams, solve problems, think critically, and implement effective solutions. The program is designed and delivered as a coherent sequence of experiences using technical instruction, experiential learning, supervised clinical experience, and leadership and personal development through the Career and Technical Student Organization, HOSA.

## Appendix C

The following describes the recommended sequence of courses. All the Career Preparation standards for Therapeutic Massage are under development.

### **RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 51.3500.10 Fundamentals of Therapeutic Massage:** This course prepares students to apply academic and technical knowledge and skill of the Therapeutic Masseuse in a clinical, medical or retail setting or to continue into postsecondary education.
- and-**
- 51.3500.20 Therapeutic Massage - Advanced Applications:** These courses prepare students to apply academic, technical knowledge and skills of the therapeutic masseuse in a clinical, medical or retail setting or to continue into postsecondary education.
- And program may elect to add:**
- 51.3500.80 Therapeutic Massage - Cooperative Education:** This course utilizes cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards identified for students within the specific program they have studied.

## **Transportation Technologies**

### **47.0600**

The Automotive Technologies program is designed to prepare individuals for jobs as technicians in the automotive or avionics fields. The program is comprised of a core curriculum and four options: Option A (Automotive Technology), Option B (Auto body/Collision Repair), Option C (Diesel Engine Repair), and Option D (Aircraft Mechanics). The occupational standards for both options A and B are aligned with National Automotive Technicians Education Foundation (NATEF) and Automotive Service Excellence (ASE) standards.

- Automotive Technology includes units on repairing brake systems, repairing electrical/electronics systems, repairing steering and suspension systems, and engine performance diagnosis and repair.
- Auto Body/Collision Repair Technology includes units on performing disassembly and assembly repairs, performing structural repairs, performing metal, plastic and fiberglass repairs, preparing and finishing surfaces, and using appropriate paint and refinishing techniques.
- Diesel Engine Repair Technology includes units on repair, service, and maintenance of diesel engines in vehicles such as automobiles, buses, trucks and construction equipment; as well as stationary diesel engines in electrical generators and related equipment.

Aircraft Mechanics prepares students to apply technical knowledge and skills to repair, service, and maintain all types of aircraft power plants and related systems. Instruction includes engine inspection and maintenance, lubrication and cooling, electrical and ignition systems, carburetion, fuels and fuel systems.

The following describes the recommended courses developed from industry-validated skills necessary for initial employment or continued related education.

### **RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 47.0600.10 Automotive Technologies Core Curriculum:** This program prepares the student to apply technical knowledge and skills in the safety, adjustment, maintenance, part replacement, and repair of tools, equipment and machines. The course includes developing career plans, preparing for employment, participating in work-based learning experiences, demonstrating oral and written communication skills, understanding financial operations of small businesses, identifying characteristics of successful leaders in the work place and participation in leadership development activities.
- and-**

**At least one option must be included as part of the instructional sequence for this program:**

#### **Option A**

- 47.0600.20 Automotive Technology I:** This course prepares the individual to apply basic technical knowledge and skills in safety, adjustment, maintenance, and parts replacement to repair automobiles and light trucks. Students are introduced to: a) brake systems; b) electric/electronic systems; c) steering and suspension systems; and d) engine performance diagnosis and repair.
- and-**

**47.0600.25**

**Automotive Technology II:** This course prepares the individual to apply higher levels of technical knowledge and skills to maintain, diagnose and repair automobiles and light trucks. Students will gain in-depth knowledge needed to troubleshoot and identify malfunctioning components and sensors; and correct these problems in four areas: 1) brake systems; 2) electrical/electronic systems; 3) steering and suspension systems; and 4) engine performance analysis. Graduates should be able to pass the ASE tests for each of the four areas.

**-or-**

**Option B**

**47.0600.30**

**Automotive Collision Repair I:** This course prepares individuals to apply basic technical knowledge and skills in seven standards areas: 1) safety and maintenance; 2) damage analysis and preparing repair cost estimates; 3) disassemble and assemble parts, 4) non-structural repair; 5) metal, plastic and fiberglass repairs; 6) prepare and finish surfaces; and 7) paint and refinishing techniques.

**-and-**

**47.0600.35**

**Automotive Collision Repair II:** This course prepares the individual to apply higher levels of technical knowledge and skills to repair, reconstruct and finish automobile and light truck bodies, fenders and external features. Includes instruction in seven competency areas: 1) safety and maintenance; 2) damage analysis and damage reports; 3) disassemble and assemble parts; 4) non-structural repairs; 5) metal, plastic and fiberglass repairs; 6) prepare and finish surfaces; and 7) paint and refinishing techniques. Graduates will be prepared to pass the four specialized tests required for the Master Collision Repair and Refinish Certification.

**-or-**

**Option C**

**47.0600.40**

**Diesel Engine Repair Technology I:** This course prepares the individuals to apply technical knowledge and skills to repair service and maintain diesel engines and related equipment.

**-and-**

**47.0600.45**

**Diesel Engine Repair Technology II:** This course prepares the individual to apply higher levels of technical knowledge and skills to repair vehicles such as buses, trucks, ships, railroad locomotives construction equipment and related equipment

**-or-**

**Option D**

**47.0600.55**

**Aircraft Mechanics II:** This course provides an advancing level of knowledge and skills that have been identified as preparation for the FAA Airframe and Power Plant (A&P) Certificate. Further education and training may be required to be able to master the knowledge and skills required for full A&P certification.

**Option E**

**47.0600.60**

**General Service Technician I:** This course prepares the individual to apply basic technical knowledge and skills in safety, adjustment, maintenance, and parts replacement to repair automobiles and light trucks. Students are introduced to: auto shop and personal safety, tools and equipment, basic vehicle service, engine repair, automatic transmission, and manual drive train and axles.

**and**

**47.0600.65**

**General Service Technician II:** This course prepares the individual to apply higher levels of technical knowledge and skills to maintain, diagnose and repair automobiles and light trucks. Students will gain in-depth knowledge needed to troubleshoot and identify malfunctioning components and sensors; and correct these problems in the areas of: suspension and steering, brakes, electrical/electronic systems, heating and air conditioning, and engine performance.

**And program may elect to add:**

**47.0600.80**

**Automotive Technologies - Cooperative Education:** This course utilizes cooperative education methodology to combine school-based and supervised work-based learning experiences related to the standards identified for the Automotive Technologies program.

**Welding Technology**  
**48.0508**

The Welding Technology program is designed to prepare students for employment welding. The curriculum provides individuals with critical thinking, career development, life management, business, economic and leadership skills required for Welding Technology occupations. Welding Technology prepares individuals to apply technical knowledge and skills to join or cut metal surfaces. Includes instruction in arc welding, resistance welding, brazing and soldering, cutting, high-energy beam welding and cutting, solid state welding, ferrous and non-ferrous materials, oxidation-reduction reactions, welding metallurgy, welding processes and heat treating, structural design, safety, and applicable codes and standards.

The following describes the recommended courses developed from industry-validated skills necessary for initial employment or continued related education.

**RECOMMENDED PROGRAM SEQUENCE OF COURSES:**

- 48.0500.10**     **Welding Technology Core Curriculum:** Instruction includes career planning, preparing for employment, work-based learning, oral and written communication skills, understanding the role of small businesses and financial management, workplace leadership styles and leadership development. The program is designed and delivered as a coherent sequence of experiences using technical instruction, experiential learning, supervised occupational experience, leadership and personal development through the career and technical student organization.
- and-**
- 48.0500.20**     **Welding Technology I:** Prepares individuals to apply basic technical knowledge and skills to join or cut metal surfaces. Includes instruction in blueprint reading, arc welding, brazing soldering, cutting, safety, and applicable codes and standards.
- and-**
- 48.0500.25**     **Welding Technology II:** This course prepares individuals to apply advanced technical knowledge and skills using a variety of welding techniques and equipment. Instruction includes Welding and Cutting Theory, Inspection and Testing, Electrical Fundamentals, Drawing and Welding Symbols, Fabrication Principles and Practices and Safety.
- And program may elect to add:**
- 48.0500.80**     **Welding Technology - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards identified for the Welding Technology program.

## 2011-2012 Course Approval Form Joint Technical Education Districts

Name of Joint Technological District: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Program Name: \_\_\_\_\_ Program CIP: \_\_\_\_\_

**For ADE Use Only**

**Course approval Check list**

**Approval Status**

**Action Needed**

*A= Approved, CA=Conditionally Approved, NA= Not Approved*

**Uses approved program standards:**

\_\_A \_\_CA \_\_NA

- *Approved ADE Career and Technical Education Program Standards (Explanation of how the standards are enhanced and taught at a higher level than in a non-JTED comprehensive high school CTE program must be submitted to ADE)*
- *Postsecondary Standards leading to a degree or certification (List of Standards must be submitted to ADE)*
- *Other Standards based on labor market needs (Determining labor market data and list of standards must be submitted to ADE)*

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**Uses industry-validated curriculum**

\_\_A \_\_CA \_\_NA

- Curriculum used to teach the standards in this program must be specified.
- Curriculum used to teach the standards exceeds the curriculum used in a non-JTED comprehensive high school CTE program must be evident

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**End of program assessment or certification available for students**

   A    CA    NA

- End of Program Assessment must be specified
- Certification must be specified

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**Requires specialized equipment or instructional materials**

   A    CA    NA

- Specialized equipment specified
- Specialized instructional materials specified

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**Has appropriately certified instructor for each course**

   A    CA    NA

- Instructor holds valid State Board of Education Career and Technical Education certification
- Instructor holds valid Community College Career and Technical Education certification

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- All courses listed on the application are approved**
- All courses listed on the application are conditionally approved**
- Courses listed below are not approved**

Course

Rationale for Unapproved Courses

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\_\_\_\_\_  
Signature of ADE Reviewer

\_\_\_\_\_  
Date of Review



**State of Arizona  
Department of Education**

Date: April 30, 2011  
To: JTED Superintendents  
From: Barbara Border, Deputy Associate Superintendent  
State Director, Career and Technical Education  
Jan Brite, Career Pathways Program Director  
Subject: JTED Application Approvals

Thank you for the 2011-2012 Joint Technical Education District Course Approval Application submissions. The new electronic submission process seemed to work well from the ADE CTE perspective. Please make us aware of any problems you encountered or any suggestions for improvements to the system.

The applications have been reviewed and evaluated in accordance with the legislative requirements outlined in House Bill 2700. Attached is the Course Approval log for each program for which courses were submitted. Courses were reviewed and evaluated in the following ways:

- All courses offered in the program sequence may be “approved”.
- All courses offered in the program sequence may be “conditionally approved” indicating that additional information required by HB 2700 is needed in order to approve the course. State Supervisors may need to conduct an on-site review prior to determining approval status. Conditionally approved courses may continue for more than one year depending on the State Supervisor’s review. Do not consider conditionally approved courses fully approved until officially notified by the State Supervisor. Conditionally approved courses are eligible for funding.
- Some courses offered in the program sequence may not meet the requirements outlined in HB 2700 and other courses do meet the requirements; therefore, some courses in a program sequence may be “approved” and other courses may be “not approved.”
- All courses offered in the program sequence may be “not approved” indicating that none of the courses meet the requirements outlined in HB 2700 (i.e. program does not appear on the **2012 CTE Program List** as approved by the Arizona State Board of Education.)

State Supervisors for each of the program areas will work with JTED administrators and teachers throughout the 2011 fall semester to assist in bringing the “conditionally approved” programs and courses into fully “approved” status.

Every effort was made to evaluate the course applications based on the legislative requirements outlined in HB 2700 and entered into statute in 2006. However, if it is believed that a program or course was “not approved” in error, an appeals process has been established.

Please review the attached Course Approval log and if you have questions regarding a specific course or program sequence, please contact the State Supervisor of that program. If you have other questions please contact either Jan Brite 602-542-4365 or Barbara Border 602-542-5358.

Attachments:  
JTED Course Approval Log  
Appeals Process  
State Supervisor Contact list



**State of Arizona  
Department of Education**

May 17, 2011

Raymond Polvani  
Chino Valley/Bradshaw Mountain High School  
Mountain Institute JTED  
Prescott Valley, AZ

Re: Culinary Arts Program JTED NOI

Dear Dr. Polvani,

I visited the Culinary Arts Programs at Chino Valley High School and Bradshaw Mountain High School on January 24, 2011. The remodel of the Chino Valley High School culinary lab is remarkable! Chino Valley students will have an excellent industry experience.

The purpose of this letter is to notify you that the Culinary Arts Programs at Chino Valley and Bradshaw Mountain High Schools have been approved.

The continuation of approval for the Culinary Arts Programs will be based upon the following:

1. A certified CTE teacher with relevant credentials/work experience
2. Alignment of the curriculum with the CTE Culinary Arts Standards
3. Evidence of a coherent sequence that includes a Career Exploration course followed by Career Preparation courses
4. Adequate facilities and equipment
5. The necessary rigor and relevance to master the Career Preparation standards such that a completer can successfully pass the Arizona Technical Skills Assessment for Culinary Arts given at the end of program
6. Examples of work-based learning experiences and/or projects
7. The development and utilization of an industry-based advisory committee
8. Active student participation in FCCLA

If I can be of further assistance please contact me at [Ruth.Kerr@azed.gov](mailto:Ruth.Kerr@azed.gov).

Sincerely,

A handwritten signature in blue ink that reads "Ruth Kerr".

State Supervisor, Family and Consumer Sciences Education  
Arizona Department of Education

Cc: Jan Brite, Education Program Director, ADE CTE  
Kimberly Spitali, FCCLA State Advisor, ADE CTE  
Jeremy Plumb, Program Director, Mountain Institute JTED

## **Joint Technical Education District (JTED) Course and Program Appeals Process**

### **ADE CTE JTED Application Processes**

Applications for new and continuing JTED programs and courses are submitted to the ADE CTE Section no later than December 31, each school year for the approval process. ADE CTE has 120 days to make determinations about approvals. (ARS 15-393)

ADE CTE Section reviews and makes a decision related to the status of the JTED program and each course. One of three decisions may be determined:

- Full approval of the program and each course for full funding for the year, without further review by ADE CTE.
- Conditional approval, with full funding for the year, with a review of the program and courses on site by a CTE program representative to receive full approval for the following year or non-approval for the next year.
- Non-approval of the program or one of the courses. This program and related courses are not eligible for funding for the year submitted. The program and each course may be resubmitted the following year, or the decision of non-approval may be appealed, using the following processes.

### **Process for JTED Appeals for Non-Approval of Programs or Courses**

#### ***State Board of Career and Technological Education Advisory Committee Review and Recommendations Processes***

- JTED submits a request to appeal to the State Board office or its delegated entity, the ADE CTE decision of non-approval for a program or course within 10 days\* of the notice of disapproval from ADE CTE.
- The State Board of Career and Technological Education Advisory Committee along with the State Board Representative to this Committee will appoint a group of three to five individuals to serve on the Appeals Review Panel. Individuals selected will have no conflict of interest with any of the appeals to be heard.
- The JTED Appeals Review Panel will utilize the JTED Legislation in ARS 15-391 and the processes identified therein related to the ADE CTE program approval processes as the guidelines for their *recommendations* to uphold non-approval or to grant approval of the appeal.

#### **JTED courses:**

- lead toward a specific career, vocation or industry;
- are taught by an instructor certified to teach by Career and Technical Education by the State Board of Education or a postsecondary education institution;
- require specialized equipment or specialized instruction materials above and beyond the scope and cost of a standard CTE course;
- require students to obtain a passing score on an examination that demonstrates a level of skill or competency for that program of study that is accepted by a vocation or an industry;
- are offered for students in grades nine, 10, 11 and 12;
- are approved by JTED governing board; and
- meet standards of a career preparatory Career and Technical Education Program as determined by the Career and Technical Education Section of the Arizona Department of Education. These standards include—

- Courses are part of a program identified on the FY2008 CTE Program List approved by the State Board of Career and Technical Education for FY 08-09, or future lists as approved,
  - Sufficient staff, equipment and facilities are in place to implement courses and program,
  - Program standards addressed in a coherent sequence of courses, including integration of appropriate academic standards, utilizing industry-validated standards that lead to technical assessments,
  - Programs provide for articulation with advanced postsecondary education or career placement.
- If the Appeals Review Panel determines that they wish to hear or review written information from ADE, CTE, and the JTED, they request that both entities submit further information, be present to answer questions, or to make presentations.
- The State Board of Career and Technological Education Advisory Committee Appeals Review Panel will make a recommendation for approval or disapproval of the JTED program and/or courses. This recommendation will be forwarded within 10 days to the State Board of Career and Technological Education for their final action.

#### **State Board of Career and Technological Education Actions**

- The State Board of Career and Technological Education may review the recommendations of the Advisory Committee Appeals Review Panel related to each JTED Appeal.
- The State Board may place the item recommended for approval by the Appeals Review Panel on the Consent Agenda for the next regularly scheduled Board meeting, abiding with the timelines set for items to be considered.
- If the recommendation of Appeals Review Panel is to disapprove the JTED appeal, the JTED may request within 10 days that the item be placed on the State Board agenda for further review and action of the next regularly scheduled State Board meeting, abiding with the timelines set for items to be considered.
  - The State Board will determine if they wish to review written materials or hear testimony before making the final decision and action related to the appeal.
- The decisions by the State Board of Career and Technological Education will be final.
- Final notification will be provided to the JTED in writing within 15 days of the Board meeting where final action has been taken. A copy of the decision will also be forwarded to ADE CTE for their appropriate actions.

**FY 2010 CTE Related Placements- for SY2010-2011  
Related placements over concentrators who graduated**

CAVIAT				
Program	Description	Placements	Graduates	Rate
100200	Audio/Visual Technologies	5	6	83.33%
100300	Graphic Communications	26	33	78.79%
120500	Culinary Arts	44	83	53.01%
131200	Education Professions	6	7	85.71%
131210	Early Childhood Education	3	4	75.00%
151200	Information Technologies	18	26	69.23%
151300	Drafting and Design Technologies	17	27	62.96%
460400	Construction Technologies	5	26	19.23%
470600	Transportation Technologies	17	34	50.00%
480500	Precision Manufacturing	1	4	25.00%
480508	Welding Technologies	31	51	60.78%
511600	Nursing Services	27	34	79.41%
520200	Business Mgmt & Admin Services	2	4	50.00%
520300	Accounting and Related Services	4	5	80.00%
520900	Hospitality Management	1	2	50.00%
521800	Marketing Management and Entrepreneurship	2	3	66.67%
521900	Design and Merchandising	9	16	56.25%

CAVIT				
Program	Description	Placements	Graduates	Rate
010100	Agricultural Business Management - Agriscience	9	13	69.23%
100200	Audio/Visual Technologies	4	8	50.00%
100300	Graphic Communications	10	22	45.45%
120400	Cosmetology	1	4	25.00%
120500	Culinary Arts	17	46	36.96%
131200	Education Professions	2	2	100.00%
131210	Early Childhood Education	17	28	60.71%
150000	Engineering Sciences	1	2	50.00%
151200	Information Technologies	1	1	100.00%
430100	Law Public Safety and Security	6	9	66.67%
430200	Fire Service	2	4	50.00%
460400	Construction Technologies	8	21	38.10%
470600	Transportation Technologies	9	24	37.50%
510800	Allied Health Services	26	38	68.42%
511600	Nursing Services	6	9	66.67%
513500	Therapeutic Massage	4	7	57.14%
520200	Business Mgmt & Admin Services	10	29	34.48%
520900	Hospitality Management	1	6	16.67%
521800	Marketing Management and Entrepreneurship	45	48	0.94%

**Concentrators who graduated - students may concentrate in 1 or more programs  
Schools may not have Concentrators/Placements in all CTE programs**

**FY 2010 CTE Related Placements- for SY2010-2011  
Related placements over concentrators who graduated**

<b>CTD</b>				
Program	Description	Placements	Graduates	Rate
010100	Agricultural Business Management - Agriscience	51	67	76.12%
100200	Audio/Visual Technologies	1	14	7.14%
100300	Graphic Communications	1	17	5.88%
120500	Culinary Arts	36	48	75.00%
131200	Education Professions	6	8	75.00%
131210	Early Childhood Education	8	22	36.36%
151200	Information Technologies	4	19	21.05%
151300	Drafting and Design Technologies	3	33	9.09%
430100	Law Public Safety and Security	1	9	11.11%
460400	Construction Technologies	19	23	82.61%
470600	Transportation Technologies	1	11	9.09%
510800	Allied Health Services	2	7	28.57%
511600	Nursing Services	4	9	44.44%
520200	Business Mgmt & Admin Services	27	37	72.97%
520300	Accounting and Related Services	9	9	100.00%
520900	Hospitality Management	1	2	50.00%
521800	Marketing Management and Entrepreneurship	30	52	57.69%

<b>CVIT</b>				
Program	Description	Placements	Graduates	Rate
010100	Agricultural Business Management - Agriscience	1	4	25.00%
100200	Audio/Visual Technologies	2	4	50.00%
100300	Graphic Communications	1	11	9.09%
120500	Culinary Arts	5	19	26.32%
131210	Early Childhood Education	1	1	100.00%
151300	Drafting and Design Technologies	1	3	33.33%
430200	Fire Service	1	1	100.00%
460400	Construction Technologies	2	13	15.38%
470600	Transportation Technologies	5	6	83.33%
480508	Welding Technologies	5	10	50.00%
511600	Nursing Services	5	9	55.56%
520200	Business Mgmt & Admin Services	7	13	53.85%
520900	Hospitality Management	3	7	42.86%

**Concentrators who graduated - students may concentrate in 1 or more programs  
Schools may not have Concentrators/Placements in all CTE programs**







**FY 2010 CTE Related Placements- for SY2010-2011**  
**Related placements over concentrators who graduated**

<b>VACTE</b>				
<b>Program</b>	<b>Description</b>	<b>Placements</b>	<b>Graduates</b>	<b>Rate</b>
010100	Agricultural Business Management - Agriscience	16	43	37.21%
100200	Audio/Visual Technologies	23	33	69.70%
100300	Graphic Communications	32	57	56.14%
120500	Culinary Arts	7	9	77.78%
151200	Information Technologies	2	2	100.00%
151300	Drafting and Design Technologies	3	5	60.00%
430200	Fire Service	2	2	100.00%
460400	Construction Technologies	6	13	46.15%
470600	Transportation Technologies	4	23	17.39%
500100	Performing Arts and Entertainment Industry	3	3	100.00%
510800	Allied Health Services	7	18	38.89%
511600	Nursing Services	17	17	100.00%
520200	Business Mgmt & Admin Services	24	32	75.00%

<b>WAVE</b>				
<b>Program</b>	<b>Description</b>	<b>Placements</b>	<b>Graduates</b>	<b>Rate</b>
010100	Agricultural Business Management - Agriscience	2	7	28.57%
100300	Graphic Communications	5	16	31.25%
120500	Culinary Arts	10	26	38.46%
131210	Early Childhood Education	4	9	44.44%
460400	Construction Technologies	1	9	11.11%
510800	Allied Health Services	4	5	80.00%
520200	Business Mgmt & Admin Services	25	48	52.08%
521800	Marketing Management and Entrepreneurship	8	9	88.89%

**Concentrators who graduated - students may concentrate in 1 or more programs**  
**Schools may not have Concentrators/Placements in all CTE programs**

**FY 2010 CTE Related Placements- for SY2010-2011  
Related placements over concentrators who graduated**

<b>WestMEC</b>				
<b>Program</b>	<b>Description</b>	<b>Placements</b>	<b>Graduates</b>	<b>Rate</b>
010100	Agricultural Business Management - Agriscience	56	103	54.37%
100200	Audio/Visual Technologies	73	151	48.34%
100300	Graphic Communications	144	247	58.30%
120400	Cosmetology	53	87	60.92%
120500	Culinary Arts	393	674	58.31%
131200	Education Professions	86	120	71.67%
131210	Early Childhood Education	97	148	65.54%
150000	Engineering Sciences	40	86	46.51%
151200	Information Technologies	118	180	65.56%
151300	Drafting and Design Technologies	110	160	68.75%
430100	Law Public Safety and Security	49	91	53.85%
430200	Fire Service	13	23	56.52%
460400	Construction Technologies	66	140	47.14%
470600	Transportation Technologies	96	166	57.83%
480500	Precision Manufacturing	18	31	58.06%
480508	Welding Technologies	20	35	57.14%
510800	Allied Health Services	188	259	72.59%
510900	Diagnostic and Intervention Technologies	44	66	66.67%
511600	Nursing Services	213	248	85.89%
520200	Business Mgmt & Admin Services	57	127	44.88%
520300	Accounting and Related Services	65	104	62.50%
520800	Financial Services	3	3	100.00%
521800	Marketing Management and Entrepreneurship	270	319	84.64%
521900	Design and Merchandising	27	38	71.05%

**Concentrators who graduated - students may concentrate in 1 or more programs  
Schools may not have Concentrators/Placements in all CTE programs**

## 2010-2011 Cost Reporting Summaries

Microsoft Excel - JTED TOTAL COST WORKBOOK 2- 2010-2011 [Compatibility Mode]

Program Number	ADE Program Title	Program Cost	Salaries 61XX	ERE 62XX	Purchased Services 63XX, 64XX, 65XX	Supplies (Textbook & Inst Aids) 66XX	Property (including Land & Bldg. Equipment) 67XX	Other 68XX
52.0300	Accounting and Related Services							
01.0100	Agricultural Business Management - Agriscience							
49.0100	Air Transportation							
51.0800	Allied Health Services							
10.0200	Audio/Visual Technologies							
41.0100	Bioscience							
52.0200	Business Management and Administrative Services							
52.0400	Business Operations Support and Assistant Services							
46.0400	Construction Technologies							
12.0400	Cosmetology							
12.0500	Culinary Arts							
51.0600	Dental Assisting							
52.1900	Design and Merchandising							
51.0900	Diagnostic and Intervention Technologies							
15.1300	Drafting and Design Technologies							
13.1210	Education and Training: Early Childhood Education							
13.1200	Education and Training: Education Professions							
46.0300	Electrical and Power Transmission Technologies							
47.0100	Electrical Systems Installation and Maintenance							
15.0300	Electronic Technologies							
15.0000	Engineering Sciences							
52.0800	Financial Services							
43.0200	Fire Science							
10.0300	Graphic Communications							
47.0200	Heating, Ventilation and Air Conditioning							
49.0200	Heavy Equipment Operations							
47.0300	Heavy Industrial Equipment Maintenance Technologies							
52.0900	Hospitality Management							
15.1200	Information Technologies							
43.0100	Law, Public Safety and Security							
52.1800	Marketing, Management and Entrepreneurship							
51.1500	Mental and Social Health Services							
51.1600	Nursing Services							
50.0100	Performing Arts and Entertainment Industry							
48.0500	Precision Manufacturing							
51.3500	Therapeutic Massage							
47.0600	Transportation Technologies							
48.0508	Welding Technologies							
<b>MEMBER DISTRICT TOTAL</b>								

- Each sheet contains the summary data for a JTED member district.
- There is a similar application supplied to each member district that allowed them to load their cost data by campus to facilitate the summative of aggregate program course cost of member district.

Total JTED Expenditures per Member Districts Memorandum 219 Report

Total JTED Expenditures from "OTHER" sources of funds (forest fees, donations, tax credits, etc)

Total JTED Perkins Expenditures per Member Districts' Completion Reports (per ADE/CTE office)

Total JTED State Vocational Block Grant Expenditures per Member Districts' Completion Reports (per ADE/CTE office)

INSTRUCTIONS / COMMENT & ADTTL INFO / **FORM D- JTED** / D1 / D2 / D3 / D4 / D5 / D6 / D7 / D8 / D9 / D10 / D11 / D12 / 2011 Programs

**JTED Cost Reporting Worksheet**

2010- 2011 JTED- CAVIAT- 030801  
 Program Cost Aggregate Total

**Reported Aggregate Program Cost**

<b>Percent Expenditure by Program Category</b>			
	<b>MODE</b>	<b>MEDIAN</b>	<b>MAX</b>
<b>Salaries</b>	52%	42%	79%
<b>ERE</b>	10%	10%	27%
<b>Purchased Services</b>	1%	4%	85%
<b>Supplies</b>	5%	8%	42%
<b>Property</b>	2%	4%	35%
<b>Other</b>	25%	25%	94%

1%= value >0 to 1.49%

If there is more than one modal value, the larger percentage value is shown.

If there is no data available or if there are \$0 reported, 0 % is shown.

<p><b>Member Districts</b>                  Flagstaff USD                  Fredonia-Moccasin USD                  Grand Canyon USD                  Page USD                  Williams USD</p>
--

<b>Number</b>	<b>Program Title</b>	<b>Total Aggregate Program Cost</b>
52.0300	Accounting and Related Services	\$ 35,886.26
51.0800	Allied Health Services	\$ 26,578.20
10.0200	Audio/Visual Technologies	\$ 145,112.80
52.0200	Business Management and Administrative Services	\$ 59,187.09
46.0400	Construction Technologies	\$ 219,909.44
12.0500	Culinary Arts	\$ 272,330.87
52.1900	Design and Merchandising	\$ 70,338.01
15.1300	Drafting and Design Technologies	\$ 102,919.79
13.1210	Education and Training: Early Childhood Education	\$ 91,568.43
13.1200	Education and Training: Education Professions	\$ 52,135.93
46.0300	Electrical and Power Transmission Technologies	\$ 13,035.00
10.0300	Graphic Communications	\$ 251,336.88
15.1200	Information Technologies	\$ 228,099.36
43.0100	Law, Public Safety and Security	\$ 53,196.69
52.1800	Marketing, Management and Entrepreneurship	\$ 82,129.01
51.1600	Nursing Services	\$ 165,520.43
50.0100	Performing Arts and Entertainment Industry	\$ 26,406.45
48.0500	Precision Manufacturing	\$ 98,214.78
47.0600	Transportation Technologies	\$ 163,957.79
48.0508	Welding Technologies	\$ 224,484.73
	<b>GRAND TOTAL</b>	<b>\$ 2,382,347.91</b>

**JTED Cost Reporting Worksheet**

2010-2011- JTED- CAVIAT- 030801  
 Program Cost Aggregate Total

Appendix J

Program Title	MEMBER DISTRICTS						
	CAVIAT Central	Flagstaff USD	Fredonia Moccasin USD	Grand Canyon USD	Page USD	Williams USD	Grand Total
Accounting and Related Services					\$ 35,886.26		\$ 35,886.26
Allied Health Services	\$ 14,599.40	\$ 11,978.80					\$ 26,578.20
Audio/Visual Technologies		\$ 30,871.55			\$ 114,241.25		\$ 145,112.80
Business Management and Administrative Services		\$ 42,883.44				\$ 16,303.65	\$ 59,187.09
Construction Technologies		\$ 86,300.56	\$ 65,488.22		\$ 47,303.49	\$ 20,817.17	\$ 219,909.44
Culinary Arts		\$ 114,876.58		\$ 25,846.26	\$ 89,172.44	\$ 42,435.59	\$ 272,330.87
Design and Merchandising		\$ 70,338.01					\$ 70,338.01
Drafting and Design Technologies					\$ 74,910.53	\$ 28,009.26	\$ 102,919.79
Education and Training: Early Childhood Education		\$ 39,951.95	\$ 18,372.30		\$ 33,244.18		\$ 91,568.43
Education and Training: Education Professions	\$ 52,135.93						\$ 52,135.93
Electrical and Power Transmission Technologies	\$ 13,035.00						\$ 13,035.00
Graphic Communications		\$ 32,093.85			\$ 219,243.03		\$ 251,336.88
Information Technologies	\$ 43,062.99	\$ 90,419.11			\$ 94,617.26		\$ 228,099.36
Law, Public Safety and Security	\$ 40,329.50		\$ 12,867.19				\$ 53,196.69
Marketing, Management and Entrepreneurship		\$ 21,974.07	\$ 14,168.21		\$ 45,986.73		\$ 82,129.01
Nursing Services	\$ 112,061.53				\$ 53,458.90		\$ 165,520.43
Performing Arts and Entertainment Industry					\$ 26,406.45		\$ 26,406.45
Precision Manufacturing		\$ 68,430.41				\$ 29,784.37	\$ 98,214.78
Transportation Technologies		\$ 163,957.79					\$ 163,957.79
Welding Technologies		\$ 64,266.48	\$ 40,107.33		\$ 120,110.92		\$ 224,484.73
<b>GRAND TOTAL</b>	<b>\$ 275,224.35</b>	<b>\$ 838,342.60</b>	<b>\$ 151,003.25</b>	<b>\$ 25,846.26</b>	<b>\$ 954,581.41</b>	<b>\$ 137,350.04</b>	<b>\$ 2,382,347.91</b>

**JTED Cost Reporting Worksheet**

2010- 2011 JTED- CAVIT- 110801  
 Program Cost Aggregate Total

**Reported Aggregate Program Cost**

**Percent Expenditure by Program Category**

	<b>MODE</b>	<b>MEDIAN</b>	<b>MAX</b>
<b>Salaries</b>	78%	63%	94%
<b>ERE</b>	22%	14%	32%
<b>Purchased Services</b>	1%	7%	73%
<b>Supplies</b>	1%	3%	63%
<b>Property</b>	0%	23%	85%
<b>Other</b>	1%	5%	24%

1%= value >0 to 1.49%

If there is more than one modal value, the larger percentage value is shown.

If there is no data available or if there are \$0 reported, 0 % is shown.

**Member Districts**  
 Casa Grande Union HSD  
 Coolidge USD  
 Florence USD  
 Maricopa USD  
 Santa Cruz Valley Union HSD

<b>Number</b>	<b>Program Title</b>	<b>Total Aggregate Program Cost</b>
01.0100	Agricultural Business Management - Agriscience	\$ 20,286.00
51.0800	Allied Health Services	\$ 99,430.67
10.0200	Audio/Visual Technologies	\$ 166,786.33
52.0200	Business Management and Administrative Services	\$ 124,221.04
52.0400	Business Operations Support and Assistant Services	\$ 59,007.91
46.0400	Construction Technologies	\$ 169,352.72
12.0500	Culinary Arts	\$ 259,054.79
13.1210	Education and Training: Early Childhood Education	\$ 34,724.31
13.1200	Education and Training: Education Professions	\$ 2,029.41
15.0000	Engineering Sciences	\$ 154,554.40
52.0800	Financial Services	\$ 3,444.58
10.0300	Graphic Communications	\$ 124,595.83
52.0900	Hospitality Management	\$ 77,357.02
15.1200	Information Technologies	\$ 17,920.46
52.1800	Marketing, Management and Entrepreneurship	\$ 83,329.19
47.0600	Transportation Technologies	\$ 2,258.71
48.0508	Welding Technologies	\$ 78,612.27
	<b>GRAND TOTAL</b>	<b>\$ 1,476,965.63</b>

**JTED Cost Reporting Worksheet**

2010-2011 JTED- CAVIT- 110801  
 Program Cost Aggregate Total

Program Title	MEMBER DISTRICTS					Grand Total
	Casa Grande Union HSD	Coolidge USD	Florence USD	Maricopa USD	Santa Cruz Valley Union HSD	
Agricultural Business Management - Agriscience	\$ 4,027.12	\$ 16,258.88				\$ 20,286.00
Allied Health Services	\$ 40,859.44	\$ 19,747.38	\$ 20,104.00	\$ 18,719.85		\$ 99,430.67
Audio/Visual Technologies			\$ 24,978.00	\$ 141,808.33		\$ 166,786.33
Business Management and Administrative Services		\$ 58,134.40	\$ 53,062.00	\$ 13,024.64		\$ 124,221.04
Business Operations Support and Assistant Services	\$ 8,088.91		\$ 50,919.00			\$ 59,007.91
Construction Technologies	\$ 52,608.11	\$ 33,956.61	\$ 68,120.00		\$ 14,668.00	\$ 169,352.72
Culinary Arts	\$ 159,013.29	\$ 17,063.23	\$ 40,268.00	\$ 21,812.27	\$ 20,898.00	\$ 259,054.79
Education and Training: Early Childhood Education	\$ 4,412.68	\$ 30,311.63				\$ 34,724.31
Education and Training: Education Professions		\$ 2,029.41				\$ 2,029.41
Engineering Sciences		\$ 154,554.40				\$ 154,554.40
Financial Services	\$ 3,444.58					\$ 3,444.58
Graphic Communications	\$ 58,759.83	\$ 38,474.91		\$ 27,361.09		\$ 124,595.83
Hospitality Management	\$ 67,290.02		\$ 10,067.00			\$ 77,357.02
Information Technologies		\$ 17,920.46				\$ 17,920.46
Marketing, Management and Entrepreneurship	\$ 66,494.98			\$ 16,834.21		\$ 83,329.19
Transportation Technologies	\$ 2,258.71					\$ 2,258.71
Welding Technologies				\$ 78,612.27		\$ 78,612.27
<b>GRAND TOTAL</b>	<b>\$ 467,257.67</b>	<b>\$ 388,451.30</b>	<b>\$ 267,518.00</b>	<b>\$ 318,172.66</b>	<b>\$ 35,566.00</b>	<b>\$ 1,476,965.63</b>

**JTED Cost Reporting Worksheet**

2010-2011 JTED- CTD- 020801  
 Program Aggregate Total

<b>Number</b>	<b>Program Title</b>	<b>Total Aggregate Program Cost</b>
52.0300	Accounting and Related Services	\$ 27,685.55
01.0100	Agricultural Business Management - Agriscience	\$ 367,688.80
49.0100	Air Transportation	\$ 58,069.36
51.0800	Allied Health Services	\$ 74,776.42
10.0200	Audio/Visual Technologies	\$ 62,931.67
41.0100	Bioscience	\$ 180,901.17
52.0200	Business Management and Administrative Services	\$ 93,249.09
52.0400	Business Operations Support and Assistant Services	\$ 72,688.73
46.0400	Construction Technologies	\$ 119,888.95
12.0500	Culinary Arts	\$ 201,295.36
15.1300	Drafting and Design Technologies	\$ 70,622.43
13.1210	Education and Training: Early Childhood Education	\$ 107,614.91
13.1200	Education and Training: Education Professions	\$ 24,398.25
15.0000	Engineering Sciences	\$ 47,147.57
43.0200	Fire Science	\$ 73,639.48
10.0300	Graphic Communications	\$ 121,449.40
15.1200	Information Technologies	\$ 72,503.06
43.0100	Law, Public Safety and Security	\$ 39,336.51
52.1800	Marketing, Management and Entrepreneurship	\$ 228,758.97
51.1600	Nursing Services	\$ 26,585.48
47.0600	Transportation Technologies	\$ 7,023.00
48.0508	Welding Technologies	\$ 30,363.34
	<b>GRAND TOTAL</b>	<b>\$ 2,108,617.50</b>

**Reported Aggregate Program Cost**

<b>Percent Expenditure by Program Category</b>			
	<b>MODE</b>	<b>MEDIAN</b>	<b>MAX</b>
<b>Salaries</b>	60%	56%	83%
<b>ERE</b>	10%	11%	25%
<b>Purchased Services</b>	4%	5%	77%
<b>Supplies</b>	7%	10%	52%
<b>Rentals</b>	4%	5%	67%
<b>Books &amp; Inst Aids</b>	17%	17%	47%

1% = value >0 to 1.49%

If there is more than one modal value, the larger percentage value is shown.

If there is no data available or if there are \$0 reported, 0 % is shown.

<p><b>Member Districts</b>                      Benson Unified SD                      Bowie Unified SD                      Douglas Unified SD                      San Simon Unified SD                      St. David Unified SD                      Tombstone Unified SD                      Valley Union HSD                      Wilcox Unified SD</p>
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JTED Cost Reporting Worksheet

2010-2011 JTED- CTD- 020801  
 Program Cost Aggregate Total

Program Title	MEMBER DISTRICTS								
	Benson USD	Bowie USD	Douglas USD	San Simon USD	St. David USD	Tombstone USD	Valley Union HSD	Willcox USD	Grand Total
Accounting and Related Services	\$ 27,685.55								\$ 27,685.55
Agricultural Business Management - Agriscience	\$ 39,852.61	\$ 8,499.60	\$ 122,482.12	\$ 11,660.00	\$ 24,956.23	\$ 41,748.24	\$ 34,832.00	\$ 83,658.00	\$ 367,688.80
Air Transportation			\$ 58,069.36						\$ 58,069.36
Allied Health Services			\$ 74,776.42						\$ 74,776.42
Audio/Visual Technologies			\$ 33,402.67					\$ 29,529.00	\$ 62,931.67
Bioscience			\$ 180,901.17						\$ 180,901.17
Business Management and Administrative Services						\$ 30,389.09	\$ 62,860.00		\$ 93,249.09
Business Operations Support and Assistant Services			\$ 72,688.73						\$ 72,688.73
Construction Technologies	\$ 52,361.75					\$ 47,164.20		\$ 20,363.00	\$ 119,888.95
Cosmetology									
Culinary Arts	\$ 62,429.06	\$ 8,141.17	\$ 66,916.69		\$ 14,006.37	\$ 33,012.07	\$ 16,790.00		\$ 201,295.36
Dental Assisting									
Design and Merchandising									
Diagnostic and Intervention Technologies									
Drafting and Design Technologies			\$ 70,622.43						\$ 70,622.43
Education and Training: Early Childhood Education			\$ 92,170.22		\$ 15,444.69				\$ 107,614.91
Education and Training: Education Professions			\$ 9,523.46			\$ 14,874.79			\$ 24,398.25
Electrical and Power Transmission Technologies									
Electrical Systems Installation and Maintenance Technologies									
Electronic Technologies									
Engineering Sciences	\$ 4,055.91		\$ 43,091.66						\$ 47,147.57
Financial Services									
Fire Science			\$ 73,639.48						\$ 73,639.48
Graphic Communications	\$ 18,775.62		\$ 73,144.78					\$ 29,529.00	\$ 121,449.40
Heating, Ventilation and Air Conditioning									
Heavy Equipment Operations									
Heavy/Industrial Equipment Maintenance Technologies									
Hospitality Management									
Information Technologies			\$ 21,671.83		\$ 17,819.72	\$ 33,011.51			\$ 72,503.06
Law, Public Safety and Security			\$ 39,336.51						\$ 39,336.51
Marketing, Management and Entrepreneurship	\$ 71,887.12		\$ 125,527.13		\$ 18,619.72			\$ 12,725.00	\$ 228,758.97
Mental and Social Health Services									
Nursing Services	\$ 2,095.69		\$ 24,489.79						\$ 26,585.48
Performing Arts and Entertainment Industry									
Precision Manufacturing									
Therapeutic Massage									
Transportation Technologies								\$ 7,023.00	\$ 7,023.00
Welding Technologies	\$ 30,363.34								\$ 30,363.34
<b>GRAND TOTAL</b>	<b>\$ 309,506.65</b>	<b>\$ 16,640.77</b>	<b>\$ 1,182,454.45</b>	<b>\$ 11,660.00</b>	<b>\$ 90,846.73</b>	<b>\$ 200,199.90</b>	<b>\$ 114,482.00</b>	<b>\$ 182,827.00</b>	<b>\$ 2,108,617.50</b>

**JTED Cost Reporting Worksheet**

2010- 2011 JTED- CVIT- 110802  
 Program Cost Aggregate Total

Number	Program Title	Total Aggregate Program Cost
01.0100	Agricultural Business Management - Agriscience	\$ 27,292.72
10.0200	Audio/Visual Technologies	\$ 34,117.60
52.0200	Business Management and Administrative Services	\$ 24,105.14
46.0400	Construction Technologies	\$ 42,564.24
12.0500	Culinary Arts	\$ 24,990.89
15.1300	Drafting and Design Technologies	\$ 18,793.52
13.1210	Education and Training: Early Childhood Education	\$ 16,949.36
13.1200	Education and Training: Education Professions	\$ 16,936.07
47.0100	Electrical Systems Installation and Maintenance Technologies	\$ 10,851.99
43.0200	Fire Science	\$ 26,610.96
10.0300	Graphic Communications	\$ 27,903.44
52.0900	Hospitality Management	\$ 8,512.63
15.1200	Information Technologies	\$ 8,054.84
52.1800	Marketing, Management and Entrepreneurship	\$ 23,906.63
51.1600	Nursing Services	\$ 51,359.62
47.0600	Transportation Technologies	\$ 11,299.31
48.0508	Welding Technologies	\$ 52,980.40
<b>GRAND TOTAL</b>		<b>\$ 427,229.36</b>

**Reported Aggregate Program Course Cost**

Percent Expenditure by Program Category			
	MODE	MEDIAN	MAX
<b>Salaries</b>	56%	54%	74%
<b>ERE</b>	18%	10%	24%
<b>Purchased Services</b>	5%	5%	31%
<b>Supplies</b>	13%	13%	42%
<b>Property</b>	8%	8%	58%
<b>Other</b>	2%	17%	27%

1% = value >0 to 1.49%

If there is more than one modal value, the larger percentage value is shown.

If there is no data available or if there are \$0 reported, 0% is shown.

<b>Member Districts</b>
Globe USD
Hayden-Windelman USD
Miami USD
San Carlos USD
Superior USD

**JTED Cost Reporting Worksheet**

2010-2011 JTED- CVIT- 110802  
 Program Cost Aggregate Total

Program Title	MEMBER DISTRICTS						
	CVIT Central	Globe USD	Hayden-Winkelman USD	Miami USD	San Carlos USD	Superior USD	Grand Total
Agricultural Business Management - Agriscience		\$ 19,237.88			\$ 8,054.84		\$ 27,292.72
Audio/Visual Technologies		\$ 23,378.93		\$ 10,738.67			\$ 34,117.60
Business Management and Administrative Services		\$ 16,050.31			\$ 8,054.83		\$ 24,105.14
Construction Technologies		\$ 34,509.40			\$ 8,054.84		\$ 42,564.24
Culinary Arts					\$ 8,054.84	\$ 16,936.05	\$ 24,990.89
Drafting and Design Technologies				\$ 10,738.67	\$ 8,054.85		\$ 18,793.52
Education and Training: Early Childhood Education			\$ 5,720.41			\$ 11,228.95	\$ 16,949.36
Education and Training: Education Professions						\$ 16,936.07	\$ 16,936.07
Electrical Systems Installation and Maintenance Technologies	\$ 10,851.99						\$ 10,851.99
Fire Science	\$ 26,610.96						\$ 26,610.96
Graphic Communications		\$ 16,913.54		\$ 10,989.90			\$ 27,903.44
Hospitality Management		\$ 8,512.63					\$ 8,512.63
Information Technologies					\$ 8,054.84		\$ 8,054.84
Marketing, Management and Entrepreneurship			\$ 10,157.59			\$ 13,749.04	\$ 23,906.63
Nursing Services	\$ 59,414.46				\$ 8,054.84		\$ 51,359.62
Transportation Technologies		\$ 11,299.31					\$ 11,299.31
Welding Technologies				\$ 52,980.40			\$ 52,980.40
<b>GRAND TOTAL</b>	<b>\$ 80,767.73</b>	<b>\$ 129,902.00</b>	<b>\$ 15,878.00</b>	<b>\$ 85,447.64</b>	<b>\$ 56,383.88</b>	<b>\$ 58,850.11</b>	<b>\$ 427,229.36</b>

JTED Cost Reporting Worksheet

Number	Program Title	Total Aggregate Program Cost
52.0300	Accounting and Related Services	\$ 64,952.07
01.0100	Agricultural Business Management - Agriscience	\$ 1,455,926.03
49.0100	Air Transportation	\$ 56,822.55
51.0800	Allied Health Services	\$ 917,409.90
10.0200	Audio/Visual Technologies	\$ 2,026,521.44
41.0100	Bioscience	\$ 856,541.96
52.0200	Business Management and Administrative Services	\$ 779,656.53
52.0400	Business Operations Support and Assistant Services	\$ 1,093,499.09
46.0400	Construction Technologies	\$ 543,198.31
12.0400	Cosmetology	\$ 593,453.88
12.0500	Culinary Arts	\$ 1,733,900.85
51.0600	Dental Assisting	\$ 45,969.49
52.1900	Design and Merchandising	\$ 1,159,273.05
15.1300	Drafting and Design Technologies	\$ 349,347.97
13.1210	Education and Training: Early Childhood Education	\$ 666,853.93
13.1200	Education and Training: Education Professions	\$ 373,161.78
15.0300	Electronic Technologies	\$ 58,353.64
15.0000	Engineering Sciences	\$ 384,428.45
52.0800	Financial Services	\$ 58,108.00
43.0200	Fire Science	\$ 154,046.16
10.0300	Graphic Communications	\$ 3,788,403.84
47.0300	Heavy/Industrial Equipment Maintenance Technologies	\$ 64,107.56
52.0900	Hospitality Management	\$ 192,176.95
15.1200	Information Technologies	\$ 901,556.71
43.0100	Law, Public Safety and Security	\$ 1,143,585.27
52.1800	Marketing, Management and Entrepreneurship	\$ 539,269.47
51.1600	Nursing Services	\$ 497,382.56
50.0100	Performing Arts and Entertainment Industry	\$ 67,064.91
48.0500	Precision Manufacturing	\$ 107,064.28
51.3500	Therapeutic Massage	\$ 128,359.97
47.0600	Transportation Technologies	\$ 967,361.89
48.0508	Welding Technologies	\$ 449,727.83
<b>GRAND TOTAL</b>		<b>\$ 22,217,486.32</b>

Reported Aggregate Program Cost			
Percent Expenditure by Program Category			
	MODE	MEDIAN	MAX
Salaries	81%	73%	90%
ERE	15%	16%	35%
Purchased Services	1%	2%	100%
Supplies	1%	2%	44%
Property	1%	1%	96%
Other	1%	1%	5%

1% = value >0 to 1.49%

If there is more than one modal value, the larger percentage value is shown.

If there is no data available or if there are \$0 reported, 0% is shown.

Member Districts
Apache Junction USD
Chandler USD
Fountain Hills USD
Gilbert USD
Higley USD
J O Combs UD
Mesa USD
Queen Creek USD
Scottsdale USD
Tempe USD

JTED Cost Reporting Worksheet

2010-2011 JTED- EVIT- 070801  
 Program Cost Aggregate Total

Program Title	MEMBER DISTRICTS											Grand Total
	AJ USD	Chandler USD	EVIT Central	Fl.Hills USD	Gilbert USD	Higley USD	JO COMBS USD	Mesa USD	Queen Creek USD	Scottsdale USD	Tempe UHSD	
Accounting and Related Services	\$ 64,952.07											\$ 64,952.07
Agricultural Business Management - Agriscience		\$ 328,561.36			\$ 635,211.88		\$ 46,385.00	\$ 152,019.00	\$ 71,675.00		\$ 222,073.79	\$ 1,455,926.03
Air Transportation			\$ 56,822.55									\$ 56,822.55
Allied Health Services		\$ 177,736.93	\$ 338,950.02		\$ 283,354.95	\$ 34,867.00		\$ 48,160.00	\$ 34,341.00			\$ 917,409.90
Audio/Visual Technologies		\$ 300,141.31	\$ 243,566.80	\$ 50,128.94	\$ 103,212.02	\$ 455,012.00		\$ 167,881.00	\$ 50,474.00	\$ 282,376.00	\$ 373,729.37	\$ 2,026,521.44
Bioscience		\$ 138,202.47	\$ 57,293.19		\$ 69,544.07	\$ 234,714.00		\$ 226,367.00		\$ 79,478.00	\$ 50,943.23	\$ 856,541.96
Business Management and Administrative Services	\$ 91,013.67	\$ 80,667.67									\$ 607,975.19	\$ 779,656.53
Business Operations Support and Assistant Services					\$ 1,093,499.09							\$ 1,093,499.09
Construction Technologies	\$ 53,338.43	\$ 37,847.01	\$ 136,666.29		\$ 45,089.25			\$ 151,472.00	\$ 75,248.00		\$ 43,537.33	\$ 543,198.31
Cosmetology			\$ 593,453.88									\$ 593,453.88
Culinary Arts	\$ 5,821.77	\$ 149,164.35	\$ 254,914.16		\$ 34,219.17			\$ 415,926.00	\$ 163,498.00	\$ 83,362.00	\$ 626,995.40	\$ 1,733,900.85
Dental Assisting			\$ 45,969.49									\$ 45,969.49
Design and Merchandising		\$ 42,180.07	\$ 125,826.80		\$ 801,923.14		\$ 2,869.00	\$ 29,919.00	\$ 18,390.00	\$ 51,042.00	\$ 87,123.04	\$ 1,159,273.05
Drafting and Design Technologies		\$ 57,191.09	\$ 11,871.71					\$ 137,685.00	\$ 31,465.00	\$ 71,432.00	\$ 39,703.17	\$ 349,347.97
Education and Training: Early Childhood Education	\$ 77,464.80	\$ 118,236.27	\$ 67,984.24		\$ 6,665.01		\$ 47,824.00		\$ 76,934.00	\$ 101,541.00	\$ 170,204.61	\$ 666,853.93
Education and Training: Education Professions		\$ 92,796.36	\$ 81,964.62	\$ 20,687.20	\$ 1,066.60			\$ 164,104.00		\$ 12,543.00		\$ 373,161.78
Electronic Technologies			\$ 58,353.64									\$ 58,353.64
Engineering Sciences		\$ 34,859.07			\$ 106,122.82	\$ 169,496.00		\$ 24,705.00			\$ 49,245.56	\$ 384,428.45
Financial Services								\$ 9,231.00		\$ 48,877.00		\$ 58,108.00
Fire Science			\$ 154,046.16									\$ 154,046.16
Graphic Communications	\$ 120,931.13	\$ 383,377.12	\$ 233,939.91	\$ 102,271.03	\$ 336,499.47	\$ 108,163.00		\$ 74,393.00	\$ 45,519.00	\$ 65,457.00	\$ 2,317,853.18	\$ 3,788,403.84
Heavy/Industrial Equipment Maintenance Technologies			\$ 35,701.66		\$ 28,405.90							\$ 64,107.56
Hospitality Management				\$ 49,821.95						\$ 142,355.00		\$ 192,176.95
Information Technologies		\$ 86,509.40				\$ 77,444.00		\$ 377,197.00		\$ 303,090.00	\$ 57,316.31	\$ 901,556.71
Law, Public Safety and Security			\$ 113,704.51						\$ 19,836.00		\$ 1,010,044.76	\$ 1,143,585.27
Marketing, Management and Entrepreneurship		\$ 109,193.04			\$ 9,765.43	\$ 121,326.00		\$ 118,170.00	\$ 84,644.00	\$ 96,171.00		\$ 539,269.47
Nursing Services		\$ 193,768.66	\$ 208,720.90							\$ 94,893.00		\$ 497,382.56
Performing Arts and Entertainment Industry					\$ 58,721.91				\$ 5,487.00	\$ 2,856.00		\$ 67,064.91
Precision Manufacturing					\$ 107,064.28							\$ 107,064.28
Therapeutic Massage			\$ 128,359.97									\$ 128,359.97
Transportation Technologies		\$ 13,198.15	\$ 462,028.22		\$ 154,246.22			\$ 222,612.00			\$ 115,277.30	\$ 967,361.89
Welding Technologies	\$ 77,462.73		\$ 121,017.10					\$ 251,248.00				\$ 449,727.83
<b>GRAND TOTAL</b>	<b>\$ 490,984.60</b>	<b>\$ 2,343,630.33</b>	<b>\$ 3,531,155.82</b>	<b>\$ 222,909.12</b>	<b>\$ 3,874,611.21</b>	<b>\$ 1,201,022.00</b>	<b>\$ 97,078.00</b>	<b>\$ 2,571,089.00</b>	<b>\$ 677,511.00</b>	<b>\$ 1,435,473.00</b>	<b>\$ 5,772,022.24</b>	<b>\$ 22,217,486.32</b>

**JTED Cost Reporting Worksheet**

2010-2011 JTED- GIFT- 050802  
 Program Cost Aggregate Total

<b>Number</b>	<b>Program Title</b>	<b>Total Aggregate Program Cost</b>
01.0100	Agricultural Business Management - Agriscience	\$ 105,036.70
51.0800	Allied Health Services	\$ 108,934.85
52.0200	Business Management and Administrative Services	\$ 305,292.25
46.0400	Construction Technologies	\$ 94,123.23
12.0400	Cosmetology	\$ 126,075.67
12.0500	Culinary Arts	\$ 48,796.23
15.1300	Drafting and Design Technologies	\$ 74,255.25
13.1210	Education and Training: Early Childhood Education	\$ 47,415.91
43.0200	Fire Science	\$ 50,927.99
10.0300	Graphic Communications	\$ 49,566.43
43.0100	Law, Public Safety and Security	\$ 32,163.16
52.1800	Marketing, Management and Entrepreneurship	\$ 27,272.07
51.1600	Nursing Services	\$ 90,905.77
48.0500	Precision Manufacturing	\$ 32,094.92
47.0600	Transportation Technologies	\$ 106,001.79
48.0508	Welding Technologies	\$ 38,084.69
<b>GRAND TOTAL</b>		<b>\$ 1,336,946.91</b>

**Reported Aggregate Program Cost**

<b>Percent Expenditure by Program Category</b>			
	<b>MODE</b>	<b>MEDIAN</b>	<b>MAX</b>
<b>Salaries</b>	71%	49%	93%
<b>ERE</b>	29%	15%	29%
<b>Purchased Services</b>	4%	7%	93%
<b>Supplies</b>	35%	11%	82%
<b>Property</b>	6%	16%	77%
<b>Other</b>	1%	3%	36%

1%= value >0 to 1.0%

If there is more than one modal value, the larger percentage value is shown.

If there is no data available or if there are \$0 reported, 0 % is shown.

<p><b>Member Districts</b></p> <p>Duncan USD</p> <p>Ft. Thomas USD</p> <p>*Morenci USD</p> <p>Pima USD</p> <p>Safford USD</p> <p>Thatcher USD</p>
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**\*New member- no JTED cost for SFY 2011**

**JTED Cost Reporting Worksheet**

2010-2011 JTED- GIFT- 050802  
 Program Cost Aggregate Total

Program Title	MEMBER DISTRICTS						
	Duncan USD	Ft. Thomas USD	GIFT Central	Pima USD	Safford USD	Thatcher USD	Grand Total
Agricultural Business Management - Agriscience	\$ 23,031.63	\$ 69,614.69			\$ 12,390.38		\$ 105,036.70
Allied Health Services			\$ 108,934.85				\$ 108,934.85
Business Management and Administrative Services	\$ 56,585.29	\$ 7,863.39		\$ 25,784.05	\$ 110,358.98	\$ 104,700.54	\$ 305,292.25
Construction Technologies		\$ 45,700.26		\$ 19,011.36		\$ 29,411.61	\$ 94,123.23
Cosmetology			\$ 126,075.67				\$ 126,075.67
Culinary Arts				\$ 36,773.04	\$ 5,544.33	\$ 6,478.86	\$ 48,796.23
Drafting and Design Technologies	\$ 33,836.61		\$ 40,418.64				\$ 74,255.25
Education and Training: Early Childhood Education	\$ 6,090.02		\$ 33,417.28		\$ 7,908.61		\$ 47,415.91
Fire Science			\$ 50,927.99				\$ 50,927.99
Graphic Communications			\$ 33,333.21	\$ 16,233.22			\$ 49,566.43
Law, Public Safety and Security			\$ 32,163.16				\$ 32,163.16
Marketing, Management and Entrepreneurship					\$ 27,272.07		\$ 27,272.07
Nursing Services			\$ 90,905.77				\$ 90,905.77
Precision Manufacturing			\$ 32,094.92				\$ 32,094.92
Transportation Technologies		\$ 1,798.34	\$ 34,443.21		\$ 69,760.24		\$ 106,001.79
Welding Technologies				\$ 23,526.94	\$ 14,557.75		\$ 38,084.69
<b>GRAND TOTAL</b>	<b>\$ 119,543.55</b>	<b>\$ 124,976.68</b>	<b>\$ 582,714.70</b>	<b>\$ 121,328.61</b>	<b>\$ 247,792.36</b>	<b>\$ 140,591.01</b>	<b>\$ 1,336,946.91</b>

**JTED Cost Reporting Worksheet**

2010-2011 JTED- MIJTED-130802  
 Program Cost Aggregate Total

<b>Number</b>	<b>Program Title</b>	<b>Total Aggregate Program Cost</b>
01.0100	Agricultural Business Management -	\$ 158,108.90
10.0200	Audio/Visual Technologies	\$ 26,446.91
41.0100	Bioscience	\$ 17,527.58
52.0200	Business Management and Administrative	\$ 54,698.48
46.0400	Construction Technologies	\$ 29,086.00
12.0500	Culinary Arts	\$ 366,621.60
15.1300	Drafting and Design Technologies	\$ 33,460.80
13.1200	Education and Training: Education Professions	\$ 18,937.00
15.1200	Information Technologies	\$ 87,489.20
52.1800	Marketing, Management and Entrepreneurship	\$ 27,454.26
51.1600	Nursing Services	\$ 39,624.29
47.0600	Transportation Technologies	\$ 165,682.99
48.0508	Welding Technologies	\$ 125,517.84
<b>GRAND TOTAL</b>		<b>\$ 1,150,655.85</b>

**Reported Aggregate Program Cost**

<b>Percent Expenditure by Program Category</b>			
	<b>MODE</b>	<b>MEDIAN</b>	<b>MAX</b>
<b>Salaries</b>	47%	50%	85%
<b>ERE</b>	15%	9%	35%
<b>Purchased Services</b>	34%	13%	72%
<b>Supplies</b>	1%	21%	100%
<b>Property</b>	3%	0%	100%
<b>Other</b>	1%	9%	38%

1%= value >0 to 1.49%

If there is more than one modal value, the larger percentage value is shown.

If there is no data available or if there are \$0 reported, 0 % is shown.

<p><b>Member Districts</b></p> <p>Ash Fork USD</p> <p>Bagdad USD</p> <p>Chino Valley USD</p> <p>Humbolt USD</p> <p>Mayer USD</p> <p>Prescott USD</p> <p>Seligman USD</p>
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**JTED Cost Reporting Worksheet**

2010-2011 JTED- MIJTED-130802  
 Program Cost Aggregate Total

Program Title	MEMBER DISTRICTS								
	Ash Fork USD	Bagdad USD	Chino Valley USD	Humbolt USD	Mayer USD	MIJTED Central	Prescott USD	Seligman USD	Grand Total
Agricultural Business Management - Agriscience			\$ 22,170.98		\$ 76,312.92	\$ 59,625.00			\$ 158,108.90
Audio/Visual Technologies				\$ 22,044.91		\$ 4,402.00			\$ 26,446.91
Bioscience			\$ 14,610.58			\$ 2,917.00			\$ 17,527.58
Business Management and Administrative Services		\$ 590.00			\$ 182.48	\$ 9,106.00	\$ 44,820.00		\$ 54,698.48
Construction Technologies						\$ 4,842.00	\$ 24,244.00		\$ 29,086.00
Culinary Arts		\$ 2,067.00	\$ 262,641.40	\$ 27,607.95	\$ 12,955.25	\$ 61,350.00			\$ 366,621.60
Drafting and Design Technologies			\$ 30,504.80			\$ 2,956.00			\$ 33,460.80
Education and Training: Education Professions				\$ 15,784.00		\$ 3,153.00			\$ 18,937.00
Information Technologies				\$ 61,317.20		\$ 14,564.00	\$ 11,608.00		\$ 87,489.20
Marketing, Management and Entrepreneurship				\$ 22,883.26		\$ 4,571.00			\$ 27,454.26
Nursing Services				\$ 33,028.29		\$ 6,596.00			\$ 39,624.29
Transportation Technologies						\$ 138,884.99	\$ 26,798.00		\$ 165,682.99
Welding Technologies	\$ 11,297.84	\$ 53,238.00				\$ 60,982.00			\$ 125,517.84
<b>GRAND TOTAL</b>	<b>\$ 11,297.84</b>	<b>\$ 55,895.00</b>	<b>\$ 329,927.76</b>	<b>\$ 182,665.61</b>	<b>\$ 89,450.65</b>	<b>\$ 373,948.99</b>	<b>\$ 107,470.00</b>		<b>\$ 1,150,655.85</b>

JTED Cost Reporting Worksheet

2010-2011 JTED- NATIVE- 090836  
 Program Cost Aggregate Total

Number	Program Title	Total Aggregate Program Cost
52.0300	Accounting and Related Services	\$ 55,052.19
01.0100	Agricultural Business Management - Agriscience	\$ 412,260.52
51.0800	Allied Health Services	\$ 8,738.63
10.0200	Audio/Visual Technologies	\$ 49,821.59
52.0200	Business Management and Administrative Services	\$ 116,193.33
52.0400	Business Operations Support and Assistant Services	\$ 47,370.72
46.0400	Construction Technologies	\$ 219,067.56
12.0400	Cosmetology	\$ 17,955.24
12.0500	Culinary Arts	\$ 87,111.90
15.1300	Drafting and Design Technologies	\$ 205,462.30
13.1210	Education and Training: Early Childhood Education	\$ 38,947.14
13.1200	Education and Training: Education Professions	\$ 57,718.25
15.0300	Electronic Technologies	\$ 46,930.24
10.0300	Graphic Communications	\$ 148,087.29
49.0200	Heavy Equipment Operations	\$ 17,955.24
52.0900	Hospitality Management	\$ 38,578.10
15.1200	Information Technologies	\$ 41,019.58
43.0100	Law, Public Safety and Security	\$ 3,620.46
52.1800	Marketing, Management and Entrepreneurship	\$ 36,256.02
51.1600	Nursing Services	\$ 257,550.98
47.0600	Transportation Technologies	\$ 41,128.64
48.0508	Welding Technologies	\$ 318,293.06
<b>GRAND TOTAL</b>		<b>\$ 2,265,119.00</b>

Reported Aggregate Program Cost

Percent Expenditure by Program Category			
	MODE	MEDIAN	MAX
<b>Salaries</b>	21%	33%	76%
<b>ERE</b>	22%	9%	24%
<b>Purchased Services</b>	7%	11%	100%
<b>Supplies</b>	5%	20%	100%
<b>Property</b>	9%	19%	100%
<b>Other</b>	1%	5%	15%

\* 1% = value >0 to 1.49%

If there is more than one modal value, the larger percentage value is shown.

If there is no data available or if there are \$0 reported, 0 % is shown.

<b>Member Districts</b>
Chinle Unified SD
Ganado Unified SD
Kayenta Unified SD
Pinon Unified SD
Red Mesa Unified SD
Sanders Unified SD
Tuba City Unified SD
Window Rock Unified SD

**JTED Cost Reporting Worksheet**

2010-2011 JTED- NATIVE- 090836  
 Program Cost Aggregate Total

Program Title	MEMBER DISTRICTS								
	Chinle USD	Ganado USD	Kayenta USD	Pinon USD	Red Mesa USD	Sanders USD	Tuba City USD	Window Rock USD	Grand Total
Accounting and Related Services	\$ 32,542.63			\$ 22,509.56					\$ 55,052.19
Agricultural Business Management - Agriscience	\$ 76,319.71	\$ 22,766.08	\$ 217,081.53			\$ 96,093.20			\$ 412,260.52
Allied Health Services			\$ 5,818.17					\$ 2,920.46	\$ 8,738.63
Audio/Visual Technologies	\$ 46,901.13							\$ 2,920.46	\$ 49,821.59
Business Management and Administrative Services	\$ 17,390.87	\$ 12,919.13	\$ 44,518.14	\$ 37,244.73				\$ 4,120.46	\$ 116,193.33
Business Operations Support and Assistant Services							\$ 44,450.26	\$ 2,920.46	\$ 47,370.72
Construction Technologies	\$ 21,678.44	\$ 18,399.91	\$ 33,853.66	\$ 28,157.74	\$ 57,404.29	\$ 3,452.40	\$ 52,413.20	\$ 3,707.91	\$ 219,067.56
Cosmetology	\$ 17,955.24								\$ 17,955.24
Culinary Arts	\$ 17,955.24	\$ 16,719.26		\$ 29,903.55			\$ 4,241.00	\$ 18,292.85	\$ 87,111.90
Drafting and Design Technologies	\$ 115,341.16	\$ 21,980.84	\$ 9,852.61				\$ 20,287.69	\$ 38,000.00	\$ 205,462.30
Education and Training: Early Childhood Education			\$ 38,947.14						\$ 38,947.14
Education and Training: Education Professions	\$ 22,073.16		\$ 27,255.14				\$ 8,389.95		\$ 57,718.25
Electronic Technologies	\$ 46,930.24								\$ 46,930.24
Graphic Communications		\$ 17,382.40	\$ 38,818.25		\$ 33,500.32	\$ 6,584.40	\$ 4,241.00	\$ 47,560.92	\$ 148,087.29
Heavy Equipment Operations	\$ 17,955.24								\$ 17,955.24
Hospitality Management								\$ 38,578.10	\$ 38,578.10
Information Technologies								\$ 41,019.58	\$ 41,019.58
Law, Public Safety and Security								\$ 3,620.46	\$ 3,620.46
Marketing, Management and Entrepreneurship	\$ 24,941.34				\$ 7,644.21			\$ 3,670.46	\$ 36,256.02
Nursing Services	\$ 64,828.24	\$ 78,999.64	\$ 7,669.88	\$ 37,560.98	\$ 5,007.96	\$ 7,157.65	\$ 11,601.70	\$ 44,724.92	\$ 257,550.98
Transportation Technologies	\$ 20,998.35			\$ 15,645.83				\$ 4,484.46	\$ 41,128.64
Welding Technologies	\$ 27,495.99	\$ 58,808.73	\$ 117,008.47	\$ 21,329.61	\$ 14,619.21	\$ 4,132.35	\$ 51,031.20	\$ 23,867.49	\$ 318,293.06
<b>GRAND TOTAL</b>	<b>\$ 571,307.00</b>	<b>\$ 247,976.00</b>	<b>\$ 540,823.00</b>	<b>\$ 192,352.00</b>	<b>\$ 118,176.00</b>	<b>\$ 117,420.00</b>	<b>\$ 196,656.00</b>	<b>\$ 280,409.00</b>	<b>\$ 2,265,119.00</b>

**JTED Cost Reporting Worksheet**

2010-2011 JTED- NAVIT- 090835  
 Program Cost Aggregate Total

Number	Program Title	Total Aggregate Program Cost
52.0300	Accounting and Related Services	\$ 123,594.77
01.0100	Agricultural Business Management - Agriscience	\$ 1,411,072.12
51.0800	Allied Health Services	\$ 58,346.99
10.0200	Audio/Visual Technologies	\$ 139,999.63
52.0200	Business Management and Administrative Services	\$ 227,228.67
52.0400	Business Operations Support and Assistant Services	\$ 62,629.53
46.0400	Construction Technologies	\$ 287,237.74
12.0400	Cosmetology	\$ 281,520.46
12.0500	Culinary Arts	\$ 240,428.54
52.1900	Design and Merchandising	\$ 61,690.00
15.1300	Drafting and Design Technologies	\$ 103,479.58
13.1210	Education and Training: Early Childhood Education	\$ 131,806.42
13.1200	Education and Training: Education Professions	\$ 173,143.08
46.0300	Electrical and Power Transmission Technologies	\$ 14,188.90
52.0800	Financial Services	\$ 40,027.53
43.0200	Fire Science	\$ 201,308.45
10.0300	Graphic Communications	\$ 205,104.77
49.0200	Heavy Equipment Operations	\$ 173,270.03
47.0300	Heavy/Industrial Equipment Maintenance Technologies	\$ 122,323.71
15.1200	Information Technologies	\$ 274,391.59
43.0100	Law, Public Safety and Security	\$ 61,006.83
52.1800	Marketing, Management and Entrepreneurship	\$ 40,210.57
51.1600	Nursing Services	\$ 397,644.12
48.0500	Precision Manufacturing	\$ 13,858.98
47.0600	Transportation Technologies	\$ 603,585.20
48.0508	Welding Technologies	\$ 393,293.32
	<b>GRAND TOTAL</b>	<b>\$ 5,842,391.51</b>

**Reported Aggregate Program Cost**

Percent Expenditure by Program Category			
	MODE	MEDIAN	MAX
<b>Salaries</b>			
<b>ERE</b>			
<b>Purchased Serv</b>			
<b>Supplies</b>			
<b>Property</b>			
<b>Other</b>			

1%= value >0 to 1.49%

If there is more than one modal value, the larger percentage value is shown.

If there is no data available or if there are \$0 reported, 0 % is shown.

<b>Member Districts</b>
Blue Ridge USD
Herber-Overgaard USD
Holbrook USD
Joseph City USD
Payson USD
Round Valley USD
Show Low USD
Snowflake USD
St. Johns USD
Whiteriver USD
Winslow USD

JTED Cost Reporting Worksheet

2010-2011 JTED- NAVIT- 090835  
 Program Cost Aggregate Total

Program Title	MEMBER DISTRICTS													Grand Total
	Blue Ridge USD	Heber-Overgaard USD	Holbrook USD	Joseph City USD	NAVIT Central	Payson USD	Round Valley USD	Show Low USD	Snow Flake USD	St. Johns USD	White River USD	Winslow USD		
Accounting and Related Services	\$ 22,602.00							\$ 60,782.20					\$ 40,210.57	\$ 123,594.77
Agricultural Business Management - Agriscience						\$ 1,222,851.04	\$ 44,873.10		\$ 88,511.00				\$ 54,836.98	\$ 1,411,072.12
Allied Health Services	\$ 7,503.00												\$ 50,843.99	\$ 58,346.99
Audio/Visual Technologies	\$ 15,286.00		\$ 77,382.08					\$ 22,091.04	\$ 8,888.00		\$ 11,721.53	\$ 4,630.98	\$ 139,999.63	
Business Management and Administrative Services			\$ 11,193.38	\$ 8,862.64		\$ 62,760.84	\$ 45,121.28	\$ 22,535.02	\$ 19,584.00	\$ 44,903.92	\$ 12,267.59		\$ 227,228.67	
Business Operations Support and Assistant Services	\$ 22,602.00											\$ 40,027.53	\$ 62,629.53	
Construction Technologies	\$ 28,241.00	\$ 12,256.35	\$ 40,323.42	\$ 13,453.15		\$ 20,743.44	\$ 51,674.94	\$ 20,521.08	\$ 52,647.00	\$ 5,421.29	\$ 16,173.60	\$ 25,782.47	\$ 287,237.74	
Cosmetology	\$ 7,503.00	\$ 19,842.51	\$ 9,557.92	\$ 10,431.48	\$ 224,220.57				\$ 5,334.00			\$ 4,630.98	\$ 281,520.46	
Culinary Arts	\$ 21,552.00	\$ 14,552.40		\$ 5,243.24		\$ 95,085.37		\$ 70,805.36		\$ 33,190.17			\$ 240,428.54	
Design and Merchandising	\$ 61,690.00												\$ 61,690.00	
Drafting and Design Technologies	\$ 25,663.00		\$ 9,557.92									\$ 68,258.66	\$ 103,479.58	
Education and Training: Early Childhood Education	\$ 12,411.00		\$ 10,317.92					\$ 20,753.23			\$ 83,415.06	\$ 4,909.21	\$ 131,806.42	
Education and Training: Education Professions	\$ 7,503.00	\$ 19,842.50			\$ 112,825.78	\$ 32,971.80							\$ 173,143.08	
Electrical and Power Transmission Technologies			\$ 9,557.92									\$ 4,630.98	\$ 14,188.90	
Financial Services												\$ 40,027.53	\$ 40,027.53	
Fire Science	\$ 7,503.00				\$ 188,472.45				\$ 5,333.00				\$ 201,308.45	
Graphic Communications	\$ 16,271.00	\$ 22,522.33						\$ 23,184.50	\$ 63,063.00	\$ 67,467.46		\$ 12,596.48	\$ 205,104.77	
Heavy Equipment Operations	\$ 7,503.00		\$ 9,557.92		\$ 150,876.11				\$ 5,333.00				\$ 173,270.03	
Heavy/Industrial Equipment Maintenance Tech					\$ 122,323.71								\$ 122,323.71	
Information Technologies	\$ 10,286.00	\$ 14,633.21			\$ 121,675.70	\$ 67,869.70			\$ 55,296.00			\$ 4,630.98	\$ 274,391.59	
Law, Public Safety and Security		\$ 12,256.37										\$ 48,750.46	\$ 61,006.83	
Marketing, Management and Entrepreneurship												\$ 40,210.57	\$ 40,210.57	
Nursing Services	\$ 7,503.00	\$ 19,842.51	\$ 9,557.92	\$ 10,431.46	\$ 331,046.53				\$ 5,333.00		\$ 9,298.72	\$ 4,630.98	\$ 397,644.12	
Precision Manufacturing	\$ 9,228.00											\$ 4,630.98	\$ 13,858.98	
Transportation Technologies	\$ 10,378.00		\$ 11,458.54	\$ 8,885.69	\$ 302,337.00	\$ 53,559.04	\$ 49,990.86	\$ 70,099.28		\$ 33,802.00	\$ 63,074.79		\$ 603,585.20	
Welding Technologies	\$ 7,503.00		\$ 76,385.48	\$ 4,035.97	\$ 256,831.53		\$ 11,301.03			\$ 23,306.61	\$ 9,298.72	\$ 4,630.98	\$ 393,293.32	
<b>GRANT TOTAL</b>	<b>\$ 308,731.00</b>	<b>\$ 135,748.18</b>	<b>\$ 274,850.42</b>	<b>\$ 61,343.63</b>	<b>\$ 1,810,609.38</b>	<b>\$ 1,555,841.23</b>	<b>\$ 202,961.21</b>	<b>\$ 310,771.71</b>	<b>\$ 309,322.00</b>	<b>\$ 208,091.45</b>	<b>\$ 205,250.01</b>	<b>\$ 458,871.29</b>	<b>\$ 5,842,391.51</b>	

**JTED Cost Reporting Worksheet**

2010-2011 JTED- PIMAJTED- 100811  
 Program Cost Aggregate Total

Number	Program Title	Total Aggregate Program Cost
52.0300	Accounting and Related Services	\$ 394,937.11
01.0100	Agricultural Business Management - Agriscience	\$ 1,628,857.54
51.0800	Allied Health Services	\$ 624,579.39
10.0200	Audio/Visual Technologies	\$ 588,146.45
41.0100	Bioscience	\$ 765,940.36
52.0200	Business Management and Administrative Services	\$ 600,214.27
52.0400	Business Operations Support and Assistant	\$ 54,236.96
46.0400	Construction Technologies	\$ 733,744.01
12.0400	Cosmetology	\$ 1,668,975.51
12.0500	Culinary Arts	\$ 1,484,263.44
52.1900	Design and Merchandising	\$ 145,213.39
51.0900	Diagnostic and Intervention Technologies	\$ 6,269.00
15.1300	Drafting and Design Technologies	\$ 257,258.26
13.1210	Education and Training: Early Childhood	\$ 1,345,573.52
13.1200	Education and Training: Education Professions	\$ 133,073.05
15.0300	Electronic Technologies	\$ 7,979.80
15.0000	Engineering Sciences	\$ 429,914.05
52.0800	Financial Services	\$ 144,136.97
43.0200	Fire Science	\$ 1,063,027.28
10.0300	Graphic Communications	\$ 2,037,977.09
47.0200	Heating, Ventilation and Air Conditioning	\$ 140,361.19
52.0900	Hospitality Management	\$ 87,613.85
15.1200	Information Technologies	\$ 361,365.56
43.0100	Law, Public Safety and Security	\$ 1,230,379.59
52.1800	Marketing, Management and Entrepreneurship	\$ 398,073.09
51.1500	Mental and Social Health Services	\$ 47,493.41
51.1600	Nursing Services	\$ 1,670,788.87
50.0100	Performing Arts and Entertainment Industry	\$ 268,058.77
48.0500	Precision Manufacturing	\$ 143,327.67
51.3500	Therapeutic Massage	\$ 70,425.57
47.0600	Transportation Technologies	\$ 1,059,599.18
48.0508	Welding Technologies	\$ 232,339.95
<b>GRAND TOTAL</b>		<b>\$ 19,824,144.15</b>

**Reported Aggregate Program Cost**

Percent Expenditure by Program Category			
	MODE	MEDIAN	MAX
<b>Salaries</b>			
<b>ERE</b>			
<b>Purchased Services</b>			
<b>Supplies</b>			
<b>Rentals</b>			
<b>Books &amp; Inst Aids</b>			
<b>Property</b>			
<b>Equipment</b>			
<b>Other</b>			

1%= value >0 to 1.49%

If there is more than one modal value, the larger percentage value is shown.

If there is no data available or if there are \$0 reported, 0 % is shown.

<p><b>Member Districts</b></p> <p>Ajo Unified SD</p> <p>Amphitheater Unified SD</p> <p>Catalina Foothills SD</p> <p>Flowing Wells Unified SD</p> <p>Indian Oasis Unified SD</p> <p>Marana Unified SD</p> <p>Sahuarity Unified SD</p> <p>Santa Cruz Unified SD</p> <p>Sunnyside Unified SD</p> <p>Tanque Verde Unified SD</p> <p>Tucson Unified SD</p> <p>Vail Unified SD</p>
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**JTED Cost Reporting Worksheet**

2010-2011 JTED- PIMAJTED- 100811  
 Program Cost Aggregate Total

Program Title	MEMBER DISTRICTS													Grand Total
	Ajo USD	Amphitheater USD	Catalina Foothills USD	Flowing Wells USD	Indian Oasis USD	Marana USD	Sahuarita USD	Santa Cruz Valley USD	Sunnyside USD	Tanque Verde USD	Tucson USD	Vail USD	Pima JTED Central	
Accounting and Related Services						\$ 12,208.74					\$ 382,728.37			\$ 394,937.11
Agricultural Business Management - Agriscience		\$ 63,839.62	\$ 63,644.52	\$ 27,930.67	\$ 14,289.37	\$ 58,575.18		\$ 56,098.11	\$ 130,476.84		\$ 118,799.19	\$ 60,774.35	\$ 1,034,429.69	\$ 1,628,857.54
Allied Health Services		\$ 105,689.02				\$ 62,147.90	\$ 15,972.00	\$ 35,786.61	\$ 106,813.38		\$ 298,170.48			\$ 624,579.39
Audio/Visual Technologies		\$ 20,140.29	\$ 26,740.89	\$ 91,952.27		\$ 26,107.99	\$ 16,372.00		\$ 103,217.50	\$ 38,043.11	\$ 175,079.96	\$ 90,492.44		\$ 588,146.45
Bioscience		\$ 109,652.36	\$ 62,359.45	\$ 58,346.00		\$ 149,634.91			\$ 25,279.86		\$ 360,667.78			\$ 765,940.36
Business Management and Administrative Services		\$ 21,183.20			\$ 475.00		\$ 14,660.00	\$ 4,712.29	\$ 27,286.42		\$ 494,535.20	\$ 37,362.16		\$ 600,214.27
Business Operations Support and Assistant Services									\$ 28,723.29		\$ 25,513.67			\$ 54,236.96
Construction Technologies		\$ 342,141.98		\$ 10,164.84		\$ 50,926.68	\$ 19,472.00				\$ 266,061.92	\$ 44,976.59		\$ 733,744.01
Cosmetology													\$ 1,668,975.51	\$ 1,668,975.51
Culinary Arts	\$ 36,769.61	\$ 110,103.70		\$ 29,511.33		\$ 14,735.79	\$ 36,172.00	\$ 11,483.15	\$ 25,043.55		\$ 187,660.40		\$ 1,032,783.91	\$ 1,484,263.44
Design and Merchandising		\$ 17,380.57		\$ 28,754.18		\$ 21,562.89			\$ 54,177.90		\$ 23,337.85			\$ 145,213.39
Diagnostic and Intervention Technologies	\$ 6,269.00													\$ 6,269.00
Drafting and Design Technologies	\$ 42,998.61	\$ 10,782.08		\$ 16,912.91		\$ 11,504.02				\$ 49,793.11	\$ 72,378.81	\$ 52,888.72		\$ 257,258.26
Education and Training: Early Childhood Education		\$ 33,027.64				\$ 27,195.88					\$ 52,983.84	\$ 66,244.14	\$ 1,166,122.02	\$ 1,345,573.52
Education and Training: Education Professions				\$ 14,026.19		\$ 25,599.18			\$ 24,284.55			\$ 69,163.13		\$ 133,073.05
Electronic Technologies											\$ 7,979.80			\$ 7,979.80
Engineering Sciences		\$ 48,397.33		\$ 64,955.04		\$ 79,642.45			\$ 72,914.09		\$ 139,591.19	\$ 24,413.95		\$ 429,914.05
Financial Services			\$ 94,268.90								\$ 49,868.07			\$ 144,136.97
Fire Science								\$ 13,246.83			\$ 50,742.14		\$ 999,038.31	\$ 1,063,027.28
Graphic Communications		\$ 183,601.97		\$ 16,383.11		\$ 174,244.43	\$ 30,210.00		\$ 108,231.72	\$ 49,801.11	\$ 302,643.95	\$ 141,331.33	\$ 1,031,529.47	\$ 2,037,977.09
Heating, Ventilation and Air Conditioning			\$ 140,361.19											\$ 140,361.19
Hospitality Management									\$ 76,937.08		\$ 10,676.77			\$ 87,613.85
Information Technologies	\$ 28,419.85	\$ 31,966.07				\$ 33,806.05			\$ 66,839.19	\$ 36,304.11	\$ 145,684.67	\$ 18,345.62		\$ 361,365.56
Law, Public Safety and Security				\$ 10,829.10		\$ 21,355.39	\$ 13,972.00	\$ 2,756.89	\$ 6,436.06		\$ 36,958.66	\$ 46,505.15	\$ 1,091,566.34	\$ 1,230,379.59
Marketing, Management and Entrepreneurship		\$ 22,450.51	\$ 17,679.31		\$ 69,505.72	\$ 74,530.19			\$ 29,043.63	\$ 37,609.11	\$ 127,293.98	\$ 19,960.64		\$ 398,073.09
Mental and Social Health Services				\$ 12,173.31								\$ 35,320.10		\$ 47,493.41
Nursing Services								\$ 39,736.65	\$ 64,153.50		\$ 58,073.70		\$ 1,508,825.02	\$ 1,670,788.87
Performing Arts and Entertainment Industry		\$ 88,426.38	\$ 45,538.68	\$ 13,070.54		\$ 13,714.29			\$ 55,659.13	\$ 20,184.24		\$ 31,465.51		\$ 268,058.77
Precision Manufacturing							\$ 48,050.00		\$ 51,068.44		\$ 44,209.23			\$ 143,327.67
Therapeutic Massage											\$ 70,425.57			\$ 70,425.57
Transportation Technologies	\$ 40,838.45	\$ 73,194.28		\$ 21,837.93	\$ 1,250.00	\$ 212,585.17	\$ 21,372.00	\$ 29,347.32	\$ 53,134.03		\$ 606,040.00			\$ 1,059,599.18
Welding Technologies						\$ 56,705.76			\$ 51,696.79		\$ 123,937.40			\$ 232,339.95
<b>GRAND TOTAL</b>	<b>\$ 155,295.52</b>	<b>\$ 1,281,977.00</b>	<b>\$ 450,592.94</b>	<b>\$ 416,847.42</b>	<b>\$ 85,520.09</b>	<b>\$ 1,126,782.89</b>	<b>\$ 216,252.00</b>	<b>\$ 193,167.85</b>	<b>\$ 1,161,416.95</b>	<b>\$ 231,734.79</b>	<b>\$ 4,232,042.60</b>	<b>\$ 739,243.83</b>	<b>\$ 9,533,270.27</b>	<b>\$ 19,824,144.15</b>

**JTED Cost Reporting Worksheet**

2010-2011 JTED- VACTE- 130801  
 Program Cost Aggregate Total

Number	Program Title	Total Aggregate Program Course Cost
01.0100	Agricultural Business Management - Agriscience	\$ 291,085.22
51.0800	Allied Health Services	\$ 2,024.84
10.0200	Audio/Visual Technologies	\$ 82,354.43
52.0200	Business Management and Administrative Services	\$ 312,772.71
46.0400	Construction Technologies	\$ 70,435.70
12.0500	Culinary Arts	\$ 42,260.03
15.1300	Drafting and Design Technologies	\$ 118,224.71
13.1200	Education and Training: Education Professions	\$ 38,570.59
15.0000	Engineering Sciences	\$ 4,395.47
43.0200	Fire Science	\$ 3,075.66
10.0300	Graphic Communications	\$ 342,114.77
51.1600	Nursing Services	\$ 49,497.96
50.0100	Performing Arts and Entertainment Industry	\$ 86,401.74
47.0600	Transportation Technologies	\$ 83,449.13
48.0508	Welding Technologies	\$ 156,407.14
<b>GRAND TOTAL</b>		<b>\$ 1,683,070.10</b>

**Reported Aggregate Program Course Cost**

Percent Expenditure by Course Category			
	MODE	MEDIAN	MAX
<b>Salaries</b>	40%	37%	53%
<b>ERE</b>	1%	5%	13%
<b>Purchased Services</b>	1%	3%	50%
<b>Supplies</b>	1%	11%	48%
<b>Property</b>	1%	0%	20%
<b>Other</b>	42%	46%	76%

\* 1%= value >0 to 1.0%

If there is more than one modal value, the larger percentage value is shown.

If there is no data available or if there are \$0 reported, 0 % is shown.

<p><b>Member Districts</b>                  Camp Verde Unified SD                  Mingus Union HSD                  Sedona-Oak Creek Unified SD</p>
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**JTED Cost Reporting Worksheet**

2010-2011 JTED- VACTE- 130801  
 Program Cost Aggregate Total

Program Title	MEMBER DISTRICTS			
	Camp Verde Unified SD	Mingus Union HSD	Sedona-Oak Creek Unified SD	Grand Total
Agricultural Business Management - Agriscience	\$ 112,583.54	\$ 178,501.69		\$ 291,085.22
Allied Health Services		\$ 2,024.84		\$ 2,024.84
Audio/Visual Technologies		\$ 82,354.43		\$ 82,354.43
Business Management and Administrative Services			\$ 312,772.71	\$ 312,772.71
Construction Technologies	\$ 70,435.70			\$ 70,435.70
Culinary Arts	\$ 42,260.03			\$ 42,260.03
Drafting and Design Technologies		\$ 118,224.71		\$ 118,224.71
Education and Training: Education Professions		\$ 38,570.59		\$ 38,570.59
Engineering Sciences		\$ 3,195.79	\$ 1,199.68	\$ 4,395.47
Fire Science	\$ 3,075.66			\$ 3,075.66
Graphic Communications	\$ 79,881.99	\$ 167,388.61	\$ 94,844.18	\$ 342,114.77
Nursing Services		\$ 49,497.96		\$ 49,497.96
Performing Arts and Entertainment Industry			\$ 86,401.74	\$ 86,401.74
Transportation Technologies	\$ 48,977.35	\$ 34,471.79		\$ 83,449.13
Welding Technologies		\$ 156,407.14		\$ 156,407.14
<b>GRAND TOTAL</b>	<b>\$ 357,214.26</b>	<b>\$ 830,637.54</b>	<b>\$ 495,218.31</b>	<b>\$ 1,683,070.10</b>

**JTED Cost Reporting Worksheet**

2010-2011 JTED- WAVE- 080850  
 Program Cost Aggregate Total

<b>Number</b>	<b>Program Title</b>	<b>Total Aggregate Program Cost</b>
52.0300	Accounting and Related Services	\$ 27,028.00
01.0100	Agricultural Business Management - Agriscience	\$ 107,239.41
51.0800	Allied Health Services	\$ 20,117.75
10.0200	Audio/Visual Technologies	\$ 38,231.60
52.0200	Business Management and Administrative Services	\$ 33,083.98
52.0400	Business Operations Support and Assistant Services	\$ 52,164.57
46.0400	Construction Technologies	\$ 50,698.51
12.0500	Culinary Arts	\$ 137,149.00
52.1900	Design and Merchandising	\$ 31,401.49
15.1300	Drafting and Design Technologies	\$ 45,956.86
13.1210	Education and Training: Early Childhood Education	\$ 148,454.20
46.0300	Electrical and Power Transmission Technologies	\$ 29,409.78
52.0800	Financial Services	\$ 27,078.00
43.0200	Fire Science	\$ 3,427.00
10.0300	Graphic Communications	\$ 96,741.60
52.0900	Hospitality Management	\$ 588.00
15.1200	Information Technologies	\$ 55,121.74
43.0100	Law, Public Safety and Security	\$ 23,407.00
52.1800	Marketing, Management and Entrepreneurship	\$ 33,381.56
47.0600	Transportation Technologies	\$ 162,694.66
48.0508	Welding Technologies	\$ 109,977.00
	<b>GRANT TOTAL</b>	\$ 1,233,351.71

**Reported Aggregate Program Cost**

<b>Percent Expenditure by Program Category</b>			
	<b>MODE</b>	<b>MEDIAN</b>	<b>MAX</b>
<b>Salaries</b>	66%	16%	69%
<b>ERE</b>	1%	4%	27%
<b>Purchased</b>	1%	4%	100%
<b>Supplies</b>	1%	10%	44%
<b>Property</b>	3%	13%	91%
<b>Other</b>	86%	48%	86%

1%= value >0 to 1.49%

If there is more than one modal value, the larger percentage value is shown.

If there is no data available or if there are \$0 reported, 0 % is shown.

<p><b>Member Districts</b>                      Colorado River UHSD                      Lake Havasu USD                      Kingman USD                      Parker USD</p>
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**JTED Cost Reporting Worksheet**

2010-2011 JTED- WAVE- 080850  
 Program Cost Aggregate Total

Program Title	MEMBER DISTRICTS				
	Colorado River UHSD	Kingman USD	Lake Havasu USD	Parker USD	Grand Total
Accounting and Related Services	\$ 27,028.00				\$ 27,028.00
Agricultural Business Management - Agriscience		\$ 17,565.00		\$ 89,674.41	\$ 107,239.41
Allied Health Services		\$ 6,207.00	\$ 13,910.75		\$ 20,117.75
Audio/Visual Technologies	\$ 2,608.00		\$ 35,623.60		\$ 38,231.60
Business Management and Administrative Services		\$ 22,059.00	\$ 11,024.98		\$ 33,083.98
Business Operations Support and Assistant Services	\$ 36,492.00			\$ 15,672.57	\$ 52,164.57
Construction Technologies	\$ 23,462.00	\$ 17,260.00	\$ 9,976.51		\$ 50,698.51
Culinary Arts	\$ 41,784.00	\$ 95,365.00			\$ 137,149.00
Design and Merchandising	\$ 2,833.00		\$ 20,673.25	\$ 7,895.24	\$ 31,401.49
Drafting and Design Technologies		\$ 7,136.00	\$ 38,820.86		\$ 45,956.86
Education and Training: Early Childhood Education	\$ 15,812.00	\$ 31,145.00	\$ 101,497.20		\$ 148,454.20
Electrical and Power Transmission Technologies				\$ 29,409.78	\$ 29,409.78
Financial Services	\$ 27,078.00				\$ 27,078.00
Fire Science	\$ 3,427.00				\$ 3,427.00
Graphic Communications	\$ 21,889.00	\$ 25,566.00	\$ 49,286.60		\$ 96,741.60
Hospitality Management				\$ 588.00	\$ 588.00
Information Technologies	\$ 2,333.00		\$ 52,788.74		\$ 55,121.74
Law, Public Safety and Security	\$ 23,407.00				\$ 23,407.00
Marketing, Management and Entrepreneurship		\$ 9,072.00	\$ 24,309.56		\$ 33,381.56
Transportation Technologies		\$ 11,066.00	\$ 151,628.66		\$ 162,694.66
Welding Technologies	\$ 107,575.00	\$ 2,402.00			\$ 109,977.00
<b>GRAND TOTAL</b>	<b>\$ 335,728.00</b>	<b>\$ 244,843.00</b>	<b>\$ 509,540.71</b>	<b>\$ 143,240.00</b>	<b>\$ 1,233,351.71</b>

**JTED Cost Reporting Worksheet**

2010-2011 JTED- WestMEC- 070802  
 Program Cost Aggregate Total

<b>Number</b>	<b>Program Title</b>	<b>Total Aggregate Program Cost</b>
52.0300	Accounting and Related Services	\$ 12,700.32
01.0100	Agricultural Business Management - Agriscience	\$ 127,384.33
51.0800	Allied Health Services	\$ 927,977.75
10.0200	Audio/Visual Technologies	\$ 348,335.67
41.0100	Bioscience	\$ 480,558.06
52.0200	Business Management and Administrative Services	\$ 510,016.52
52.0400	Business Operations Support and Assistant	\$ 6,536.00
46.0400	Construction Technologies	\$ 685,387.48
12.0400	Cosmetology	\$ 15,400.00
12.0500	Culinary Arts	\$ 2,940,154.55
52.1900	Design and Merchandising	\$ 106,616.61
51.0900	Diagnostic and Intervention Technologies	\$ 49,163.14
15.1300	Drafting and Design Technologies	\$ 509,984.93
13.1210	Education and Training: Early Childhood Education	\$ 607,508.14
13.1200	Education and Training: Education Professions	\$ 313,197.37
15.0000	Engineering Sciences	\$ 836,385.31
52.0800	Financial Services	\$ 16,049.54
43.0200	Fire Science	\$ 61,371.62
10.0300	Graphic Communications	\$ 748,939.40
52.0900	Hospitality Management	\$ 4,917.44
15.1200	Information Technologies	\$ 608,362.87
43.0100	Law, Public Safety and Security	\$ 164,118.24
52.1800	Marketing, Management and Entrepreneurship	\$ 851,348.44
51.1600	Nursing Services	\$ 250,719.25
50.0100	Performing Arts and Entertainment Industry	\$ 35,472.60
48.0500	Precision Manufacturing	\$ 91,832.19
47.0600	Transportation Technologies	\$ 474,443.00
48.0508	Welding Technologies	\$ 101,805.25
<b>GRAND TOTAL</b>		<b>\$ 11,886,686.02</b>

**Reported Aggregate Program Cost**

<b>Percent Expenditure by Program Category</b>			
	<b>MODE</b>	<b>MEDIAN</b>	<b>MAX</b>
<b>Salaries</b>	70%	47%	95%
<b>ERE</b>	5%	10%	34%
<b>Purchased Services</b>	5%	10%	100%
<b>Supplies</b>	1%	5%	100%
<b>Property</b>	1%	12%	94%
<b>Other</b>	1%	5%	90%

\*1%= value >0 to 1.49%

If there is more than one modal value, the larger percentage value is shown.

If there is no data available or if there are \$0 reported, 0 % is shown.

<p><b>Member Districts</b></p> <p>Agua Fria Union HSD</p> <p>Buckeye Union HSD</p> <p>Deer Valley Unified SD</p> <p>Dysart Unified SD</p> <p>Glendale Union HSD</p> <p>Paradise Valley Unified SD</p> <p>Peoria Unified SD</p> <p>Saddle Mountain Unified SD</p> <p>Wickenburg Unified SD</p>
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**JTED Cost Reporting Worksheet**

2010-2011 JTED- WestMEC- 070802  
 Program Cost Aggregate Total

Program Title	MEMBER DISTRICTS									Grand Total
	Agua Fria USD	Buckeye Union HSD	Deer Valley USD	Dysart USD	Glendale Union HSD	Paradise Valley USD	Peoria USD	Saddle Mountain USD	Wickenburg USD	
Accounting and Related Services			\$ 7,329.50				\$ 5,370.82			\$ 12,700.32
Agricultural Business Management - Agriscience	\$ 16,734.94	\$ 46,224.00				\$ 13,461.60	\$ 29,730.85	\$ 21,232.94		\$ 127,384.33
Allied Health Services	\$ 80,689.74	\$ 108,838.00	\$ 5,411.58	\$ 322,998.95			\$ 410,039.48			\$ 927,977.75
Audio/Visual Technologies	\$ 104,760.32		\$ 44,234.63	\$ 46,616.74	\$ 45,318.00	\$ 6,027.16	\$ 101,378.82			\$ 348,335.67
Bioscience						\$ 480,558.06				\$ 480,558.06
Business Management and Administrative Services	\$ 9,111.12	\$ 94,972.00		\$ 87,738.89			\$ 263,146.54	\$ 14,167.01	\$ 40,880.96	\$ 510,016.52
Business Operations Support and Assistant Services			\$ 6,536.00							\$ 6,536.00
Construction Technologies	\$ 7,050.42	\$ 15,876.00			\$ 66,518.00	\$ 136,622.66	\$ 425,511.03	\$ 18,943.91	\$ 14,865.46	\$ 685,387.48
Cosmetology	\$ 15,400.00									\$ 15,400.00
Culinary Arts	\$ 32,699.63	\$ 101,546.00	\$ 10,038.69	\$ 99,772.78	\$ 2,178,574.00	\$ 168,978.84	\$ 335,776.32		\$ 12,768.29	\$ 2,940,154.55
Design and Merchandising			\$ 4,688.31			\$ 100,013.70	\$ 1,914.60			\$ 106,616.61
Diagnostic and Intervention Technologies						\$ 49,163.14				\$ 49,163.14
Drafting and Design Technologies		\$ 41,871.00	\$ 6,309.72	\$ 167,415.46	\$ 258,106.00	\$ 36,282.75				\$ 509,984.93
Education and Training: Early Childhood Education	\$ 5,240.66	\$ 49,534.00	\$ 29,412.07	\$ 23,518.31	\$ 324,265.00	\$ 29,776.22	\$ 145,761.88			\$ 607,508.14
Education and Training: Education Professions	\$ 8,316.93	\$ 28,245.00	\$ 10,380.74	\$ 40,485.19	\$ 50,388.00	\$ 91,439.37	\$ 83,942.14			\$ 313,197.37
Engineering Sciences	\$ 131,716.86		\$ 43,079.52	\$ 176,810.33	\$ 134,270.00	\$ 232,401.41	\$ 104,867.03		\$ 13,240.16	\$ 836,385.31
Financial Services				\$ 15,643.51			\$ 406.03			\$ 16,049.54
Fire Science				\$ 11,007.89	\$ 6,610.00		\$ 43,753.73			\$ 61,371.62
Graphic Communications	\$ 142,863.05		\$ 33,797.42	\$ 211,865.94	\$ 90,299.00	\$ 253,057.01		\$ 17,056.98		\$ 748,939.40
Hospitality Management			\$ 4,917.44							\$ 4,917.44
Information Technologies	\$ 5,162.01		\$ 49,331.59	\$ 103,340.08	\$ 2,020.00	\$ 230,612.02	\$ 217,897.17			\$ 608,362.87
Law, Public Safety and Security	\$ 512.10		\$ 4,345.00	\$ 17,077.45	\$ 42,131.00	\$ 32,370.01	\$ 67,682.68			\$ 164,118.24
Marketing, Management and Entrepreneurship	\$ 95,561.02		\$ 135,851.03	\$ 75,502.09	\$ 176,531.00	\$ 82,999.44	\$ 245,153.02		\$ 39,750.84	\$ 851,348.44
Nursing Services	\$ 92,592.21		\$ 18,408.03		\$ 69,938.00	\$ 68,889.31	\$ 891.70			\$ 250,719.25
Performing Arts and Entertainment Industry					\$ 922.00				\$ 34,550.60	\$ 35,472.60
Precision Manufacturing		\$ 34,014.00				\$ 57,818.19				\$ 91,832.19
Transportation Technologies		\$ 37,617.00		\$ 19,416.11	\$ 4,249.00	\$ 115,262.99	\$ 297,897.90			\$ 474,443.00
Welding Technologies		\$ 18,982.00			\$ 24,299.00	\$ 58,524.25				\$ 101,805.25
<b>GRAND TOTAL</b>	<b>\$ 748,411.01</b>	<b>\$ 577,719.00</b>	<b>\$ 414,071.27</b>	<b>\$ 1,419,209.72</b>	<b>\$ 3,474,438.00</b>	<b>\$ 2,244,258.13</b>	<b>\$ 2,781,121.74</b>	<b>\$ 71,400.84</b>	<b>\$ 156,056.31</b>	<b>\$ 11,886,686.02</b>

