REPORT ON STEM ENROLLMENT AND GRADUATION TRENDS

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The purpose of this report on Arkansas STEM (Science, Technology, Engineering, and Mathematics) program activity is to inform education and policy makers about the need to prepare and graduate more students with degrees in STEM education fields.

Arkansas is witnessing a significant shortfall in its ability to meet the STEM education needs of its students which will have tremendous implications for the state's scientific and engineering workforce needed for the next decade. Addressing this issue is absolutely essential for the continued economic success of Arkansas. All Arkansas citizens must have the basic scientific, technological, and mathematical knowledge to make informed personal choices, to develop human capital, and to thrive in the increasingly technological global marketplace. However, the number of STEM graduates in Arkansas has declined during the past five years.

Enrollment Trends

As a percent of total STEM majors over five years (fall term only, AY2006-2010), freshmen account for 35.4% of STEM majors, sophomores account for 23.4% of STEM majors, juniors account for 17.0% of STEM majors, and seniors[1] account for 23.7% of STEM majors.[2] These percentages have been relatively stable during the time period reviewed.

Table 1: STEM Student Majors by Year and Student Level Enrollment

Term (Academic Year)	Students	Freshmen	%	Sophomore	%	Junior	%	Senior	%
2009 Fall (AY 2010)	11,088	3,859	34.8	2,658	24.0	1,887	17.0	2,635	23.8
2008 Fall (AY 2009)	10,288	3,656	35.5	2,411	23.4	1,793	17.4	2,382	23.2
2007 Fall (AY 2008)	9,808	3,428	35.0	2,295	23.4	1,675	17.1	2,334	23.8
2006 Fall (AY 2007)	9,382	3,436	36.6	2,110	22.5	1,528	16.3	2,246	23.9
2005 Fall (AY 2006)	9,262	3,260	35.2	2,190	23.6	1,570	17.0	2,198	23.7
TOTAL	49,828	17,639	35.4	11,664	23.4	8,453	17.0	11,795	23.7

As seen above, STEM enrollment has steadily increased from AY2006 to 2010 for each student classification. Overall, STEM enrollment rose from 9,262 in AY2005 to 11,088 in AY2010 marking a 19.7 percent increase[3] whereas enrollment at public institutions increased by 17.3 percent over the same time period. However, this does not hold true for students graduating within the STEM fields as discussed below under the Degree Production section.

Most STEM majors are white males although this is changing. The percentage of white students is declining. But, the change in the male/female percentages for STEM students has changed very little.

[1] The percent of STEM seniors is larger than that of STEM juniors due to seniors taking longer than 4 years to graduate, i.e., the percent of STEM seniors would include fourth- and fifth-year seniors and possibly even sixth-year seniors.
[2] See Attachment C
[3] See Attachment C

Table 2A: STEM Student Enrollment by Year Race/Ethnicity Enrollment										
		Race/Ethnicity								
Term	Students	Asian Only	Black Only	Hispanic of any Race	AI/AN* Only	White Only	Two or More Races	Hawaiian Only	NRA*	Unknown
2009 Fall	11,088	2.8%	13.9%	3.0%	1.0%	66.9%	0.0%	1.5%	7.5%	3.2%
2008 Fall	10,288	3.3%	15.4%	2.8%	1.3%	72.6%	0.0%	0.0%	3.0%	1.7%
2007 Fall	9,808	3.1%	15.2%	2.6%	1.5%	73.1%	0.0%	0.0%	2.9%	1.7%
2006 Fall	9,382	3.0%	14.6%	1.9%	1.3%	74.8%	0.0%	0.0%	2.8%	1.5%
2005 Fall	9,262	2.7%	15.2%	1.7%	1.2%	74.8%	0.0%	0.0%	2.6%	1.7%
TOTAL	100.0%	3.0%	15.2%	2.5%	1.3%	73.1%	0.4%	0.0%	2.9%	1.5%
CHANGE	1,826	0.1	(1.2)	1.3	(0.2)	(7.9)	0.0	1.5	4.9	1.5

*AI/AN = American Indian or Alaskan Native
** NRA = Non-Resident Alien

Table 2B: STEM Student Enrollment by Year and Gender			
Term (Academic Year)	Students	Gender	
		Male	Female
2009 Fall	11,088	66.6%	33.4%
2008 Fall	10,288	67.6%	32.4%
2007 Fall	9,808	64.9%	35.1%
2006 Fall	9,382	67.0%	33.0%
2005 Fall	9,262	67.3%	32.7%
TOTAL	49,828	66.7%	33.3%
CHANGE	1,826	(0.7)	0.7

The most popular academic programs by statewide undergraduate enrollment by CIP Code[4] are:

1. Biology/Biology Sciences General (CIP 26.0101) with a AY2009 enrollment of 3,243 students (64.7 percent increase over 5 years);
2. Computer and Information Sciences, General (CIP 11.0101) with a AY2009 enrollment of 1,484 students (-9.5 percent);
3. Chemistry, General (CIP 40.0501) with a AY2009 enrollment of 1,005 students (45.4 percent);
4. Mechanical Engineering (CIP 14.1901) with a AY2009 enrollment of 573 students (16.7 percent); and
5. Mathematics, General (CIP 27.0101) with a AY2009 enrollment of 419 students (6.6 percent).

[4] See Attachment E.

Table 3: STEM Enrollment – Worst and Best Programs based on Change in the Number of Students Enrolled from AY2005 to AY2009		
WORST		
CIP CODE	**CIP TITLE**	**Change**
11.0301	Data Processing and Data Processing Technology/Technician	-184
11.0101	Computer and Information Sciences, General.	-155
26.1307	Conservation Biology	-107
15.1301	Drafting and Design Technology/Technician, General.	-99
14.0901	Computer Engineering, General.	-83
BEST		
CIP CODE	**CIP TITLE**	**Change**
26.0101	Biology/Biology Sciences General	1274
40.0501	Chemistry, General	314
15.0903	Petroleum Technology/Technician	198
15.0613	Manufacturing Technology/Technician	160
14.2501	Petroleum Engineering	133

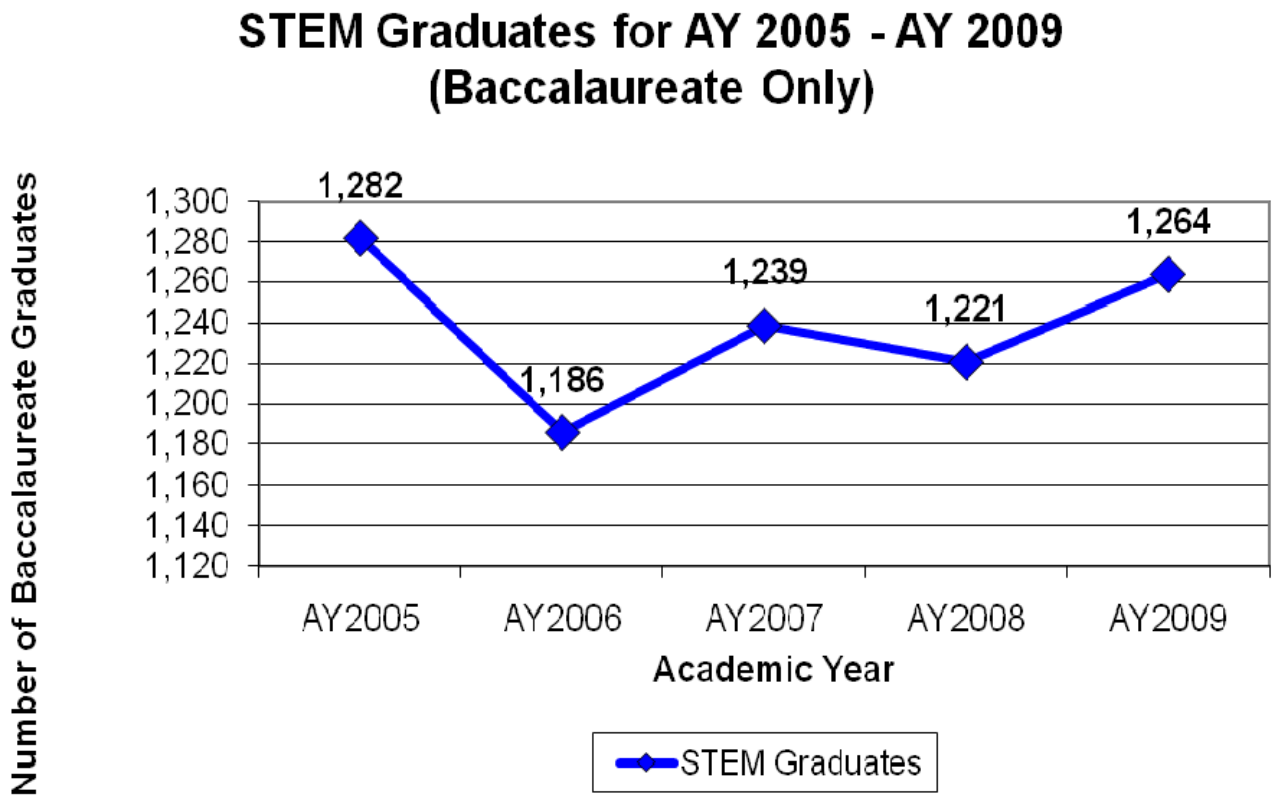
Degree Production

At the associate degree level (including both two-year and four-year institutions), the total number of STEM graduates has increased 54.6 % between AY 2005 and AY 2009 (from 529 to 818 with the highest increase during the 2009 academic year).[5] However, this growth only occurred at the two-year institutions (see Table 3).

Table 4A: STEM Graduates (Associate Level)						
Inst. Type	AY2005	AY2006	AY2007	AY2008	AY2009	TOTAL
4-Year	158	168	142	118	149	735
2-Year	371	399	385	594	669	2,418
TOTAL	**529**	**567**	**527**	**712**	**818**	**3,153**

The total number of STEM students receiving bachelors degrees from four-year institutions has declined from 1,282 to 1,264 (a 1.4% decrease) between 2005 and 2009.[6]

[5] See Attachment B.
[6] See Attachment B.

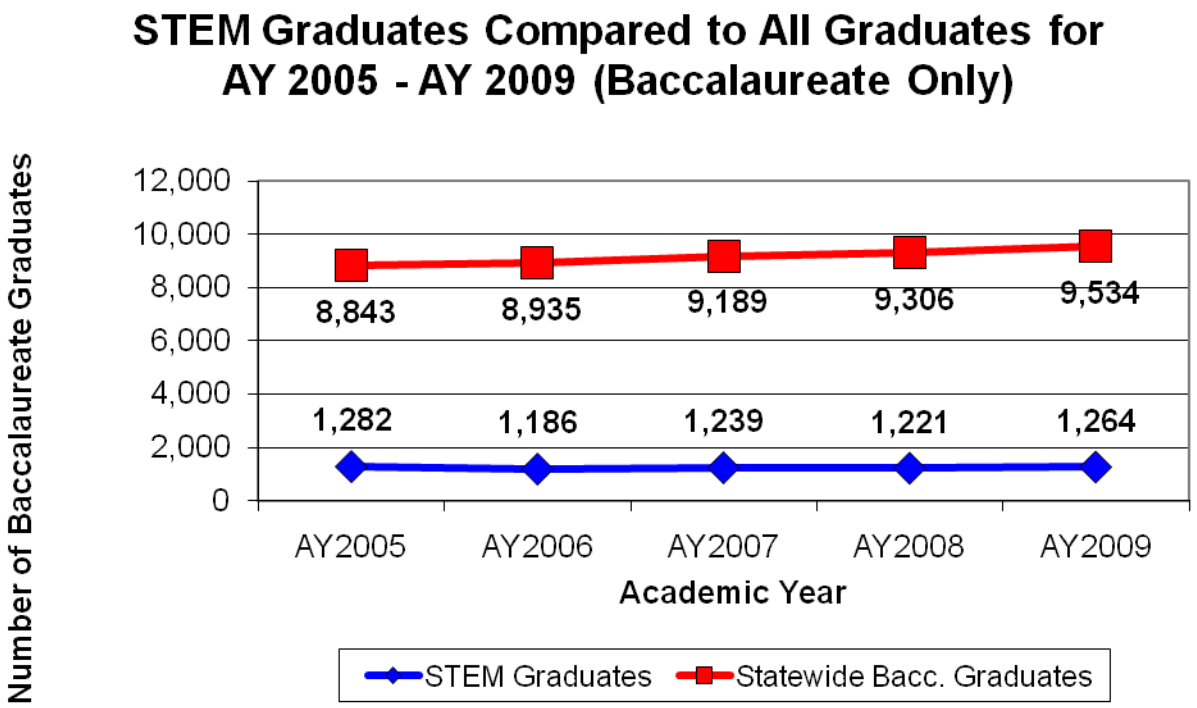


At the four-year institution baccalaureate level, UAF[7] continues to have the highest number of STEM graduates. Three schools (UAFS, UALR, and UCA) have also experienced the biggest increases in STEM graduates. (See Table 4B.)

Table 4B: STEM Graduates (Baccalaureate Level)

Institution	AY2005	AY2006	AY2007	AY2008	AY2009	% Change
ASUJ	221	183	127	140	156	-29.4
ATU	136	143	135	118	130	-4.4
HSU	37	33	34	42	33	-10.8
SAUM	45	36	27	46	34	-24.4
UAF	476	426	477	441	488	2.5
UAFS	23	31	60	40	42	82.6
UALR	155	146	168	164	192	23.9
UAM	26	27	23	26	22	-15.4
UAPB	57	59	49	58	53	-7.0
UCA	106	102	139	146	114	7.5
STEM Graduates	**1,282**	**1,186**	**1,239**	**1,221**	**1,264**	**-1.4**
Statewide Bacc. Graduates	8,843	8,935	9,189	9,306	9,534	7.8
STEM % of Statewide	14.5	13.3	13.5	13.1	13.3	-1.8

[7] See school abbreviation definitions on page 9



As a percent of the state total (all Arkansas graduates between AY2005-09), the doctoral and related professional degrees and associate degree categories experienced an increase in the STEM share of graduates, while the others (bachelors and masters) experienced a decrease (see Table 5).

Table 5: STEM Graduates as a Percent of Statewide Totals[8]

Degree Type	AY2005	AY2006	AY2007	AY2008	AY2009	Change
STEM Percent of Statewide (Assoc.)	5.6%	5.6%	4.9%	6.0%	5.8%	+0.2
STEM Percent of Statewide (Bacc.)	14.5%	13.3%	13.5%	13.1%	13.3%	-1.2
STEM Percent of Statewide (Masters)	9.3%	9.8%	9.0%	9.4%	6.6%	-2.7
STEM Percent of Statewide (Doctoral)	9.0%	8.7%	7.0%	10.8%	9.7%	+0.7

[8] See Attachment B

Table 6: 5-Year STEM Graduates (AY2005-2009)[9]											
CIP	CIP Description	Associates Degree and Lower		Baccalaureate Only		Masters Level & Related		Doctoral Level & Related		Total Graduates	
		#	%	#	%	#	%	#	%	#	%
11	Computer and Information Sciences and Support Services	1,073	9.8%	1,073	9.8%	373	3.4%	10	0.1%	2,529	23.0%
14	Engineering	-	0.0%	1,557	14.2%	373	3.4%	80	0.7%	2,010	18.3%
15	Engineering Technologies/Technicians	2,072	18.8%	400	3.6%	-	0.0%	-	0.0%	2,472	22.5%
26	Biological and Biomedical Sciences	3	0.0%	1,992	18.1%	250	2.3%	142	1.3%	2,387	21.7%
27	Mathematics and Statistics	-	0.0%	408	3.7%	184	1.7%	8	0.1%	600	5.5%
40	Physical Sciences	1	0.0%	762	6.9%	137	1.2%	100	0.9%	1,000	9.1%
29	Military Technologies	4	0.0%	-	0.0%	-	0.0%	-	0.0%	4	0.0%
Totals		3,153	28.7%	6,192	56.3%	1,317	12.0%	340	3.1%	11,002	100.0%

Overall, of the 11,002 total STEM graduates from AY2005 to AY2009:

- The largest portion (23.0%) of credentials awarded was in CIP category 11: Computer and Information Sciences and Support Services.[10]
- The largest portion for the associates and lower credentials (18.8%) was in CIP 15: Engineering Technologies/Technicians.[11]
- The largest portion for the baccalaureate credentials (18.1%) was in CIP 26: Biological and Biomedical Sciences.[12]

Of the AY 2005 Baccalaureate STEM graduates, 315 enrolled in graduate school. Of the AY 2009 Baccalaureate STEM graduates, only 136 enrolled in graduate school. Over the course of five years, those baccalaureate degree holders who majored in a STEM related field seeking a post-baccalaureate STEM degree have declined by 56.8% as seen on Table 7.

Table 7: STEM Bachelor Degree Holders Enrolling Into Post-Baccalaureate STEM Program						
Note: These totals represent the number of distinct graduates (bachelors and post-baccalaureate AY2005-AY2009)	AY2005	AY2006	AY2007	AY2008	AY2009	CHANGE
Number Graduating w/ Baccalaureate (degree level 05)	1,282	1,186	1,239	1,221	1,264	-1.4%
Number Enrolled in Public Institution Seeking Degree Levels of 06-12	315	303	259	191	136	-56.8%
Grad. School Enrollment Rate (% of STEM Baccalaureates)	24.6%	25.5%	20.9%	15.6%	10.8%	-13.8
*Degree Levels: 06 = Post-Baccalaureate 07 = Masters Degree 08 = Specialist Degree			09 = Doctoral Degree 10 = First Professional Degree 11 = Post-First Professional Certificate 12 = Post-First Professional Degree			

[9] See Attachment A.
[10] See Attachment A.
[11] See Attachment A.
[12] See Attachment A.

Discussion

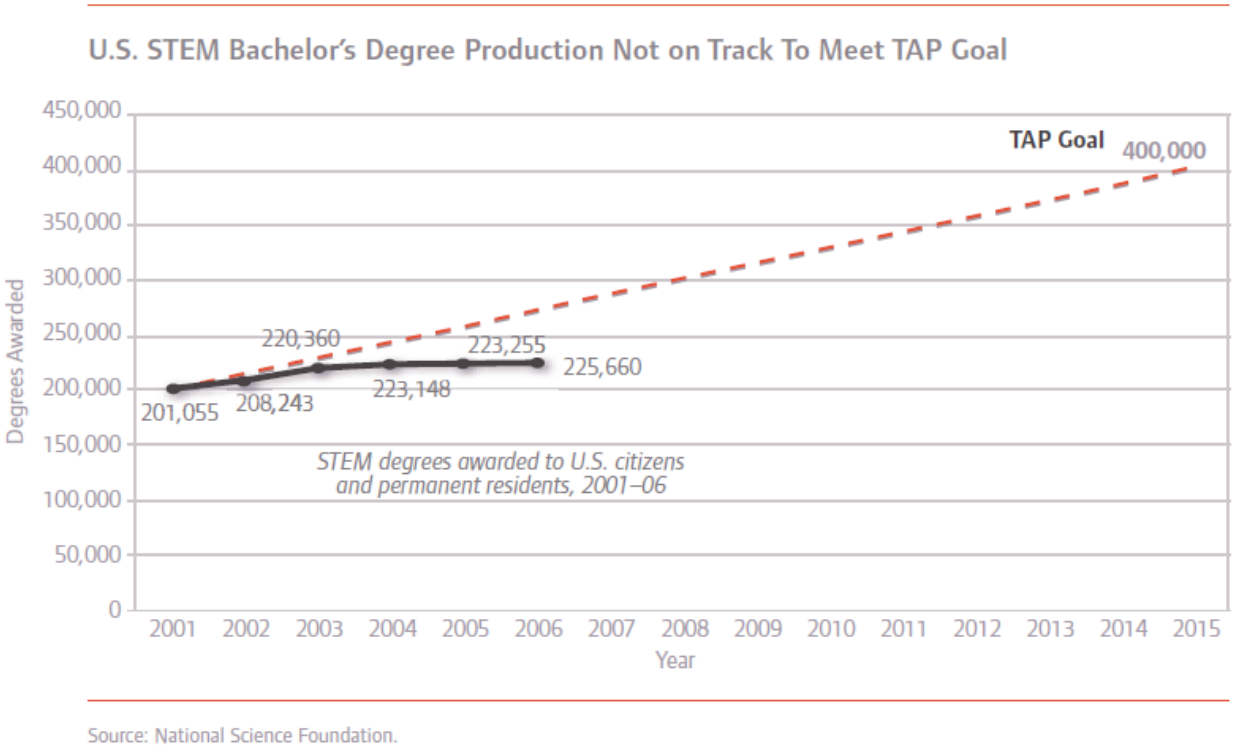
The good news:

- Overall STEM enrollment is up by 19.7 percent from AY2005 to AY2009.[13]
- Overall STEM graduates as measured by credentials awarded is up by 13.7 percent from AY2005 to AY2009.[14]

The bad news:

- As a percent of all statewide graduates, the percentage of STEM graduates has not kept pace with the growth in credentials awarded having gone from 9.8 percent in AY2005 to 8.5 percent in AY2009.[15]
- Education majors focusing on STEM related fields are in decline. Overall enrollment dropped by 26.8 percent between AY 2005 and AY 2009.[16]

National trends are only slightly better, but not on target with expectations (see graph below). A coalition formed in 2005 known as Tapping America's Potential (TAP) came out with an ambitious goal of doubling STEM bachelor's-level graduates by 2015. In their 2008 progress report, they found that the 200,000 number of graduates had only slightly increased.[17]



Source: National Science Foundation.

[13] See Attachment C
[14] See Attachment A
[15] See Attachment B
[16] See Attachment G
[17] "Gaining Momentum, Losing Ground". Progress Report, 2008. Business Rountable, Washington, DC.

Summary & Recommendations

In Arkansas, STEM enrollments have increased over the past five years. In addition, total credentials awarded in the STEM fields increased but at a much slower pace. However, the number of Baccalaureate credentials awarded has decreased over the same time period. This should represent a significant concern for higher education officials and faculty – that efforts are working to improve the number of students seeking STEM credentials from an input perspective (more majors). But looking at the issue from an output perspective (graduates), the outlook is not as bright.

In order to reverse the current trend of fewer graduates, higher education institutions should consider establishing support mechanisms, such as:

1. Creating residential STEM communities or STEM dormitories;
2. Providing special access to tutors;
3. Creating customized or special new student orientations for STEM students
4. Creating and promoting STEM student organizations and/or social organizations;
5. Providing targeted scholarships for juniors and/or seniors in STEM fields; and
6. Developing business/education internships for STEM students.

Additionally, K-12 and higher education agencies should:

1. Integrate engineering education into K-12 instruction by designing challenging content and curricula frameworks and assessments that include engineering;
2. Increase engineering and technology teacher preparation programs and recruit qualified teachers to provide engineering education in high-needs schools;
3. Promote aspirations for a STEM career particularly in engineering among diverse student populations, especially among girls and underrepresented minorities;
4. Invest in afterschool STEM programs; and
5. Promote STEM competitions such as Math Counts, robotics competitions, and science fairs.
6. Promote partnerships among K-12 school administrators, teachers and business, manufacturing and engineering professionals.

List of Attachments

Attachment A	STEM Graduates from AY 2005 – 2009 (by CIP Category)
Attachment B	STEM Graduates from AY 2005– 2009 (by Institution)
Attachment C	STEM Undergraduate Student Majors by Year (Fall Term Only)
Attachment D	STEM Student Majors by Race/Ethnicity for the 2009 Fall Term
Attachment E	Undergraduate Enrollment by STEM Degree Programs
Attachment F	STEM Designated Degree Programs (STEM List: Numerical Order)
Attachment G	Education Majors by Year with a STEM Field of Study (CIP Code 13 - Fall Term Only)

Arkansas Public Higher Education Institutions			
Abbr.	**Name (4-Year Universities)**	**Abbr.**	**Name (2-Year Colleges)**
ASUJ	Arkansas State University - Jonesboro	ASUB	Arkansas State University - Beebe
ATU	Arkansas Tech University	ANC	Arkansas Northeastern College
HSU	Henderson State University	ASUMH	Arkansas State University - Mountain Home
SAUM	Southern Arkansas University - Magnolia	ASUN	Arkansas State University - Newport
UAF	University of Arkansas Fayetteville	CCCUA	Cossatot Community College of the UA
UAFS	University of Arkansas - Fort Smith	EACC	East Arkansas Community College
UALR	University of Arkansas at Little Rock	MSCC	Mid-South Community College
UAM	University of Arkansas at Monticello	NAC	North Arkansas College
UAMS	University of Arkansas for Medical Sciences	NPCC	National Park Community College
UAPB	University of Arkansas at Pine Bluff	NWACC	Northwest Arkansas Community College
UCA	University of Central Arkansas	PCCUA	Phillips Community College /UA
		RMCC	Rich Mountain Community College
		SACC	South Arkansas Community College
		UACCB	UA Community College at Batesville
		UACCH	UA Community College at Hope
		UACCM	UA Community College at Morrilton
		BRTC	Black River Technical College
		OTC	Ouachita Technical College
		OZC	Ozarka College
		PTC	Pulaski Technical College
		SAUT	Southern Arkansas University - Tech
		SEAC	Southeast Arkansas College

STEM Graduates from Academic Years 2005 - 2009

Graduates/Credentials Awards							Growth		Percent of All
Academic Year/ STEM Field	AY2005	AY2006	AY2007	AY2008	AY2009	TOTAL	Number	Percent	STEM Graduates
CIP Category = 11: Computer and Information Sciences and Support Services									
Associates Degree and Lower	264	253	194	157	205	1,073	(59)	-22.3%	9.8%
Baccalaureate Only	278	216	205	185	189	1,073	(89)	-32.0%	9.8%
Masters Level & Related	60	77	68	88	80	373	20	33.3%	3.4%
Doctoral Level & Related	2	3	1	2	2	10	-	0.0%	0.1%
Sub-Total	604	549	468	432	476	2,529	(128)	-21.2%	23.0%
CIP Category = 14: Engineering									
Associates Degree and Lower									
Baccalaureate Only	304	290	317	291	355	1,557	51	16.8%	14.2%
Masters Level & Related	76	78	72	84	63	373	(13)	-17.1%	3.4%
Doctoral Level & Related	17	13	15	14	21	80	4	23.5%	0.7%
Sub-Total	397	381	404	389	439	2,010	42	10.6%	18.3%
CIP Category = 15: Engineering Technologies/Technicians									
Associates Degree and Lower	263	314	332	554	609	2,072	346	131.6%	18.8%
Baccalaureate Only	60	80	86	84	90	400	30	50.0%	3.6%
Masters Level & Related							-		
Doctoral Level & Related							-		
Sub-Total	323	394	418	638	699	2,472	376	116.4%	22.5%
CIP Category = 26: Biological and Biomedical Sciences									
Associates Degree and Lower	2	-	1	-		3	(2)	-100.0%	0.0%
Baccalaureate Only	395	382	379	427	409	1,992	14	3.5%	18.1%
Masters Level & Related	49	51	56	46	48	250	(1)	-2.0%	2.3%
Doctoral Level & Related	25	27	20	35	35	142	10	40.0%	1.3%
Sub-Total	471	460	456	508	492	2,387	21	4.5%	21.7%
CIP Category = 27: Mathematics and Statistics									
Associates Degree and Lower									
Baccalaureate Only	94	90	95	61	68	408	(26)	-27.7%	3.7%
Masters Level & Related	32	44	27	42	39	184	7	21.9%	1.7%
Doctoral Level & Related	3		2	2	1	8	(2)	-66.7%	0.1%
Sub-Total	129	134	124	105	108	600	(21)	-16.3%	5.5%
CIP Category = 40: Physical Sciences									
Associates Degree and Lower					1	1	1		
Baccalaureate Only	151	128	157	173	153	762	2	1.3%	6.9%
Masters Level & Related	28	18	35	31	25	137	(3)	-10.7%	1.2%
Doctoral Level & Related	21	21	12	28	18	100	(3)	-14.3%	0.9%
Sub-Total	200	167	204	232	197	1,000	(3)	-1.5%	9.1%
CIP Category = 29: Military Technologies									
Associates Degree and Lower				1	3	4	3		
Baccalaureate Only						-	-		0.0%
Masters Level & Related						-	-		0.0%
Doctoral Level & Related						-	-		0.0%
Sub-Total	-	-	-	1	3	4	1		0.0%
TOTALS									
Associates Degree and Lower	529	567	527	712	818	3,153	289	54.6%	28.7%
Baccalaureate Only	1,282	1,186	1,239	1,221	1,264	6,192	(18)	-1.4%	56.3%
Masters Level & Related	245	268	258	291	255	1,317	10	4.1%	12.0%
Doctoral Level & Related	68	64	50	81	77	340	9	13.2%	3.1%
Totals	2,124	2,085	2,074	2,305	2,414	11,002	290	13.7%	100.0%

STEM Graduates from Academic Years 2005 - 2009

		Associate Level (Degree Levels 01 - 04)					Growth	
Inst. Type	Institution	AY2005	AY2006	AY2007	AY2008	AY2009	Number	Percent
4-Year	ASUJ	4	2	17	7		(4)	-100.0%
4-Year	ATU	30	38	27	14	21	(9)	-30.0%
4-Year	HSU						-	
4-Year	SAUM		1			1	1	
4-Year	UAF						-	
4-Year	UAFS	101	102	73	72	102	1	1.0%
4-Year	UALR	11	3	9	9	7	(4)	-36.4%
4-Year	UAM	12	22	16	16	18	6	50.0%
4-Year	UAMS						-	
4-Year	UAPB						-	
4-Year	UCA						-	
2-Year	ANC	13	3	4	4		(13)	-100.0%
2-Year	ANC					5	5	
2-Year	ASUB	48	34	30	149	119	71	147.9%
2-Year	ASUMH	21	25	25	18	21	-	0.0%
2-Year	ASUN	1	3	2	1	9	8	800.0%
2-Year	BRTC						-	
2-Year	CCCUA	4	4	4	7	5	1	25.0%
2-Year	EACC	13	19	15	62	36	23	176.9%
2-Year	MSCC	18	31	13	12	31	13	72.2%
2-Year	NAC	24	38	43	20	42	18	75.0%
2-Year	NPCC	1			3	1	-	0.0%
2-Year	NWACC	32	19	22	41	43	11	34.4%
2-Year	OTC	50	17	24	9	22	(28)	-56.0%
2-Year	OZC	2	1	1			(2)	-100.0%
2-Year	PCCUA	48	95	40	32	54	6	12.5%
2-Year	PTC	14	27	12	31	17	3	21.4%
2-Year	RMCC	6	2	8	2	3	(3)	-50.0%
2-Year	SACC	3				2	(1)	-33.3%
2-Year	SAUT	29	19	18	41	30	1	3.4%
2-Year	SEAC	18	19	42	31	50	32	177.8%
2-Year	UACCB						-	
2-Year	UACCH				5	2	2	
2-Year	UACCM	26	43	82	126	177	151	580.8%
TOTAL		**529**	**567**	**527**	**712**	**818**	**289**	**54.6%**
4-Year Colleges		158	168	142	118	149	(9)	-5.7%
2-Year Colleges		371	399	385	594	669	298	80.3%
4-Year College %		29.9%	29.6%	26.9%	16.6%	18.2%	-3.1%	-10.4%
2-Year College %		70.1%	70.4%	73.1%	83.4%	81.8%	103.1%	147.0%
State Totals		9,382	10,076	10,713	11,827	14,077		
As Percent of State Total		5.6%	5.6%	4.9%	6.0%	5.8%		

STEM Graduates from Academic Years 2005 - 2009

		Baccalaurate Only (Degree Level 05)					Growth	
Inst. Type	Institution	AY2005	AY2006	AY2007	AY2008	AY2009	Change	Percent
4-Year	ASUJ	221	183	127	140	156	-65	-29.4%
4-Year	ATU	136	143	135	118	130	-6	-4.4%
4-Year	HSU	37	33	34	42	33	-4	-10.8%
4-Year	SAUM	45	36	27	46	34	-11	-24.4%
4-Year	UAF	476	426	477	441	488	12	2.5%
4-Year	UAFS	23	31	60	40	42	19	82.6%
4-Year	UALR	155	146	168	164	192	37	23.9%
4-Year	UAM	26	27	23	26	22	-4	-15.4%
4-Year	UAPB	57	59	49	58	53	-4	-7.0%
4-Year	UCA	106	102	139	146	114	8	7.5%
TOTAL		**1,282**	**1,186**	**1,239**	**1,221**	**1,264**	**-18**	**-1.4%**
State Totals		8,843	8,935	9,189	9,306	9,534		
As Percent of State Total		14.5%	13.3%	13.5%	13.1%	13.3%		

		Specialist and Masters Level (Degree Levels 06, 07, 08)					Growth	
Inst. Type	Institution	AY2005	AY2006	AY2007	AY2008	AY2009	Change	Percent
4-Year	ASUJ	21	18	19	20	15	(6)	-28.6%
4-Year	ATU	19	33	28	32	29	10	52.6%
4-Year	HSU							
4-Year	SAUM				2	3	3	
4-Year	UAF	140	164	165	170	136	(4)	-2.9%
4-Year	UAFS							
4-Year	UALR	37	24	22	37	32	(5)	-13.5%
4-Year	UAM							
4-Year	UAMS	10	7	8	10	14	4	40.0%
4-Year	UAPB							
4-Year	UCA	18	22	16	20	26	8	44.4%
TOTAL		**245**	**268**	**258**	**291**	**255**	**10**	**4.1%**
State Totals		2,629	2,729	2,863	3,105	3,859		
As Percent of State Total		9.3%	9.8%	9.0%	9.4%	6.6%		

		Doctoral and related (Degree Levels 09 - 12)					Growth	
Inst. Type	Institution	AY2005	AY2006	AY2007	AY2008	AY2009	Change	Percent
4-Year	UAF	47	41	28	47	45	(2)	-4.3%
4-Year	UALR	11	5	8	13	10	(1)	-9.1%
4-Year	UAMS	10	18	14	20	22	12	120.0%
TOTAL		**68**	**64**	**50**	**80**	**77**	**9**	**13.2%**
State Totals		754	735	718	741	793	39	5.2%
As Percent of State Total		9.0%	8.7%	7.0%	10.8%	9.7%		
Total Stem Graduates		2,124	2,085	2,074	2,304	2,414		

Summary	AY2005	AY2006	AY2007	AY2008	AY2009	Change	Percent
State Totals	21,608	22,475	23,483	24,979	28,263	6,655	30.8%
STEM Totals	2,124	2,085	2,074	2,304	2,414	290	13.7%
STEM as Percent of State Totals	9.8%	9.3%	8.8%	9.2%	8.5%		

STEM Undergraduate Student Majors by Year (Fall Term Only)

Term (Academic Year)	Students	Unclassified UG*	Percent	Freshmen	Percent	Sophomore	Percent	Junior	Percent	Senior	Percent
2009 Fall (2010)	11,088	49	0.4%	3,859	34.8%	2,658	24.0%	1,887	17.0%	2,635	23.8%
2008 Fall (2009)	10,288	46	0.4%	3,656	35.5%	2,411	23.4%	1,793	17.4%	2,382	23.2%
2007 Fall (2008)	9,808	76	0.8%	3,428	35.0%	2,295	23.4%	1,675	17.1%	2,334	23.8%
2006 Fall (2007)	9,382	62	0.7%	3,436	36.6%	2,110	22.5%	1,528	16.3%	2,246	23.9%
2005 Fall (2006)	9,262	44	0.5%	3,260	35.2%	2,190	23.6%	1,570	17.0%	2,198	23.7%
TOTAL	49,828	277	0.6%	17,639	35.4%	11,664	23.4%	8,453	17.0%	11,795	23.7%
PERCENT	100.0%	0.6%	0.6%	35.4%	35.4%	23.4%	23.4%	17.0%	17.0%	23.7%	23.7%
AVERAGE	9,966	55	0.6%	3,528	35.4%	2,333	23.4%	1,691	17.0%	2,359	23.7%
GROWTH	19.7%	11.4%		18.4%		21.4%		20.2%		19.9%	

*NOTE: UG stands for undergraduate

Attachment C

STEM Student Majors by Race/Ethnicity for the 2009 Fall Term

#	Inst. Type	College	Enrollment Fall 2009										
			Asian Only[1]	Black Only[1]	Hispanic of Any Race[2]	Amer. Indian or Alaska Native Only[1]	White Only[1]	Native Hawaiian or Pacific Islander Only[1]	Two or More Races[1] (non-Hispanic)	Non-Resident Aliens[3]	Unknown	Did Not Answer[4]	TOTAL
1	1	ASUJ	1.0%	13.2%	1.0%	0.3%	70.9%	0.2%	1.8%	9.6%	2.1%		100.0%
2	1	ATU	1.4%	3.5%	3.7%	1.1%	81.9%	0.1%	0.3%	7.3%		0.6%	100.0%
3	1	HSU		12.6%	3.1%	0.4%	74.0%		4.4%	2.9%	0.9%	1.8%	100.0%
4	1	SAUM		19.1%	3.5%		64.3%	0.5%		12.1%		0.5%	100.0%
5	1	UAF	4.2%	4.0%	3.2%	1.4%	68.6%	0.1%	1.3%	13.3%	0.9%	3.0%	100.0%
6	1	UAFS	8.1%	2.9%	5.6%	3.0%	73.3%		6.4%	0.4%		0.3%	100.0%
7	1	UALR	3.6%	15.3%	2.8%	0.8%	59.1%		1.1%	11.1%	0.7%	5.6%	100.0%
8	1	UAM	1.5%	16.4%	1.5%	0.7%	75.4%		0.7%	0.4%		3.4%	100.0%
9	1	UAMS	2.2%	4.5%			61.8%			31.5%			100.0%
10	1	UAPB		94.8%	0.6%		2.5%			1.7%	0.3%		100.0%
11	1	UCA	4.9%	10.1%	2.3%	1.0%	73.0%			4.8%	3.5%	0.5%	100.0%
12	2	ANC	2.6%	12.8%			82.1%				2.6%		100.0%
13	2	ASUB		6.6%	4.0%		86.1%		1.3%	0.7%		1.3%	100.0%
14	2	ASUMH			3.2%		71.0%		4.8%			21.0%	100.0%
15	2	ASUN		23.8%			76.2%						100.0%
16	2	BRTC											
17	2	CCCUA		50.0%						50.0%			100.0%
18	2	EACC	2.5%	48.1%	7.4%	1.2%	35.8%		2.5%			2.5%	100.0%
19	2	MSCC	0.6%	45.5%	2.8%		48.3%		2.8%				100.0%
20	2	NAC	1.1%	1.7%	2.9%	1.7%	89.7%		2.9%				100.0%
21	2	NPCC		20.0%			80.0%						100.0%
22	2	NWACC	3.7%	1.0%	10.5%	2.0%	80.3%			0.3%	2.0%		100.0%
23	2	OTC		16.7%			79.2%		4.2%				100.0%
24	2	OZC											
25	2	PCCUA		29.3%	4.9%		65.9%						100.0%
26	2	PTC	0.8%	45.2%	3.2%	0.8%	48.4%					1.6%	100.0%
27	2	RMCC			2.2%	6.7%	91.1%						100.0%
28	2	SACC										100.0%	100.0%
29	2	SAUT	1.1%	39.1%	1.1%		50.6%					8.0%	100.0%
30	2	SEAC		40.4%	2.1%	0.7%	34.8%		0.7%			21.3%	100.0%
31	2	UACCB											
32	2	UACCH	0.8%	13.8%	3.8%	0.8%	74.6%				0.8%	5.4%	100.0%
33	2	UACCM	0.3%	4.6%	3.4%	1.2%	84.8%		5.2%		0.3%	0.3%	100.0%
4-Year Universities			3.2%	13.2%	2.8%	1.1%	66.3%	0.1%	1.5%	8.9%	1.0%	2.0%	100.0%
2-Year Colleges			1.1%	17.8%	4.1%	1.0%	70.2%		1.8%	0.1%	0.5%	3.4%	100.0%
State Total			2.8%	13.9%	3.0%	1.0%	66.9%	0.0%	1.5%	7.5%	0.9%	2.2%	100.0%

NOTES:

1. These categories are for non-Hispanics only.
2. Hispanics may be or any one or more races.
3. Non-Resident Aliens are international students.
4. Did Not Answer are those students that did not delcare as unknown but did not answer the race or ethnicity questions.

Undergraduate Enrollment by STEM Degree Programs

CIP Code	Numeric Order CIP Code Title	2005 Fall	2006 Fall	2007 Fall	2008 Fall	2009 Fall	CHANGE	% CHANGE
11.0101	Computer and Information Sciences, General.	1,639	1,415	1,332	1,358	1,484	(155)	-9.5%
11.0102	Artificial Intelligence and Robotics.	-	1	-	-		-	
11.0103	Information Technology.	14	8	38	82	95	81	578.6%
11.0201	Computer Programming/Programmer, General.	1	1	2	5	8	7	700.0%
11.0202	Computer Programming, Specific Applications.	-	-	1	-		-	
11.0203	Computer Programming, Vendor/Product Certification.	-	-	2	1	2	2	
11.0301	Data Processing and Data Processing Technology/Technician.	403	296	238	251	219	(184)	-45.7%
11.0401	Information Science/Studies.	160	161	134	147	174	14	8.8%
11.0501	Computer Systems Analysis/Analyst.	40	80	84	77	68	28	70.0%
11.0701	Computer Science.	52	32	35	48	52	-	0.0%
11.0801	Web Page, Digital/Multimedia and Information Resources Design.	1	-	1	2	2	1	100.0%
11.0901	Computer Systems Networking and Telecommunications.	174	134	110	112	106	(68)	-39.1%
11.1001	System Administration/Administrator.	-	-	1	-	1	1	
11.1002	System, Networking, and LAN/WAN Management/Manager.	5	1	5	1		(5)	-100.0%
11.1003	Computer and Information Systems Security.	-	-	3	3	7	7	
11.1004	Web/Multimedia Management and Webmaster.	3	1	5	2	3	-	0.0%
14.0101	Engineering, General.	290	279	249	260	250	(40)	-13.8%
14.0301	Agricultural/Biological Engineering and Bioengineering.	92	108	115	90	82	(10)	-10.9%
14.0701	Chemical Engineering.	179	185	180	176	150	(29)	-16.2%
14.0801	Civil Engineering, General.	194	232	269	196	219	25	12.9%
14.0901	Computer Engineering, General.	164	134	122	85	81	(83)	-50.6%
14.1001	Electrical, Electronics and Communications Engineering.	303	295	280	248	271	(32)	-10.6%
14.1201	Engineering Physics.	8	3	12	13	14	6	75.0%
14.1901	Mechanical Engineering.	491	512	529	483	573	82	16.7%
14.2501	Petroleum Engineering.					133	133	
14.2701	Systems Engineering.	36	56	77	100		(36)	-100.0%
14.3501	Industrial Engineering.	213	180	157	120	140	(73)	-34.3%
15.0303	Electrical, Electronic and Communications Engineering Technology/Technician.	70	40	88	95	186	116	165.7%
15.0401	Biomedical Technology/Technician.	15	11	5	9	12	(3)	-20.0%
15.0403	Electromechanical Technology/Electromechanical Engineering Technology.	12	14	-	1	10	(2)	-16.7%
15.0507	Environmental Engineering Technology/Environmental Technology.	39	42	44	44	57	18	46.2%
15.0611	Metallurgical Technology/Technician.	9	10	9	8	34	25	277.8%
15.0612	Industrial Technology/Technician.	222	234	207	182	243	21	9.5%
15.0613	Manufacturing Technology/Technician.	25	8	7	41	185	160	640.0%
15.0702	Quality Control Technology/Technician.	1	1	2	5		(1)	-100.0%
15.0805	Mechanical Engineering/Mechanical Technology/Technician.	54	61	54	56	83	29	53.7%
15.0903	Petroleum Technology/Technician.	-	-	35	82	198	198	
15.1001	Construction Engineering Technology/Technician.	143	156	178	191	164	21	14.7%
15.1102	Surveying Technology/Surveying.	98	101	78	70	68	(30)	-30.6%
15.1201	Computer Engineering Technology/Technician.	39	39	51	49	52	13	33.3%
15.1202	Computer Technology/Computer Systems Technology.	239	229	224	191	238	(1)	-0.4%
15.1301	Drafting and Design Technology/Technician, General.	343	332	340	253	244	(99)	-28.9%
15.1302	CAD/CADD Drafting and/or Design Technology/Technician.	-	9	11	129	105	105	
15.1306	Mechanical Drafting and Mechanical Drafting CAD/CADD.	18	-	-	-	13	(5)	-27.8%
15.1401	Nuclear Engineering Technology/Technician.	25	15	16	18	28	3	12.0%
26.0101	Biology/Biological Sciences, General.	1,969	2,308	2,450	2,920	3,243	1,274	64.7%
26.0301	Botany/Plant Biology.	3	2	-	-		(3)	-100.0%
26.0503	Medical Microbiology and Bacteriology.	29	9	-	-		(29)	-100.0%
26.0701	Zoology/Animal Biology.	9	2	-	-		(9)	-100.0%
26.1201	Biotechnology.	6	4	4	4	6	-	0.0%
26.1307	Conservation Biology.	107	112	96	-		(107)	-100.0%
27.0101	Mathematics, General.	393	412	417	389	419	26	6.6%
27.0301	Applied Mathematics.					1	1	
29.0101	Military Technologies.					4	4	
40.0101	Physical Sciences.	11	16	21	14	15	4	36.4%
40.0501	Chemistry, General.	691	737	827	932	1,005	314	45.4%
40.0601	Geology/Earth Science, General.	78	89	86	96	159	81	103.8%
40.0801	Physics, General.	138	155	151	169	182	44	31.9%

STEM Designated Degree Programs

Effective date: April 8, 2008; Updated September 25, 2008
The following is a list of Classification of Instructional Programs codes published by the National Center for Education Statistics (NCES CIP codes) that have been designated by ICE as science, technology, engineering, or math (STEM) degrees for the purpose of approving a 17-month STEM extension of optional practical training (OPT) under the provisions of 8 CFR214.2(f)(10)(ii)(C).In order for F-1 students to qualify for this 17-month extension, the code for the student's degree program must be on this list. Other requirements are found in the regulatory language.

STEM Designated Degree Programs

CIP Code Family	CIP Code	Numeric Order CIP Code Title
11	11.0101	Computer and Information Sciences, General.
11	11.0102	Artificial Intelligence and Robotics.
11	11.0103	Information Technology.
11	11.0201	Computer Programming/Programmer, General.
11	11.0202	Computer Programming, Specific Applications.
11	11.0203	Computer Programming, Vendor/Product Certification.
11	11.0301	Data Processing and Data Processing Technology/Technician.
11	11.0401	Information Science/Studies.
11	11.0501	Computer Systems Analysis/Analyst.
11	11.0701	Computer Science.
11	11.0801	Web Page, Digital/Multimedia and Information Resources Design.
11	11.0802	Data Modeling/Warehousing and Database Administration.
11	11.0803	Computer Graphics.
11	11.0901	Computer Systems Networking and Telecommunications.
11	11.1001	System Administration/Administrator.
11	11.1002	System, Networking, and LAN/WAN Management/Manager.
11	11.1003	Computer and Information Systems Security.
11	11.1004	Web/Multimedia Management and Webmaster.
14	14.0101	Engineering, General.
14	14.0201	Aerospace, Aeronautical and Astronautical Engineering.
14	14.0301	Agricultural/Biological Engineering and Bioengineering.
14	14.0401	Architectural Engineering.
14	14.0501	Biomedical/Medical Engineering.
14	14.0601	Ceramic Sciences and Engineering.
14	14.0701	Chemical Engineering.
14	14.0801	Civil Engineering, General.
14	14.0802	Geotechnical Engineering.
14	14.0803	Structural Engineering.
14	14.0804	Transportation and Highway Engineering.
14	14.0805	Water Resources Engineering.
14	14.0901	Computer Engineering, General.
14	14.0902	Computer Hardware Engineering.
14	14.0903	Computer Software Engineering.
14	14.1001	Electrical, Electronics and Communications Engineering.
14	14.1101	Engineering Mechanics.
14	14.1201	Engineering Physics.
14	14.1301	Engineering Science.
14	14.1401	Environmental/Environmental Health Engineering.
14	14.1801	Materials Engineering.
14	14.1901	Mechanical Engineering.
14	14.2001	Metallurgical Engineering.
14	14.2101	Mining and Mineral Engineering.
14	14.2201	Naval Architecture and Marine Engineering.
14	14.2301	Nuclear Engineering.
14	14.2401	Ocean Engineering.
14	14.2501	Petroleum Engineering.
14	14.2701	Systems Engineering.
14	14.2801	Textile Sciences and Engineering.
14	14.3101	Materials Science.
14	14.3201	Polymer/Plastics Engineering.
14	14.3301	Construction Engineering.
14	14.3401	Forest Engineering.
14	14.3501	Industrial Engineering.
14	14.3601	Manufacturing Engineering.
14	14.3701	Operations Research.
14	14.3801	Surveying Engineering.
14	14.3901	Geological/Geophysical Engineering.
15	15	Engineering Technology, General.
15	15.0101	Architectural Engineering Technology/Technician.
15	15.0201	Civil Engineering Technology/Technician.
15	15.0303	Electrical, Electronic and Communications Engineering Technology/Technician.
15	15.0304	Laser and Optical Technology/Technician.
15	15.0305	Telecommunications Technology/Technician.
15	15.0401	Biomedical Technology/Technician.
15	15.0403	Electromechanical Technology/Electromechanical Engineering Technology.
15	15.0404	Instrumentation Technology/Technician.
15	15.0405	Robotics Technology/Technician.
15	15.0501	Heating, Air Conditioning and Refrigeration Technology/Technician (ACH/ACR/AC

STEM Designated Degree Programs

CIP Code Family	CIP Code	Numeric Order CIP Code Title
15	15.0503	Energy Management and Systems Technology/Technician.
15	15.0505	Solar Energy Technology/Technician.
15	15.0506	Water Quality and Wastewater Treatment Management and Recycling Technolog
15	15.0507	Environmental Engineering Technology/Environmental Technology.
15	15.0508	Hazardous Materials Management and Waste Technology/Technician.
15	15.0607	Plastics Engineering Technology/Technician.
15	15.0611	Metallurgical Technology/Technician.
15	15.0612	Industrial Technology/Technician.
15	15.0613	Manufacturing Technology/Technician.
15	15.0701	Occupational Safety and Health Technology/Technician.
15	15.0702	Quality Control Technology/Technician.
15	15.0703	Industrial Safety Technology/Technician.
15	15.0704	Hazardous Materials Information Systems Technology/Technician.
15	15.0801	Aeronautical/Aerospace Engineering Technology/Technician.
15	15.0803	Automotive Engineering Technology/Technician.
15	15.0805	Mechanical Engineering/Mechanical Technology/Technician.
15	15.0901	Mining Technology/Technician.
15	15.0903	Petroleum Technology/Technician.
15	15.1001	Construction Engineering Technology/Technician.
15	15.1102	Surveying Technology/Surveying.
15	15.1103	Hydraulics and Fluid Power Technology/Technician.
15	15.1201	Computer Engineering Technology/Technician.
15	15.1202	Computer Technology/Computer Systems Technology.
15	15.1203	Computer Hardware Technology/Technician.
15	15.1204	Computer Software Technology/Technician.
15	15.1301	Drafting and Design Technology/Technician, General.
15	15.1302	CAD/CADD Drafting and/or Design Technology/Technician.
15	15.1303	Architectural Drafting and Architectural CAD/CADD.
15	15.1304	Civil Drafting and Civil Engineering CAD/CADD.
15	15.1305	Electrical/Electronics Drafting and Electrical/Electronics CAD/CADD.
15	15.1306	Mechanical Drafting and Mechanical Drafting CAD/CADD.
15	15.1401	Nuclear Engineering Technology/Technician.
15	15.1501	Engineering/Industrial Management.
26	26.0101	Biology/Biological Sciences, General.
26	26.0102	Biomedical Sciences, General.
26	26.0202	Biochemistry.
26	26.0203	Biophysics.
26	26.0204	Molecular Biology.
26	26.0205	Molecular Biochemistry.
26	26.0206	Molecular Biophysics.
26	26.0207	Structural Biology.
26	26.0208	Photobiology.
26	26.0209	Radiation Biology/Radiobiology.
26	26.021	Biochemistry/Biophysics and Molecular Biology.
26	26.0301	Botany/Plant Biology.
26	26.0305	Plant Pathology/Phytopathology.
26	26.0307	Plant Physiology.
26	26.0308	Plant Molecular Biology.
26	26.0401	Cell/Cellular Biology and Histology.
26	26.0403	Anatomy.
26	26.0404	Developmental Biology and Embryology.
26	26.0405	Neuroanatomy.
26	26.0406	Cell/Cellular and Molecular Biology.
26	26.0407	Cell Biology and Anatomy.
26	26.0502	Microbiology, General.
26	26.0503	Medical Microbiology and Bacteriology.
26	26.0504	Virology.
26	26.0505	Parasitology.
26	26.0506	Mycology.
26	26.0507	Immunology.
26	26.0701	Zoology/Animal Biology.
26	26.0702	Entomology.
26	26.0707	Animal Physiology.
26	26.0708	Animal Behavior and Ethology.
26	26.0709	Wildlife Biology.
26	26.0801	Genetics, General.
26	26.0802	Molecular Genetics.
26	26.0803	Microbial and Eukaryotic Genetics.
26	26.0804	Animal Genetics.
26	26.0805	Plant Genetics.
26	26.0806	Human/Medical Genetics.
26	26.0901	Physiology, General.
26	26.0902	Molecular Physiology.
26	26.0903	Cell Physiology.
26	26.0904	Endocrinology.
26	26.0905	Reproductive Biology.
26	26.0906	Neurobiology and Neurophysiology.
26	26.0907	Cardiovascular Science.
26	26.0908	Exercise Physiology.

STEM Designated Degree Programs

CIP Code Family	CIP Code	Numeric Order CIP Code Title
26	26.0909	Vision Science/Physiological Optics.
26	26.091	Pathology/Experimental Pathology.
26	26.0911	Oncology and Cancer Biology.
26	26.1001	Pharmacology.
26	26.1002	Molecular Pharmacology.
26	26.1003	Neuropharmacology.
26	26.1004	Toxicology.
26	26.1005	Molecular Toxicology.
26	26.1006	Environmental Toxicology.
26	26.1007	Pharmacology and Toxicology.
26	26.1101	Biometry/Biometrics.
26	26.1102	Biostatistics.
26	26.1103	Bioinformatics.
26	26.1201	Biotechnology.
26	26.1301	Ecology.
26	26.1302	Marine Biology and Biological Oceanography.
26	26.1303	Evolutionary Biology.
26	26.1304	Aquatic Biology/Limnology.
26	26.1305	Environmental Biology.
26	26.1306	Population Biology.
26	26.1307	Conservation Biology.
26	26.1308	Systematic Biology/Biological Systematics.
26	26.1309	Epidemiology.
27	27.0101	Mathematics, General.
27	27.0102	Algebra and Number Theory.
27	27.0103	Analysis and Functional Analysis.
27	27.0104	Geometry/Geometric Analysis.
27	27.0105	Topology and Foundations.
27	27.0301	Applied Mathematics.
27	27.0303	Computational Mathematics.
27	27.0501	Statistics, General.
27	27.0502	Mathematical Statistics and Probability.
29	29.0101	Military Technologies.
40	40.0101	Physical Sciences.
40	40.0201	Astronomy.
40	40.0202	Astrophysics.
40	40.0203	Planetary Astronomy and Science.
40	40.0401	Atmospheric Sciences and Meteorology, General.
40	40.0402	Atmospheric Chemistry and Climatology.
40	40.0403	Atmospheric Physics and Dynamics.
40	40.0404	Meteorology.
40	40.0501	Chemistry, General.
40	40.0502	Analytical Chemistry.
40	40.0503	Inorganic Chemistry.
40	40.0504	Organic Chemistry.
40	40.0506	Physical and Theoretical Chemistry.
40	40.0507	Polymer Chemistry.
40	40.0508	Chemical Physics.
40	40.0601	Geology/Earth Science, General.
40	40.0602	Geochemistry.
40	40.0603	Geophysics and Seismology.
40	40.0604	Paleontology.
40	40.0605	Hydrology and Water Resources Science.
40	40.0606	Geochemistry and Petrology.
40	40.0607	Oceanography, Chemical and Physical.
40	40.0801	Physics, General.
40	40.0802	Atomic/Molecular Physics.
40	40.0804	Elementary Particle Physics.
40	40.0805	Plasma and High-Temperature Physics.
40	40.0806	Nuclear Physics.
40	40.0807	Optics/Optical Sciences.
40	40.0808	Solid State and Low-Temperature Physics.
40	40.0809	Acoustics.
40	40.0810	Theoretical and Mathematical Physics.
41	41.0101	Biology Technician/Biotechnology Laboratory Technician.
41	41.0204	Industrial Radiologic Technology/Technician.
41	41.0205	Nuclear/Nuclear Power Technology/Technician.
41	41.0301	Chemical Technology/Technician.
51	51.1401	Medical Scientist (MS, PhD).
52	52.1304	Actuarial Science

Education Majors by Year with a STEM Field of Study (CIP Code 13 - Fall Term Only)

NOTE: (1) This is a count of all students for the Fall term only.
Degree Codes based on the Academic Year selected of **2010**

No.	Type	Inst. Name	CIP Code	CIP Name	Degree Level	Degree Code	Degree Name	AY 2005	AY 2006	AY 2007	AY 2008	AY 2009	% CHANGE
1	1	ASUJ	13.1309	Technology Teacher Education/Industrial Arts Teacher Education	3	1215	Technical - Vocational Education	-	1	-	-	-	
2	1	ASUJ	13.1311	Mathematics Teacher Education	5	3910	Mathematics Education	55	46	41	33	39	-29.1%
3	1	ASUJ	13.1311	Mathematics Teacher Education	7	6870	Mathematics	5	-	-	-	5	0.0%
4	1	ASUJ	13.1322	Biology Teacher Education	7	6650	Biology	1	-	-	2	1	0.0%
5	1	ASUJ	13.1322	Biology Teacher Education	5	3700	Biology	22	16	10	11	17	-22.7%
6	1	ASUJ	13.1323	Chemistry Teacher Education	5	3720	Chemistry	8	1	4	5	7	-12.5%
7	1	ASUJ	13.1323	Chemistry Teacher Education	7	6670	Chemistry	-	-	-	-	-	
8	1	ASUJ	13.1329	Physics Teacher Education	5	3960	Physics	2	-	-	-	-	-100.0%
9	1	ATU	13.1311	Mathematics Teacher Education	7	5790	Mathematics	2	3	1	2	1	-50.0%
10	1	ATU	13.1311	Mathematics Teacher Education	5	9870	Mathematics	38	26	42	35	40	5.3%
11	1	ATU	13.1316	Science Teacher Education/General Science Teach Education	5	9010	Physical Science & Earth Science	9	3	7	7	6	-33.3%
12	1	ATU	13.1322	Biology Teacher Education	5	9300	Life Science & Earth Science	13	12	6	8	16	23.1%
13	1	ATU	13.1323	Chemistry Teacher Education	5	3720	Chemistry	-	-	-	-	-	
14	1	HSU	13.1311	Mathematics Teacher Education	5	3910	Mathematics	-	-	-	-	-	
15	1	HSU	13.1311	Mathematics Teacher Education	7	6870	Mathematics	1	-	-	-	-	-100.0%
16	1	HSU	13.1316	Science Teacher Education/General Science Teach Education	7	6890	Physical Science	-	-	-	-	-	
17	1	HSU	13.1316	Science Teacher Education/General Science Teach Education	5	2640	General Science	-	-	-	-	-	
18	1	HSU	13.1322	Biology Teacher Education	5	3700	Biology	-	-	-	-	-	
19	1	HSU	13.1322	Biology Teacher Education	7	6650	Biology	2	-	-	-	-	-100.0%
20	1	HSU	13.1323	Chemistry Teacher Education	5	3720	Chemistry	-	-	-	-	-	
21	1	HSU	13.1329	Physics Teacher Education	5	3960	Physics	-	-	-	-	-	
22	1	SAUM	13.1311	Mathematics Teacher Education	7	5790	Mathematics Education	-	-	-	-	-	
23	1	SAUM	13.1311	Mathematics Teacher Education	7	5800	Mathematics, General Science	-	-	-	-	-	
24	1	SAUM	13.1311	Mathematics Teacher Education	5	3910	Mathematics	10	6	2	2	1	-90.0%
25	1	SAUM	13.1316	Science Teacher Education/General Science Teach Education	5	3830	General Science	3	2	3	1	-	-100.0%
26	1	SAUM	13.1316	Science Teacher Education/General Science Teach Education	7	5710	General Science in Secondary Education	-	-	-	-	-	
27	1	SAUM	13.1322	Biology Teacher Education	5	3690	Biological Sciences	5	3	-	-	-	-100.0%
28	1	SAUM	13.1323	Chemistry Teacher Education	5	3720	Chemistry	-	-	-	-	-	
29	1	SAUM	13.1329	Physics Teacher Education	5	3960	Physics	-	-	-	-	-	

No.	Type	Inst. Name	CIP Code	CIP Name	Degree Level	Degree Code	Degree Name	AY 2005	AY 2006	AY 2007	AY 2008	AY 2009	% CHANGE
30	1	UAF	13.1309	Technology Teacher Education/Industrial Arts Teacher Education	5	3890	Industrial & Technical Education	-	-	-	-	-	
31	1	UAF	13.1311	Mathematics Teacher Education	5	3910	Mathematics Education	-	-	-	-	-	
32	1	UAF	13.1311	Mathematics Teacher Education	7	5460	Secondary Mathematics	-	1	2	1	-	
33	1	UAF	13.1311	Mathematics Teacher Education	7	5790	Mathematics Education	-	-	-	-	-	
34	1	UAF	13.1316	Science Teacher Education/General Science Teach Education	5	3990	Science Education	-	-	-	-	-	
35	1	UAFS	13.1311	Mathematics Teacher Education	5	3910	Mathematics	56	40	31	39	41	-26.8%
36	1	UAFS	13.1322	Biology Teacher Education	5	3700	Biology	45	42	42	34	39	-13.3%
37	1	UAFS	13.1323	Chemistry Teacher Education	5	3720	Chemistry	4	5	3	5	5	25.0%
38	1	UAM	13.1311	Mathematics Teacher Education	7	5790	Mathematics	-	-	-	-	-	
39	1	UAM	13.1311	Mathematics Teacher Education	5	9870	Mathematics	-	-	-	-	-	
40	1	UAM	13.1316	Science Teacher Education/General Science Teach Education	5	9640	General Science	-	-	-	-	-	
41	1	UAM	13.1316	Science Teacher Education/General Science Teach Education	5	9010	Physical Science	-	-	-	-	-	
42	1	UAM	13.1316	Science Teacher Education/General Science Teach Education	7	5700	General Science	-	-	-	-	-	
43	1	UAM	13.1322	Biology Teacher Education	5	9300	Biology	-	-	-	-	-	
44	1	UAM	13.1323	Chemistry Teacher Education	5	3720	Chemistry	-	-	-	-	-	
45	1	UAM	13.1329	Physics Teacher Education	5	9030	Physics	-	-	-	-	-	
46	1	UAPB	13.1311	Mathematics Teacher Education	5	3910	Mathematics Education	10	10	12	16	15	50.0%
47	1	UAPB	13.1311	Mathematics Teacher Education	7	5790	Mathematics Education	-	2	1	3	3	
48	1	UAPB	13.1316	Science Teacher Education/General Science Teach Education	7	5845	Science Education	3	2	5	5	6	100.0%
49	1	UAPB	13.1316	Science Teacher Education/General Science Teach Education	5	3170	Science Education	2	1	4	2	1	-50.0%
50	1	UCA	13.1309	Technology Teacher Education/Industrial Arts Teacher Education	7	6865	Industrial Technology	-	-	-	-	-	
51	1	UCA	13.1309	Technology Teacher Education/Industrial Arts Teacher Education	5	3895	Industrial Technology	-	-	-	-	-	
52	1	UCA	13.1311	Mathematics Teacher Education	5	3910	Mathematics	50	48	54	44	53	6.0%
53	1	UCA	13.1311	Mathematics Teacher Education	7	6870	Mathematics	-	-	-	-	-	
54	1	UCA	13.1316	Science Teacher Education/General Science Teach Education	7	6890	Physical Science	76	14	-	-	-	-100.0%
55	1	UCA	13.1316	Science Teacher Education/General Science Teach Education	5	3830	General Science	-	1	-	-	-	
56	1	UCA	13.1316	Science Teacher Education/General Science Teach Education	5	3950	Secondary Science Education	14	17	26	19	23	64.3%
57	1	UCA	13.1322	Biology Teacher Education	5	3700	Biology	-	-	-	-	-	
58	1	UCA	13.1322	Biology Teacher Education	7	6650	Biology	-	-	-	-	-	
59	1	UCA	13.1323	Chemistry Teacher Education	5	3720	Chemistry	-	-	-	-	-	
60	1	UCA	13.1329	Physics Teacher Education	5	3960	Physics	-	-	-	-	-	
							Total	436	302	296	274	319	-26.8%