REPORT ON STEM GRADUATION AND ENROLLMENT TRENDS

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AUTHORS:

Rick Jenkins
Associate Director of Planning and Accountability
Arkansas Department of Higher Education

Sharon Butler
Program Specialist
Arkansas Department of Higher Education

Suzanne Mitchell, Ph.D.
No Child Left Behind Coordinator
Arkansas Department of Higher Education

ARKANSAS DEPARTMENT OF HIGHER EDUCATION
2015 REPORT ON STEM GRADUATION AND ENROLLMENT TRENDS

List of Attachments

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 related fields as defined by the U.S. Immigration and Customs Enforcement (ICE).

A Brief Literature Review

The Need for STEM

STEM jobs are very important to the economy and the need for STEM-skilled applicants is steadily rising. The U.S. Department of Education Secretary states that a ". . . STEM education is a pathway to prosperity" (U.S. Commerce Department.gov, 2011). In the first decade of the 21st century, growth in STEM jobs was three times greater than growth in non-STEM jobs and such growth is expected to continue at a faster pace in the future (U.S. Commerce Department.gov, 2011).

According to Joe Harlan of the Dow Chemical Company, there is no worker shortage, only a skills shortage: ". . . four million jobs are open because the workers who are available don't have the right skills, primarily skills in Science, Technology, Engineering and Math—what's commonly referred to as STEM skills. . . Mostly we're talking about students who need an associate's degree in a STEM-related area or, at least, better STEM skills coming out of high school" (Harlan, 2014, p. 165) ". . . on average, there are 200,000 vacant engineering positions annually in the United States . . ." (Hall, Dickerson, Batts, Kauffmann, & Bosse, 2011, p. 32). While the need for STEM workers is not being fully addressed in the United States, other countries are attempting to address this need. ". . . fewer than one in seven students in the United States receive a degree in science or engineering, compared to one out of every two students in China and two out of every three students in Singapore. . ." (Soldner, Rowan-Kenyon, Inkelas, Garvey, & Robbins, 2012, p. 311). While engineering and scientific jobs are expected to increase by 70 percent, ". . . students from 15 countries are higher achieving in math, and students from eight countries are higher achieving in science than students in the U.S. . ." and ". . . while the

U.S. is producing fewer engineering and technology professionals, other countries are increasing the number of graduates in these fields" (Nugent, Kunz, Rilett, & Jones, 2010, p.14).

While the number of STEM graduates is growing in the United States, the growth is not keeping pace with the demand. ". . .while our nation's workforce is growing in these fields, it still lags behind the overall growth of the United States, resulting in a serious deficit in the supply side of the STEM workforce" (Hall, Dickerson, Batts, Kauffmann, & Bosse, 2011, p. 32). "While the actual enrollment in STEM degree fields increased from 519,000 students in 1994-1995 to 578,000 students in 2003-2004, the proportion of undergraduate degrees awarded in STEM fields actually declined from 32% to 27 % of all degrees awarded" (Hall, Dickerson, Batts, Kauffmann, & Bosse, 2011, p. 32).

The highest salaries seem to be in the STEM fields (Perryman, 2013, p. 4). According to a 2012 study, once they enter the labor market, STEM graduates earn an average of $48,856 whereas education majors earn only $31,236 (Melguizo & Wolniak, 2012). According to the Commerce Department, STEM employees earn 26 percent more that non-STEM employees (U.S. Commerce Department.gov, 2011). The occupations with the highest earnings tend to have ". . . well-defined body of content knowledge and skills development, and focus on methods of inquiry that require a high level of quantitative or scientific knowledge" (Melguizo & Wolniak, 2012, p. 385). These are STEM occupations. Part of the reason that STEM graduates tend to have substantially higher earnings is because ". . . STEM workers are highly educated. More than two-thirds of STEM workers have at least a college degree, compared to less than one-third of non-STEM workers" (U.S. Commerce Department.gov, 2011).

Reasons for Under-Performance

Unfortunately, a large portion of students that enter college as a STEM major are not completing their STEM education. "About 28 percent of bachelor's degree students and 20 percent of associate's degree students entered a STEM field (i.e., chose a STEM major) at some point within 6 years of entering postsecondary education in 2003−04" (Chen & Soldner, 2014, p. iv). In addition, a total of ". . . 48 percent of bachelor's degree students and 69 percent of associate's degree students who entered STEM fields between 2003 and 2009 had left these fields by spring 2009. Roughly one-half of these leavers switched their major to a non-STEM field, and the rest of them left STEM fields by exiting college before earning a degree or certificate" (Chen & Soldner, 2014, p. iv). According to the GAO, 27 percent of degrees awarded in AY2003-2004 were in STEM fields, but it was 32 percent ten years earlier (Raines, 2012). Low-performing STEM students experience a greater chance of dropping out of college whereas higher-performing STEM students have a greater chance of changing majors to a non-STEM field (Chen & Soldner, 2014).

Both math and science seems to be the subjects in which many STEM students have deficiencies. Too "many high school graduates fail to reach proficiency in math and science and are unprepared for college-level courses" (Raines, 2012, p. 22). "Nearly half of the students who entered four-year colleges or universities as biology or agriculture majors failed to graduate in those fields. . ." (Soldner, Rowan-Kenyon, Inkelas, Garvey, & Robbins, 2012, p. 312).

"The problem of STEM attrition appears to be more vexing for specific student populations. Degree attainment for women and under-represented minority (URM) students in STEM . . . are even lower than for undergraduates as a whole. . ." (Soldner, Rowan-Kenyon, Inkelas, Garvey, & Robbins, 2012, p. 312).

Potential Strategies to Improve College Performance of STEM Students

1. Improve Math Skills: Math preparation is a good indicator of success for STEM students (Reisel, Jablonski, Hosseini, & Munson, 2012).

2. Improve Science Skills: "Students in science disciplines often arrive at college without experience using primary science literature and lacking in skills required to manipulate information. A cohesive, curriculum-integrated information literacy program is crucial in teaching science majors how to determine information needs and to locate, evaluate, synthesize, and use information" (Scaramozzino, 2010, p. 315). ". . . if students are to be attracted to STEM fields, they must be given meaningful science experiences outside of textbook chapters, problem sets, quizzes, and tests. To make this cost-effective, these science experiences should be given an interactive lab environment in which to learn these concepts, one that doesn't jeopardize precious lab space or departmental budgets or educators' time" (Schwab, 2013, p. 334).

3. Identify Strategies for Under-Represented Minorities: "Recent research indicates that students of color or underrepresented racial minorities (URM) are now entering the STEM disciplines as college freshmen in the same proportional interest (as compared to interest in the liberal arts) as their White and Asian American classmates. However, these students of color continue to graduate with degrees in STEM at a considerably lower proportional rate than their White counterparts" (Schwartz, 2012, p. 36).

4. Consider Implementing Summer Bridge Programs: Summer bridge programs are an effective means to recruit students to the STEM fields and to increase their academic preparedness (Raines, 2012).

5. Consider Implementing Programs for Undergraduate Research (UR): "The literature suggests that undergraduate research is a promising pedagogical strategy for retaining students in STEM" (Schwartz, 2012, p. 36).

6. Consider Implementing Mentoring Programs: "Using NSF/CSEMS and NSF/S-STEM projects, LSU/OSI has developed a very successful mentoring program for economically disadvantaged students based on the following indicators: (a) The costs for college education have been leveraged efficiently and effectively; (b) Graduation rates have increased; (c) More students have received regional/national awards and recognitions; and (d) Student performance (e.g., GPA) has improved. Achieving all of these for college students has been a challenge in higher education, especially for minority and female students in the STEM disciplines. LSU/OSI has created numerous innovative mentoring activities to achieve these impressive results. OSI was established to break disciplinary barriers and change the traditional way of conducting education and mentoring. Herein,

LSU resources have been leveraged to enhance the synergy and positive ‘‘composite action’’ among the existing projects. OSI Mentoring Programs have and continue to: (1) nurture students in an interdisciplinary environment so that they become Inspirational Teachers, Exemplary Mentors, and Effective Leaders; (2) create and implement programs that broaden the participation of more diversified students; (3) enhance the academic environment to better support students, who subsequently transfer their service to K-12 education. Furthermore, CSEMS/S-STEM Scholars are able to readily relate to a broad spectrum of individuals: academicians, K-12 teachers and students, industry personnel, and the public in general. It is anticipated that all OSI program students will exert a positive and ethical influence in the community as Model Citizens" (Wilson, Ivengar, Pang, Warner, & Luces, 2012, p. 586).

STEM in Arkansas

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.

STEM CIP Codes

The Arkansas Department of Higher Education uses three different sets of CIP Codes for the STEM fields. The most recent was obtained in 2012 with other versions being obtained in 2011 and before 2010. All sets of CIP Codes for the STEM fields were obtained from the website of the U.S. Immigration and Customs Enforcement (ICE) at www.ice.gov. The 2010 and earlier version contains 217 CIP Codes, the 2011 version contains 328 CIP Codes, and the 2012 version contains 422 CIP Codes. In this report,

- all graduate and enrollment data for Academic Year 2010 and before used the 2010 version (217 CIP Codes);
- all graduate and enrollment data for Academic Year 2011 used the 2011 version (328 CIP Codes); and
- all graduate and enrollment data for Academic Year 2012 and 2012 Fall (AY2013) through Academic Year 2014 and 2014 Fall (AY2015) used the 2012 version (422 CIP Codes).

Therefore, this report is comparable to last year's report.

The above discussion regarding the different versions of CIP Codes for the STEM fields points to the need for the state of Arkansas to consider establishing a list of static STEM CIP Codes. A static or less fluid list of CIP Codes for STEM would enable the state to better identify growth, or the lack of such, from year to year. With an increasing list of STEM CIP Codes, some growth can be attributed to the increasing number of CIP Codes and not in the growth of graduates or enrollment. However, any and all growth noted in this report from AY2012 to AY2014 or 2012 Fall to 2014 Fall will be due to actual growth in the graduates and students since the STEM CIP Codes did not change in 2013 or 2014.

Due to the growth in the number of CIP Codes designated as STEM, substantial growth can be attributed to the increasing number of CIP Codes rather than the growth of graduates. Note that the below comparisons have not changed since last year's report as the STEM CIP Codes did not change from AY2012 to AY2013.

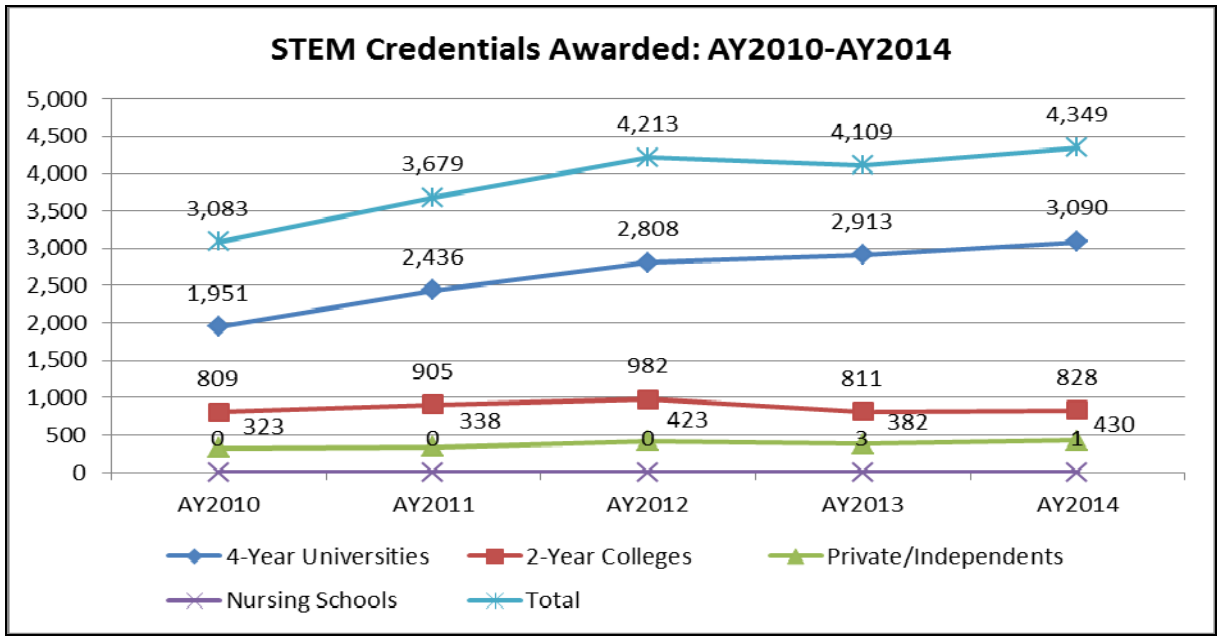
- Using the 2011 CIP Codes for AY2011 graduates accounts for an additional 6.9 percent credentials to be counted. In other words, if the 2010 STEM Codes were used, 3,439 credentials would have been counted rather than 3,679 actually reported below.
- Using the 2012 CIP Codes for AY2012 graduates accounts for an additional 16.7 percent credentials to be counted. In other words, if the 2010 STEM Codes were used, 3,609 credentials would have been counted rather than 4,213 actually reported below.
- Using the 2012 CIP Codes for AY2012 graduates accounts for an additional 8.8 percent credentials to be counted. In other words, if the 2011 STEM Codes were used, 3,872 credentials would have been counted rather than 4,213 actually reported below.

The state of Arkansas should consider adopting a static list of CIP Codes for identifying STEM categories.

STEM Degree Production

The total number of all STEM credentials awarded has increased in each year except AY2013. The total growth from AY2010 to AY2014 was 41.1 percent.

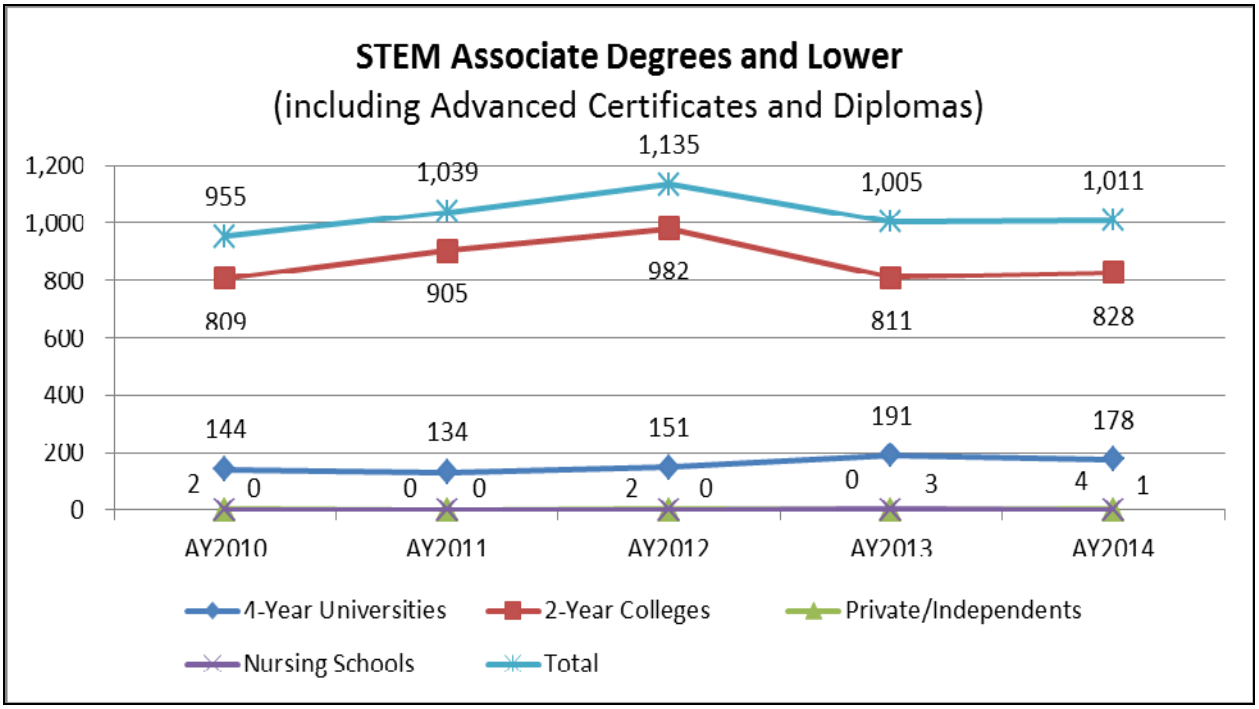
Credentials Awarded	AY2010	AY2011	AY2012	AY2013	AY2014
4-Year Universities	1,951	2,436	2,808	2,913	3,090
2-Year Colleges	809	905	982	811	828
Private/Independents	323	338	423	382	430
Nursing Schools	0	0	0	3	1
Total	3,083	3,679	4,213	4,109	4,349
Growth	NA	19.3%	14.5%	-2.5%	5.8%



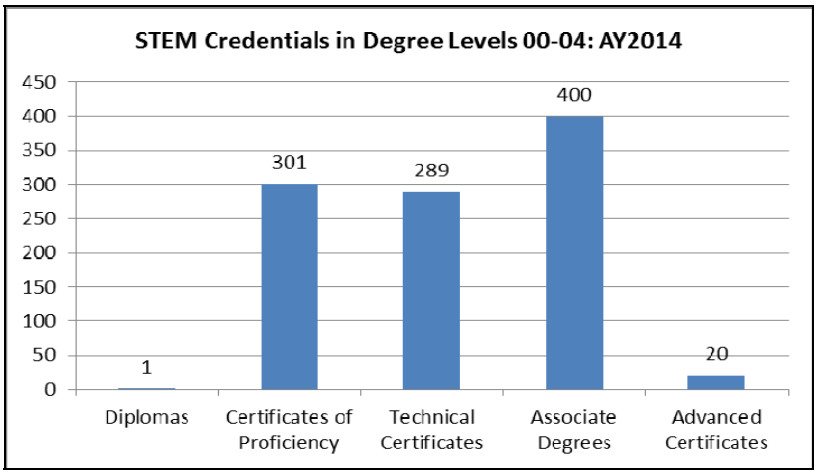
NOTE: The Private/Independent and Vocational includes the 11 Private/Independent institutions and the 2 Nursing Schools. (The Nursing Schools had 3 STEM credentials awarded in AY2013 and 1 in AY2014).

At the associate degree level, the total number of STEM graduates has increased 5.9 percent between AY2010 and AY2014. (This level includes Diplomas [from Nursing Schools], Certificates of Proficiency, Technical Certificates, Associate Degrees, and Advanced Certificates).

Associates and Lower (including Advanced Certificates)					
TOTAL	**AY2010**	**AY2011**	**AY2012**	**AY2013**	**AY2014**
4-Year Universities	144	134	151	191	178
2-Year Colleges	809	905	982	811	828
Private/Independents	2	0	2	0	4
Nursing Schools	0	0	0	3	1
Total	955	1,039	1,135	1,005	1,011
Growth	NA	8.8%	9.2%	-11.5%	0.6%

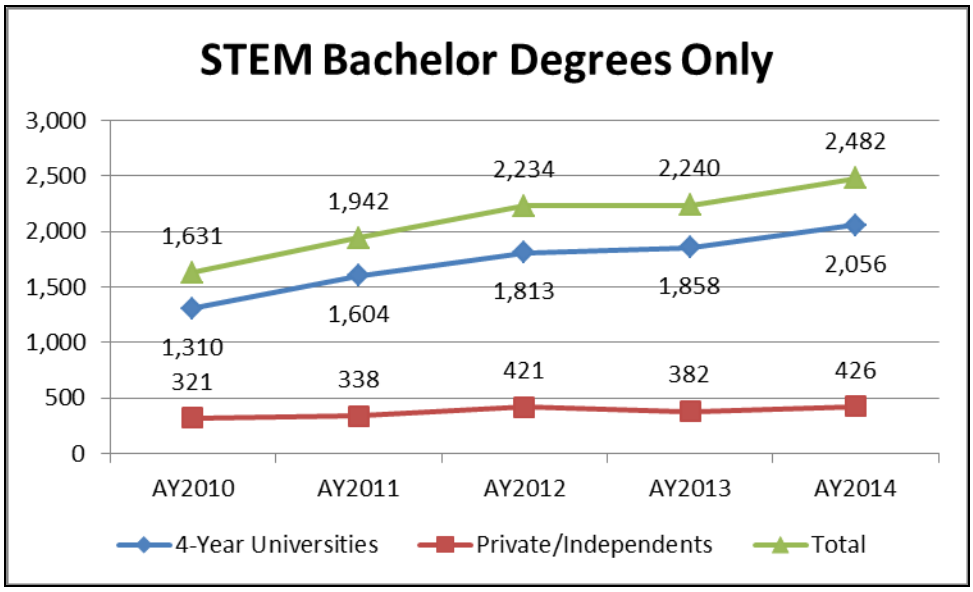


As the graph below indicates this lower level of credentials includes Certificates of Proficiency, Technical Certificates, Associate Degrees, and Advanced Certificates.



At the Bachelor's level, the total number of STEM graduates has increased by 52.2 percent over the 5-year period.

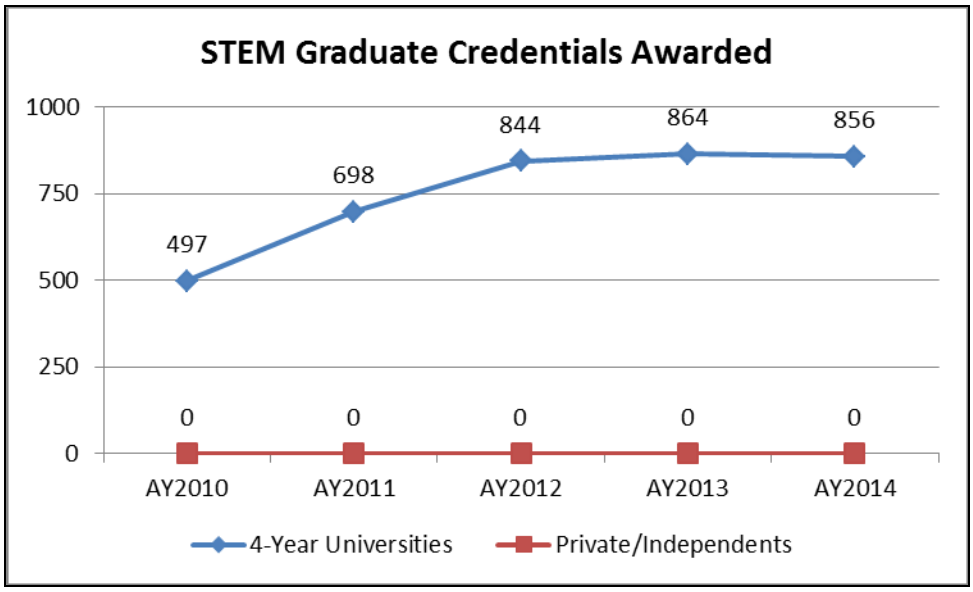
STEM Bachelor Degrees Only					
Credentials Awarded	**AY2010**	**AY2011**	**AY2012**	**AY2013**	**AY2014**
4-Year Universities	1,310	1,604	1,813	1,858	2,056
Private/Independents	321	338	421	382	426
Total	1,631	1,942	2,234	2,240	2,482
Growth	NA	19.1%	15.0%	0.3%	10.8%

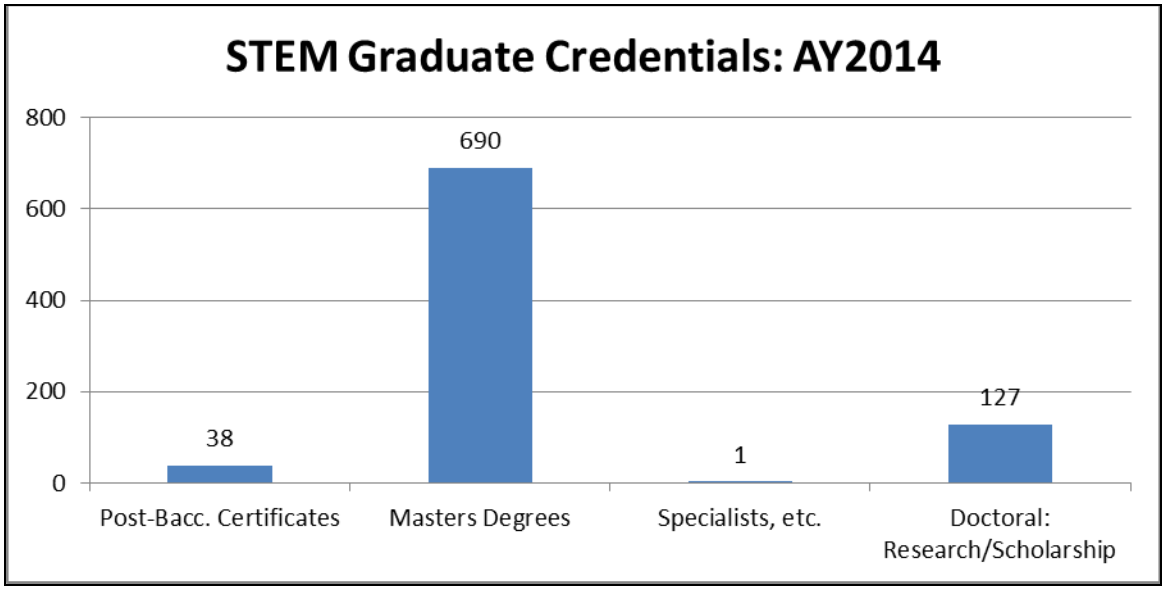


Increases have also occurred at the graduate levels. The graduate level indicated below includes Master Degrees, Post-Baccalaureate Certificates, Specialist Degrees, and Doctoral Degrees: Research/Scholarship. This level has increased 72.2 percent over the 5-year period.

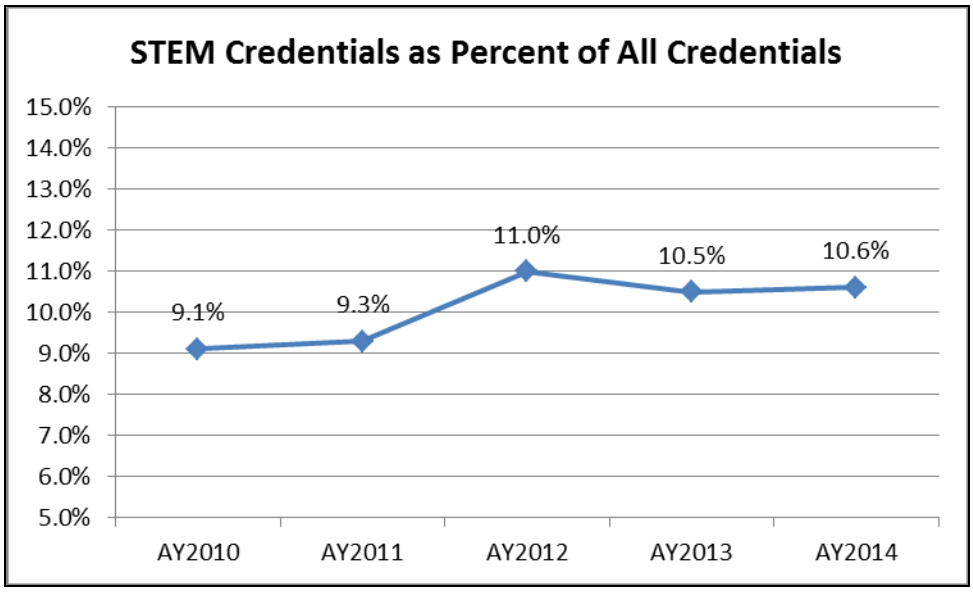
The Doctoral Level includes both the Doctor: Research/Scholarship and Doctor: Professional Practice degrees. However, there were no Doctor: Professional Practice credentials awarded during the 5-year period as these are not included in the STEM CIP Codes.

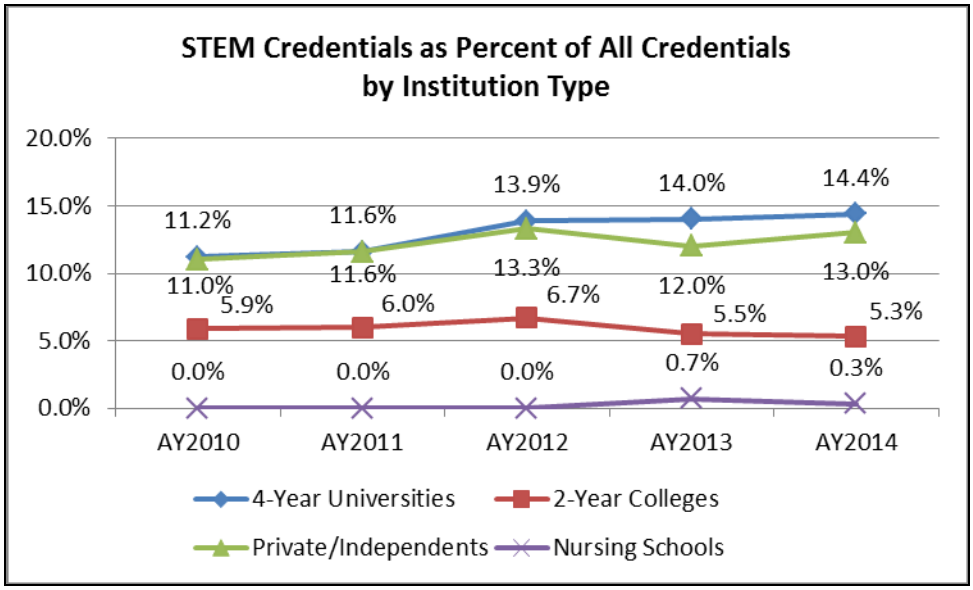
STEM Graduate Credentials Awarded					
Credentials Awarded	**AY2010**	**AY2011**	**AY2012**	**AY2013**	**AY2014**
4-Year Universities	497	698	844	864	856
Private/Independents	0	0	0	0	0
Total	497	698	844	864	856
Growth	NA	40.4%	20.9%	2.4%	-0.9%



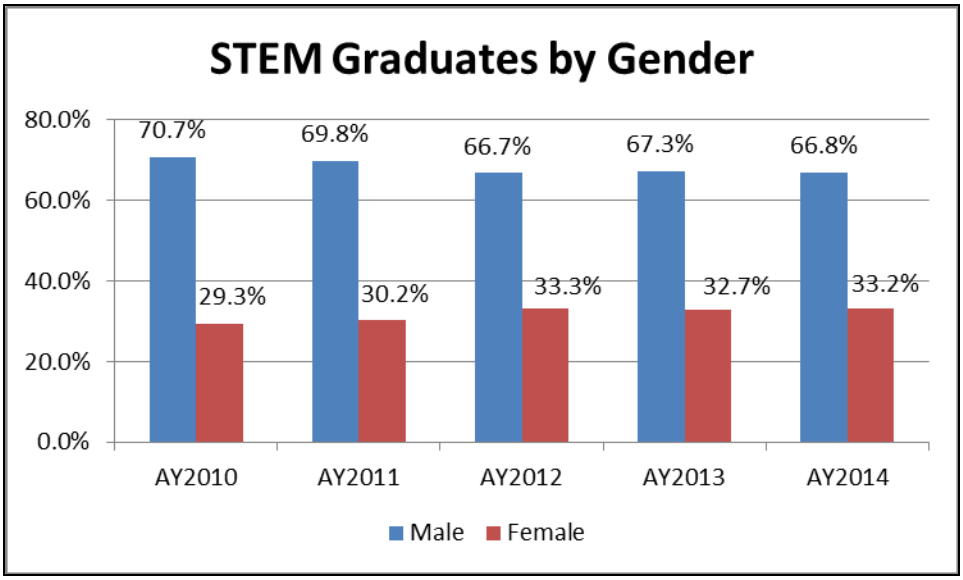


The below graphic shows that the number of STEM credentials awarded as compared to all credentials awarded increased from AY2010 to AY2012. However, this percentage has dropped to 10.6 percent from a high of 11.0 percent in AY2012 but does illustrate an increase of 0.1 percentage points from the previous year.





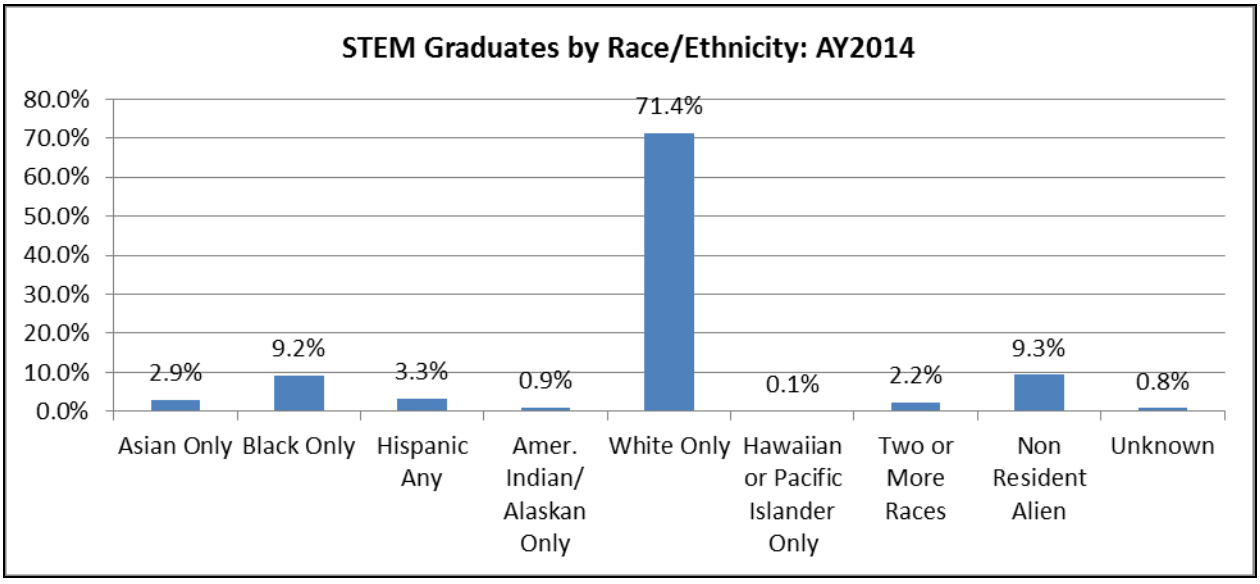
STEM graduates are predominantly male.



STEM graduates are predominantly white.

Academic Year	Asian Only	Black Only	Hispanic Any	Amer. Indian/ Alaskan Only	White Only	Hawaiian or Pacific Islander Only	Two or More Races	Non Resident Alien	Unknown
AY2010	2.5%	9.0%	2.5%	1.0%	74.6%	0.0%	1.5%	7.2%	1.7%
AY2011	3.0%	8.5%	2.6%	1.0%	73.3%	0.1%	2.0%	8.2%	1.2%
AY2012	2.8%	9.9%	2.4%	0.9%	71.8%	0.1%	1.6%	9.1%	1.4%
AY2013	3.3%	8.9%	2.6%	0.8%	71.5%	0.1%	1.8%	10.0%	1.1%
AY2014	2.9%	9.2%	3.3%	0.9%	71.4%	0.1%	2.2%	9.3%	0.8%

The following shows a summary by Race/Ethnicity for AY2014.



Credentials awarded in AY2010-AY2014 were in seventeen different CIP Categories (2-digit CIP Code). The percentages shown below represent the total credentials awarded in the 5-year period reviewed. Note that the Engineering Technologies (CIP 15) and Engineering (CIP 14) fields comprise 42.5 percent of the overall total. Also, the hard sciences (biology and physical science) along with engineering and computers constitute the top five categories.

2-Digit CIP Categories							
CIP Description	AY2010	AY2011	AY2012	AY2013	AY2014	Total	Percent
15: ENGINEERING TECHNOLOGIES AND ENGINEERING-RELATED FIELDS	990	1,172	1,164	992	1,030	5,348	27.5%
26: BIOLOGICAL AND BIOMEDICAL SCIENCES	707	723	820	748	867	3,865	19.9%
11: COMPUTER AND INFORMATION SCIENCES AND SUPPORT SERVICES	485	557	663	653	623	2,981	15.3%
14: ENGINEERING	503	551	559	644	654	2,911	15.0%
40: PHYSICAL SCIENCES	264	319	371	436	472	1,862	9.6%
27: MATHEMATICS AND STATISTICS	134	128	166	172	195	795	4.1%
01: AGRICULTURE, AGRICULTURE OPERATIONS, AND RELATED SCIENCES	0	120	138	141	150	549	2.8%
03: NATURAL RESOURCES AND CONSERVATION	0	34	95	76	92	297	1.5%
51: HEALTH PROFESSIONS AND RELATED PROGRAMS	0	0	71	73	76	220	1.1%
13: EDUCATION	0	7	70	70	67	214	1.1%
30: MULTI/INTERDISCIPLINARY STUDIES	0	26	41	43	40	150	0.8%
09: COMMUNICATION, JOURNALISM, AND RELATED PROGRAMS	0	30	29	21	22	102	0.5%
29: MILITARY TECHNOLOGIES AND APPLIED SCIENCES	0	0	15	9	23	47	0.2%
43: HOMELAND SECURITY, LAW ENFORCEMENT, FIREFIGHTING AND RELATED PROTECTIVE SERVICES	0	12	4	15	6	37	0.2%
41: SCIENCE TECHNOLOGIES/TECHNICIANS	0	0	0	3	17	20	0.1%
49: TRANSPORTATION AND MATERIALS MOVING	0	0	0	12	8	20	0.1%
10: COMMUNICATIONS TECHNOLOGIES/TECHNICIANS AND SUPPORT SERVICES	0	0	7	1	3	11	0.1%
42: PSYCHOLOGY	0	0	0	0	4	4	0.0%
52: BUSINESS, MANAGEMENT, MARKETING, AND RELATED SUPPORT SERVICES	0	0	0	0	0	0	0.0%
Totals	3,083	3,679	4,213	4,109	4,349	19,433	100.0%

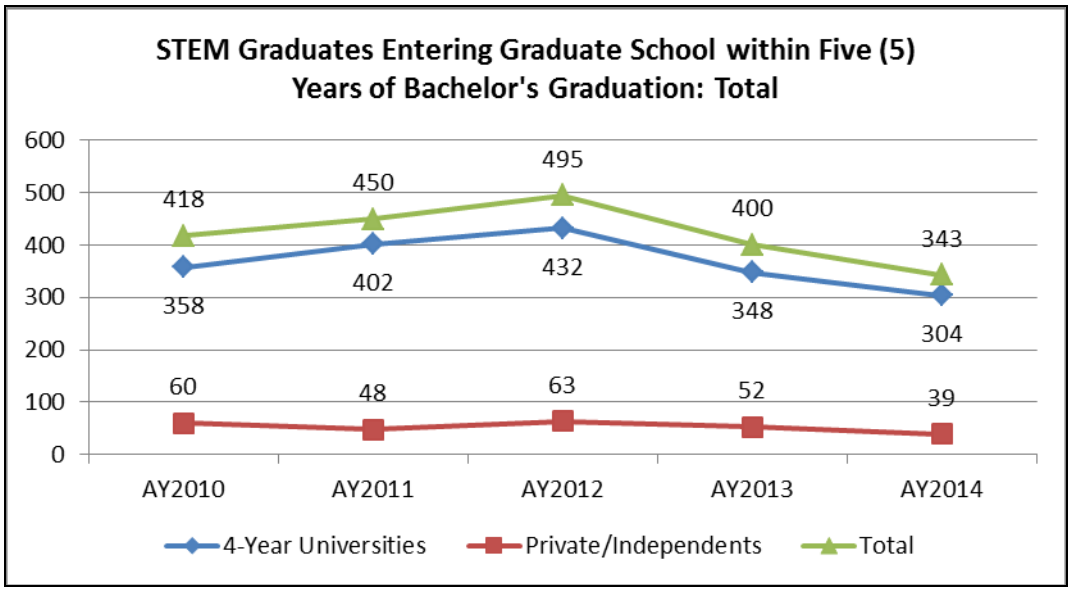
The twenty most popular individual (6-digit) CIP Codes are as follows.

6-Digit CIP Detailed Categories										
#	CIP2	CIP6	CIP Description	AY2010	AY2011	AY2012	AY2013	AY2014	Total	Percent
1	26	26.0101	Biology/Biological Sciences, General	633	640	717	647	757	3,394	17.5%
2	11	11.0101	Computer and Information Sciences, General	249	287	321	358	333	1,548	8.0%
3	15	15.1501	Engineering/Industrial Management	221	264	263	241	222	1,211	6.2%
4	40	40.0501	Chemistry, General	153	209	186	215	226	989	5.1%
5	15	15.0903	Petroleum Technology/Technician	183	183	172	139	114	791	4.1%
6	14	14.1901	Mechanical Engineering	143	141	167	147	168	766	3.9%
7	15	15.1202	Computer Technology/Computer Systems Technology	105	132	157	145	142	681	3.5%
8	27	27.0101	Mathematics, General	113	110	142	141	165	671	3.5%
9	14	14.1001	Electrical and Electronics Engineering	77	97	78	92	111	455	2.3%
10	15	15.1301	Drafting and Design Technology/Technician, General	96	108	90	74	80	448	2.3%
11	14	14.0101	Engineering, General	78	60	64	108	69	379	2.0%
12	14	14.0801	Civil Engineering, General	72	63	69	100	63	367	1.9%
13	15	15.0613	Manufacturing Engineering Technology/Technician	77	100	80	49	52	358	1.8%
14	40	40.0801	Physics, General	54	53	68	70	75	320	1.6%
15	15	15.1302	CAD/CADD Drafting and/or Design Technology/Technician	73	59	38	61	81	312	1.6%
16	15	15.0303	Electrical, Electronic and Communications Engineering Technology/Technician	46	93	81	31	28	279	1.4%
17	11	11.0103	Information Technology	41	63	61	55	52	272	1.4%
18	40	40.0601	Geology/Earth Science, General	30	35	48	63	71	247	1.3%
19	14	14.3501	Industrial Engineering	31	59	54	42	60	246	1.3%
20	01	01.0901	Animal Sciences, General		48	59	65	64	236	1.2%

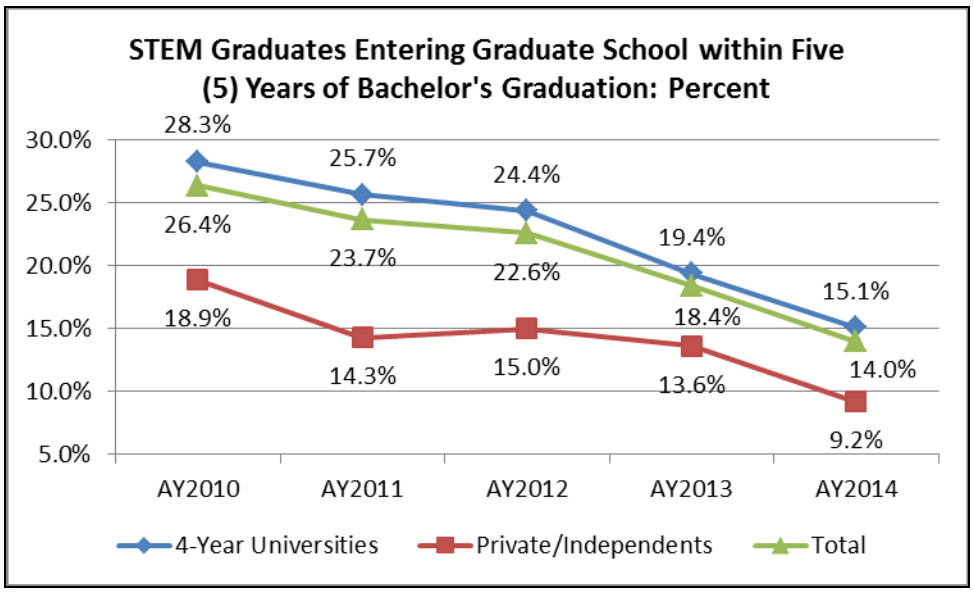
STEM Graduates Entering Graduate School

The following graph shows that the total number of students earning bachelor degrees in STEM fields and entering graduate school within five (5) years is decreasing. The total number has decreased by 17.9 percent since AY2010 (from 418 to 343). (Graduates from AY2010 were reviewed for AY2011-AY2015, graduates from AY2011 were reviewed for AY2012-AY2015, graduates from AY2012 were reviewed for AY2013-AY2015, graduates from AY2013 were reviewed for AY2014-AY2015, and graduates from AY2014 were for reviewed for AY2015.) The total number was increasing for students earning bachelor degrees until AY2012. However, the total number dropped substantially in AY2013 and thereafter. This is most likely due to the period reviewed (AY2015) having only the Summer II and Fall terms available at the time of the report were created. If the entire academic year was available at the time of the review, the number for AY2014 would most certainly be higher.

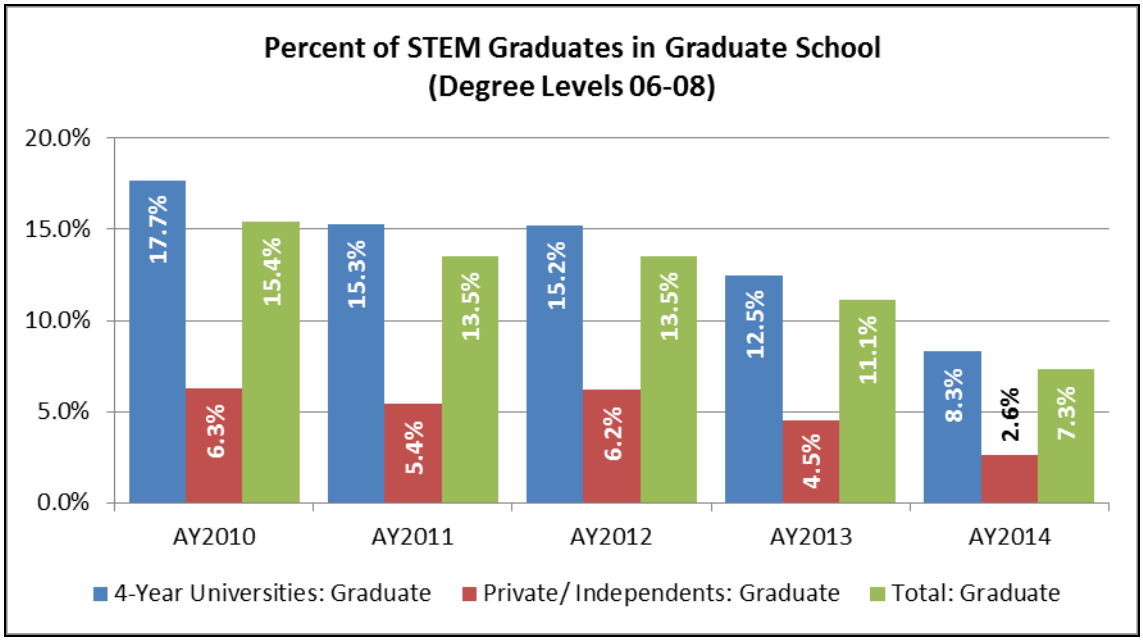
NOTES: (1) The first year below had five years of review, but the second year had only four, the third year had three, the fourth had two, and the fifth year had only one partial year. Therefore, a declining number is anticipated due to the fewer years reviewed. Therefore, to have an increase in the first few years is a promising sign.
(2) The field of study for the graduate students is any field, i.e., meaning that these are not necessarily STEM fields of study. But these students obtained STEM bachelor degrees before entering graduate school.



In addition, STEM graduates entering graduate school expressed as a percentage of total STEM graduates is decreasing. But this decrease may be primarily due to the fewer years reviewed for each successive cohort (see the notes above).

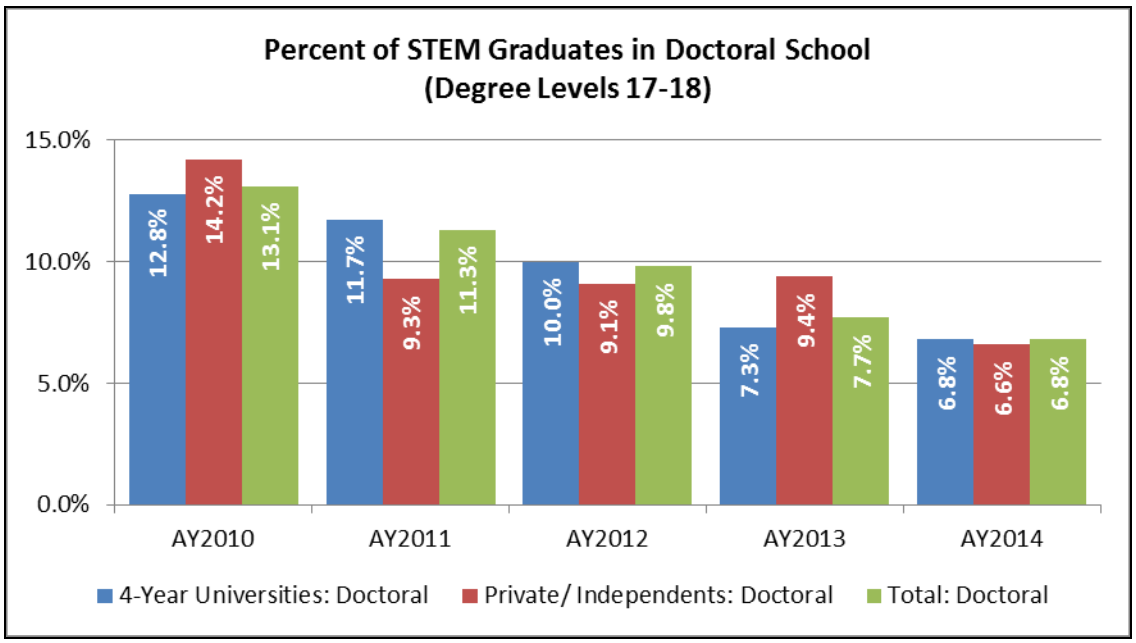


The next graph illustrates the percent of STEM gradutes entering graduate school (seeking a Post-Baccalaureate Certificate, a Masters Degree, or a Specialist Degree/Post-Masters Certificate) within five years.



The 4-Year Universities have a substantially higher percentage of STEM graduates entering graduate school (Masters, etc. level).

The next graph illustrates the percent of STEM gradutes entering doctoral school (seeking a Doctoral: Research/Scholarship Degree, Doctoral: Professional Practice Degree, or other similar credential) within five years.



The percentage of Doctoral students between 4-Year Universities and Private/Independent Institutions is approximately the same.

Note that the graduate and doctoral programs referenced above may not be a STEM program. Also, the percentages shown for graduate levels and doctoral levels may exceed the total shown for graduate school. This is due to some students enrolling twice within the same 5-year period, for example, a student enrolling in a master's degree program, earning the master's degree, and then going on to a doctoral program.

Education

The following three CIP Codes are the only "Educational" STEM programs: 13.0501 Educational/Instructional Technology, 13.0601 Educational Evaluation and Research, and 13.0603 Educational Statistics and Research Methods. No CIP Codes for education were present in the 2010 and before version of the STEM Codes and only one CIP Code for education was present in the 2011 version of the STEM Codes (13.0603).

In Arkansas, the only public institutions with these CIP Codes are:

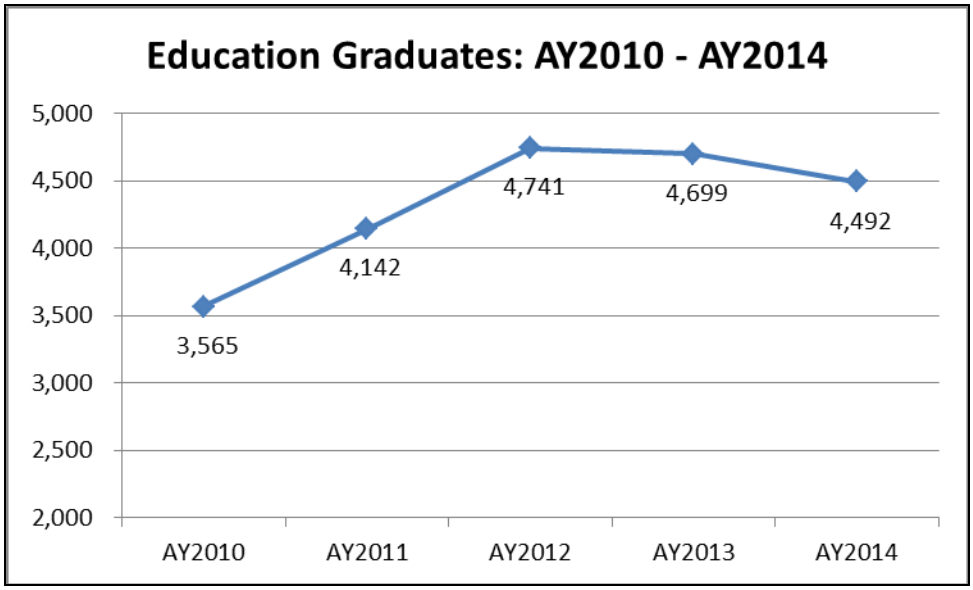
AY2014 Graduates						
Inst. Type	**Institution**	**CIP Code**	**Degree Level**	**Award**	**Degree Name**	**Count**
1	ATU	13.0501	07	MEd	Instructional Technology	15
1	SAUM	13.0501	06	GC	STEM Education for Early Childhood (K-4)	10
1	SAUM	13.0501	06	GC	Teaching Advanced Placement	10
1	SAUM	13.0501	07	MEd	Library Media	10
1	UAF	13.0501	07	MEd	Educational Technology	LT10
1	UAF	13.0501	07	MEd	Learning Systems Technology	LT10
1	UAF	13.0501	07	MS	Instructional Technology	LT10
1	UAF	13.0601	08	PMC	Educational Program Evaluation	LT10
1	UAF	13.0603	17	PhD	Educational Statistics & Research Methods	LT10
1	UALR	13.0501	07	MEd	Educational Technology	19
1	UALR	13.0501	07	MEd	Learning Systems Technology	19
1	UALR	13.0501	07	MS	Instructional Technology	19
1	UCA	13.0501	07	MEd	Educational Technology	11
1	UCA	13.0501	07	MEd	Learning Systems Technology	11
1	UCA	13.0501	07	MS	Instructional Technology	11
LT10 = Less Than 10						

The credentials awarded in these "Educational" STEM programs in AY2011-AY2014 are shown in the following table. (Note that none of the STEM educational codes were STEM codes per ICE in AY2010 and the only CIP Code in AY2011 recognized by ICE was 13.0603.)

Inst. Type	Institution	CIP Code	Degree Level	Award	Degree Name	AY2011	AY2012	AY2013	AY2014
1	ATU	13.0501	7	MEd	Instructional Technology	LT10	14	18	15
1	SAUM	13.0501	6	GC	STEM Education for Early Childhood (K-4)	LT10	16	14	10
1	SAUM	13.0501	6	GC	Teaching Advanced Placement	LT10	16	14	10
1	SAUM	13.0501	7	MEd	Library Media	LT10	16	14	10
1	UAF	13.0501	7	MEd	Educational Technology	LT10	LT10	11	LT10
1	UAF	13.0501	7	MEd	Learning Systems Technology	LT10	LT10	11	LT10
1	UAF	13.0501	7	MS	Instructional Technology	LT10	LT10	11	LT10
1	UAF	13.0601	8	PMC	Educational Program Evaluation	LT10	LT10	LT10	LT10
1	UAF	13.0603	8	PMC	Educational Statistics & Research Methods	LT10	LT10	LT10	LT10
1	UAF	13.0603	17	PhD	Educational Statistics & Research Methods	LT10	LT10	LT10	LT10
1	UALR	13.0501	7	MEd	Educational Technology	LT10	17	15	19
1	UALR	13.0501	7	MEd	Learning Systems Technology	LT10	17	15	19
1	UALR	13.0501	7	MS	Instructional Technology	LT10	17	15	19
1	UCA	13.0501	7	MEd	Educational Technology	LT10	LT10	LT10	11
1	UCA	13.0501	7	MEd	Learning Systems Technology	LT10	LT10	LT10	11
1	UCA	13.0501	7	MS	Instructional Technology	LT10	LT10	LT10	11
Totals						7	172	162	165
LT10 = Less Than 10									

However, there were many education graduates that were in CIP Codes not officially recognized by ICE as a STEM CIP Code.

Education Graduates	AY2010	AY2011	AY2012	AY2013	AY2014
4-Year Universities	2,881	3,314	3,886	3,845	3,629
2-Year Colleges	313	400	408	373	346
Private/Independents	371	428	447	481	517
Total	3,565	4,142	4,741	4,699	4,492



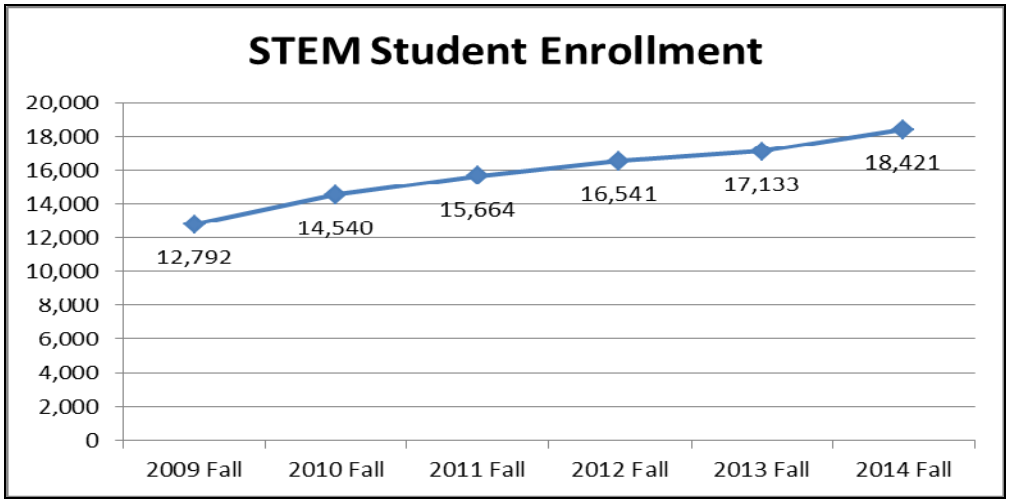
The education fields with the most graduates in AY2014 are:

Rank	CIP Code	CIP Description	Count
1	13.1210	Early Childhood Education and Teaching	683
2	13.0408	Elementary and Middle School Administration/Principalship	432
3	13.0301	Curriculum and Instruction	378
4	13.1206	Teacher Education, Multiple Levels	306
5	31.0501	Health and Physical Education/Fitness, General	239
6	13.1202	Elementary Education and Teaching	224
7	13.1203	Junior High/Intermediate/Middle School Education and Teaching	217
8	13.1101	Counselor Education/School Counseling and Guidance Services	216
9	13.1314	Physical Education Teaching and Coaching	181
10	13.1299	Teacher Education and Professional Development, Specific Levels and Methods, Other	176
11	13.1001	Special Education and Teaching, General	173
12	13.1205	Secondary Education and Teaching	172
13	13.1209	Kindergarten/Preschool Education and Teaching	147
14	13.1401	Teaching English as a Second or Foreign Language/ESL Language Instructor	140
15	13.1102	College Student Counseling and Personnel Services	114
16	13.1004	Education/Teaching of the Gifted and Talented	95
17	13.0401	Educational Leadership and Administration, General	92
18	13.0101	Education, General	84
19	13.1305	English/Language Arts Teacher Education	65
20	13.0501	Educational/Instructional Technology	64

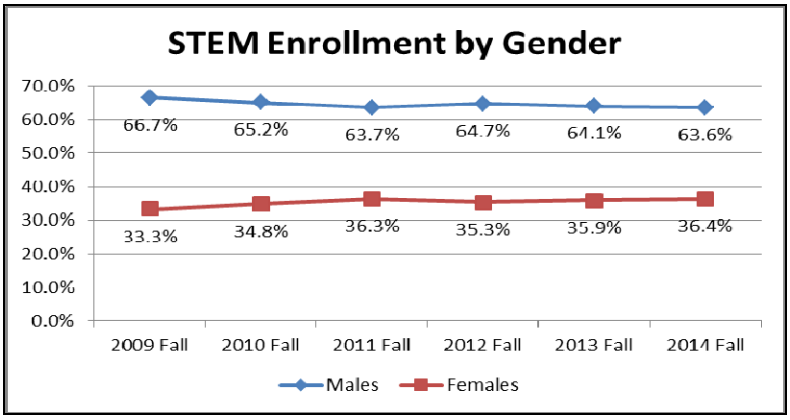
Enrollment Trends

As the following table and chart illustrates, STEM enrollment has increased substantially. Over the entire 5-year period, STEM enrollment has increased by 35.4 percent. However, this growth has significantly slowed as growth over the last 1-year (fall-to-fall) was only 3.2 percent.

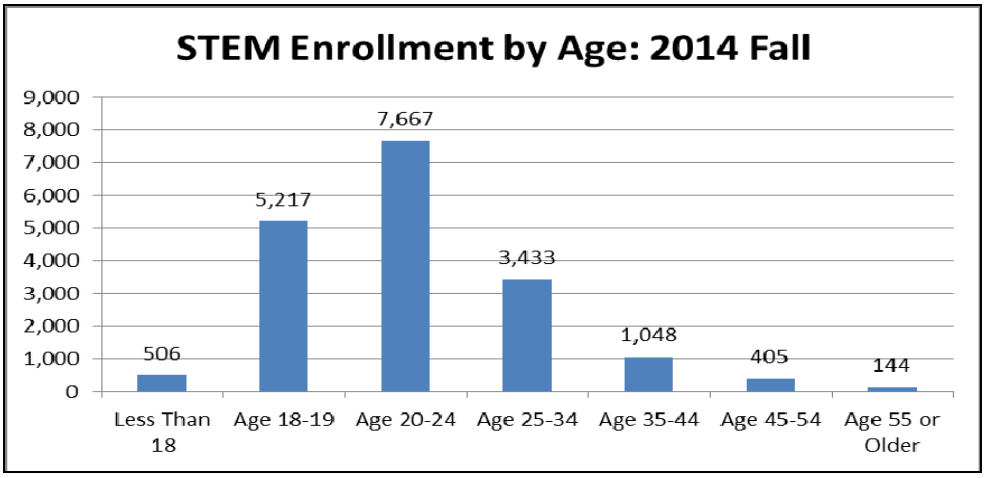
STEM Enrollment	2009 Fall	2010 Fall	2011 Fall	2012 Fall	2013 Fall	2014 Fall
Enrollment	12,792	14,540	15,664	16,541	17,133	18,421
Growth	NA	13.7%	7.7%	5.6%	3.6%	7.5%



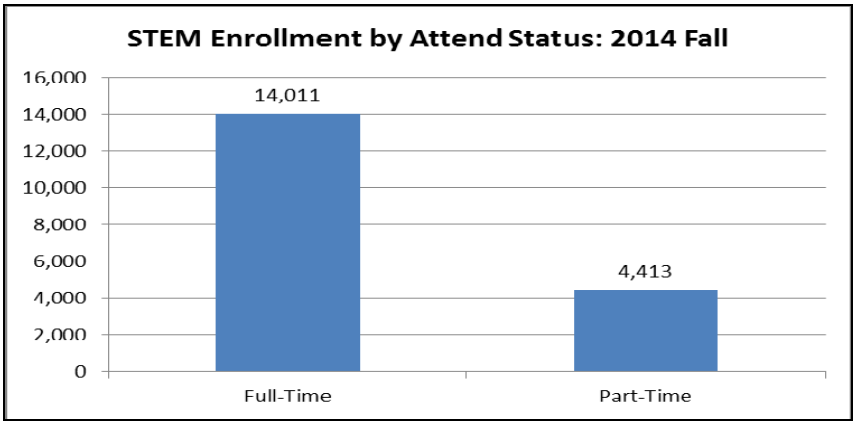
Males substantially outnumber females in the STEM fields, but the percentage of females in STEM programs are increasing.



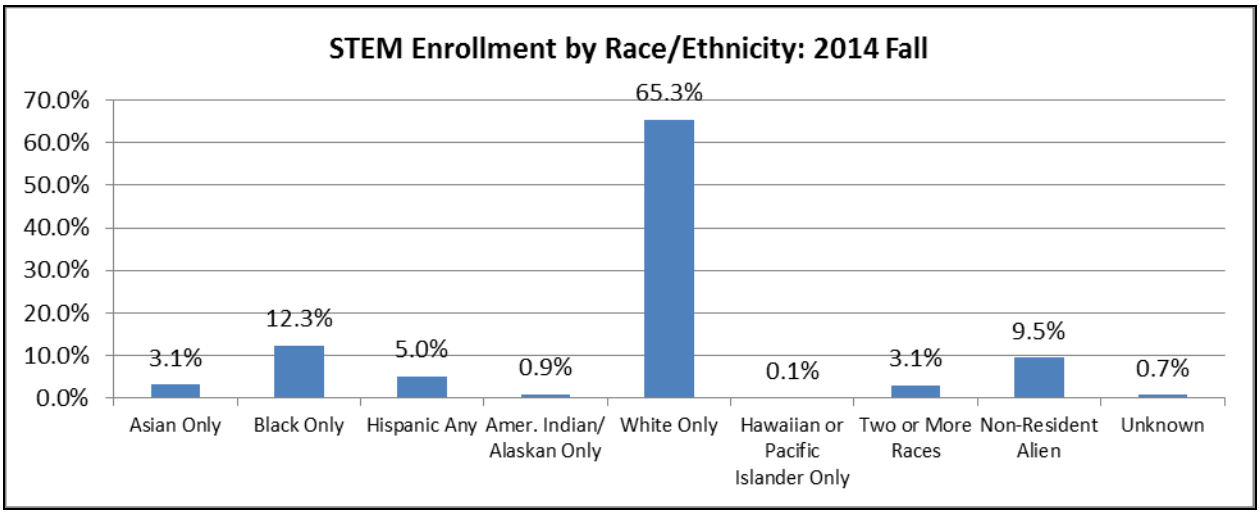
Almost three-fourths (72.7 percent) of STEM students are age 24 or younger.



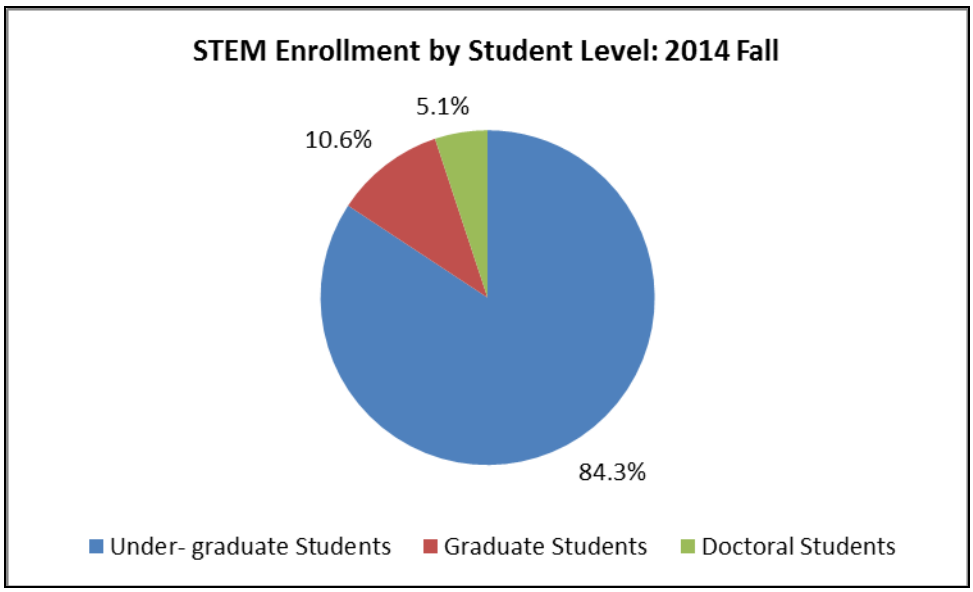
Most STEM students attend college on a full-time basis (76.0 percent).



White students substantially outnumber other races/ethnicities in the STEM fields.

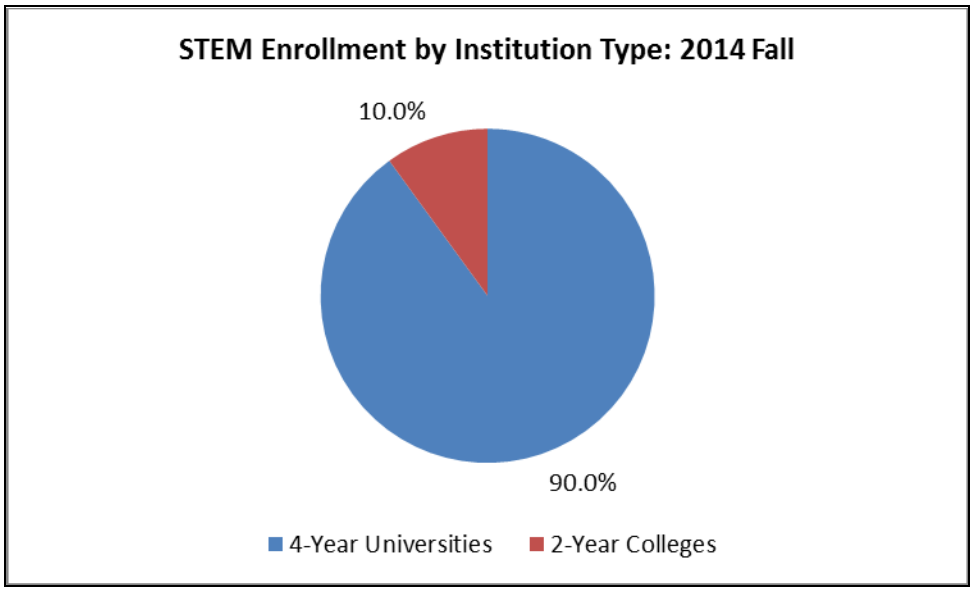


The vast majority of STEM students are undergraduates.

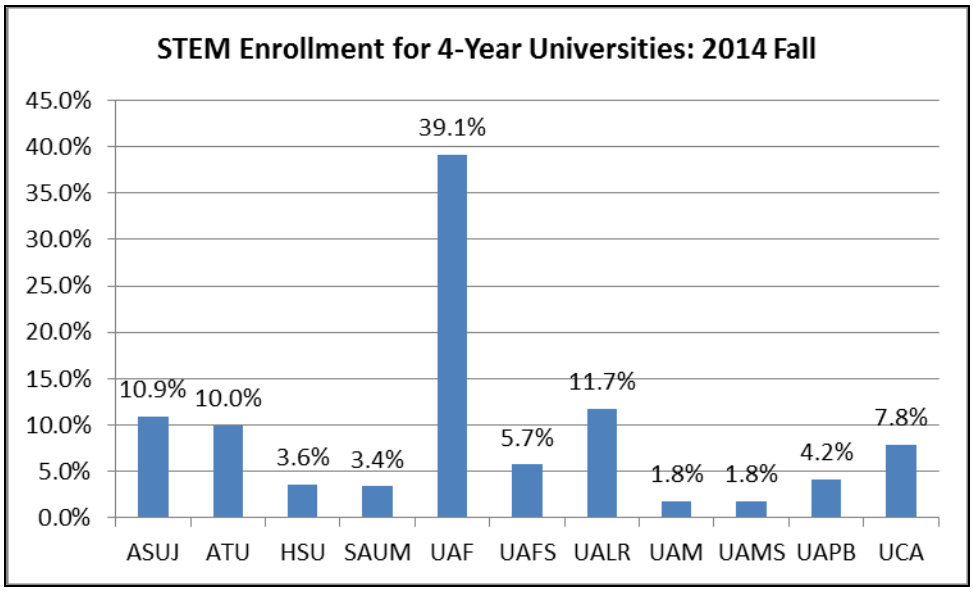


STEM Enrollment at Institutions

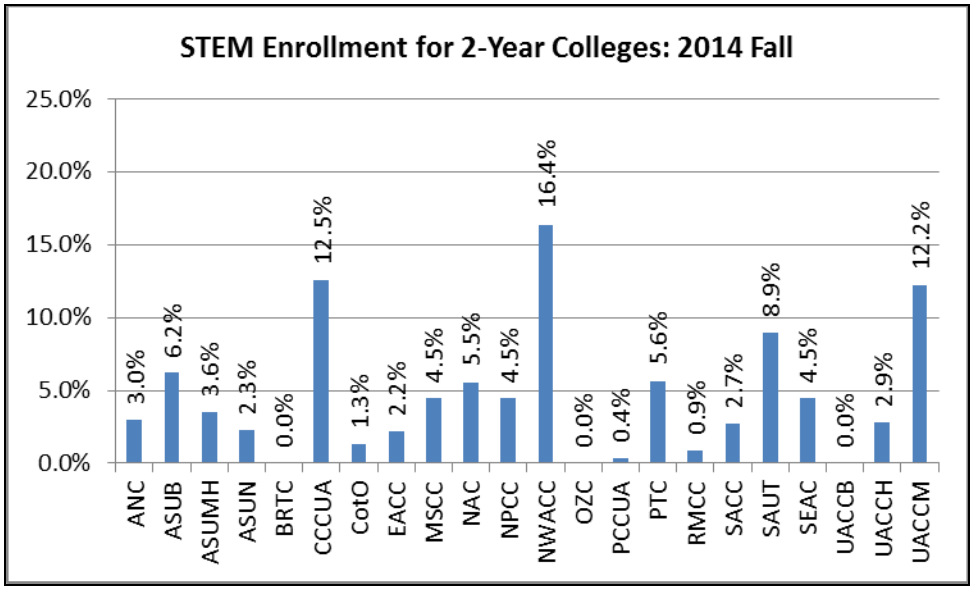
ADHE can track STEM enrollment at public institutions of higher education only. The pie chart below shows that the vast majority of STEM students are enrolled at public 4-Year Universities.



UAF (University of Arkansas, Fayetteville) has the largest share of STEM students followed by UALR (University of Arkansas at Little Rock), and ASUJ (Arkansas State University at Jonesboro). All percentages shown are percentages of the total for 4-Year Universities the 2014 Fall term.



While the 2-Year Colleges do not enroll as many STEM students, the enrollment percentage by institution is shown below. NWACC (Northwest Arkansas Community College) has the largest share followed by CCCUA (Cossatot Community College of the University of Arkansas) and UACCM (University of Arkansas Community College at Morrilton). All percentages shown are percentages of the total 2-Year Colleges for the 2014 Fall term.



Teachers for STEM Fields

As noted above, the official ICE STEM CIP Codes have few listings for education majors. Only three CIP Codes are listed as education in the ICE STEM CIP Code list: Educational/Instructional Technology (13.0501), Educational Evaluation and Research (13.0601), and Educational Statistics and Research Methods (13.0603).

The following additional CIP Codes were identified as being STEM Education: Technology Teacher Education/Industrial Arts Teacher Education (13.1309), Mathematics Teacher Education (13.1311), Science Teacher Education/General Science Teacher Education (13.1316), Computer Teacher Education (13.1321), Biology Teacher Education (13.1322), Chemistry Teacher Education (13.1323), and Physics Teacher Education (13.1329).

Also, the Student Information System Database (SISDB) maintained by ADHE contains a field that identifies education students other than by their major. These fields are included because many education majors are identified by CIP Code other than 13 (Education). For example, a Biology Education major may be reported as CIP 26 (Biological and Biomedical Sciences) rather than CIP 13. This field is UTeach and it is found in the student file.

Using the (a) above list of STEM CIP 13 Codes, (b) the seven listed CIP Codes, and (c) the UTeach field from the student file, the following academic majors are identified.

Top 20 Education Majors using Three Criteria			
No.	**CIP Code**	**CIP Name**	**Count**
1	24.0101	Liberal Arts and Sciences/Liberal Studies	3,409
2	13.1210	Early Childhood Education and Teaching	2,677
3	13.0408	Elementary and Middle School Administration/Principalship	1,765
4	24.0102	General Studies	1,765
5	13.1206	Teacher Education, Multiple Levels	1,332
6	13.1314	Physical Education Teaching and Coaching	1,302
7	52.0101	Business/Commerce, General	1,221
8	13.0301	Curriculum and Instruction	1,092
9	13.1202	Elementary Education and Teaching	1,010
10	13.1203	Junior High/Intermediate/Middle School Education and Teaching	837
11	13.1001	Special Education and Teaching, General	622
12	52.0201	Business Administration and Management, General	602
13	13.1209	Kindergarten/Preschool Education and Teaching	547
14	13.1101	Counselor Education/School Counseling and Guidance Services	491
15	13.1205	Secondary Education and Teaching	398
16	13.1312	Music Teacher Education	382
17	13.0401	Educational Leadership and Administration, General	357
18	51.3801	Registered Nursing/Registered Nurse	320
19	13.1004	Education/Teaching of the Gifted and Talented	315
20	13.1305	English/Language Arts Teacher Education	299

Discussion

The good news:

- Overall, the number of total STEM credentials awarded has increased from 3,083 credentials in AY2010 to 4,349 credentials in AY2014 (a 41.1 percent increase).
- STEM credentials awarded at the associate level (including lower level certificates) have increased from 955 credentials in AY2010 to 1,011 in AY2014 (a 5.9 percent increase).

- STEM credentials awarded for bachelor's degrees have increased from 1,631 credentials in AY2010 to 2,482 in AY2014 (a 52.2 percent increase).
- STEM credentials awarded for all graduate levels have increased from 497 credentials AY2010 to 856 in AY2014 (a 72.2 percent increase).
- Overall STEM enrollment is up from 12,792 in the 2010 Fall term to 18,421 in the Fall 2014 term (a 44.0 percent increase).

Summary and Recommendations

STEM means jobs!!!! Nearly two-thirds of the jobs in today's economy are high-skill positions. The Arkansas workforce has fewer than half the number of qualified candidates needed to fill these positions. In Arkansas, STEM enrollments have increased over the past five years but not enough to continue the graduation pool so that STEM graduates fill the many job openings that are available. In addition, total credentials awarded in the STEM fields increased but at a slower pace. The number of Baccalaureate degrees awarded has increased over the same time period. In addition, increasing the number of graduates will increase the number of job seekers to fill the STEM jobs in Arkansas.

Borrowing from Change the Equation, *". . .a nonprofit, nonpartisan, CEO-led initiative that is mobilizing the business community to improve the quality of science, technology, engineering and mathematics (STEM) learning in the United States,"*[1] the following three recommendations are provided.

Ease the Transition between High School and Colleges

Arkansas students should understand the requirements for college admission and whether a high school diploma prepares them for college-level work. One way to ensure that diplomas have meaning is to align state high school graduation and college entrance requirements. Arkansas should also expand access to rigorous courses in math and science. For example, the state could strengthen initiatives that help schools boost participation in AP courses, especially among women and minorities.

Stretch the STEM Education Investment

In lean or flush times, Arkansas must improve its return on investment in K-12 STEM education. Every dollar spent should be linked to student mastery of high expectations in STEM courses. This does not mean that resources are not critical to dramatically raising student performance. It does mean that Arkansas has to ask tough questions and make choices about which investments in STEM learning are most closely tied to the goals of college and career readiness.

Improve Teacher Preparation and Support

Arkansas needs more teachers with a strong background in STEM content and pedagogy, particularly in math. Strategies include requiring teachers to demonstrate a stronger grasp of content while broadening the supply of teachers who can clear the higher hurdles. Arkansas should create more pathways into teaching for STEM majors in

[1] Change the Equation.org. (February, 10, 2014). Retrieved from http://changetheequation.org/about-change-equation.

college or STEM professionals who are interested in teaching. The state should also strengthen incentives to attract and retain such teachers for the schools that need them most – often in low-income communities.

Current teachers must receive excellent professional development, especially as new math and science standards take effect. Rather than reporting on the amount of professional development teachers receive, states should measure and report on its quality. (Source: Change the Equation.org, September 2012, Retrieved from http://vitalsigns.changetheequation.org/tcpdf/vitalsigns/newsletter.php?statename=Arkansas)

Arkansas policymakers, business and industry, and educators must consider these outcomes in order to "fix the gap" between employers and STEM job seekers:

1. Create the basis for a new data-driven jobs and careers marketplace that will accurately reflect the employment needs of companies and the skill requirements necessary to obtain jobs, making it easier for both sides to match supply and demand;
2. Inform educators and policymakers of the innovation needed in the classroom and beyond to better align skills with jobs;
3. Produce a statewide leadership consensus on implementing programs that demonstrate success and can scale to a statewide level;
4. Showcase the industry/government/education partnerships that are doing the best at aligning skills with jobs;
5. Increase public and political awareness of the expanding skills gap and the devastating effect it is having on the economy as a whole and certain segments of Arkansas' society in particular; and
6. Develop a policy that promotes the study of computer science from kindergarten through college to produce more computer science skilled workers.
7. Adopt a static list of CIP Codes for identifying STEM categories.

In order to increase the number of graduates, higher education institutions should consider establishing support mechanisms, such as:

1. Create residential STEM communities or STEM dormitories;
2. Provide special access to tutors;
3. Create customized or special new student orientations for STEM students;
4. Create and promoting STEM student organizations and/or social organizations;
5. Provide targeted scholarships for juniors and/or seniors in STEM fields;
6. Develop education and engineering internships for STEM students;
7. Continue to develop new programs, such as UTeach, to increase the number of new, certified secondary STEM teachers;
8. Train college faculty to use technology in classroom instruction;
9. Improve data collection at the university and state levels in STEM education fields as well as in STEM hard sciences so that there is accurate data on which to study trends;
10. Increase graduate assistantships and other mechanisms to promote research, laboratory science, and engineering opportunities; and

11. Promote the need of STEM majors in the workforce after college graduation in the state of Arkansas. With gas companies moving to Arkansas to drill for natural gas, there has been a surge in the number of engineers needed in the state.

Additionally, K-12 and higher education agencies should:

1. Develop the vision for every high school to have a 21st century learning environment;
2. Integrate engineering education into K-12 instruction by designing challenging content and curricula frameworks and assessments that include engineering;
3. Increase engineering and technology teacher preparation programs and recruit qualified teachers to provide engineering education in high-needs schools;
4. Promote aspirations for a STEM career particularly in engineering among diverse student populations, especially among girls and underrepresented minorities;
5. Invest in afterschool K-12 STEM programs;
6. Invite non-profit organizations and informal science organizations to sponsor after school STEM programs;
7. Invest in professional development that trains teachers how to incorporate technology into the instructional process;
8. Allow students to use technology to facilitate learning while working on educational projects that incorporate curriculum elements form multiple classes;
9. Increase the rigor and time for hands-on learning, and the understanding of science concepts in the elementary schools (K-5);
10. Promote STEM competitions such as Math Counts, robotics competitions, and science fairs; and
11. Promote active partnerships among K-12 school administrators, teachers and business, manufacturing and engineering professionals.
12. Create an Arkansas K-12 computer science curriculum and require school districts to promote a computer science credit for all high school graduating students.

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STEM Total Degrees and Certificates by Academic Year and Institution												
#	Inst Type	Institution	Credentials Awarded					Unduplicated Graduates				
			AY2010	AY2011	AY2012	AY2013	AY2014	AY2010	AY2011	AY2012	AY2013	AY2014
1	1	ASUJ	205	277	288	343	288	166	249	262	297	279
2	1	ATU	180	225	260	273	262	161	201	242	247	226
3	1	HSU	45	47	46	57	61	45	47	46	57	61
4	1	SAUM	31	48	73	69	80	31	47	73	69	76
5	1	UAF	851	1,144	1,195	1,210	1,373	844	1,137	1,188	1,192	1,354
6	1	UAFS	136	110	112	161	144	114	87	103	130	119
7	1	UALR	217	279	342	360	370	216	273	325	345	346
8	1	UAM	57	56	101	81	84	53	52	97	70	81
9	1	UAMS	16	29	94	107	104	16	29	94	107	104
10	1	UAPB	52	62	88	77	107	52	62	87	77	107
11	1	UCA	161	159	209	175	217	161	159	208	175	217
12	2	ANC		21		18	20		18		18	20
13	2	ASUB	85	113	93	94	97	82	105	78	70	69
14	2	ASUMH	26	18	39	43	37	19	15	19	24	21
15	2	ASUN	35	42	37	32	43	32	37	29	26	30
16	2	BRTC										
17	2	CCCUA										
18	2	CotO	99	30	39	37	86	29				40
19	2	EACC	49	45	53	16	27	48	43	47	13	25
20	2	MSCC	30	27	31	23	21	28	22	26	19	17
21	2	NAC	51	37	56	56	44	46	30	41	44	32
22	2	NPCC			11	19	11				11	11
23	2	NWACC	41	69	63	93	49	40	54	44	61	44
24	2	OZC										
25	2	PCCUA	26	59	23	18	15	20	32	12		15
26	2	PTC	24	18	34	24	47	20	15	31	22	43
27	2	RMCC				11					11	
28	2	SACC					17					12
29	2	SAUT	19	34	86	57	67	17	33	79	46	52
30	2	SEAC	41	52	72	22	25	19	26	37	19	25
31	2	UACCB										
32	2	UACCH	16	55	46	24	22		49	32	13	11
33	2	UACCM	248	263	281	217	191	140	147	142	125	93
34	P	ABC										
35	P	CBC	11	11	15			11	11	15		
36	P	CRC										
37	P	HC	82	72	99	99	107	82	72	99	99	107
38	P	HU	77	89	123	91	114	76	87	122	91	113
39	P	JBU	41	62	53	52	59	38	61	53	52	56
40	P	LC	31	29	27	38	32	31	29	27	38	32
41	P	OBU	35	27	54	50	60	35	27	53	50	60
42	P	PSC	14	20	26	30	27	14	20	26	30	27
43	P	SC										
44	P	UO	17	17	20		19	17	17	20		19
45	P	WBC	15	11		11		15	11		11	
46	V	BSN										
47	V	JSN										
4-Year Universities			1,951	2,436	2,808	2,913	3,090	1,859	2,343	2,725	2,766	2,970
2-Year Colleges			809	905	982	811	828	564	653	652	543	569
Private/Independents			323	338	423	382	430	319	335	421	382	426
Nursing Schools												
Total			3,083	3,679	4,213	4,109	4,349	2,742	3,331	3,798	3,694	3,966

STEM Diplomas by Academic Year and Institution												
#	Inst Type	Institution	Credentials Awarded					Unduplicated Graduates				
			AY2010	AY2011	AY2012	AY2013	AY2014	AY2010	AY2011	AY2012	AY2013	AY2014
1	1	ASUJ										
2	1	ATU										
3	1	HSU										
4	1	SAUM										
5	1	UAF										
6	1	UAFS										
7	1	UALR										
8	1	UAM										
9	1	UAMS										
10	1	UAPB										
11	1	UCA										
12	2	ANC										
13	2	ASUB										
14	2	ASUMH										
15	2	ASUN										
16	2	BRTC										
17	2	CCCUA										
18	2	CotO										
19	2	EACC										
20	2	MSCC										
21	2	NAC										
22	2	NPCC										
23	2	NWACC										
24	2	OZC										
25	2	PCCUA										
26	2	PTC										
27	2	RMCC										
28	2	SACC										
29	2	SAUT										
30	2	SEAC										
31	2	UACCB										
32	2	UACCH										
33	2	UACCM										
34	P	ABC										
35	P	CBC										
36	P	CRC										
37	P	HC										
38	P	HU										
39	P	JBU										
40	P	LC										
41	P	OBU										
42	P	PSC										
43	P	SC										
44	P	UO										
45	P	WBC										
46	V	BSN										
47	V	JSN										
4-Year Universities												
2-Year Colleges												
Private/Independents												
Nursing Schools												
Total												

STEM Certificates of Proficiency by Academic Year and Institution												
#	Inst Type	Institution	Credentials Awarded					Unduplicated Graduates				
			AY2010	AY2011	AY2012	AY2013	AY2014	AY2010	AY2011	AY2012	AY2013	AY2014
1	1	ASUJ										
2	1	ATU										
3	1	HSU										
4	1	SAUM										
5	1	UAF										
6	1	UAFS	23	14		16	18	23	14		16	18
7	1	UALR										
8	1	UAM										
9	1	UAMS										
10	1	UAPB										
11	1	UCA										
12	2	ANC										
13	2	ASUB	57	65	53	62	44	57	64	52	55	43
14	2	ASUMH	13			12		13			12	
15	2	ASUN	22	12	19	11	15	22	12	19	11	15
16	2	BRTC										
17	2	CCCUA										
18	2	CotO	72	21	27	25	70	28				40
19	2	EACC										
20	2	MSCC	20	12	23	13	15	20	12	23	13	15
21	2	NAC	13		14	16		13		12	15	
22	2	NPCC										
23	2	NWACC	13	25	20	26	12	13	25	20	26	11
24	2	OZC										
25	2	PCCUA	15	27			15	14	26			15
26	2	PTC										
27	2	RMCC										
28	2	SACC										
29	2	SAUT		19	26	32	27		19	26	27	27
30	2	SEAC										
31	2	UACCB										
32	2	UACCH										
33	2	UACCM	81	91	111	69	50	76	81	96	63	44
34	P	ABC										
35	P	CBC										
36	P	CRC										
37	P	HC										
38	P	HU										
39	P	JBU										
40	P	LC										
41	P	OBU										
42	P	PSC										
43	P	SC										
44	P	UO										
45	P	WBC										
46	V	BSN										
47	V	JSN										
4-Year Universities			23	14		25	18	23	14		25	18
2-Year Colleges			330	314	329	295	283	278	288	293	255	242
Private/Independents												
Nursing Schools												
Total			353	328	333	320	301	301	302	297	280	260

STEM Technical Certificates by Academic Year and Institution												
#	Inst Type	Institution	Credentials Awarded					Unduplicated Graduates				
			AY2010	AY2011	AY2012	AY2013	AY2014	AY2010	AY2011	AY2012	AY2013	AY2014
1	1	ASUJ										
2	1	ATU			14	14				14		
3	1	HSU										
4	1	SAUM										
5	1	UAF										
6	1	UAFS	13	15		17	14	13	15		17	14
7	1	UALR										
8	1	UAM	21	29	20	33	34	21	29	20	33	34
9	1	UAMS										
10	1	UAPB										
11	1	UCA										
12	2	ANC										
13	2	ASUB		13		17	24		13		17	24
14	2	ASUMH			16	18	12			16	18	12
15	2	ASUN		21	11		17		21	11		17
16	2	BRTC										
17	2	CCCUA										
18	2	CotO	12					12				
19	2	EACC	42	41	44	11	25	42	41	44	11	25
20	2	MSCC										
21	2	NAC	12		16		11			15		11
22	2	NPCC				11						
23	2	NWACC			11	21				11	19	
24	2	OZC										
25	2	PCCUA		17					16			
26	2	PTC	15					15				
27	2	RMCC										
28	2	SACC										
29	2	SAUT					13					13
30	2	SEAC	25	32	50	14	20	17	22	36	14	20
31	2	UACCB										
32	2	UACCH										
33	2	UACCM	88	84	91	75	72	88	84	91	75	72
34	P	ABC										
35	P	CBC										
36	P	CRC										
37	P	HC										
38	P	HU										
39	P	JBU										
40	P	LC										
41	P	OBU										
42	P	PSC										
43	P	SC										
44	P	UO										
45	P	WBC										
46	V	BSN										
47	V	JSN										
4-Year Universities			35	47	44	64	57	35	47	44	60	53
2-Year Colleges			235	252	296	217	232	225	240	278	213	232
Private/Independents												
Nursing Schools												
Total			270	299	340	281	289	260	287	322	273	285

STEM Associate Degrees by Academic Year and Institution												
#	Inst Type	Institution	Credentials Awarded					Unduplicated Graduates				
			AY2010	AY2011	AY2012	AY2013	AY2014	AY2010	AY2011	AY2012	AY2013	AY2014
1	1	ASUJ				12					12	
2	1	ATU	20	31	29	24	31	20	31	29	24	31
3	1	HSU										
4	1	SAUM										
5	1	UAF										
6	1	UAFS	46	28	27	35	27	46	28	27	35	27
7	1	UALR										
8	1	UAM										
9	1	UAMS										
10	1	UAPB										
11	1	UCA										
12	2	ANC		15		16	15		15		16	15
13	2	ASUB	23	35	32	15	29	23	35	32	15	29
14	2	ASUMH	11	11	16	13	15	11	11	16	13	15
15	2	ASUN				12	11				12	11
16	2	BRTC										
17	2	CCCUA										
18	2	CotO	15					15				
19	2	EACC										
20	2	MSCC		14					14			
21	2	NAC	26	20	26	34	23	26	20	25	33	23
22	2	NPCC										
23	2	NWACC	25	39	32	46	32	25	39	32	46	32
24	2	OZC										
25	2	PCCUA		15					14			
26	2	PTC			26	19	39			25	19	39
27	2	RMCC										
28	2	SACC										
29	2	SAUT			50	21	27			50	21	27
30	2	SEAC	16	19	21			16	19	21		
31	2	UACCB										
32	2	UACCH		47	29	12			47	29	12	
33	2	UACCM	79	88	79	73	69	79	88	79	73	69
34	P	ABC										
35	P	CBC										
36	P	CRC										
37	P	HC										
38	P	HU										
39	P	JBU										
40	P	LC										
41	P	OBU										
42	P	PSC										
43	P	SC										
44	P	UO										
45	P	WBC										
46	V	BSN										
47	V	JSN										
4-Year Universities			86	73	80	79	83	86	73	80	79	83
2-Year Colleges			244	339	357	299	313	244	338	355	298	313
Private/Independents												
Nursing Schools												
Total			332	412	439	378	400	332	411	437	377	400

NOTE: Counts of 10 or less are not shown due to FERPA.

STEM Advanced Certificates by Academic Year and Institution												
#	Inst Type	Institution	Credentials Awarded					Unduplicated Graduates				
			AY2010	AY2011	AY2012	AY2013	AY2014	AY2010	AY2011	AY2012	AY2013	AY2014
1	1	ASUJ										
2	1	ATU										
3	1	HSU										
4	1	SAUM										
5	1	UAF										
6	1	UAFS										
7	1	UALR										
8	1	UAM			23	23	20			23	23	20
9	1	UAMS										
10	1	UAPB										
11	1	UCA										
12	2	ANC										
13	2	ASUB										
14	2	ASUMH										
15	2	ASUN										
16	2	BRTC										
17	2	CCCUA										
18	2	CotO										
19	2	EACC										
20	2	MSCC										
21	2	NAC										
22	2	NPCC										
23	2	NWACC										
24	2	OZC										
25	2	PCCUA										
26	2	PTC										
27	2	RMCC										
28	2	SACC										
29	2	SAUT										
30	2	SEAC										
31	2	UACCB										
32	2	UACCH										
33	2	UACCM										
34	P	ABC										
35	P	CBC										
36	P	CRC										
37	P	HC										
38	P	HU										
39	P	JBU										
40	P	LC										
41	P	OBU										
42	P	PSC										
43	P	SC										
44	P	UO										
45	P	WBC										
46	V	BSN										
47	V	JSN										
4-Year Universities					23	23	20			23	23	20
2-Year Colleges												
Private/Independents												
Nursing Schools												
Total					23	23	20			23	23	20

NOTE: Counts of 10 or less are not shown due to FERPA.

STEM Baccalaureate Degree by Academic Year and Institution											
#	Inst Type	Institution	Credentials Awarded					Unduplicated Graduates				
			AY2010	AY2011	AY2012	AY2013	AY2014	AY2010	AY2011	AY2012	AY2013	AY2014
1	1	ASUJ	181	219	225	271	232	142	191	199	225	223
2	1	ATU	139	159	175	177	177	138	158	173	176	172
3	1	HSU	45	47	46	57	57	45	47	46	57	57
4	1	SAUM	28	42	51	54	55	28	42	51	54	55
5	1	UAF	486	657	690	701	881	480	650	684	687	865
6	1	UAFS	54	53	71	93	85	54	53	71	93	85
7	1	UALR	164	211	203	216	214	164	206	199	209	206
8	1	UAM	27	23	54	23	27	27	23	54	23	27
9	1	UAMS			45	45	47			45	45	47
10	1	UAPB	52	62	88	77	100	52	62	87	77	100
11	1	UCA	134	131	165	144	181	134	131	164	144	181
12	P	ABC										
13	P	CBC		11	14				11	14		
14	P	CRC										
15	P	HC	82	72	99	99	107	82	72	99	99	107
16	P	HU	77	89	123	91	114	76	87	122	91	113
17	P	JBU	40	62	52	52	56	38	61	52	52	55
18	P	LC	31	29	27	38	32	31	29	27	38	32
19	P	OBU	35	27	54	50	60	35	27	53	50	60
20	P	PSC	14	20	26	30	27	14	20	26	30	27
21	P	SC										
22	P	UO	17	17	20		19	17	17	20		19
23	P	WBC	15	11		11		15	11		11	
4-Year Universities			1,310	1,604	1,813	1,858	2,056	1,264	1,563	1,773	1,790	2,018
Private/Independents			321	338	421	382	426	318	335	419	382	424
Total			1,631	1,942	2,234	2,240	2,482	1,582	1,898	2,192	2,172	2,442

STEM Post-Baccalaureate Certificates by Academic Year and Institution												
#	Inst Type	Institution	Credentials Awarded					Unduplicated Graduates				
			AY2010	AY2011	AY2012	AY2013	AY2014	AY2010	AY2011	AY2012	AY2013	AY2014
1	1	ASUJ										
2	1	ATU										
3	1	HSU										
4	1	SAUM										
5	1	UAF										
6	1	UAFS										
7	1	UALR			20	20	15			20	20	14
8	1	UAM										
9	1	UAMS				27	19				27	19
10	1	UAPB										
11	1	UCA										
12	P	ABC										
13	P	CBC										
14	P	CRC										
15	P	HC										
16	P	HU										
17	P	JBU										
18	P	LC										
19	P	OBU										
20	P	PSC										
21	P	SC										
22	P	UO										
23	P	WBC										
4-Year Universities					25	48	38			25	48	37
Private/Independents												
Total					25	48	38			25	48	37

STEM Master's Degrees by Academic Year and Institution												
#	Inst Type	Institution	Credentials Awarded					Unduplicated Graduates				
			AY2010	AY2011	AY2012	AY2013	AY2014	AY2010	AY2011	AY2012	AY2013	AY2014
1	1	ASUJ	24	57	53	54	46	24	57	53	54	46
2	1	ATU	20	32	42	49	45	20	32	42	49	45
3	1	HSU										
4	1	SAUM			19	15	19			19	15	19
5	1	UAF	306	403	432	398	421	306	403	432	398	420
6	1	UAFS										
7	1	UALR	27	48	84	95	89	27	48	83	94	89
8	1	UAM										
9	1	UAMS		12	25	19	23		12	25	19	23
10	1	UAPB										
11	1	UCA	27	28	44	31	36	27	28	44	31	36
12	P	ABC										
13	P	CBC										
14	P	CRC										
15	P	HC										
16	P	HU										
17	P	JBU										
18	P	LC										
19	P	OBU										
20	P	PSC										
21	P	SC										
22	P	UO										
23	P	WBC										
4-Year Universities			410	584	699	661	690	410	584	698	660	689
Private/Independents												
Total			410	584	699	661	690	410	584	698	660	689

STEM Post-Masters, Specialist, Post-First Prof Degrees/Certificates by Academic Year and Institution												
#	Inst Type	Institution	Credentials Awarded					Unduplicated Graduates				
			AY2010	AY2011	AY2012	AY2013	AY2014	AY2010	AY2011	AY2012	AY2013	AY2014
1	1	ASUJ										
2	1	ATU										
3	1	HSU										
4	1	SAUM										
5	1	UAF										
6	1	UAFS										
7	1	UALR										
8	1	UAM										
9	1	UAMS										
10	1	UAPB										
11	1	UCA										
12	P	ABC										
13	P	CBC										
14	P	CRC										
15	P	HC										
16	P	HU										
17	P	JBU										
18	P	LC										
19	P	OBU										
20	P	PSC										
21	P	SC										
22	P	UO										
23	P	WBC										
4-Year Universities												
Private/Independents												
Total												

STEM Doctoral Degrees: Research/Scholarship by Academic Year and Institution												
#	Inst Type	Institution	Credentials Awarded					Unduplicated Graduates				
			AY2010	AY2011	AY2012	AY2013	AY2014	AY2010	AY2011	AY2012	AY2013	AY2014
1	1	ASUJ										
2	1	ATU										
3	1	HSU										
4	1	SAUM										
5	1	UAF	59	78	70	105	66	59	78	70	105	66
6	1	UAFS										
7	1	UALR	15	11	25	23	42	15	11	25	23	42
8	1	UAM										
9	1	UAMS	12	14	19	16	15	12	14	19	16	15
10	1	UAPB										
11	1	UCA										
12	P	ABC										
13	P	CBC										
14	P	CRC										
15	P	HC										
16	P	HU										
17	P	JBU										
18	P	LC										
19	P	OBU										
20	P	PSC										
21	P	SC										
22	P	UO										
23	P	WBC										
4-Year Universities			86	104	117	150	127	86	104	117	150	127
Private/Independents												
Total			86	104	117	150	127	86	104	117	150	127

STEM Doctoral Degrees: Professional Practice by Academic Year and Institution												
#	Inst Type	Institution	Credentials Awarded					Unduplicated Graduates				
			AY2010	AY2011	AY2012	AY2013	AY2014	AY2010	AY2011	AY2012	AY2013	AY2014
1	1	ASUJ										
2	1	ATU										
3	1	HSU										
4	1	SAUM										
5	1	UAF										
6	1	UAFS										
7	1	UALR										
8	1	UAM										
9	1	UAMS										
10	1	UAPB										
11	1	UCA			No Doctoral Degrees: Professional Practice credentials awarded in the STEM fields.							
12	P	ABC										
13	P	CBC										
14	P	CRC										
15	P	HC										
16	P	HU										
17	P	JBU										
18	P	LC										
19	P	OBU										
20	P	PSC										
21	P	SC										
22	P	UO										
23	P	WBC										
4-Year Universities												
Private/Independents												
Total												

NOTE: Counts of 10 or less are not shown due to FERPA.

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STEM Graduates by CIP Code: For Public and Private / Independent Institutions
By CIP Category (2-digit CIP Code)

CIP Description	AY2010	AY2011	AY2012	AY2013	AY2014	Total	Percent
15: ENGINEERING TECHNOLOGIES AND ENGINEERING-RELATED FIELDS	990	1,172	1,164	992	1,030	5,348	27.5%
26: BIOLOGICAL AND BIOMEDICAL SCIENCES	707	723	820	748	867	3,865	19.9%
11: COMPUTER AND INFORMATION SCIENCES AND SUPPORT SERVICES	485	557	663	653	623	2,981	15.3%
14: ENGINEERING	503	551	559	644	654	2,911	15.0%
40: PHYSICAL SCIENCES	264	319	371	436	472	1,862	9.6%
27: MATHEMATICS AND STATISTICS	134	128	166	172	195	795	4.1%
01: AGRICULTURE, AGRICULTURE OPERATIONS, AND RELATED SCIENCES	0	120	138	141	150	549	2.8%
03: NATURAL RESOURCES AND CONSERVATION	0	34	95	76	92	297	1.5%
51: HEALTH PROFESSIONS AND RELATED PROGRAMS	0	0	71	73	76	220	1.1%
13: EDUCATION	0	7	70	70	67	214	1.1%
30: MULTI/INTERDISCIPLINARY STUDIES	0	26	41	43	40	150	0.8%
09: COMMUNICATION, JOURNALISM, AND RELATED PROGRAMS	0	30	29	21	22	102	0.5%
29: MILITARY TECHNOLOGIES AND APPLIED SCIENCES	0	0	15	9	23	47	0.2%
43: HOMELAND SECURITY, LAW ENFORCEMENT, FIREFIGHTING AND RELATED PROTECTIVE SERVICES	0	12	4	15	6	37	0.2%
41: SCIENCE TECHNOLOGIES/TECHNICIANS	0	0	0	3	17	20	0.1%
49: TRANSPORTATION AND MATERIALS MOVING	0	0	0	12	8	20	0.1%
10: COMMUNICATIONS TECHNOLOGIES/TECHNICIANS AND SUPPORT SERVICES	0	0	7	1	3	11	0.1%
42: PSYCHOLOGY	0	0	0	0	4	4	0.0%
52: BUSINESS, MANAGEMENT, MARKETING, AND RELATED SUPPORT SERVICES	0	0	0	0	0	0	0.0%
Totals	3,083	3,679	4,213	4,109	4,349	19,433	100.0%

NOTE: Counts of 10 or less are not shown due to FERPA.

ADHE Prepared 11/6/2014

STEM Graduates by CIP Code: For Public and Private / Independent Institutions
By CIP Detail (6-digit CIP Code)

AY2010 and earlier Academic Years use 2010 STEM CIP Codes
AY2011 uses 2011 STEM CIP Codes
AY2012 uses 2012 STEM CIP Codes
AY2013 uses 2012 STEM CIP Codes
AY2014 uses 2012 STEM CIP Codes

#	Inst Type	CIP2	CIP6	CIP Description	AY2010	AY2011	AY2012	AY2013	AY2014
1	ALL	01	01.0901	Animal Sciences, General		48	59	65	64
2	ALL	01	01.0907	Poultry Science		28	21	26	22
3	ALL	01	01.1001	Food Science		20	27	15	27
4	ALL	01	01.1002	Food Technology and Processing					
5	ALL	01	01.1101	Plant Sciences, General		11		14	13
6	ALL	01	01.1102	Agronomy and Crop Science			20	17	21
7	ALL	01	01.1103	Horticultural Science					
8	ALL	03	03.0103	Environmental Studies			30	31	31
9	ALL	03	03.0104	Environmental Science		34	27	19	35
10	ALL	03	03.0601	Wildlife, Fish and Wildlands Science and Management			38	26	26
11	ALL	09	09.0702	Digital Communication and Media/Multimedia		30	29	21	22
12	ALL	10	10.0304	Animation, Interactive Technology, Video Graphics and Special Effects					
13	ALL	11	11.0101	Computer and Information Sciences, General	249	287	321	358	333
14	ALL	11	11.0103	Information Technology	41	63	61	55	52
15	ALL	11	11.0199	Computer and Information Sciences, Other			20	18	23
16	ALL	11	11.0201	Computer Programming/Programmer, General	24	13	18	18	11
17	ALL	11	11.0203	Computer Programming, Vendor/Product Certification					
18	ALL	11	11.0301	Data Processing and Data Processing Technology/Technician	31	23	31	23	17
19	ALL	11	11.0401	Information Science/Studies	27	30	49	54	50
20	ALL	11	11.0501	Computer Systems Analysis/Analyst				12	
21	ALL	11	11.0701	Computer Science	30	45	50	33	50
22	ALL	11	11.0801	Web Page, Digital/Multimedia and Information Resources Design					
23	ALL	11	11.0899	Computer Software and Media Applications, Other			14	13	15
24	ALL	11	11.0901	Computer Systems Networking and Telecommunications	44	61	56	43	32
25	ALL	11	11.1001	Network and System Administration/Administrator					
26	ALL	11	11.1002	System, Networking, and LAN/WAN Management/Manager		12	21		
27	ALL	11	11.1003	Computer and Information Systems Security/Information Assurance	17				12
28	ALL	11	11.1004	Web/Multimedia Management and Webmaster					
29	ALL	13	13.0501	Educational/Instructional Technology			65	64	64
30	ALL	13	13.0601	Educational Evaluation and Research					
31	ALL	13	13.0603	Educational Statistics and Research Methods					
32	ALL	14	14.0101	Engineering, General	78	60	64	108	69
33	ALL	14	14.0301	Agricultural Engineering	25	24	28	29	24
34	ALL	14	14.0501	Bioengineering and Biomedical Engineering					18
35	ALL	14	14.0701	Chemical Engineering	35	47	32	40	69
36	ALL	14	14.0702	Chemical and Biomolecular Engineering					
37	ALL	14	14.0801	Civil Engineering, General	72	63	69	100	63
38	ALL	14	14.0804	Transportation and Highway Engineering					
39	ALL	14	14.0901	Computer Engineering, General	20	25	23	25	33
40	ALL	14	14.0903	Computer Software Engineering					
41	ALL	14	14.1001	Electrical and Electronics Engineering	77	97	78	92	111

#	Inst Type	CIP2	CIP6	CIP Description	AY2010	AY2011	AY2012	AY2013	AY2014
42	ALL	14	14.1201	Engineering Physics/Applied Physics					
43	ALL	14	14.1401	Environmental/Environmental Health Engineering					
44	ALL	14	14.1901	Mechanical Engineering	143	141	167	147	168
45	ALL	14	14.2701	Systems Engineering	20	30	41	44	30
46	ALL	14	14.3301	Construction Engineering					
47	ALL	14	14.3501	Industrial Engineering	31	59	54	42	60
48	ALL	14	14.4501	Biological/Biosystems Engineering					
49	ALL	14	14.9999	Engineering, Other					
50	ALL	15	15.0303	Electrical, Electronic and Communications Engineering Technology/Technician	46	93	81	31	28
51	ALL	15	15.0399	Electrical and Electronic Engineering Technologies/Technicians, Other			11	16	
52	ALL	15	15.0401	Biomedical Technology/Technician					
53	ALL	15	15.0403	Electromechanical Technology/Electromechanical Engineering Technology	18	23	17	28	56
54	ALL	15	15.0499	Electromechanical and Instrumentation and Maintenance Technologies/Technicians, Other			23	23	20
55	ALL	15	15.0507	Environmental Engineering Technology/Environmental Technology	13		12		13
56	ALL	15	15.0611	Metallurgical Technology/Technician				14	15
57	ALL	15	15.0612	Industrial Technology/Technician	26	42	47	33	47
58	ALL	15	15.0613	Manufacturing Engineering Technology/Technician	77	100	80	49	52
59	ALL	15	15.0801	Aeronautical/Aerospace Engineering Technology/Technician		16	21		13
60	ALL	15	15.0805	Mechanical Engineering/Mechanical Technology/Technician		16	13	17	17
61	ALL	15	15.0903	Petroleum Technology/Technician	183	183	172	139	114
62	ALL	15	15.1001	Construction Engineering Technology/Technician	33	56	37	23	31
63	ALL	15	15.1102	Surveying Technology/Surveying	60	34	34	26	31
64	ALL	15	15.1201	Computer Engineering Technology/Technician				11	13
65	ALL	15	15.1202	Computer Technology/Computer Systems Technology	105	132	157	145	142
66	ALL	15	15.1301	Drafting and Design Technology/Technician, General	96	108	90	74	80
67	ALL	15	15.1302	CAD/CADD Drafting and/or Design Technology/Technician	73	59	38	61	81
68	ALL	15	15.1401	Nuclear Engineering Technology/Technician	18	22	20	16	22
69	ALL	15	15.1501	Engineering/Industrial Management	221	264	263	241	222
70	ALL	15	15.9999	Engineering Technologies and Engineering-Related Fields, Other			33	26	26
71	ALL	26	26.0101	Biology/Biological Sciences, General	633	640	717	647	757
72	ALL	26	26.0202	Biochemistry			11	11	
73	ALL	26	26.0210	Biochemistry and Molecular Biology	31	30	42	32	40
74	ALL	26	26.0305	Plant Pathology/Phytopathology					
75	ALL	26	26.0403	Anatomy					
76	ALL	26	26.0406	Cell/Cellular and Molecular Biology		22	14	17	14
77	ALL	26	26.0503	Medical Microbiology and Bacteriology					
78	ALL	26	26.0702	Entomology					
79	ALL	26	26.0707	Animal Physiology					
80	ALL	26	26.0806	Human/Medical Genetics					
81	ALL	26	26.0903	Cell Physiology					
82	ALL	26	26.1001	Pharmacology					
83	ALL	26	26.1004	Toxicology					
84	ALL	26	26.1103	Bioinformatics					
85	ALL	26	26.9999	Biological and Biomedical Sciences, Other				12	14
86	ALL	27	27.0101	Mathematics, General	113	110	142	141	165
87	ALL	27	27.0301	Applied Mathematics, General	13		12	15	13
88	ALL	27	27.0501	Statistics, General					12
89	ALL	27	27.0599	Statistics, Other					
90	ALL	29	29.9999	Military Technologies and Applied Sciences, Other			15		23
91	ALL	30	30.0101	Biological and Physical Sciences		23	38	38	28
92	ALL	30	30.1901	Nutrition Sciences					

#	Inst Type	CIP2	CIP6	CIP Description	AY2010	AY2011	AY2012	AY2013	AY2014
93	ALL	30	30.3301	Sustainability Studies					
94	ALL	40	40.0101	Physical Sciences	21		36	47	51
95	ALL	40	40.0203	Planetary Astronomy and Science					
96	ALL	40	40.0501	Chemistry, General	153	209	186	215	226
97	ALL	40	40.0508	Chemical Physics					
98	ALL	40	40.0599	Chemistry, Other					
99	ALL	40	40.0601	Geology/Earth Science, General	30	35	48	63	71
100	ALL	40	40.0699	Geological and Earth Sciences/Geosciences, Other					
101	ALL	40	40.0801	Physics, General	54	53	68	70	75
102	ALL	40	40.0806	Nuclear Physics					
103	ALL	40	40.0899	Physics, Other				12	16
104	ALL	40	40.1002	Materials Chemistry			12	16	13
105	ALL	40	40.9999	Physical Sciences, Other					
106	ALL	41	41.0301	Chemical Technology/Technician					17
107	ALL	42	42.2703	Developmental and Child Psychology					
108	ALL	43	43.0106	Forensic Science and Technology		12		15	
109	ALL	49	49.0101	Aeronautics/Aviation/Aerospace Science and Technology, General				12	
110	ALL	51	51.1002	Cytotechnology/Cytotechnologist					
111	ALL	51	51.1005	Clinical Laboratory Science/Medical Technology/Technologist			64	66	71
112	ALL	52	52.1301	Management Science					
				Totals	3,083	3,679	4,213	4,109	4,349

NOTE: Counts of 10 or less are not shown due to FERPA.

Total Credentials vs. STEM Credentials Awarded by Academic Year

#	Inst Type	Institution	2010			2011			2012			2013			2014		
			Total Graduates	STEM Graduates	STEM Percent	Total Graduates	STEM Graduates	STEM Percent	Total Graduates	STEM Graduates	STEM Percent	Total Graduates	STEM Graduates	STEM Percent	Total Graduates	STEM Graduates	STEM Percent
1	1	ASUJ	2,673	205	7.7%	3,554	277	7.8%	3,997	288	7.2%	3,992	343	8.6%	3,780	288	7.6%
2	1	ATU	1,667	180	10.8%	1,990	225	11.3%	2,077	260	12.5%	2,611	273	10.5%	2,344	262	11.2%
3	1	HSU	852	45	5.3%	699	47	6.7%	767	46	6.0%	791	57	7.2%	759	61	8.0%
4	1	SAUM	605	31	5.1%	581	48	8.3%	699	73	10.4%	718	69	9.6%	741	80	10.8%
5	1	UAF	3,940	851	21.6%	4,361	1,144	26.2%	4,590	1,195	26.0%	4,842	1,210	25.0%	5,313	1,373	25.8%
6	1	UAFS	1,104	136	12.3%	1,305	110	8.4%	1,177	112	9.5%	1,304	161	12.3%	1,276	144	11.3%
7	1	UALR	2,132	217	10.2%	2,266	279	12.3%	2,338	342	14.6%	2,381	360	15.1%	2,475	370	14.9%
8	1	UAM	987	57	5.8%	934	56	6.0%	1,058	101	9.5%	838	81	9.7%	1,342	84	6.3%
9	1	UAMS	833	16	1.9%	907	29	3.2%	874	94	10.8%	890	107	12.0%	891	104	11.7%
10	1	UAPB	409	52	12.7%	403	62	15.4%	498	88	17.7%	429	77	17.9%	455	107	23.5%
11	1	UCA	2,250	161	7.2%	3,992	159	4.0%	2,157	209	9.7%	2,015	175	8.7%	2,112	217	10.3%
12	2	ANC	432		1.4%	493	21	4.3%	433		2.3%	437	18	4.1%	401	20	5.0%
13	2	ASUB	1,165	85	7.3%	1,140	113	9.9%	1,235	93	7.5%	1,454	94	6.5%	1,604	97	6.0%
14	2	ASUMH	467	26	5.6%	579	18	3.1%	571	39	6.8%	494	43	8.7%	583	37	6.3%
15	2	ASUN	539	35	6.5%	571	42	7.4%	730	37	5.1%	549	32	5.8%	537	43	8.0%
16	2	BRTC	423		0.0%	428		0.0%	520		0.0%	687		0.0%	822		0.0%
17	2	CCCUA	254		1.6%	271		3.3%	287		1.7%	329		0.0%	414		0.2%
18	2	CotO	659	99	15.0%	644	30	4.7%	644	39	6.1%	608	37	6.1%	661	86	13.0%
19	2	EACC	358	49	13.7%	312	45	14.4%	388	53	13.7%	362	16	4.4%	308	27	8.8%
20	2	MSCC	188	30	16.0%	194	27	13.9%	279	31	11.1%	276	23	8.3%	359	21	5.8%
21	2	NAC	471	51	10.8%	490	37	7.6%	674	56	8.3%	708	56	7.9%	764	44	5.8%
22	2	NPCC	476		1.5%	630		1.1%	667	11	1.6%	619	19	3.1%	541	11	2.0%
23	2	NWACC	779	41	5.3%	924	69	7.5%	1,110	63	5.7%	1,246	93	7.5%	974	49	5.0%
24	2	OZC	316		0.0%	375		0.0%	403		0.0%	456		0.0%	503		0.0%
25	2	PCCUA	362	26	7.2%	481	59	12.3%	289	23	8.0%	320	18	5.6%	345	15	4.3%
26	2	PTC	3,033	24	0.8%	3,725	18	0.5%	2,289	34	1.5%	1,975	24	1.2%	2,794	47	1.7%
27	2	RMCC	168		1.2%	197		3.0%	252		1.2%	317	11	3.5%	229		3.5%
28	2	SACC	437		0.0%	456		0.0%	631		0.0%	798		0.9%	736	17	2.3%
29	2	SAUT	869	19	2.2%	752	34	4.5%	742	86	11.6%	799	57	7.1%	1,042	67	6.4%
30	2	SEAC	654	41	6.3%	595	52	8.7%	708	72	10.2%	528	22	4.2%	523	25	4.8%
31	2	UACCB	480		0.0%	571		0.0%	474		0.0%	487		0.0%	400		0.0%
32	2	UACCH	505	16	3.2%	534	55	10.3%	463	46	9.9%	495	24	4.8%	418	22	5.3%
33	2	UACCM	618	248	40.1%	787	263	33.4%	909	281	30.9%	719	217	30.2%	725	191	26.3%
34	P	ABC	50		0.0%	75		0.0%	100		0.0%	123		0.0%	127		0.0%
35	P	CBC	103	11	10.7%	110	11	10.0%	131	15	11.5%	130		1.5%	130		3.1%
36	P	CRC	17		0.0%	18		0.0%	21		0.0%	26		0.0%	14		0.0%
37	P	HC	304	82	27.0%	299	72	24.1%	319	99	31.0%	328	99	30.2%	331	107	32.3%
38	P	HU	1,170	77	6.6%	1,182	89	7.5%	1,264	123	9.7%	1,239	91	7.3%	1,313	114	8.7%
39	P	JBU	624	41	6.6%	592	62	10.5%	609	53	8.7%	615	52	8.5%	600	59	9.8%
40	P	LC	102	31	30.4%	95	29	30.5%	98	27	27.6%	119	38	31.9%	103	32	31.1%
41	P	OBU	293	35	11.9%	258	27	10.5%	314	54	17.2%	294	50	17.0%	354	60	16.9%
42	P	PSC	98	14	14.3%	98	20	20.4%	118	26	22.0%	126	30	23.8%	108	27	25.0%
43	P	SC			0.0%			0.0%			0.0%			0.0%			0.0%
44	P	UO	109	17	15.6%	99	17	17.2%	106	20	18.9%	69		13.0%	123	19	15.4%
45	P	WBC	77	15	19.5%	100	11	11.0%	101		5.9%	112	11	9.8%	111		7.2%
46	V	BSN			0.0%	363		0.0%	312		0.0%	374		0.8%	340		0.3%
47	V	JSN			0.0%	21		0.0%	28		0.0%	27		0.0%	32		0.0%
4-Year Universities			17,452	1,951	11.2%	20,992	2,436	11.6%	20,232	2,808	13.9%	20,811	2,913	14.0%	21,488	3,090	14.4%
2-Year Colleges			13,653	809	5.9%	15,149	905	6.0%	14,698	982	6.7%	14,663	811	5.5%	15,683	828	5.3%
Private/Independents			2,947	323	11.0%	2,926	338	11.6%	3,181	423	13.3%	3,181	382	12.0%	3,314	430	13.0%
Nursing Schools					0.0%	384		0.0%	340		0.0%	401		0.7%	372		0.3%
Total			34,052	3,083	9.1%	39,451	3,679	9.3%	38,451	4,213	11.0%	39,056	4,109	10.5%	40,857	4,349	10.6%

NOTE: Counts of 10 or less are not shown due to FERPA.

ADHE Prepared 11/6/2014

STEM Bachelor Graduates in Graduate School

Graduating Year = 2010 and Graduate Experience from 2011-2015

No.	Inst. Type	Institution	2010 Graduates	2011-2015 Graduate School		Graduate Levels		Doctoral Levels	
				Number	Percent	Number	Percent	Number	Percent
1	1	ASUJ	142	39	27.5%	28	19.7%	14	9.9%
2	1	ATU	138	28	20.3%	17	12.3%	13	9.4%
3	1	HSU	45		22.2%		17.8%		11.1%
4	1	SAUM	28		28.6%		21.4%		7.1%
5	1	UAF	480	168	35.0%	104	21.7%	74	15.4%
6	1	UAFS	54		11.1%		5.6%		7.4%
7	1	UALR	164	31	18.9%	20	12.2%	15	9.1%
8	1	UAM	27		33.3%		18.5%		14.8%
9	1	UAMS			0.0%		0.0%		0.0%
10	1	UAPB	52		13.5%		9.6%		5.8%
11	1	UCA	134	52	38.8%	28	20.9%	28	20.9%
12	P	ABC			0.0%		0.0%		0.0%
13	P	CBC			0.0%		0.0%		0.0%
14	P	CRC			0.0%		0.0%		0.0%
15	P	HC	82	22	26.8%		3.7%	21	25.6%
16	P	HU	76		2.6%		0.0%		2.6%
17	P	JBU	38		15.8%		5.3%		13.2%
18	P	LC	31	11	35.5%		6.5%		29.0%
19	P	OBU	35	12	34.3%		22.9%		11.4%
20	P	PSC	14		21.4%		21.4%		7.1%
21	P	SC			0.0%		0.0%		0.0%
22	P	UO	17		17.6%		11.8%		11.8%
23	P	WBC	15		6.7%		0.0%		6.7%
		4-Year Universities	1,264	358	28.3%	224	17.7%	162	12.8%
		Private/Independents	318	60	18.9%	20	6.3%	45	14.2%
		Total	1,582	418	26.4%	244	15.4%	207	13.1%

NOTES:

1. Degree Levels are:
   - 06 = Post-Baccalaureate (Graduate School)
   - 07 = Masters Degree (Graduate School)
   - 08 = Specialist Degree (Graduate School)
   - 09 = Doctoral Degree (Doctoral School)
   - 10 = First Professional Degree (Doctoral School)
   - 11 = Post-First Professional Certificate (Doctoral School)
   - 12 = Post-First Professional Degree (Doctoral School)
   - 17 = Doctoral - Research/Scholarship (Doctoral School)
   - 18 = Doctoral - Professional Practice (Doctoral School)
   - 19 = Doctoral - Other (Doctoral School)
2. Graduate Level and Doctoral Level totals may exceed the number enrolled in Graduate Schools due to students completing a graduate program and then enrolling in a doctoral program.
3. Students entered graduate school at any Arkansas 4-Year University.
4. Student entering graduate school are <u>not</u> necessarily entering into STEM graduate program.

NOTE: Counts of 10 or less are not shown due to FERPA.

STEM Bachelor Graduates in Graduate School

Graduating Year = 2011 and Graduate Experience from 2012-2016

No.	Inst. Type	Institution	2011 Graduates	2012-2016 Graduate School		Graduate Levels		Doctoral Levels	
				Number	Percent	Number	Percent	Number	Percent
1	1	ASUJ	191	46	24.1%	26	13.6%	22	11.5%
2	1	ATU	158	27	17.1%	15	9.5%	12	7.6%
3	1	HSU	47	17	36.2%		21.3%		14.9%
4	1	SAUM	42	13	31.0%		11.9%		19.0%
5	1	UAF	650	197	30.3%	129	19.8%	79	12.2%
6	1	UAFS	53		15.1%		5.7%		9.4%
7	1	UALR	206	46	22.3%	27	13.1%	23	11.2%
8	1	UAM	23		21.7%		17.4%		4.3%
9	1	UAMS			0.0%		0.0%		0.0%
10	1	UAPB	62		12.9%		11.3%		1.6%
11	1	UCA	131	35	26.7%	13	9.9%	25	19.1%
12	P	ABC			0.0%		0.0%		0.0%
13	P	CBC	11		9.1%		9.1%		0.0%
14	P	CRC			0.0%		0.0%		0.0%
15	P	HC	72	23	31.9%		6.9%	18	25.0%
16	P	HU	87		4.6%		2.3%		3.4%
17	P	JBU	61		4.9%		1.6%		3.3%
18	P	LC	29		17.2%		6.9%		10.3%
19	P	OBU	27		29.6%		14.8%		14.8%
20	P	PSC	20		5.0%		5.0%		0.0%
21	P	SC			0.0%		0.0%		0.0%
22	P	UO	17		11.8%		5.9%		5.9%
23	P	WBC	11		9.1%		9.1%		0.0%
		4-Year Universities	1,563	402	25.7%	239	15.3%	183	11.7%
		Private/Independents	335	48	14.3%	18	5.4%	31	9.3%
		Total	1,898	450	23.7%	257	13.5%	214	11.3%

NOTES:

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   - 11 = Post-First Professional Certificate (Doctoral School)
   - 12 = Post-First Professional Degree (Doctoral School)
   - 17 = Doctoral - Research/Scholarship (Doctoral School)
   - 18 = Doctoral - Professional Practice (Doctoral School)
   - 19 = Doctoral - Other (Doctoral School)
2. Graduate Level and Doctoral Level totals may exceed the number enrolled in Graduate Schools due to students completing a graduate program and then enrolling in a doctoral program.
3. Students entered graduate school at any Arkansas 4-Year University.
4. Student entering graduate school are <u>not</u> necessarily entering into STEM graduate program.

NOTE: Counts of 10 or less are not shown due to FERPA.

STEM Bachelor Graduates in Graduate School

Graduating Year = 2012 and Graduate Experience from 2013-2017

No.	Inst. Type	Institution	2012 Graduates	2013-2017 Graduate School		Graduate Levels		Doctoral Levels	
				Number	Percent	Number	Percent	Number	Percent
1	1	ASUJ	199	52	26.1%	38	19.1%	18	9.0%
2	1	ATU	173	34	19.7%	24	13.9%		5.8%
3	1	HSU	46	19	41.3%	14	30.4%		10.9%
4	1	SAUM	51	13	25.5%		7.8%		17.6%
5	1	UAF	684	187	27.3%	113	16.5%	84	12.3%
6	1	UAFS	71	14	19.7%	12	16.9%		4.2%
7	1	UALR	199	30	15.1%	16	8.0%	14	7.0%
8	1	UAM	54	19	35.2%		14.8%	11	20.4%
9	1	UAMS	45		8.9%		6.7%		2.2%
10	1	UAPB	87	17	19.5%	12	13.8%		5.7%
11	1	UCA	164	43	26.2%	26	15.9%	17	10.4%
12	P	ABC			0.0%		0.0%		0.0%
13	P	CBC	14		0.0%		0.0%		0.0%
14	P	CRC			0.0%		0.0%		0.0%
15	P	HC	99	18	18.2%		7.1%	12	12.1%
16	P	HU	122	11	9.0%		1.6%		7.4%
17	P	JBU	52		1.9%		0.0%		1.9%
18	P	LC	27		11.1%		3.7%		7.4%
19	P	OBU	53	18	34.0%		17.0%		17.0%
20	P	PSC	26		15.4%		15.4%		0.0%
21	P	SC			0.0%		0.0%		0.0%
22	P	UO	20		35.0%		15.0%		20.0%
23	P	WBC			16.7%		0.0%		16.7%
		4-Year Universities	1,773	432	24.4%	270	15.2%	177	10.0%
		Private/Independents	419	63	15.0%	26	6.2%	38	9.1%
		Total	2,192	495	22.6%	296	13.5%	215	9.8%

NOTES:

1. Degree Levels are:
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   - 07 = Masters Degree (Graduate School)
   - 08 = Specialist Degree (Graduate School)
   - 09 = Doctoral Degree (Doctoral School)
   - 10 = First Professional Degree (Doctoral School)
   - 11 = Post-First Professional Certificate (Doctoral School)
   - 12 = Post-First Professional Degree (Doctoral School)
   - 17 = Doctoral - Research/Scholarship (Doctoral School)
   - 18 = Doctoral - Professional Practice (Doctoral School)
   - 19 = Doctoral - Other (Doctoral School)
2. Graduate Level and Doctoral Level totals may exceed the number enrolled in Graduate Schools due to students completing a graduate program and then enrolling in a doctoral program.
3. Students entered graduate school at any Arkansas 4-Year University.
4. Student entering graduate school are <u>not</u> necessarily entering into STEM graduate program.

NOTE: Counts of 10 or less are not shown due to FERPA.

STEM Bachelor Graduates in Graduate School

Graduating Year = 2013 and Graduate Experience from 2014-2018

No.	Inst. Type	Institution	2013 Graduates	2014-2018 Graduate School		Graduate Levels		Doctoral Levels	
				Number	Percent	Number	Percent	Number	Percent
1	1	ASUJ	225	41	18.2%	28	12.4%	14	6.2%
2	1	ATU	176	29	16.5%	21	11.9%		4.5%
3	1	HSU	57		12.3%		8.8%		3.5%
4	1	SAUM	54		18.5%		3.7%		14.8%
5	1	UAF	687	161	23.4%	100	14.6%	64	9.3%
6	1	UAFS	93		10.8%		5.4%		5.4%
7	1	UALR	209	35	16.7%	26	12.4%	11	5.3%
8	1	UAM	23		30.4%		21.7%		8.7%
9	1	UAMS	45		6.7%		2.2%		4.4%
10	1	UAPB	77	11	14.3%	11	14.3%		0.0%
11	1	UCA	144	34	23.6%	20	13.9%	15	10.4%
12	P	ABC			0.0%		0.0%		0.0%
13	P	CBC			0.0%		0.0%		0.0%
14	P	CRC			0.0%		0.0%		0.0%
15	P	HC	99	18	18.2%		5.1%	14	14.1%
16	P	HU	91		6.6%		0.0%		6.6%
17	P	JBU	52		3.8%		0.0%		3.8%
18	P	LC	38		13.2%		5.3%		7.9%
19	P	OBU	50	13	26.0%		6.0%		20.0%
20	P	PSC	30		20.0%		16.7%		3.3%
21	P	SC			0.0%		0.0%		0.0%
22	P	UO			0.0%		0.0%		0.0%
23	P	WBC	11		18.2%		18.2%		0.0%
4-Year Universities			1,790	348	19.4%	224	12.5%	131	7.3%
Private/Independents			382	52	13.6%	17	4.5%	36	9.4%
Total			2,172	400	18.4%	241	11.1%	167	7.7%

NOTES:

1. Degree Levels are:
   - 06 = Post-Baccalaureate (Graduate School)
   - 07 = Masters Degree (Graduate School)
   - 08 = Specialist Degree (Graduate School)
   - 09 = Doctoral Degree (Doctoral School)
   - 10 = First Professional Degree (Doctoral School)
   - 11 = Post-First Professional Certificate (Doctoral School)
   - 12 = Post-First Professional Degree (Doctoral School)
   - 17 = Doctoral - Research/Scholarship (Doctoral School)
   - 18 = Doctoral - Professional Practice (Doctoral School)
   - 19 = Doctoral - Other (Doctoral School)
2. Graduate Level and Doctoral Level totals may exceed the number enrolled in Graduate Schools due to students completing a graduate program and then enrolling in a doctoral program.
3. Students entered graduate school at any Arkansas 4-Year University.
4. Student entering graduate school are <u>not</u> necessarily entering into STEM graduate program.

NOTE: Counts of 10 or less are not shown due to FERPA.

STEM Bachelor Graduates in Graduate School

Graduating Year = 2014 and Graduate Experience from 2015-2019

No.	Inst. Type	Institution	2014 Graduates	2015-2019 Graduate School		Graduate Levels		Doctoral Levels	
				Number	Percent	Number	Percent	Number	Percent
1	1	ASUJ	223	36	16.1%	22	9.9%	14	6.3%
2	1	ATU	172	20	11.6%	15	8.7%		2.9%
3	1	HSU	57	13	22.8%		10.5%		12.3%
4	1	SAUM	55	14	25.5%		9.1%		16.4%
5	1	UAF	865	139	16.1%	71	8.2%	68	7.9%
6	1	UAFS	85		4.7%		2.4%		2.4%
7	1	UALR	206	27	13.1%	16	7.8%	11	5.3%
8	1	UAM	27		18.5%		3.7%		14.8%
9	1	UAMS	47		0.0%		0.0%		0.0%
10	1	UAPB	100		10.0%		9.0%		1.0%
11	1	UCA	181	36	19.9%	20	11.0%	16	8.8%
12	P	ABC			0.0%		0.0%		0.0%
13	P	CBC			0.0%		0.0%		0.0%
14	P	CRC			0.0%		0.0%		0.0%
15	P	HC	107	15	14.0%		2.8%	12	11.2%
16	P	HU	113		2.7%		0.9%		1.8%
17	P	JBU	55		3.6%		1.8%		1.8%
18	P	LC	32		3.1%		0.0%		3.1%
19	P	OBU	60	12	20.0%		3.3%		16.7%
20	P	PSC	27		7.4%		7.4%		0.0%
21	P	SC			0.0%		0.0%		0.0%
22	P	UO	19		15.8%		5.3%		10.5%
23	P	WBC			12.5%		12.5%		0.0%
4-Year Universities			2,018	304	15.1%	167	8.3%	137	6.8%
Private/Independents			424	39	9.2%	11	2.6%	28	6.6%
Total			2,442	343	14.0%	178	7.3%	165	6.8%

NOTES:

1. Degree Levels are:
   - 06 = Post-Baccalaureate (Graduate School)
   - 07 = Masters Degree (Graduate School)
   - 08 = Specialist Degree (Graduate School)
   - 09 = Doctoral Degree (Doctoral School)
   - 10 = First Professional Degree (Doctoral School)
   - 11 = Post-First Professional Certificate (Doctoral School)
   - 12 = Post-First Professional Degree (Doctoral School)
   - 17 = Doctoral - Research/Scholarship (Doctoral School)
   - 18 = Doctoral - Professional Practice (Doctoral School)
   - 19 = Doctoral - Other (Doctoral School)
2. Graduate Level and Doctoral Level totals may exceed the number enrolled in Graduate Schools due to students completing a graduate program and then enrolling in a doctoral program.
3. Students entered graduate school at any Arkansas 4-Year University.
4. Student entering graduate school are <u>not</u> necessarily entering into STEM graduate program.

NOTE: Counts of 10 or less are not shown due to FERPA.

Education Graduates

No.	Inst. Type	Institution	Graduates with CIP 13					Graduates with EE CIP Code					Total				
			AY2010	AY2011	AY2012	AY2013	AY2014	AY2010	AY2011	AY2012	AY2013	AY2014	AY2010	AY2011	AY2012	AY2013	AY2014
1	1	ASUJ	686	1,237	1,750	1,591	1,423						686	1,237	1,750	1,591	1,423
2	1	ATU	311	339	341	410	452						311	339	341	410	452
3	1	HSU	415	263	316	329	273						415	263	316	329	273
4	1	SAUM	214	170	155	158	163						214	170	155	158	163
5	1	UAF	434	456	471	481	423	41	49	44	61	38	475	505	515	542	461
6	1	UAFS	84	116	96	130	121						84	116	96	130	121
7	1	UALR	240	289	265	256	222				24	36	240	289	265	280	258
8	1	UAM	85	85	93	89	102						85	85	93	89	102
9	1	UAPB	41	31	42	37	35						41	31	42	42	37
10	1	UCA	330	279	292	274	311			21		28	330	279	313	274	339
11	2	ANC		37	18	26	16							37	18	26	16
12	2	ASUB	41	42	51	37	53						41	42	51	37	53
13	2	ASUMH	27	37	42	24	32						27	37	42	24	32
14	2	ASUN															
15	2	BRTC															
16	2	CCCUA		16	12	15	11							16	12	15	11
17	2	CotO															
18	2	EACC															
19	2	MSCC			13	11	15								13	11	15
20	2	NAC			16										16		
21	2	NPCC		24	37	33	25							24	37	33	25
22	2	NWACC	29	32	23	37	29						29	32	23	37	29
23	2	OZC	21	23	29	27	22						21	23	29	27	22
24	2	PCCUA	29	37	24	22	13						29	37	24	22	13
25	2	PTC		14	23	20	18							14	23	20	18
26	2	RMCC															
27	2	SACC	40	21	25	15	38						40	21	25	15	38
28	2	SAUT	17	12		12	12						17	12		12	12
29	2	SEAC															
30	2	UACCB	48	65	46	39	29						48	65	46	39	29
31	2	UACCH															
32	2	UACCM				15	12									15	12
33	P	CBC															
34	P	CRC															
35	P	HC															
36	P	HU	275	283	301	342	374						275	283	301	342	374
37	P	JBU	41	52	48	61	40						41	52	48	61	40
38	P	OBU	21	22	29	23	29						21	22	29	23	29
39	P	PSC															
40	P	UO		20	18		29							20	18		29
41	P	WBC	19	35	40	42	33						19	35	40	42	33
4-Year Universities			2,840	3,265	3,821	3,755	3,525	41	49	65	90	104	2,881	3,314	3,886	3,845	3,629
2-Year Colleges			313	400	408	373	346						313	400	408	373	346
Private/Independents			371	428	447	481	517						371	428	447	481	517
Total			3,524	4,093	4,676	4,609	4,388	41	49	65	90	104	3,565	4,142	4,741	4,699	4,492

NOTE: Counts of 10 or less are not shown due to FERPA.

STEM Fall Enrollment by Institution and by Race/Ethnicity												
#	Inst. Type	Institution	AY2010 (2009 Fall)									
			Total	Asian Only	Black Only	Hispanic Any	Amer. Indian/ Alaskan Only	White Only	Hawaiian or Pacific Islander Only	Two or More Races	Non-Resident Alien	Unknown
1	1	ASUJ	1,304	13	172	13		925		23	125	27
2	1	ATU	1,247	18	44	47	14	1,027			92	
3	1	HSU	454		57	14		336		20	13	12
4	1	SAUM	199		38			128			24	
5	1	UAF	3,565	150	180	109	51	2,547		51	438	37
6	1	UAFS	765	62	22	43	23	565		47		
7	1	UALR	1,370	52	222	40	11	859		14	162	
8	1	UAM	259		44			202				
9	1	UAMS	89					55			28	
10	1	UAPB	631		598			16			11	
11	1	UCA	938	46	95	22		688			45	33
12	2	ANC	78					64				
13	2	ASUB	151					130				
14	2	ASUMH	62					44				13
15	2	ASUN	39					29				
16	2	BRTC										
17	2	CCCUA										
18	2	CotO	48					38				
19	2	EACC	82		42			29				
20	2	MSCC	178		81			86				
21	2	NAC	174					156				
22	2	NPCC										
23	2	NWACC	295	11		31		237				
24	2	OZC										
25	2	PCCUA	41		12			27				
26	2	PTC	122		54			60				
27	2	RMCC	45					41				
28	2	SACC										
29	2	SAUT	80		34			44				
30	2	SEAC	111		57			49				
31	2	UACCB										
32	2	UACCH	130		18			97				
33	2	UACCM	328		15	11		278		17		
4-Year Universities			10,821	347	1,476	303	116	7,348		161	942	122
2-Year Colleges			1,976	22	359	82	20	1,413		37		40
Totals			12,797	369	1,835	385	136	8,761		198	945	162

NOTE: Counts of 10 or less are not shown due to FERPA.

STEM Fall Enrollment by Institution and by Race/Ethnicity												
#	Inst. Type	Institution	AY2011 (2010 Fall)									
			Total	Asian Only	Black Only	Hispanic Any	Amer. Indian/ Alaskan Only	White Only	Hawaiian or Pacific Islander Only	Two or More Races	Non-Resident Alien	Unknown
1	1	ASUJ	1,491	24	182	26	13	1,030			162	52
2	1	ATU	1,309	28	65	45	15	1,047			100	
3	1	HSU	508		83	23		366		18		
4	1	SAUM	249		37			174			22	
5	1	UAF	4,550	172	221	144	58	3,292		107	520	35
6	1	UAFS	825	66	27	48	22	609		46		
7	1	UALR	1,503	48	222	59	11	908		28	209	18
8	1	UAM	247		59			173				
9	1	UAMS	156	13	14			87			37	
10	1	UAPB	674		638			17			11	
11	1	UCA	967	45	97	23		702			52	34
12	2	ANC	48		12			33				
13	2	ASUB	143					126				
14	2	ASUMH	83					73				
15	2	ASUN	66					34				27
16	2	BRTC										
17	2	CCCUA										
18	2	CotO	37					30				
19	2	EACC	94		36			41				
20	2	MSCC	153		78			68				
21	2	NAC	140					128				
22	2	NPCC	12									
23	2	NWACC	368	13		32		289				11
24	2	OZC										
25	2	PCCUA	33					21				
26	2	PTC	130		59			61				
27	2	RMCC	36					32				
28	2	SACC										
29	2	SAUT	88		37			48				
30	2	SEAC	137		73			60				
31	2	UACCB										
32	2	UACCH	169		29			116				19
33	2	UACCM	317		21	13		270		12		
4-Year Universities			12,479	413	1,645	388	129	8,405		223	1,128	144
2-Year Colleges			2,065	26	381	82	11	1,445		37	14	69
Totals			14,544	439	2,026	470	140	9,850		260	1,142	213

NOTE: Counts of 10 or less are not shown due to FERPA.

STEM Fall Enrollment by Institution and by Race/Ethnicity												
#	Inst. Type	Institution	AY2012 (2011 Fall)									
			Total	Asian Only	Black Only	Hispanic Any	Amer. Indian/ Alaskan Only	White Only	Hawaiian or Pacific Islander Only	Two or More Races	Non-Resident Alien	Unknown
1	1	ASUJ	1,769	24	210	30		1,219			209	69
2	1	ATU	1,452	27	57	46	16	1,193		20	93	
3	1	HSU	493		85	21		352		23		
4	1	SAUM	319		45	11		227			23	
5	1	UAF	4,906	195	241	181	64	3,519		126	551	27
6	1	UAFS	838	68	23	60	29	598		46	14	
7	1	UALR	1,606	53	242	71		917		49	225	42
8	1	UAM	319		62	11		236				
9	1	UAMS	255	11	27			161			48	
10	1	UAPB	672		624			18			15	
11	1	UCA	1,107	52	104	30		806		20	48	41
12	2	ANC	48					35				
13	2	ASUB	139					120				
14	2	ASUMH	73					71				
15	2	ASUN	56					50				
16	2	BRTC										
17	2	CCCUA										
18	2	CotO	37					28				
19	2	EACC	42					24				
20	2	MSCC	138		82			48				
21	2	NAC	161					140				
22	2	NPCC	12									
23	2	NWACC	381	20	14	43		272			15	
24	2	OZC										
25	2	PCCUA	42		11			30				
26	2	PTC	134		48			50				31
27	2	RMCC	39					34				
28	2	SACC										
29	2	SAUT	196		76			112				
30	2	SEAC	81		39			35				
31	2	UACCB										
32	2	UACCH	79		16			53				
33	2	UACCM	259		23			215				
4-Year Universities			13,736	446	1,720	467	138	9,246		295	1,234	187
2-Year Colleges			1,930	25	349	86	17	1,333		37	30	48
Totals			15,666	471	2,069	553	155	10,579		332	1,264	235

NOTE: Counts of 10 or less are not shown due to FERPA.

STEM Fall Enrollment by Institution and by Race/Ethnicity												
#	Inst. Type	Institution	AY2013 (2012 Fall)									
			Total	Asian Only	Black Only	Hispanic Any	Amer. Indian/ Alaskan Only	White Only	Hawaiian or Pacific Islander Only	Two or More Races	Non-Resident Alien	Unknown
1	1	ASUJ	1,756	23	183	36	11	1,216			226	61
2	1	ATU	1,487	28	77	53	22	1,187		23	97	
3	1	HSU	594		92	23		429		30	13	
4	1	SAUM	349		56			248			29	
5	1	UAF	5,554	215	256	243	70	3,974		164	604	27
6	1	UAFS	895	74	18	57	31	646		52	17	
7	1	UALR	1,685	68	246	85		969		74	233	
8	1	UAM	323		70			233				
9	1	UAMS	263	16	31			156			52	
10	1	UAPB	646		608			22				
11	1	UCA	1,160	48	97	43		847		34	52	32
12	2	ANC	42		11			30				
13	2	ASUB	139					115				
14	2	ASUMH	79					73				
15	2	ASUN	58					41				
16	2	BRTC										
17	2	CCCUA										
18	2	CotO	30					22				
19	2	EACC	30		13			11				
20	2	MSCC	112		57			50				
21	2	NAC	170					152				
22	2	NPCC	19					16				
23	2	NWACC	363	17	16	40		251			14	12
24	2	OZC										
25	2	PCCUA	16					11				
26	2	PTC	149		58			66				
27	2	RMCC	34					31				
28	2	SACC	22		11							
29	2	SAUT	116		39			69				
30	2	SEAC	101		54			40				
31	2	UACCB										
32	2	UACCH	61					41				
33	2	UACCM	290		29	14		232				
4-Year Universities			14,712	484	1,734	559	151	9,927		389	1,334	132
2-Year Colleges			1,832	26	327	98	16	1,261		43	27	32
Totals			16,544	510	2,061	657	167	11,188		432	1,361	164

NOTE: Counts of 10 or less are not shown due to FERPA.

STEM Fall Enrollment by Institution and by Race/Ethnicity												
#	Inst. Type	Institution	AY2014 (2013 Fall)									
			Total	Asian Only	Black Only	Hispanic Any	Amer. Indian/ Alaskan Only	White Only	Hawaiian or Pacific Islander Only	Two or More Races	Non-Resident Alien	Unknown
1	1	ASUJ	1,704	22	162	35	11	1,223			205	43
2	1	ATU	1,506	29	90	70	17	1,133		44	123	
3	1	HSU	567		88	14		419		28	11	
4	1	SAUM	427		70			300			31	
5	1	UAF	5,889	209	304	294	71	4,143		165	674	26
6	1	UAFS	947	68	31	57	30	678		55	26	
7	1	UALR	1,723	73	260	98		954		101	230	
8	1	UAM	304		43			234				
9	1	UAMS	292	25	32			171			51	
10	1	UAPB	643		601			23				
11	1	UCA	1,262	42	117	56		915		37	59	29
12	2	ANC	55					40				
13	2	ASUB	124					98				
14	2	ASUMH	59					52				
15	2	ASUN	63					47				
16	2	BRTC										
17	2	CCCUA	126		12	13		91				
18	2	CotO	22					16				
19	2	EACC	26					11				
20	2	MSCC	93		46			40				
21	2	NAC	136					121				
22	2	NPCC	85					70				
23	2	NWACC	327	13		38		224			13	15
24	2	OZC										
25	2	PCCUA	12									
26	2	PTC	148		63	11		61				
27	2	RMCC	25					21				
28	2	SACC	40		14			22				
29	2	SAUT	122		38			71				
30	2	SEAC	90		52			33				
31	2	UACCB										
32	2	UACCH	66		18			41				
33	2	UACCM	255		21	14		190		18		
4-Year Universities			15,264	483	1,798	653	143	10,193	11	446	1,424	113
2-Year Colleges			1,874	28	317	120	19	1,258		64	27	40
Totals			17,138	511	2,115	773	162	11,451	12	510	1,451	153

NOTE: Counts of 10 or less are not shown due to FERPA.

STEM Fall Enrollment by Institution and by Race/Ethnicity												
			AY2015 (2014 Fall)									
#	Inst. Type	Institution	Total	Asian Only	Black Only	Hispanic Any	Amer. Indian/ Alaskan Only	White Only	Hawaiian or Pacific Islander Only	Two or More Races	Non-Resident Alien	Unknown
1	1	ASUJ	1,821	27	169	42	16	1,289			239	36
2	1	ATU	1,667	25	99	80		1,218		41	197	
3	1	HSU	602		105	18		429		31	11	
4	1	SAUM	531		79	15		337			78	
5	1	UAF	6,526	251	363	373	74	4,479		195	748	39
6	1	UAFS	955	78	36	76	33	662		41	28	
7	1	UALR	1,951	79	290	107		1,015		144	312	
8	1	UAM	296		39	11		233				
9	1	UAMS	292	21	35	14		173			40	
10	1	UAPB	698		652			20			11	
11	1	UCA	1,303	42	117	48		960		51	65	11
12	2	ANC	56		12			42				
13	2	ASUB	115					92				
14	2	ASUMH	66					61				
15	2	ASUN	42					33				
16	2	BRTC	0									
17	2	CCCUA	233		25	46		147				
18	2	CotO	24					22				
19	2	EACC	41		13			22				
20	2	MSCC	83		41			34				
21	2	NAC	103					98				
22	2	NPCC	83					68				
23	2	NWACC	304	18		46		207				
24	2	OZC	0									
25	2	PCCUA	7									
26	2	PTC	104		46			42				
27	2	RMCC	16					14				
28	2	SACC	51		17			31				
29	2	SAUT	93		25			63				
30	2	SEAC	84		47			34				
31	2	UACCB	0									
32	2	UACCH	53		21			29				
33	2	UACCM	226		12			167		14		14
4-Year Universities			16,642	545	1,984	790	145	10,815		520	1,733	101
2-Year Colleges			1,784	33	288	137	12	1,210		54	19	30
Totals			18,426	578	2,272	927	157	12,025		574	1,752	131

NOTE: Counts of 10 or less are not shown due to FERPA.

Students with Education Majors

No.	Inst. Type	Institution	AY2010 Education Majors				
			STEM	CIP	UTeach	Dup. Totals	Undup. Totals
1	1	ASUJ		96		96	96
2	1	ATU		85		85	85
3	1	HSU					
4	1	SAUM					
5	1	UAF					
6	1	UAFS		122		122	122
7	1	UALR					
8	1	UAM					
9	1	UAMS					
10	1	UAPB		38		38	38
11	1	UCA		93		93	93
12	2	ANC					
13	2	ASUB					
14	2	ASUMH					
15	2	ASUN					
16	2	BRTC					
17	2	CCCUA					
18	2	CotO					
19	2	EACC					
20	2	MSCC					
21	2	NAC					
22	2	NPCC					
23	2	NWACC					
24	2	OZC					
25	2	PCCUA					
26	2	PTC					
27	2	RMCC					
28	2	SACC					
29	2	SAUT					
30	2	SEAC					
31	2	UACCB					
32	2	UACCH					
33	2	UACCM					
4 Year University Totals				437		437	437
2 Year College Totals							
Totals				437		437	437

NOTE: Counts of 10 or less are not shown due to FERPA.

Students with Education Majors

No.	Inst. Type	Institution	AY2011 Education Majors				
			STEM	CIP	UTeach	Dup. Totals	Undup. Totals
1	1	ASUJ		103		103	103
2	1	ATU		87		87	87
3	1	HSU					
4	1	SAUM					
5	1	UAF	15			19	19
6	1	UAFS		117		117	117
7	1	UALR					
8	1	UAM					
9	1	UAMS					
10	1	UAPB		44		44	44
11	1	UCA		80		80	80
12	2	ANC					
13	2	ASUB					
14	2	ASUMH					
15	2	ASUN					
16	2	BRTC					
17	2	CCCUA					
18	2	CotO					
19	2	EACC					
20	2	MSCC					
21	2	NAC					
22	2	NPCC					
23	2	NWACC					
24	2	OZC					
25	2	PCCUA					
26	2	PTC					
27	2	RMCC					
28	2	SACC					
29	2	SAUT					
30	2	SEAC					
31	2	UACCB					
32	2	UACCH					
33	2	UACCM					
4 Year University Totals			15	435		450	450
2 Year College Totals							
Totals			15	435		450	450

NOTE: Counts of 10 or less are not shown due to FERPA.

Students with Education Majors

No.	Inst. Type	Institution	AY2012 Education Majors				
			STEM	CIP	UTeach	Dup. Totals	Undup. Totals
1	1	ASUJ		98		98	98
2	1	ATU	51	89		140	140
3	1	HSU					
4	1	SAUM	42			42	42
5	1	UAF	69		506	579	563
6	1	UAFS		110		110	110
7	1	UALR	79			79	79
8	1	UAM					
9	1	UAMS					
10	1	UAPB		45		45	45
11	1	UCA	37	61	14	112	111
12	2	ANC					
13	2	ASUB					
14	2	ASUMH					
15	2	ASUN					
16	2	BRTC					
17	2	CCCUA					
18	2	CotO					
19	2	EACC					
20	2	MSCC					
21	2	NAC					
22	2	NPCC					
23	2	NWACC					
24	2	OZC					
25	2	PCCUA					
26	2	PTC					
27	2	RMCC					
28	2	SACC					
29	2	SAUT					
30	2	SEAC					
31	2	UACCB					
32	2	UACCH					
33	2	UACCM					
4 Year University Totals			278	407	522	1,207	1,190
2 Year College Totals							
Totals			278	407	525	1,210	1,193

NOTE: Counts of 10 or less are not shown due to FERPA.

Students with Education Majors

No.	Inst. Type	Institution	AY2013 Education Majors				
			STEM	CIP	UTeach	Dup. Totals	Undup. Totals
1	1	ASUJ		101	5,080	5,181	5,081
2	1	ATU	52	85	2,440	2,577	2,440
3	1	HSU			1,034	1,034	1,034
4	1	SAUM	34			34	34
5	1	UAF	76		3,023	3,104	3,023
6	1	UAFS		116		116	116
7	1	UALR	94		1,072	1,166	1,072
8	1	UAM			584	584	584
9	1	UAMS					
10	1	UAPB		37	449	486	449
11	1	UCA	35	46	547	628	596
12	2	ANC			110	110	110
13	2	ASUB					
14	2	ASUMH					
15	2	ASUN					
16	2	BRTC					
17	2	CCCUA					
18	2	CotO			67	67	67
19	2	EACC					
20	2	MSCC			168	168	168
21	2	NAC			122	122	122
22	2	NPCC			167	167	167
23	2	NWACC			11,702	11,702	11,702
24	2	OZC			182	182	182
25	2	PCCUA			28	28	28
26	2	PTC					
27	2	RMCC			47	47	47
28	2	SACC					
29	2	SAUT					
30	2	SEAC			24	24	24
31	2	UACCB			11	11	11
32	2	UACCH			65	65	65
33	2	UACCM			148	148	148
4 Year University Totals			291	390	14,229	14,910	14,429
2 Year College Totals					12,851	12,851	12,851
Totals			291	390	27,080	27,761	27,280

NOTE: Counts of 10 or less are not shown due to FERPA.

Students with Education Majors

No.	Inst. Type	Institution	AY2014 Education Majors				
			STEM	CIP	UTeach	Dup. Totals	Undup. Totals
1	1	ASUJ		102	5,202	5,304	5,202
2	1	ATU	42	73	2,356	2,471	2,356
3	1	HSU			957	957	957
4	1	SAUM	34		802	836	802
5	1	UAF	80		2,644	2,730	2,644
6	1	UAFS		114	1,102	1,216	1,105
7	1	UALR	77		918	995	918
8	1	UAM			589	589	589
9	1	UAMS					
10	1	UAPB		12	421	433	421
11	1	UCA	41	29	575	645	618
12	2	ANC			82	82	82
13	2	ASUB					
14	2	ASUMH			130	130	130
15	2	ASUN					
16	2	BRTC					
17	2	CCCUA					
18	2	CotO			76	76	76
19	2	EACC					
20	2	MSCC			131	131	131
21	2	NAC			131	131	131
22	2	NPCC			150	150	150
23	2	NWACC			11,575	11,575	11,575
24	2	OZC			150	150	150
25	2	PCCUA			45	45	45
26	2	PTC					
27	2	RMCC			31	31	31
28	2	SACC					
29	2	SAUT					
30	2	SEAC					
31	2	UACCB					
32	2	UACCH			29	29	29
33	2	UACCM			151	151	151
4 Year University Totals			274	336	15,566	16,176	15,612
2 Year College Totals					12,681	12,681	12,681
Totals			274	336	28,247	28,857	28,293

NOTE: Counts of 10 or less are not shown due to FERPA.

Top Education Majors (Degree 1) AY2014

Ranked by Count

NOTE: Counts of 10 or less is not shown due to FERPA.

No.	CIP Code	CIP Name	Count
1	24.0101	Liberal Arts and Sciences/Liberal Studies	3,409
2	13.1210	Early Childhood Education and Teaching	2,677
3	13.0408	Elementary and Middle School Administration/Principalship	1,765
4	24.0102	General Studies	1,765
5	13.1206	Teacher Education, Multiple Levels	1,332
6	13.1314	Physical Education Teaching and Coaching	1,302
7	52.0101	Business/Commerce, General	1,221
8	13.0301	Curriculum and Instruction	1,092
9	13.1202	Elementary Education and Teaching	1,010
10	13.1203	Junior High/Intermediate/Middle School Education and Teaching	837
11	13.1001	Special Education and Teaching, General	622
12	52.0201	Business Administration and Management, General	602
13	13.1209	Kindergarten/Preschool Education and Teaching	547
14	13.1101	Counselor Education/School Counseling and Guidance Services	491
15	13.1205	Secondary Education and Teaching	398
16	13.1312	Music Teacher Education	382
17	13.0401	Educational Leadership and Administration, General	357
18	51.3801	Registered Nursing/Registered Nurse	320
19	13.1004	Education/Teaching of the Gifted and Talented	315
20	13.1305	English/Language Arts Teacher Education	299
21	11.0101	Computer and Information Sciences, General	294
22	13.0501	Educational/Instructional Technology	262
23	13.1102	College Student Counseling and Personnel Services	240
24	31.0501	Health and Physical Education/Fitness, General	237
25	43.0104	Criminal Justice/Safety Studies	236
26	13.1299	Teacher Education and Professional Development, Specific Levels and Methods, Other	225
27	13.1311	Mathematics Teacher Education	219
28	12.0503	Culinary Arts/Chef Training	208
29	13.0406	Higher Education/Higher Education Administration	197
30	13.1201	Adult and Continuing Education and Teaching	185
31	13.1317	Social Science Teacher Education	174
32	13.1328	History Teacher Education	166
33	13.0101	Education, General	165
34	51.0904	Emergency Medical Technology/Technician (EMT Paramedic)	162
35	50.0402	Commercial and Advertising Art	145
36	13.1318	Social Studies Teacher Education	133
37	13.1315	Reading Teacher Education	122
38	23.0101	English Language and Literature, General	117
39	13.1301	Agricultural Teacher Education	112
40	22.0302	Legal Assistant/Paralegal	93
41	13.9999	Education, Other	89
42	13.1322	Biology Teacher Education	88
43	13.1401	Teaching English as a Second or Foreign Language/ESL Language Instructor	85
44	13.1199	Student Counseling and Personnel Services, Other	83
45	13.1302	Art Teacher Education	83
46	13.1319	Technical Teacher Education	80
47	15.1301	Drafting and Design Technology/Technician, General	78
48	50.0901	Music, General	77
49	51.0601	Dental Assisting/Assistant	77
50	13.1303	Business Teacher Education	75
51	43.0202	Fire Services Administration	70
52	26.0101	Biology/Biological Sciences, General	63
53	42.0101	Psychology, General	63
54	30.9999	Multi-/Interdisciplinary Studies, Other	62
55	50.0903	Music Performance, General	56
56	54.0101	History, General	53

No.	CIP Code	CIP Name	Count
57	51.0806	Physical Therapy Technician/Assistant	52
58	15.0507	Environmental Engineering Technology/Environmental Technology	50
59	19.0708	Child Care and Support Services Management	50
60	27.0101	Mathematics, General	48
61	13.0403	Adult and Continuing Education Administration	46
62	51.0908	Respiratory Care Therapy/Therapist	40
63	13.1306	Foreign Language Teacher Education	35
64	51.0707	Health Information/Medical Records Technology/Technician	35
65	50.0701	Art/Art Studies, General	32
66	13.1330	Spanish Language Teacher Education	31
67	44.0701	Social Work	29
68	51.0204	Audiology/Audiologist and Speech-Language Pathology/Pathologist	29
69	52.0301	Accounting	24
70	13.1316	Science Teacher Education/General Science Teacher Education	23
71	15.0303	Electrical, Electronic and Communications Engineering Technology/Technician	23
72	51.0913	Athletic Training/Trainer	23
73	09.0101	Speech Communication and Rhetoric	21
74	09.0401	Journalism	21
75	19.0706	Child Development	21
76	40.0501	Chemistry, General	20
77	13.1015	Education/Teaching of Individuals in Early Childhood Special Education Programs	18
78	19.0101	Family and Consumer Sciences/Human Sciences, General	18
79	31.0505	Kinesiology and Exercise Science	18
80	45.1101	Sociology	18
81	13.0901	Social and Philosophical Foundations of Education	17
82	01.0102	Agribusiness/Agricultural Business Operations	16
83	31.0101	Parks, Recreation and Leisure Studies	16
84	43.0107	Criminal Justice/Police Science	16
85	16.0101	Foreign Languages and Literatures, General	15
86	31.0301	Parks, Recreation and Leisure Facilities Management, General	15
87	51.3902	Nursing Assistant/Aide and Patient Care Assistant/Aide	15
88	13.1308	Family and Consumer Sciences/Home Economics Teacher Education	14
89	43.9999	Homeland Security, Law Enforcement, Firefighting and Related Protective Services, Other	14
90	52.0901	Hospitality Administration/Management, General	14
91	52.1401	Marketing/Marketing Management, General	14
92	13.0404	Educational, Instructional, and Curriculum Supervision	13
93	45.1001	Political Science and Government, General	13
94	19.0501	Foods, Nutrition, and Wellness Studies, General	12
95	12.0501	Baking and Pastry Arts/Baker/Pastry Chef	11
96	13.0499	Educational Administration and Supervision, Other	11
97	13.0603	Educational Statistics and Research Methods	11
98	13.1331	Speech Teacher Education	11
99	50.0409	Graphic Design	11
100	51.2314	Rehabilitation Science	11

STEM CIP Codes by ICE STEM Version

#	CIP Code	CIP Name	Version		
			2010	2011	2012
1	01.0308	Agroecology and Sustainable Agriculture			X
2	01.0901	Animal Sciences, General		X	X
3	01.0902	Agricultural Animal Breeding		X	X
4	01.0903	Animal Health		X	X
5	01.0904	Animal Nutrition		X	X
6	01.0905	Dairy Science		X	X
7	01.0906	Livestock Management		X	X
8	01.0907	Poultry Science		X	X
9	01.0999	Animal Sciences, Other			X
10	01.1001	Food Science		X	X
11	01.1002	Food Technology and Processing		X	X
12	01.1099	Food Science and Technology, Other			X
13	01.1101	Plant Sciences, General		X	X
14	01.1102	Agronomy and Crop Science		X	X
15	01.1103	Horticultural Science		X	X
16	01.1104	Agricultural and Horticultural Plant Breeding		X	X
17	01.1105	Plant Protection and Integrated Pest Management		X	X
18	01.1106	Range Science and Management		X	X
19	01.1199	Plant Sciences, Other			X
20	01.1201	Soil Science and Agronomy, General		X	X
21	01.1202	Soil Chemistry and Physics		X	X
22	01.1203	Soil Microbiology		X	X
23	01.1299	Soil Sciences, Other			X
24	03.0101	Natural Resources/Conservation, General			X
25	03.0103	Environmental Studies			X
26	03.0104	Environmental Science		X	X
27	03.0199	Natural Resources Conservation and Research, Other			X
28	03.0205	Water, Wetlands, and Marine Resources Management			X
29	03.0502	Forest Sciences and Biology		X	X
30	03.0508	Urban Forestry			X
31	03.0509	Wood Science and Wood Products/Pulp and Paper Technology		X	X
32	03.0601	Wildlife, Fish and Wildlands Science and Management			X
33	04.0902	Architectural and Building Sciences/Technology			X
34	09.0702	Digital Communication and Media/Multimedia		X	X
35	10.0304	Animation, Interactive Technology, Video Graphics and Special Effects		X	X
36	11.0101	Computer and Information Sciences, General	X	X	X
37	11.0102	Artificial Intelligence	X	X	X
38	11.0103	Information Technology	X	X	X
39	11.0104	Informatics		X	X
40	11.0199	Computer and Information Sciences, Other			X
41	11.0201	Computer Programming/Programmer, General	X	X	X
42	11.0202	Computer Programming, Specific Applications	X	X	X
43	11.0203	Computer Programming, Vendor/Product Certification	X	X	X
44	11.0299	Computer Programming, Other			X
45	11.0301	Data Processing and Data Processing Technology/Technician	X	X	X
46	11.0401	Information Science/Studies	X	X	X
47	11.0501	Computer Systems Analysis/Analyst	X	X	X
48	11.0701	Computer Science	X	X	X
49	11.0801	Web Page, Digital/Multimedia and Information Resources Design	X	X	X
50	11.0802	Data Modeling/Warehousing and Database Administration	X	X	X
51	11.0803	Computer Graphics	X	X	X
52	11.0804	Modeling, Virtual Environments and Simulation		X	X
53	11.0899	Computer Software and Media Applications, Other			X
54	11.0901	Computer Systems Networking and Telecommunications	X	X	X
55	11.1001	Network and System Administration/Administrator	X	X	X
56	11.1002	System, Networking, and LAN/WAN Management/Manager	X	X	X
57	11.1003	Computer and Information Systems Security/Information Assurance	X	X	X
58	11.1004	Web/Multimedia Management and Webmaster	X	X	X
59	11.1005	Information Technology Project Management		X	X
60	11.1006	Computer Support Specialist		X	X
61	11.1099	Computer/Information Technology Services Administration and Management, Other			X
62	13.0501	Educational/Instructional Technology			X
63	13.0601	Educational Evaluation and Research			X
64	13.0603	Educational Statistics and Research Methods		X	X
65	14.0101	Engineering, General	X	X	X
66	14.0102	Pre-Engineering		X	X
67	14.0201	Aerospace, Aeronautical and Astronautical/Space Engineering	X	X	X
68	14.0301	Agricultural Engineering	X	X	X
69	14.0401	Architectural Engineering	X	X	X
70	14.0501	Bioengineering and Biomedical Engineering	X	X	X
71	14.0601	Ceramic Sciences and Engineering	X	X	X
72	14.0701	Chemical Engineering	X	X	X
73	14.0702	Chemical and Biomolecular Engineering		X	X
74	14.0799	Chemical Engineering, Other			X

STEM CIP Codes by ICE STEM Version

#	CIP Code	CIP Name	Version		
			2010	2011	2012
75	14.0801	Civil Engineering, General	X	X	X
76	14.0802	Geotechnical and Geoenvironmental Engineering	X	X	X
77	14.0803	Structural Engineering	X	X	X
78	14.0804	Transportation and Highway Engineering	X	X	X
79	14.0805	Water Resources Engineering	X	X	X
80	14.0899	Civil Engineering, Other			X
81	14.0901	Computer Engineering, General	X	X	X
82	14.0902	Computer Hardware Engineering	X	X	X
83	14.0903	Computer Software Engineering	X	X	X
84	14.0999	Computer Engineering, Other			X
85	14.1001	Electrical and Electronics Engineering	X	X	X
86	14.1003	Laser and Optical Engineering		X	X
87	14.1004	Telecommunications Engineering		X	X
88	14.1099	Electrical, Electronics and Communications Engineering, Other			X
89	14.1101	Engineering Mechanics	X	X	X
90	14.1201	Engineering Physics/Applied Physics	X	X	X
91	14.1301	Engineering Science	X	X	X
92	14.1401	Environmental/Environmental Health Engineering	X	X	X
93	14.1801	Materials Engineering	X	X	X
94	14.1901	Mechanical Engineering	X	X	X
95	14.2001	Metallurgical Engineering	X	X	X
96	14.2101	Mining and Mineral Engineering	X	X	X
97	14.2201	Naval Architecture and Marine Engineering	X	X	X
98	14.2301	Nuclear Engineering	X	X	X
99	14.2401	Ocean Engineering	X	X	X
100	14.2501	Petroleum Engineering	X	X	X
101	14.2701	Systems Engineering	X	X	X
102	14.2801	Textile Sciences and Engineering	X	X	X
103	14.3101	Materials Science	X		
104	14.3201	Polymer/Plastics Engineering	X	X	X
105	14.3301	Construction Engineering	X	X	X
106	14.3401	Forest Engineering	X	X	X
107	14.3501	Industrial Engineering	X	X	X
108	14.3601	Manufacturing Engineering	X	X	X
109	14.3701	Operations Research	X	X	X
110	14.3801	Surveying Engineering	X	X	X
111	14.3901	Geological/Geophysical Engineering	X	X	X
112	14.4001	Paper Science and Engineering		X	X
113	14.4101	Electromechanical Engineering		X	X
114	14.4201	Mechatronics, Robotics, and Automation Engineering		X	X
115	14.4301	Biochemical Engineering		X	X
116	14.4401	Engineering Chemistry		X	X
117	14.4501	Biological/Biosystems Engineering		X	X
118	14.9999	Engineering, Other			X
119	15.0000	ENGINEERING TECHNOLOGIES AND ENGINEERING-RELATED FIELDS	X	X	X
120	15.0101	Architectural Engineering Technology/Technician	X	X	X
121	15.0201	Civil Engineering Technology/Technician	X	X	X
122	15.0303	Electrical, Electronic and Communications Engineering Technology/Technician	X	X	X
123	15.0304	Laser and Optical Technology/Technician	X	X	X
124	15.0305	Telecommunications Technology/Technician	X	X	X
125	15.0306	Integrated Circuit Design		X	X
126	15.0399	Electrical and Electronic Engineering Technologies/Technicians, Other			X
127	15.0401	Biomedical Technology/Technician	X	X	X
128	15.0403	Electromechanical Technology/Electromechanical Engineering Technology	X	X	X
129	15.0404	Instrumentation Technology/Technician	X	X	X
130	15.0405	Robotics Technology/Technician	X	X	X
131	15.0406	Automation Engineer Technology/Technician		X	X
132	15.0499	Electromechanical and Instrumentation and Maintenance Technologies/Technicians, Other			X
133	15.0501	Heating, Ventilation, Air Conditioning and Refrigeration Engineering Technology/Technician	X	X	X
134	15.0503	Energy Management and Systems Technology/Technician	X	X	X
135	15.0505	Solar Energy Technology/Technician	X	X	X
136	15.0506	Water Quality and Wastewater Treatment Management and Recycling Technology/Technician	X	X	X
137	15.0507	Environmental Engineering Technology/Environmental Technology	X	X	X
138	15.0508	Hazardous Materials Management and Waste Technology/Technician	X	X	X
139	15.0599	Environmental Control Technologies/Technicians, Other			X
140	15.0607	Plastics and Polymer Engineering Technology/Technician	X	X	X
141	15.0611	Metallurgical Technology/Technician	X	X	X
142	15.0612	Industrial Technology/Technician	X	X	X
143	15.0613	Manufacturing Engineering Technology/Technician	X	X	X
144	15.0614	Welding Engineering Technology/Technician		X	X
145	15.0615	Chemical Engineering Technology/Technician		X	X
146	15.0616	Semiconductor Manufacturing Technology		X	X
147	15.0699	Industrial Production Technologies/Technicians, Other			X
148	15.0701	Occupational Safety and Health Technology/Technician	X	X	X

STEM CIP Codes by ICE STEM Version

#	CIP Code	CIP Name	Version		
			2010	2011	2012
149	15.0702	Quality Control Technology/Technician	X	X	X
150	15.0703	Industrial Safety Technology/Technician	X	X	X
151	15.0704	Hazardous Materials Information Systems Technology/Technician	X	X	X
152	15.0799	Quality Control and Safety Technologies/Technicians, Other			X
153	15.0801	Aeronautical/Aerospace Engineering Technology/Technician	X	X	X
154	15.0803	Automotive Engineering Technology/Technician	X	X	X
155	15.0805	Mechanical Engineering/Mechanical Technology/Technician	X	X	X
156	15.0899	Mechanical Engineering Related Technologies/Technicians, Other			X
157	15.0901	Mining Technology/Technician	X	X	X
158	15.0903	Petroleum Technology/Technician	X	X	X
159	15.0999	Mining and Petroleum Technologies/Technicians, Other			X
160	15.1001	Construction Engineering Technology/Technician	X	X	X
161	15.1102	Surveying Technology/Surveying	X	X	X
162	15.1103	Hydraulics and Fluid Power Technology/Technician	X	X	X
163	15.1199	Engineering-Related Technologies, Other			X
164	15.1201	Computer Engineering Technology/Technician	X	X	X
165	15.1202	Computer Technology/Computer Systems Technology	X	X	X
166	15.1203	Computer Hardware Technology/Technician	X	X	X
167	15.1204	Computer Software Technology/Technician	X	X	X
168	15.1299	Computer Engineering Technologies/Technicians, Other			X
169	15.1301	Drafting and Design Technology/Technician, General	X	X	X
170	15.1302	CAD/CADD Drafting and/or Design Technology/Technician	X	X	X
171	15.1303	Architectural Drafting and Architectural CAD/CADD	X	X	X
172	15.1304	Civil Drafting and Civil Engineering CAD/CADD	X	X	X
173	15.1305	Electrical/Electronics Drafting and Electrical/Electronics CAD/CADD	X	X	X
174	15.1306	Mechanical Drafting and Mechanical Drafting CAD/CADD	X	X	X
175	15.1399	Drafting/Design Engineering Technologies/Technicians, Other			X
176	15.1401	Nuclear Engineering Technology/Technician	X	X	X
177	15.1501	Engineering/Industrial Management	X	X	X
178	15.1502	Engineering Design		X	X
179	15.1503	Packaging Science		X	X
180	15.1599	Engineering-Related Fields, Other			X
181	15.1601	Nanotechnology		X	X
182	15.9999	Engineering Technologies and Engineering-Related Fields, Other			X
183	26.0101	Biology/Biological Sciences, General	X	X	X
184	26.0102	Biomedical Sciences, General	X	X	X
185	26.0202	Biochemistry	X	X	X
186	26.0203	Biophysics	X	X	X
187	26.0204	Molecular Biology	X	X	X
188	26.0205	Molecular Biochemistry	X	X	X
189	26.0206	Molecular Biophysics	X	X	X
190	26.0207	Structural Biology	X	X	X
191	26.0208	Photobiology	X	X	X
192	26.0209	Radiation Biology/Radiobiology	X	X	X
193	26.0210	Biochemistry and Molecular Biology	X	X	X
194	26.0299	Biochemistry, Biophysics and Molecular Biology, Other			X
195	26.0301	Botany/Plant Biology	X	X	X
196	26.0305	Plant Pathology/Phytopathology	X	X	X
197	26.0307	Plant Physiology	X	X	X
198	26.0308	Plant Molecular Biology	X	X	X
199	26.0399	Botany/Plant Biology, Other			X
200	26.0401	Cell/Cellular Biology and Histology	X	X	X
201	26.0403	Anatomy	X	X	X
202	26.0404	Developmental Biology and Embryology	X	X	X
203	26.0405	Neuroanatomy	X		
204	26.0406	Cell/Cellular and Molecular Biology	X	X	X
205	26.0407	Cell Biology and Anatomy	X	X	X
206	26.0499	Cell/Cellular Biology and Anatomical Sciences, Other			X
207	26.0502	Microbiology, General	X	X	X
208	26.0503	Medical Microbiology and Bacteriology	X	X	X
209	26.0504	Virology	X	X	X
210	26.0505	Parasitology	X	X	X
211	26.0506	Mycology	X	X	X
212	26.0507	Immunology	X	X	X
213	26.0508	Microbiology and Immunology		X	X
214	26.0599	Microbiological Sciences and Immunology, Other			X
215	26.0701	Zoology/Animal Biology	X	X	X
216	26.0702	Entomology	X	X	X
217	26.0707	Animal Physiology	X	X	X
218	26.0708	Animal Behavior and Ethology	X	X	X
219	26.0709	Wildlife Biology	X	X	X
220	26.0799	Zoology/Animal Biology, Other			X
221	26.0801	Genetics, General	X	X	X
222	26.0802	Molecular Genetics	X	X	X

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#	CIP Code	CIP Name	Version		
			2010	2011	2012
223	26.0803	Microbial and Eukaryotic Genetics	X	X	X
224	26.0804	Animal Genetics	X	X	X
225	26.0805	Plant Genetics	X	X	X
226	26.0806	Human/Medical Genetics	X	X	X
227	26.0807	Genome Sciences/Genomics		X	X
228	26.0899	Genetics, Other			X
229	26.0901	Physiology, General	X	X	X
230	26.0902	Molecular Physiology	X	X	X
231	26.0903	Cell Physiology	X	X	X
232	26.0904	Endocrinology	X	X	X
233	26.0905	Reproductive Biology	X	X	X
234	26.0906	Neurobiology and Neurophysiology	X		
235	26.0907	Cardiovascular Science	X	X	X
236	26.0908	Exercise Physiology	X	X	X
237	26.0909	Vision Science/Physiological Optics	X	X	X
238	26.0910	Pathology/Experimental Pathology	X	X	X
239	26.0911	Oncology and Cancer Biology	X	X	X
240	26.0912	Aerospace Physiology and Medicine		X	X
241	26.0999	Physiology, Pathology, and Related Sciences, Other			X
242	26.1001	Pharmacology	X	X	X
243	26.1002	Molecular Pharmacology	X	X	X
244	26.1003	Neuropharmacology	X	X	X
245	26.1004	Toxicology	X	X	X
246	26.1005	Molecular Toxicology	X	X	X
247	26.1006	Environmental Toxicology	X	X	X
248	26.1007	Pharmacology and Toxicology	X	X	X
249	26.1099	Pharmacology and Toxicology, Other			X
250	26.1101	Biometry/Biometrics	X	X	X
251	26.1102	Biostatistics	X	X	X
252	26.1103	Bioinformatics	X	X	X
253	26.1104	Computational Biology		X	X
254	26.1199	Biomathematics, Bioinformatics, and Computational Biology, Other			X
255	26.1201	Biotechnology	X	X	X
256	26.1301	Ecology	X	X	X
257	26.1302	Marine Biology and Biological Oceanography	X	X	X
258	26.1303	Evolutionary Biology	X	X	X
259	26.1304	Aquatic Biology/Limnology	X	X	X
260	26.1305	Environmental Biology	X	X	X
261	26.1306	Population Biology	X	X	X
262	26.1307	Conservation Biology	X	X	X
263	26.1308	Systematic Biology/Biological Systematics	X	X	X
264	26.1309	Epidemiology	X	X	X
265	26.1310	Ecology and Evolutionary Biology		X	X
266	26.1399	Ecology, Evolution, Systematics and Population Biology, Other			X
267	26.1401	Molecular Medicine		X	X
268	26.1501	Neuroscience		X	X
269	26.1502	Neuroanatomy		X	X
270	26.1503	Neurobiology and Anatomy		X	X
271	26.1504	Neurobiology and Behavior		X	X
272	26.1599	Neurobiology and Neurosciences, Other			X
273	26.9999	Biological and Biomedical Sciences, Other			X
274	27.0101	Mathematics, General	X	X	X
275	27.0102	Algebra and Number Theory	X	X	X
276	27.0103	Analysis and Functional Analysis	X	X	X
277	27.0104	Geometry/Geometric Analysis	X	X	X
278	27.0105	Topology and Foundations	X	X	X
279	27.0199	Mathematics, Other			X
280	27.0301	Applied Mathematics, General	X	X	X
281	27.0303	Computational Mathematics	X	X	X
282	27.0304	Computational and Applied Mathematics		X	X
283	27.0305	Financial Mathematics		X	X
284	27.0306	Mathematical Biology		X	X
285	27.0399	Applied Mathematics, Other			X
286	27.0501	Statistics, General	X	X	X
287	27.0502	Mathematical Statistics and Probability	X	X	X
288	27.0503	Mathematics and Statistics		X	X
289	27.0599	Statistics, Other			X
290	27.9999	Mathematics and Statistics, Other			X
291	28.0501	Air Science/Airpower Studies			X
292	28.0502	Air and Space Operational Art and Science			X
293	28.0505	Naval Science and Operational Studies			X
294	29.0101	Military Technologies	X		
295	29.0201	Intelligence, General		X	X
296	29.0202	Strategic Intelligence		X	X

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#	CIP Code	CIP Name	Version		
			2010	2011	2012
297	29.0203	Signal/Geospatial Intelligence		X	X
298	29.0204	Command & Control (C3, C4I) Systems and Operations		X	X
299	29.0205	Information Operations/Joint Information Operations		X	X
300	29.0206	Information/Psychological Warfare and Military Media Relations		X	X
301	29.0207	Cyber/Electronic Operations and Warfare		X	X
302	29.0299	Intelligence, Command Control and Information Operations, Other			X
303	29.0301	Combat Systems Engineering		X	X
304	29.0302	Directed Energy Systems		X	X
305	29.0303	Engineering Acoustics		X	X
306	29.0304	Low-Observables and Stealth Technology		X	X
307	29.0305	Space Systems Operations		X	X
308	29.0306	Operational Oceanography		X	X
309	29.0307	Undersea Warfare		X	X
310	29.0399	Military Applied Sciences, Other			X
311	29.0401	Aerospace Ground Equipment Technology		X	X
312	29.0402	Air and Space Operations Technology		X	X
313	29.0403	Aircraft Armament Systems Technology		X	X
314	29.0404	Explosive Ordinance/Bomb Disposal		X	X
315	29.0405	Joint Command/Task Force (C3, C4I) Systems		X	X
316	29.0406	Military Information Systems Technology		X	X
317	29.0407	Missile and Space Systems Technology		X	X
318	29.0408	Munitions Systems/Ordinance Technology		X	X
319	29.0409	Radar Communications and Systems Technology		X	X
320	29.0499	Military Systems and Maintenance Technology, Other			X
321	29.9999	Military Technologies and Applied Sciences, Other			X
322	30.0101	Biological and Physical Sciences		X	X
323	30.0601	Systems Science and Theory		X	X
324	30.0801	Mathematics and Computer Science		X	X
325	30.1001	Biopsychology		X	X
326	30.1701	Behavioral Sciences			X
327	30.1801	Natural Sciences		X	X
328	30.1901	Nutrition Sciences		X	X
329	30.2501	Cognitive Science		X	X
330	30.2701	Human Biology			X
331	30.3001	Computational Science			X
332	30.3101	Human Computer Interaction			X
333	30.3201	Marine Sciences		X	X
334	30.3301	Sustainability Studies			X
335	40.0101	Physical Sciences	X	X	X
336	40.0201	Astronomy	X	X	X
337	40.0202	Astrophysics	X	X	X
338	40.0203	Planetary Astronomy and Science	X	X	X
339	40.0299	Astronomy and Astrophysics, Other			X
340	40.0401	Atmospheric Sciences and Meteorology, General	X	X	X
341	40.0402	Atmospheric Chemistry and Climatology	X	X	X
342	40.0403	Atmospheric Physics and Dynamics	X	X	X
343	40.0404	Meteorology	X	X	X
344	40.0499	Atmospheric Sciences and Meteorology, Other			X
345	40.0501	Chemistry, General	X	X	X
346	40.0502	Analytical Chemistry	X	X	X
347	40.0503	Inorganic Chemistry	X	X	X
348	40.0504	Organic Chemistry	X	X	X
349	40.0506	Physical Chemistry	X	X	X
350	40.0507	Polymer Chemistry	X	X	X
351	40.0508	Chemical Physics	X	X	X
352	40.0509	Environmental Chemistry		X	X
353	40.0510	Forensic Chemistry		X	X
354	40.0511	Theoretical Chemistry		X	X
355	40.0599	Chemistry, Other			X
356	40.0601	Geology/Earth Science, General	X	X	X
357	40.0602	Geochemistry	X	X	X
358	40.0603	Geophysics and Seismology	X	X	X
359	40.0604	Paleontology	X	X	X
360	40.0605	Hydrology and Water Resources Science	X	X	X
361	40.0606	Geochemistry and Petrology	X	X	X
362	40.0607	Oceanography, Chemical and Physical	X	X	X
363	40.0699	Geological and Earth Sciences/Geosciences, Other			X
364	40.0801	Physics, General	X	X	X
365	40.0802	Atomic/Molecular Physics	X	X	X
366	40.0804	Elementary Particle Physics	X	X	X
367	40.0805	Plasma and High-Temperature Physics	X	X	X
368	40.0806	Nuclear Physics	X	X	X
369	40.0807	Optics/Optical Sciences	X	X	X
370	40.0808	Condensed Matter and Materials Physics	X	X	X

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			2010	2011	2012
371	40.0809	Acoustics	X	X	X
372	40.0810	Theoretical and Mathematical Physics	X	X	X
373	40.0899	Physics, Other			X
374	40.1001	Materials Science		X	X
375	40.1002	Materials Chemistry		X	X
376	40.1099	Materials Sciences, Other			X
377	40.9999	Physical Sciences, Other			X
378	41.0000	SCIENCE TECHNOLOGIES/TECHNICIANS		X	X
379	41.0101	Biology Technician/Biotechnology Laboratory Technician	X	X	X
380	41.0204	Industrial Radiologic Technology/Technician	X	X	X
381	41.0205	Nuclear/Nuclear Power Technology/Technician	X	X	X
382	41.0299	Nuclear and Industrial Radiologic Technologies/Technicians, Other			X
383	41.0301	Chemical Technology/Technician	X	X	X
384	41.0303	Chemical Process Technology		X	X
385	41.0399	Physical Science Technologies/Technicians, Other			X
386	41.9999	Science Technologies/Technicians, Other			X
387	42.2701	Cognitive Psychology and Psycholinguistics		X	X
388	42.2702	Comparative Psychology		X	X
389	42.2703	Developmental and Child Psychology		X	X
390	42.2704	Experimental Psychology		X	X
391	42.2705	Personality Psychology		X	X
392	42.2706	Physiological Psychology/Psychobiology		X	X
393	42.2707	Social Psychology		X	X
394	42.2708	Psychometrics and Quantitative Psychology		X	X
395	42.2709	Psychopharmacology		X	X
396	42.2799	Research and Experimental Psychology, Other			X
397	43.0106	Forensic Science and Technology		X	X
398	43.0116	Cyber/Computer Forensics and Counterterrorism			X
399	45.0301	Archeology			X
400	45.0603	Econometrics and Quantitative Economics			X
401	45.0702	Geographic Information Science and Cartography		X	X
402	49.0101	Aeronautics/Aviation/Aerospace Science and Technology, General			X
403	51.1002	Cytotechnology/Cytotechnologist			X
404	51.1005	Clinical Laboratory Science/Medical Technology/Technologist			X
405	51.1401	Medical Scientist	X	X	X
406	51.2003	Pharmaceutics and Drug Design		X	X
407	51.2004	Medicinal and Pharmaceutical Chemistry		X	X
408	51.2005	Natural Products Chemistry and Pharmacognosy		X	X
409	51.2006	Clinical and Industrial Drug Development			X
410	51.2007	Pharmacoeconomics/Pharmaceutical Economics			X
411	51.2009	Industrial and Physical Pharmacy and Cosmetic Sciences			X
412	51.2010	Pharmaceutical Sciences			X
413	51.2202	Environmental Health			X
414	51.2205	Health/Medical Physics			X
415	51.2502	Veterinary Anatomy			X
416	51.2503	Veterinary Physiology			X
417	51.2504	Veterinary Microbiology and Immunobiology			X
418	51.2505	Veterinary Pathology and Pathobiology			X
419	51.2506	Veterinary Toxicology and Pharmacology			X
420	51.2510	Veterinary Preventive Medicine, Epidemiology, and Public Health			X
421	51.2511	Veterinary Infectious Diseases			X
422	51.2706	Medical Informatics		X	X
423	52.1301	Management Science		X	X
424	52.1302	Business Statistics		X	X
425	52.1304	Actuarial Science	X	X	X
426	52.1399	Management Sciences and Quantitative Methods, Other			X