## **SEEC Data Update (12/15/09)**

The goal of the SEEC Project is to increase the number of engineering graduates at Iowa State University by 100 per year. More specifically the numeric

goals of SEEC are as follows:

- Increase in graduates (degrees) per year: 100 (12.5% increase compared to baseline)
- Total graduates per year: approximately 900
  This total would place ISU back in the ASEE top 10 list of schools by degrees awarded. ISU is currently 12th. Our goal is to stay in the top 10.
- Increase in diversity of graduates per year: increase the number of minority graduates by a minimum of 20 (to 75) and women graduates by a minimum of 45 (to 175).

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As a graduate baseline number for the project, we used an average of the American Society for Engineering Education

(ASEE) 2001-2006 degree data, as shown in Table 1 below. The ASEE 2005 and 2006 degree data represent a peak, resulting from record enrollments in 2001 and 2002. The additional graduates represent an increase of about 12.5% over the total number of engineering degrees awarded at ISU compared to the baseline.

Table 1

Number of B.S. Degrees in Engineering for Iowa State University (ASEE)

	African-	Asian-		Native-						
Year	American	American	Hispanic	American	Foreign	Caucasian	Other	Men	Women	Total
2001	6	28	9	0	93	555	0	574	117	691
2002	12	31	11	1	68	594	0	607	110	717
2003	9	27	8	1	94	711	0	696	154	850
2004	11	23	14	1	89	668	0	662	144	806
2005	18	32	24	1	83	672	38	741	127	868
2006	28	38	11	4	61	684	36	723	139	862
Avg.*	14	30	13	1	81	647	12	667	132	799
2007	14	32	15	2	31	663	37	668	126	794
2008	21	25	19	4	45	637	39	672	118	790
2009	6	25	14	2	55	546	21	568	113	735

<sup>\*</sup>Baseline data – average of 2001 to 2006 data

Of the 900 total graduates, we continue to aim for a minimum of 175 women and 75 minority graduates. These represent the following percentages of total graduates.

Percentage of women in 2006 graduates:	16.1%	Minority students in 2006 graduates:	9.4%
Percentage of women in baseline data:	16.5%	Minority students in baseline data:	7.3%
Percentage of women in SEEC graduates:	19.4%	Minority students in SEEC graduates:	8.3%

## Year 3 Data - Where are we at now?

Simply, to increase ISU engineering graduates, enrollment numbers (new freshmen and transfer students) as well as retention numbers need to increase. Just as the 2001-2002 incoming enrollments led to the 2005/2006 peak graduating classes, the 2007-2008 enrollments should lead to the 2012 graduating class, which is the first target class for SEEC. Table 2 shows ISU enrollment numbers for these pivotal years.

Table 2

Engineering Fall Enrollment for Iowa State University

									New
								New	Enrollment
Fall Enrollment	Fr	So	Jr	Sr	Sp	Total	New Fr	Tr	(Fr + Tr)
2001	1566	920	1060	1277	53	4876	1264	216	1523
2002	1371	1112	952	1472	56	4963	1107	207	1361
01, 02 Average	1469	1016	1006	1375	55	4920	1186	212	1442
2007	1344	928	939	1369	20	4600	1200	206	1423
2008	1383	965	989	1312	27	4676	1231	215	1469
07, 08 Average	1364	947	964	1341	24	4638	1216	211	1446
2009	1506	1076	1005	1475	23	5085	1304	252	1575

The fall 2009 new student enrollment in engineering at ISU is 1575 students. Of these new students, 57.5% are residents and 42.4% non-residents; 16.0% are transfers, and 82.8% new freshmen. For

additional background on enrollment data and graduation rates at ISU, see the ISU website under Enrollment Statistics and Fact Book (refer to the Index). One of the SEEC project goals is to increase transfer student enrollment in engineering. Review of DMACC students enrolled at ISU in fall 2009 showed a total 1358 students compared with 2008 enrollment of 1242, and 2007 of 1142. Of those 1358 enrolled, 453 were in STEM majors, including 123 in engineering majors. This compares with 2008 figures of 393 and 103 in STEM and engineering, respectively. 152 new transfers from DMACC were admitted in fall 2009 in STEM majors, and of these, 47 in engineering. See table 3 below for a more detailed comparison of 2007-2009 enrollment numbers.

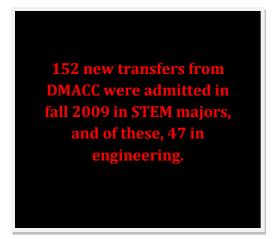


Table 3

DMACC Relevant Enrollment for Iowa State University

						New DMACC
				Former DMACC	New DMACC	transfers to
	New	Total DMACC	Former DMACC	Students in ISU	transfers to	ISU
	Enrollment in	Students	students in ISU	Engineering	ISU STEM	Engineering
Year	Engineering	Enrolled at ISU	STEM majors	Majors	majors	majors
2007	1423	1144	310	94	97	31
2008	1469	1242	393	103	130	42
2009	1575	1358	453	123	152	47

Further review of 2007-2009 enrollment numbers by ethnic minority and gender can be seen in Table 4. The percentages of women in 2008 and 2009 are, respectively, 14.6% and 15.0%. The minority percentages are, respectively, 7.7% and 8.9%.

Table 4

Engineering Enrollment at ISU by Ethnic Minority and Gender

Enrollment	Totals				
	2009	2008	2007		
American Indian/Alaskan Native	20	11	12		
African American	119	78	101		
Asian or Pacific Islander	187	156	155		
Hispanic	124	115	120		
Total Ethnic Minority	450	360	388		
Male	4324	3995	3935		
Female	761	681	665		
Total	5085	4676	4600		