2011 AIMS$^2$ Program Completion Study

Exploring Program Completion and Persistence among AIMS$^2$ Scholars

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Background

• Introduction
  • Longitudinal study based on the AIMS$^2$ 2011 HSI-STEM award

• Purpose
  • Investigate the overall 3-year (from transfer) program completion (graduation) rate and persistence rate of AIMS$^2$ students.
  • Understand the role of gender, major and ethnicity on completion rates of students in the AIMS$^2$ program.
Methods

• Data sources and sample
  • AIMS² program data collected from 2011 – 2017 cohorts
    • Data updated to start-of-term Spring 2018
  • AIMS² transfer students only—primarily from Glendale Community College and College of the Canyons
  • CSUN Counts Institutional Data

• Data analysis procedures
  • Frequency analysis
    • Overall 2011-2014 cohort completion rate
      • Completion rates by gender, race/ethnicity, and major
    • Distribution of 2011-2017 cohort students still enrolled
“Big Picture” Overall Results

- Overall completion rate of 88% of students in 2011-2014 cohorts
  - 70% (n=74/106) of students in cohorts 2011-2014 completed the program in 3 years or less.
  - 18% (n=19/106) of students in cohorts 2011-2014 completed in over 3 years.
- Gender
  - 70% (n=14/20) of females from cohorts 2011-2014 completed in 3 years or less.
  - 70% (n=60/86) of males from cohorts 2011-2014 completed in 3 years or less.
- Ethnicity
  - 65% (n=15/23) Hispanic students, 89% (n=24/27) White students, 75% (n=6/8) Asian students and 80% (n=4/5) non-specified students from 2011-2014 completed/3 years or less.
- Major
  - 80% (n=28/35) students from cohorts 2011-2014 majoring in Mechanical Engineering completed in 3 years or less.
  - 63% (n=10/16) students from cohorts 2011-2014 majoring in Electrical Engineering completed in 3 years or less.
AIMS² Program Completion Rate (Fall 2011 - 2014 Cohorts)

- 3-year and under Completion Rate: 70% (n=74)
- Over 3-year Completion Rate: 18% (n=19)
- Still Enrolled: 7% (n=7)
- Never Completed/Disqualified: 6% (n=6)
Completion Rate by Gender (Fall 2011 - 2014)

**Males**
- 3-year and under Completion Rate: 70% (n=60)
- Over 3-year Completion Rate: 20% (n=17)
- Still Enrolled: 3% (n=3)
- Never Completed/Disqualified: 7% (n=6)

**Females**
- 3-year and under Completion Rate: 70% (n=14)
- Over 3-year Completion Rate: 20% (n=4)
- Still Enrolled: 10% (n=2)
- Never Completed/Disqualified: 20% (n=4)
## Overall 3-year Completion Rate by Ethnicity (Fall 2011 - 2014)

<table>
<thead>
<tr>
<th>Ethnicity/Race</th>
<th>&lt; 3-year Completion Rate</th>
<th>&gt; 3-year Completion Rate</th>
<th>Total Completion/Non—completion Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>65% (n=15/23)</td>
<td>17% (n=4/23)</td>
<td>82% (n=19/23)</td>
</tr>
<tr>
<td>White</td>
<td>89% (n=24/27)</td>
<td>4% (n=1/27)</td>
<td>93% (n=25/27)</td>
</tr>
<tr>
<td>Asian</td>
<td>75% (n=6/8)</td>
<td>13% (n=1/8)</td>
<td>88% (n=7/8)</td>
</tr>
<tr>
<td>Non-specified</td>
<td>80% (n=4/5)</td>
<td>20% (n=1/5)</td>
<td>100% (n=5/5)</td>
</tr>
</tbody>
</table>

*No reported completion rate of African American students from cohorts Fall 2011-2014*
Completion Rate: 2011-2014 Hispanic Cohort

- 3-year and under Completion Rate: 65%
- Over 3-year Completion Rate: 17%
- Still Enrolled: 17%

Distribution of Students Still Enrolled by 2011-2014 Cohort: Hispanic

- Fall 2011: 0%
- Fall 2012: 25%
- Fall 2013: 50%
- Fall 2014: 25%
Completion Rate: 2011-2014 White Cohort

- 3-year and under Completion Rate: 89%
- Over 3-year Completion Rate: 4%
- Still Enrolled: 7%

$n = 27$

$n = 2$ from Fall 2014 are still enrolled
Completion Rate:
2011-2014 Asian Cohort

- 3-year and under Completion Rate: 13%
- Over 3-year Completion Rate: 13%
- Still Enrolled: 75%

n = 1 from Fall 2013 is still enrolled

n = 8
<table>
<thead>
<tr>
<th>Major</th>
<th>&lt; 3-year Completion Rate</th>
<th>&gt; 3-year Completion Rate</th>
<th>Total Completion/Non-completion Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical Engineering</td>
<td>80% (n=28/35)</td>
<td>14% (n=5/35)</td>
<td>94% (n=33/35)</td>
</tr>
<tr>
<td>Computer Science</td>
<td>44% (n=4/9)</td>
<td>22% (n=2/9)</td>
<td>66% (n=7/9)</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>56% (n=9/16)</td>
<td>25% (n=4/16)</td>
<td>81% (n=13/16)</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>63% (n=10/16)</td>
<td>19% (n=3/16)</td>
<td>82% (n=13/16)</td>
</tr>
<tr>
<td>Manufacturing Systems</td>
<td>100% (n=3/3)</td>
<td>0% (n=0/3)</td>
<td>100% (n=3/3)</td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Engineering</td>
<td>60% (n=3/5)</td>
<td>20% (n=1/5)</td>
<td>80% (n=4/5)</td>
</tr>
<tr>
<td>Computer Info. Tech.</td>
<td>80% (n=4/5)</td>
<td>20% (n=1/5)</td>
<td>100% (n=5/5)</td>
</tr>
<tr>
<td>Construction Management</td>
<td>67% (n=6/9)</td>
<td>33% (n=3/9)</td>
<td>100% (n=9/9)</td>
</tr>
<tr>
<td>Computer Science &amp; Applied</td>
<td>100% (n=1/1)</td>
<td>0% (n=0/1)</td>
<td>100% (n=1/1)</td>
</tr>
<tr>
<td>Math</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Management</td>
<td>100% (n=1/1)</td>
<td>0% (n=0/1)</td>
<td>100% (n=1/1)</td>
</tr>
</tbody>
</table>
3-year Completion Rate by AIMS² Cohort, CECS & CSUN (Fall 2011 – 2014)

- Fall 2011: AIMS 67%, CECS 38%, CSUN 62%
- Fall 2012: AIMS 50%, CECS 30%, CSUN 64%
- Fall 2013: AIMS 78%, CECS 34%, CSUN 63%
- Fall 2014: AIMS 78%, CECS 39%, CSUN 66%

*Data source: CSUN Counts
Pell Grant recipients, Transfer students
Distribution of AIMS\textsuperscript{2} Students Still Enrolled (Fall 2011 - 2017 Cohorts)

- Fall 2011: 70% (n=23)
- Fall 2012: 6% (n=2)
- Fall 2013: 6% (n=2)
- Fall 2014: 3% (n=1)
- Fall 2015: 3% (n=1)
- Fall 2016: 3% (n=1)
- Fall 2017: 9% (n=3)
Discussion and Limitations

- Overall, 88% of AIMS$^2$ students from Fall 2011-2014 cohorts completed the program, and 70% of students from these cohorts completed the program in 3 or fewer years.

- Slightly lower completion rates for female students—but still enrolled!

- Generally high completion rates of students by race/ethnicity with lower overall rates for Hispanic students.

- 3-year completion rates in the AIMS$^2$ program was higher than completion rates in the College of Engineering and Computer Science.

- Limitations
  - Scope of study’s focus on completion rates of AIMS$^2$ students.
  - Lack of understanding of influencing factors that impact completion.