**Degrees and Certificates:**

Our Division includes viable programs that fulfill the needs of many types of students. The needs range from transferring to a 4-year institution to the retraining of job skills. As shown in Table 1.0, in the Academic year 2013-2014, the Division of Business, Computer Science, and Applied Technologies awarded 305 Associate Degrees (17.9% of the degrees awarded by the College) and 324 Certificates (55.5% of the overall number of certificates awarded by the College). As illustrated, there is a significant increase in the number of degrees and certificates awarded in 2014-2015 compared to 2013-2014. This number could increase if there were a system to alert students when a requirement for a certificate is met. For Example, in the case of the Business graduates, each graduate should receive a certificate in addition to their associate degree, but this has been overlooked and requests to put a system in place have not been given priority.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2013-2014** | | **2014-2015** | |
|  | **Applied Technologies** | **Business and Computer Science** | **Applied Technologies** | **Business and Computer Science** |
| **Associate Degrees** | 81 | 187 | 66 | 239 |
| **certificates** | 126 | 130 | 162 | 162 |
| **Total** | **207** | **317** | **228** | **401** |
| **Difference from 2012-2013** | | | **21** | **84** |
| **% Change** | | | **9%** | **21%** |

*Table 1.0:* Degrees and Certificates awarded by the Division of Business, Computer Science, and Applied Technologies (<http://www.deanza.edu/ir/pdf/Awards%20Summary.pdf>)

**Enrollment trend:**

1. **Accounting, Business, CDI, Computer Science and Real Estate:**

As shown in Table 2.0, the division enrollment has shown a 7.61% increase from 2013-2014. Overall, the division enrollment has been on the rise even though the termination of the CAOS program has resulted in the loss of several thousand enrollments as shown in the difference between the academic year 2012-2013 and 2013-2014. The impact of downsizing the Computer Aided Design and Digital Imagining (CDI) had some impact on the enrollment. This program has now been merged with the Manufacturing program forming the Design and Manufacturing Technologies program (DMT). The productivity is at 648 which is way above the college average. The average number of students per .111 of load is 43.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 2012-2013 | 2013-2014 | 2014-2015 | 1 Year Diff | 1 Year % Diff |
| **Enrollment** | 21,002 | 18,868 | 20,304 | 1,436 | **7.61%** |
| **WSCH** | 105,577 | 95,268 | 102,663 | 7,395 | **7.76%** |
| **Productivity** | 664 | 641 | 648 | 7 | **1.09%** |

*Table 2.0:* Accounting, Business, Computer Science, and Real Estate.

(<http://www.deanza.edu/ir/program-review_2013-14/CB_Div.pdf>)

1. **Automotive Technologies and Design and Manufacturing Technologies:**

As shown in Table 3.0, the Applied Technology Division has a 1.73% drop in enrollment as well as a 3.78% drop in productivity. This may have been the result of:

1. High demand in the job market. Employers are pulling students out of the programs.
2. In the case of Manufacturing, the loss of one full-time faculty has had a significant negative impact on enrollment. There is now only one full-time instructor, and he also serves as the Department Chair. Please note that it has been very difficult to replace the instructor who was lost due to a shortage in qualified machinist and CNC specialists. Salaries offered outside the college for CNC specialists are more than double the salaries offered by De Anza. We are hoping that we will be able to hire a new instructor for the 2016-2017 academic year.

New DMT classes in the area of 3-D printing as well as other new technology courses should boost enrollment in the DMT program. Revisions to existing courses, new courses, and better scheduling are also being discussed as ways to improve enrollment.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 2012-2013 | 2013-2014 | 2014-2015 | 1 Year Diff | 1 Year % Diff |
| **Enrollment** | 2,370 | 2,427 | 2,385 | -42 | **-1.73%** |
| **WSCH** | 13,783 | 14,244 | 13,995 | -249 | **-1.75%** |
| **Productivity** | 436 | 450 | 433 | -17 | **-3.78%** |

*Table 3.0:* Applied Technologies Enrollment (http://www.deanza.edu/ir/Program\_Review\_2014-15/AUTO.pdf).

**Success Rates:**

1. **Accounting, Business, CDI, Computer Science and Real Estate:**

As shown in Table 4.0, the Accounting, Business, Computer Science, CDI, and Real Estate Departments have an overall success rate of 72% which is 1% over 2013-2014. Table 5.0 shows the success rate by ethnic group. Although the gap is still at 17%, with the exception of Native Americans, which has a 10% drop over 2013-2014, the success of targeted groups has improved by at least 1%. The highest increase was for Pacific Islanders which is 13%. Native Americans have declined by 10%, but the sample size is very small.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2012-2013** | **2013-2014** | **2014-2015** | **1 Year Diff** |
| **Overall Success Rates** | 71% | 71% | 72% | 1% |
| **Targeted Groups** | 60% | 58% | 59% | 1% |
| **Non-Targeted Group** | 75% | 75% | 76% | 1% |
| **Difference** | **15%** | **17%** | **17%** |  |

*Table 4.* Success Rates (<http://www.deanza.edu/ir/program-review_2013-14/CB_Div.pdf>).

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **African American** | **Asian** | **Filipino** | **Latino/a** | **Native American** | **Pacific Islanders** | **White** | **Declined to State** |
| **2013-2014** | 52% | 76% | 63% | 58% | 62% | 55% | 72% | 77% |
| **2014-2015** | 53% | 76% | 65% | 59% | 52% | 68% | 75% | 79% |
| **% Change** | **1%** | **0%** | **2%** | **1%** | **-10%** | **13%** | **3%** | **2%** |

*Table 5.* Enrollment by Ethnic Group (<http://www.deanza.edu/ir/program-review_2013-14/CB_Div.pdf>).

1. **Automotive Technologies and Design and Manufacturing Technologies:**

As shown in Table 6.0, the Applied Technology Division has an overall success rate of 83% which is 2% lower than 2013-2014. Although there is a drop of 2%, an 83% success rate is way above the college average. Although the gap between targeted and non-targeted groups was at 10% in 2014-2015, a 77% success rate for targeted groups is still above the campus average. The slight drop in success rates may be due to high demand in the job market as students are being offered attractive job offers, making it hard to stay in school and complete coursework.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2012-2013** | **2013-2014** | **2014-2015** | **1 Year Diff** |
| **Overall Success Rates** | 83% | 85% | 83% | -2% |
| **Targeted Groups** | 80% | 80% | 77% | -3% |
| **Non-Targeted Group** | 85% | 85% | 87% | 2% |
| **Difference** | **5%** | **5%** | **10%** |  |

*Table 6.* Success Rates for 2AT (<http://www.deanza.edu/ir/Program_Review_2014-15/AT_Div.pdf>)

Table 7.0 shows the success rates by ethics groups. The major decline is in the Pacific Islander group which has dropped from 85% to 50%. However, due to the small sample size, conclusions on the reasons cannot be accurately drawn.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **African American** | **Asian** | **Filipino** | | **Latino/a** | | **Native American** | **Pacific Islander** | **White** | **Declined to State** |
| **2013-2014** | 70% | 86% | 86% | 81% | | 75% | | 85% | 87% | 87% |
| **2014-2015** | 71% | 86% | 80% | 77% | | 72% | | 50% | 88% | 81% |
| **% Change** | **1%** | **0%** | **-6%** | **-4%** | | **-3%** | | **-35%** | **1%** | **-6%** |

*Table 7.* Enrollment by Ethnic Group for 2AT (<http://www.deanza.edu/ir/Program_Review_2014-15/AT_Div.pdf>).

**Job Forecast and Reflection on Enrollment:**

Table 8.0 shows the 2014-2024 Job Forecast per the US Department of Labor Statistics. In the third column, you will find a one year change in enrollment (2013-2014 to 2014-2015). For the most part, the decline could possibly be due to high demand in the job market. The Design and Manufacturing Technologies Department has been operating with only one full time faculty for the past 24 months. The search has failed twice and the position for a new member of the faculty is still open. Additionally new 3-D printing courses which will be introduced in Fall 2016 should help improve the enrollment. One department that is not expected to improve in enrollment anytime soon, is the Real Estate Department. At the moment, there are more real estate agents than the market needs. It is my understanding that some colleges in the surrounding area are closing or reducing course offerings in real estate. We have reduced our offerings and hope to pick up some of the students that no longer can enroll in the other colleges. Additional information regarding the real estate job market is shown at (<http://journal.firsttuesday.us/the-rises-and-declines-of-real-estate-licensees/2983/>).

|  |  |  |
| --- | --- | --- |
| **Discipline** | **2014-2024 Forecast** | **1 Year Change in Enrollment** |
| **Accounting** | 11% | -2.90% |
| **Automotive Technologies** | 5% | -3% |
| **Business** | 8% | 2.70% |
| **Computer Science** | 12% | 31.10% |
| **Design and Manufacturing Technologies** | 16% | -8.60% |
| **Real Estate** | 3% | -5.50% |

*Table 8.* Job Forecast 2014-2024 as the U.S. Department of Labor and Statistics.

**Equity:**

Table 9.0 displays the success rates and gaps in equity. The Applied Technology Program has the highest Targeted Group success rate with Automotive Technologies at 79%, Manufacturing at 74%, and CAD & Digital Imagining at 69%. Computer Science is at 60% with 1% improvement over 2013-2014. Although Accounting, Business, and Real Estate are under 60%, there has been a small percentage of improvement of one to two percent over 2013-2014. The increase in the Targeted Group success rate is a step in the right direction. The improvements are most likely a result of the Division’s Strategic Equity Plan which includes:

* Working with publishers to reduce the cost of textbooks.
* Using ebooks and customized editions when available.
* Purchasing some textbooks (e.g. Business 10) and placing them on short term loans in the Library.
* Adjunct skills courses (.5 unit courses funded by the Tutoring Center,Accounting and Business currently).
* Encouraging students to attend study skills workshops (in time management, test taking skills, and earning extra credit).
* Sharing of best practices among the faculty.
* Teaching Assistants in the CIS Lab.
* CodeLab Tutorial for CIS.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **2012-2013** | **2013-2014** | **2014-2015** |
| **Accounting** | Overall | 74% | 74% | 74% |
| Non-Targeted | 78% | 78% | 78% |
| Targeted | 57% | 56% | 58% |
|  |  |  |  |
| **Automotive Technologies** | Overall | 83% | 85% | 83% |
| Non-Targeted | 85% | 88% | 86% |
| Targeted | 80% | 80% | 78% |
|  |  |  |  |
| **Business** | Overall | 70% | 69% | 71% |
| Non-Targeted | 75% | 75% | 77% |
| Targeted | 57% | 57% | 58% |
|  |  |  |  |
| **Computer Information Systems** | Overall | 70% | 70% | 71% |
| Non-Targeted | 73% | 73% | 74% |
| Targeted | 58% | 59% | 60% |
|  |  |  |  |
| **Design and Manufacturing Technologies** | Overall | 84% | 83% | 85% |
| Non-Targeted | 85% | 84% | 89% |
| Targeted | 81% | 82% | 74% |
|  |  |  |  |
| **CAD & Digital Imagining** | Overall | 74% | 75% | 75% |
| Non-Targeted | 75% | 76% | 77% |
| Targeted | 71% | 72% | 69% |
|  |  |  |  |
| **Real Estate** | Overall | 72% | 68% | 69% |
| Non-Targeted | 76% | 71% | 72% |
| Targeted | 54% | 57% | 59% |

*Table 9.* Success Rates and Gaps in Equity

**Requested Budget:**

1. **Accounting, Business, CDI, Computer Science and Real Estate:**

Table 10.0 shows the requested budget for Accounting, Computer Science, and Real Estate. A total of $282,070.66 has been requested by the four departments. For details, refer to each program annual program review.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Program** | **Dean's Ranking** | **Dept Ranking** | **Item**(please remember, the per item value must be over $100) | Life Expectancy of item (years) | Per Item Cost | How Many? | Estimated Cost inc. tax and shipping | Total Cost | Funding |
| **Accounting** | 1 | 1 | Software for Quickbooks and Peachtree | 1 | $ 750.00 | 2 | $ 1,631.25 | $ 1,631.25 | Lottery |
| **CIS** | 2 | 1 | CodeLab Annual License | 1 | $ 12,500.00 | 1 | $ 27,187.50 | $ 27,187.50 | Lottery |
| **CIS** | 3 | 1 | A Mac classroom equipped with a Mac computer for each student to use (evening would work) | Same as any classroom with computers | $ 2,000.00 | 45 | $ 98,875.00 | $ 98,875.00 |  |
| **Business** | 4 | 1 | Hire a programmer to turn Byron Lilly's Custom Homework Builder into something everyone in our division could use. | 5 | $ 10,000.00 | 1 | $ 10,000.00 | $ 10,000.00 |  |
| **Business** | 5 | 2 | Purchase a site license for a business simulation game | 5 | $ 15,000.00 | 1 | $ 15,000.00 | $ 15,000.00 | Lottery |
| **Accounting** | 6 | 3 | Simulation Software Acct 1C | 1 | $ 53.99 | 200 | $ 10,798.00 | $ 10,798.00 | Lottery |
| **CIS** | 7 | 1 | More electrical outlets are needed in the lab | 10 years | $ 125.00 | 119 | $ 14,875.00 | $ 14,875.00 |  |
| **CIS** | 8 | 1 | Two more smart classrooms between the hours of 6:00 - 8:00 pm; one more classroom during the daytime (9:30 - 5:20 pm). | Same as any classroom with computers | $ 5,000.00 | 2 | $ 10,875.00 | $ 10,875.00 |  |
| **Accounting** | 9 | 2 | White Boards in L-81 and 84 | 10 | $ 750.00 | 2 | $ 1,731.25 | $ 1,731.25 |  |
| **CIS** | 10 | 1 | Each Full-time CIS Faculty member's office desktop computer needs parallel software to software on computers in AT 203 and in the classrooms. Office computers need direct access to AT 203 server. | No time limit | ETS Labor | 0 | ETS Labor | ETS Labor |  |

*Table 10.* Requested Budget for Accounting, Computer Science, and Real Estate

*Table 10.* Continue…

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Program** | **Dean's Ranking** | **Dept Ranking** | **Item**(please remember, the per item value must be over $100) | Life Expectancy of item (years) | Per Item Cost | How Many? | Estimated Cost inc. tax and shipping | Total Cost | Funding |
| **CIS** | 11 | 2 | Re-design for AT 205 (This could be accomplished by smaller desks and/or chairs with smaller footptint) | 10 years | $ 243.00 | 40 | $ 10,670.50 | $ 10,670.50 |  |
| **CIS** | 12 | 1 | PolyCom phone to allow dial-in access to the meetings in AT 203F. | 5 years | $ 232.95 | 1 | $ 278.33 | $ 278.33 |  |
| **CIS** | 13 | 1 | Lab 203 is too dark especially in the corner by the door from the lab to room 205 | 10 years | $ 429.00 | 15 | $ 7,198.06 | $ 7,198.06 |  |
| **CIS** | 14 | 1 | Computer in AT 203F cloned as computers in lab | 5 years | $ 1,200.00 | 2 | $ 2,610.00 | $ 2,610.00 |  |
| **CIS** | 15 | 2 | Smart boards for the classrooms | 10 yrs | $ 3,999.00 | 8 | $ 35,791.30 | $ 35,791.30 |  |
| **CIS** | 16 | 3 | A second overhead projector | 10 yrs | $ 3,628.00 | 4 | $ 16,781.80 | $ 16,781.80 |  |
| **CIS** | 17 | 3 | Noise level abatement in AT 203 such as partitions, i.e. higher partition than now exits) http://www.globalindustrial.com/g/office/partitions/panels/global-office-partition | Same as current | $ 124.95 | 20 | $ 3,717.66 | $ 3,717.66 |  |
| **CIS** | 18 | 1 | Each FT CIS Faculty member needs a laptop in addition to a desktop. The laptop needs software in parallel to software used by students in lab and classrooms | 5 years | $ 1,200.00 | 10 | $ 14,050.00 | $ 14,050.00 |  |

*Table 10.* Continue …

1. **Automotive Technologies and Design and Manufacturing Technologies:**
2. ***Design and Manufacturing Department***

Table 11.0 shows the requested budget for the Design and Manufacturing Department. For additional details, please refer to the department annual program review report.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Priority** | **Item(please remember, the per item value must be over $100)** | **Life Expectancy of item (years)** | **Per Item Cost** | | **How Many?** | | **Estimated Cost inc. tax and shipping** | **Total Cost** |
| 1 | HAAS VF2 SS 4/5 axis capabilities | 10 | $ 95,328.00 | | 2 | | $ 103,500.00 | $ 207,000.00 |
| 2 | HAAS SL20 Y Axis live Tooling | 10 | $ 93,995.00 | | 2 | | $ 102,000.00 | $ 204,000.00 |
| 3 | HAAS UMC 750 SS 5 axis machine | 12 | $ 186,500.00 | | 1 | | $ 205,818.00 | $ 205,818.00 |
| 4 | 14" Engine Lathes | 20 | $ 23,000.00 | | 3 | | $ 26,000.00 | $ 78,000.00 |
| 5 | Vertical Manual Milling Machines | 20 | $ 15,000.00 | | 3 | | $ 18,500.00 | $ 55,500.00 |
| 6 | Surface Grinder | 20 | $ 19,000.00 | | 1 | | $ 23,000.00 | $ 23,000.00 |
| **Total** | | | | | | | | **$ 773,318.00** |
|  | **SOFTWARE FOR EXSISTING PROGRAM NEEDED TO RUN CLASSES (HAS BEEN PAID FOR BY LOTTERY).** | | | | | | | |
| 1 | Mastecam annual update | 1 | $ 2,400.00 | 1 | | $ 2,400.00 | | $ 2,400.00 |
| 1 | NIMS National Certification annual | 1 | $ 5,000.00 | 1 | | $ 5,000.00 | | $ 5,000.00 |
| 1 | Vericut Simulation annual update | 1 | $ 1,000.00 | 1 | | $ 1,000.00 | | $ 1,000.00 |
| 1 | SilidWorks CAD annual update | 1 | $ 3,000.00 | 1 | | $ 3,000.00 | | $ 3,000.00 |
| 1 | NX (both cad and cam) annual update | 1 | $ 3,720.00 | 1 | | $ 3,720.00 | | $ 3,720.00 |
| **Total** | | | | | | | | **$ 15,120.00** |

*Table 11.* Requested Budget for the Design and Manufacturing Department

1. ***Automotive Technologies Department***

Table 12.0 shows the requested budget for the Automotive Technologies Department. For additional details, please refer to the department annual program review report.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Priority** | **Item(please remember, the per item value must be over $100)** | **Life Expectancy of item (years)** | **Per Item Cost** | **How Many?** | **Estimated Cost inc. tax and shipping** | **Total Cost** |
| 1 | New transmission dynamometer | 10 | $ 106,000.00 | 1 | $ 106,000.00 | $ 106,000.00 |
| 2 | A new flush mount alignment rack | 15 | $ 45,000.00 | 1 | $ 45,000.00 | $ 45,000.00 |
| 3 | New 5 gas emissions analyzers. | 5 | $ 4,999.00 | 4 | $ 19,996.00 | $ 19,996.00 |
| 4 | Rottler F9A CNC Boring Machine for sleeving and boring | 10 | $ 38,500.00 | 1 | $ 38,500.00 | $ 38,500.00 |
| 5 | Rottler HP7A Automatice Cylinder Hone for new materials | 10 | $ 30,000.00 | 1 | $ 30,000.00 | $ 30,000.00 |
| 6 | New low amp current probes. | 3 | $ 125.00 | 10 | $ 1,250.00 | $ 1,250.00 |
| 7 | Fluke 375 Fluke 600A TRMS AC/DC CLAMP | 4 | $ 287.92 | 4 | $ 1,151.68 | $ 1,151.68 |
| 8 | New air conditioning servicing equipment. | 5 | $ 7,500.00 | 1 | $ 75,000.00 | $ 7,500.00 |
| **Total** | | | | | | **$ 249,397.68** |

*Table 12.* Requested budget for the Automotive Technologies Department