

PROGRAM: Drafting Technology

DIVISION: Technology

1. **BRIEF DESCRIPTION OF PROGRAM:**

Drafting is common to all manufacturing and construction activities. The drafter interprets the engineer's, architect's and industrial designer's ideas, presenting them in the language of manufacturing and construction.

Currently the program offers an AS degree, a Certificate of Achievement and Certificates of Specialization.

2. **Based on the elements in your *Core Program and Student Success Indicators* (provided by PRIE for each program) and the goals stated in your most recent Program Review, please identify any key successes and challenges.**

The program provides current AutoCAD and SolidWorks software.

The last PIV process reduced the core program to four classes to accommodate budget cut backs.

The Drafting department was also physically reduced from three labs to one due to building renovations.

Equipment failure due to out of date computers negates marketing the program until new computers are obtained.

3. **Are you on track for meeting the goals/targets that your program identified in its most recent Program Review? If not, please explain possible reasons why. If needed, update your goal/targets based on these reasons.**

A SolidWorks II class has been added to the curriculum as per the recommendation of the PIV committee.

We are unable to run additional courses due to budget cuts and lab configurations that do not support the program.

4. **Have you identified any new goals or projects for the program to focus on during this next year? Please explain (grants, stipends, initiatives, etc.).**

A new computer lab has to be identified and refurbished (computers, printer & furniture) since in Spring 08 one of the computer labs was staged for student services. The current lab (19-110) requires new computers since they are out of date according to ITS. ITS has

replaced motherboards and fans in many of the stations although, the computers freeze up due to the complexity of the software programs.

5. **Are there any critical issues you expect to face in the coming year? How will you address those challenges?**

Critical Issues:

- Software and hardware must be kept current; this requires funding.
- Faculty recruitment; growing the program may require additional adjunct faculty.
- The need for surge space on campus has resulted in the loss of one of two DRAF computer labs; program requires sufficient lab space to run two classes (each using 20-30 computers) simultaneously.

The following goals would be incorporated if new computers were provided.

- Modify the drafting curriculum so that program is attractive to a broader range of students. Possible courses targeting Veterans and handicapped students could be added.
- Integrate model-making into the drafting curriculum. Obtain funding for a small, tabletop, "clean" manufacturing unit for each lab to allow CAD/CAM demonstrations in the classroom in each course.
- **Increase efforts in marketing, recruitment, and placement**
 - Emphasize the AutoCAD and Solidworks brands in the marketing and recruitment effort.
 - Develop an attractive brochure that reflects the (to be) modified course offerings.
 - Consider promoting the program on KCSM, Peninsula TV, and elsewhere.
 - Pursue concurrent enrollment students, especially at high schools without drafting/CAD programs.
 - Consider scheduling of classes to promote concurrent enrollment.
 - Develop transfer articulation agreements with CSU schools offering CAD/Drafting/Document Control concentrations as part of an Industrial Technology or Industrial Design major.

NOTE: The recent switch to networked software allows use of other labs on campus. In the past we have recommended scheduling classes at CSM and at Canada in order be able to use the same software licenses thus saving the District a considerable amount of money.

6. **STUDENT LEARNING OUTCOMES (SLOs) AND ASSESSMENT FOCUS FOR THIS YEAR:**

- a. **Academic areas: Identify at least one course SLO on which to focus. Describe the assessment strategies you will use and your method of reflection and documentation for this cycle.**

Judge and select correct drawing processes and procedures to synthesize and integrate information in drawings and assemblies.

Using a timed drawing quiz, the instructor will analyze and evaluate the results and then revise the curriculum accordingly.

7. **SUMMARY OF RESOURCES NEEDED TO REACH PROGRAM ACTION STEPS**

(Data resources: Educational Master Plan, 2008 (EMP); Data Updates to EMP, 2011-12; Institutional Priorities, 2008-2011; 5 & 5 College Strategies; College Index, 2008/9-2011/12; GE-SLOs; SLOs; other institutional data; department records; Core Program and Student Success Indicators; previous Program Review and Planning reports)

- a. In the matrices below, itemize the resources needed to reach program action steps and describe the expected outcomes for program improvement.* Specifically, describe the potential outcomes of receiving these resources and the programmatic impact if the requested resources cannot be granted.

*Note: Whenever possible, requests should stem from assessment of SLOs and the resulting program changes or plans. Ideally, SLOs are assessed, the assessments lead to planning, and the resources requested link directly to those plans.

Full-Time Faculty Positions Requested	Expected Outcomes if Granted and Expected Impact if Not Granted	If applicable, <u>briefly</u> indicate how the requested resources will link to achieving department action steps based on SLO assessment.
Adjunct Faculty can be called in until a new lab is identified as well as new computer stations.	N/A	N/A

Classified Positions Requested	Expected Outcomes if Granted and Expected Impact if Not Granted	If applicable, <u>briefly</u> indicate how the requested resources will link to achieving department action steps based on SLO assessment.
None required since the hour by arrangement per week has been removed from the COI forms. Students are able to have the programs for free on their home computers or use the CIS open lab	N/A	N/A

- b. For instructional resources including equipment and materials, please list the exact items you want to acquire and the total costs, including tax, shipping, and handling. Include items used for instruction (such as computers, furniture for labs and centers) and all materials designed for use by students and instructors as a learning resource (such as lab equipment, books, CDs, technology-based materials, educational software, tests, non-printed materials). Add rows to the tables as necessary. If you have questions as to the specificity required, please consult with your division dean. Please list by priority.

Resources Requested	Expected Outcomes if Granted and Expected Impact if Not Granted	If applicable, <u>briefly</u> indicate how the requested resources will link to achieving department action steps based on SLO assessment.
<p>Item: 30 Number: Dell Optiplex Vendor: Dell Unit price: \$1486. Total Cost: \$48712.00 Status*: Replacement</p> <p>Item: SolidWorks Software Upgrade Number: 30 Station network License Vendor: Oliver Labs Total Cost: \$2003.00 Status*: Upgrade</p> <p>Item: AutoCAD Software Upgrade Number: 30 Station network License Vendor: AutoDesk Total Cost: \$3200.00 Status*: Upgrade</p>	<p>If we had new computers we would be able to market the program to specific groups such as handicapped Veterans or people in wheelchairs.</p> <p>If we had two labs we would be able to build the program to the specifics of the Advisory Committee recommendations.</p> <p>Please note that this software package includes complete software packages that we do not use but Canada does (such as Maya).</p>	<p>We are not able to teach the advanced courses thus, we have to revise the certificate of completion as well as the A.S. and A. A. Degree requirements.</p> <p>The program will not be able to adhere to degrees and certificates requirements nor will it be able to accomplish the goals set forth in the PIV or in Certificate SLOs.</p>

*Status = New, Upgrade, Replacement, Maintenance or Repair.

8. PROGRAM REVIEW PARTICIPANTS AND SIGNATURES

Date of this *Annual Update for Program Review and Planning* evaluation: 20 March 2012

Please list the department's *Annual Update for Program Review and Planning* report team [as appropriate](#):

Primary program contact person: Lilya Vorobey
Phone and email address: 358.6758 vorobey@smccd.edu
Full-time faculty:
Part-time faculty:
Administrators: Kathleen Ross
Classified staff:
Students:

Lilya Vorobey	20 March 2012
<i>Primary Program Contact Person's Signature</i>	<i>Date</i>
Lilya Vorobey	20 March 2012
<i>Full-time Faculty's Signature</i>	<i>Date</i>
<i>Part-time Faculty's Signature</i>	<i>Date</i>
	(as appropriate)
<i>Classified Staff Person's Signature</i>	<i>Date</i>
	(as appropriate)
<i>Student's Signature</i>	<i>Date</i>
	(as appropriate)
Kathleen Ross	March 25, 2012
<i>Dean's Signature</i>	<i>Date</i>