COMPUTER AIDED DESIGN/DRAFTING PROGRAM REVIEW

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I. Overview

A. Description of Program

The Computer Aided Design/Drafting (CADD) program prepares students for employment in career fields utilizing computer aided drafting processes, and provides upgrade opportunities for currently employed personnel. By completing the degree or certificate requirements, the student will gain proficiency in sketching, manual and CADD fundamentals, three dimensional design and modeling, and geometric dimensioning and tolerancing. Competencies will be assessed regularly by student performance using industry standard computer hardware and software. Students completing the program may expect to enter industry as CADD drafters or modelers in mechanical design, aerospace, automotive, or other related fields.

B. Status of Previous Recommendations

Previous Program Review not yet posted online. Copy is on order from Academic Affairs office.
II. Program Statistics

A. Demand: FTES by Course/Program

Instructions: Analyze the **FTES by Course/Program** using 1st census data and answer the following questions. At a minimum, your analysis must include a 3-year cycle comparing like semesters.

<table>
<thead>
<tr>
<th>Course</th>
<th>Year 1 (Term and year)</th>
<th>Year 2 (Term and year)</th>
<th>Year 3 (Term and year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CADD 5</td>
<td>FALL 2004</td>
<td>FALL 2005</td>
<td>FALL 2006</td>
</tr>
<tr>
<td>CADD 10</td>
<td>FALL 2004</td>
<td>FALL 2005</td>
<td>FALL 2006</td>
</tr>
<tr>
<td>CADD 45</td>
<td>FALL 2004</td>
<td>FALL 2005</td>
<td>FALL 2006</td>
</tr>
</tbody>
</table>

1. Given the data, can you recognize any trends in course demand in any of the Program’s courses?
   **Decrease in demand**

2. What are you doing to respond to trends?
   **Schedule fewer sections. Advertise availability with other departments**

3. Should a recommendation be written addressing the data? _____ Yes ___X__ No
   (If yes, list.)

B. Offerings: Fill Rate*

Instructions: Review and analyze the **fill rate data** (including the fill rate per course for both day and evening), provided by Institutional Research for this program for a three year cycle and answer the following questions:

**Survey will be given in the Spring Semester. Currently involved with Research dept (Irene Graf) on this issue.**

Average fill rate of courses in program: How does this program compare to:

<table>
<thead>
<tr>
<th></th>
<th>Year 1 (Term and year)</th>
<th>Year 2 (Term and year)</th>
<th>Year 3 (Term and year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day classes</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Evening classes</td>
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<td></td>
</tr>
</tbody>
</table>

1. Given the data, is the program in a growth mode? _____ Yes ___X__ No
   **Due to the cyclical nature of local industry (mainly aerospace) and economic trends (high cost of living, longer commute time, etc.) we are experiencing a dip in enrollment**

2. What adjustments are indicated?
   **Reduction in offerings. Schedule adjustments until conditions improve.**

3. Should a recommendation be written that addresses the data? _____ Yes ___X__ No
   (If yes, list.)
C. Scheduling: Student Satisfaction with Scheduling

Instructions: Complete the chart below. Indicate the time when sections of courses in the program are currently scheduled to start. Analyze the data provided by Institutional Research on student satisfaction with scheduling in the program and answer the questions.

Survey will be given in the Spring Semester. Currently involved with Research dept (Irene Graf) on this issue.

<table>
<thead>
<tr>
<th>Course</th>
<th>During the early morning before 10 am</th>
<th>During the late afternoon 2 pm -4:25 pm</th>
<th>During the evening 4:30 &amp; later</th>
<th>During the weekend</th>
<th>During the summer</th>
<th>Via Telecourse</th>
<th>Via Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>CADD 5</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CADD 10</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CADD 26</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CADD 27</td>
<td>X</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CADD 28</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CADD 31</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CADD 32</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CADD 33</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CADD 37</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CADD 45</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CADD 47</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CADD 49</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. What (if anything) is indicated by the student satisfaction with scheduling?

Students prefer access to classes outside of normal working hours.

2. Are there time periods of high student demand which are not being addressed? ____ Yes ___ X__ No
   How could such demand be addressed?

3. Should a recommendation be written addressing this area? _____ Yes ___X__ No
   (If yes, list.)

D. Retention and Success

1. Retention
Instructions: Review and analyze the data on retention (course completion with a grade other than W) over a three-year cycle comparing day to evening classes, term to term (e.g. fall to spring, spring to summer, etc.), and course levels.

Currently involved with Research dept (Irene Graf) on this issue.

1. Given the data, what trends are observed?
Comment.

No overall trend noted. Good retention for weekend classes.

2. Should a recommendation be written addressing the data? _____ Yes __X__ No
(If yes, list.)

2. Success Rate

Instructions: Review and analyze the data on success rate (students who earned a grade of A,B,C, or Credit) over a three-year cycle comparing day to evening classes, term to term (e.g. fall to spring, spring to summer, etc.), and course levels and answer the following questions:

Currently involved with Research dept (Irene Graf) on this issue.

1. What trends are observed?

No overall trend noted

2. Should a recommendation be written addressing the data? _____ Yes __X__ No
(If yes, list.)

III. Curriculum
A. Course and Content

1. Courses Not Offered
Instructions: Indicate the total number of courses in the program and list all courses in the program which are in the catalog but have not been offered in the last three years. Refer to this list to answer the following questions:

13 courses – total
All offered in the last 3 years

1. Given the data, are there courses that should be inactivated? _____ Yes __X__ No
Comment.
2. If there are courses not offered in the last three years that you do not wish to inactivate, what reasons are there to keep them active?

3. Should a recommendation be written addressing the data? _____ Yes ___X__ No
   (If yes, list.)

2. Course Revisions and Additions

Instructions: Utilize the Course Review Chart from the Curriculum Office to answer the following:

1. Are there course outlines that should be revised? _____ Yes ___X__ No
   (If yes, list.)

2. Are there courses inconsistent with current practice in the field? ___ Yes _X__ No
   Explain.

3. Should new courses to be added to the program? _____ Yes ___X__ No
   Explain.

4. Are adjustments necessary to the conditions of enrollment (Prerequisite, Corequisite, Recommended Preparation, and Enrollment Limitations) for a specific course to increase student success?
   _____ Yes _X__ No _____ Uncertain Comment.

5. If the program offers a degree and/or certificate, list them and indicate when the requirements were last reviewed?  (If not applicable, skip to Question 7.)
   **Associate in Science degree**  04/13/2001
   **Certificate of Completion**   04/13/2001
Certificate of Competence       0 4/13/2001

6. Are these degree and/or certificate requirements inconsistent with current practice? ___ Yes ___X__ No
   Explain.

7. Is there a need to create or delete a degree and/or certificate? _____ Yes ___X___ No
   Explain.

8. Should any recommendations be written that address the above responses? ______ Yes _____X___ No
   (If yes, list.)
B. Articulation

Instructions: Articulation is the process by which courses taken at ECC can be used to satisfy subject matter requirements at another college or university. This is important in the transfer process for students. To help you in this area, you can review articulation agreements at www.assist.org, the California Articulation Number Guide or meet with the Articulation Officer, Lori Suekawa (ext. 3517).

1. Are there any courses in your curriculum which are part of a lower division preparation for the major that are not articulated with our major transfer institutions?

All courses are on the CSU Baccalaureate Level Course List.

2. What problems, if any, are there in articulating these courses?

-NA-

3. Should a recommendation be written addressing above responses? _____ Yes __X___ No

   (If yes, list.)

C. Instruction and Assessment

1. Learning Methods

1. What learning methods are incorporated inside and outside the classroom in the program to promote student success? Explain.

   Lecture
   Demo
   Lab
   Testing
   Projects

2. Should a recommendation be written addressing above response? _____ Yes __X___ No

   (If yes, list.)

2. Assessment

1. How do you evaluate the extent to which the learning objectives, skills, and competencies are being met?

   A) Courses – Lab assignments, Projects, Testing
   B) Program - Review
2. How do you use the results of the above evaluation to improve student learning and the quality of the program?

Information is used to adjust the pace and content of the lectures and assignments, so that students can absorb the information.

3. Should a recommendation be written addressing this area? _____ Yes _____ No (If yes, list.)

IV. Program Requirements
A. Instructional Support

1. Identify key instructional support areas used by the program.

<table>
<thead>
<tr>
<th>Libraries &amp; Programs:</th>
<th>Special Resource Center</th>
<th>Basic Skills Study Center</th>
<th>Library Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Library</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music Library</td>
<td>Puente Program</td>
<td>Honors Transfer Program</td>
<td>Other (Please list.)</td>
</tr>
<tr>
<td>Learning Resource Center Media Materials Collection</td>
<td>Assessment/Testing Office</td>
<td>Counseling</td>
<td></td>
</tr>
<tr>
<td>X EOP&amp;S/CalWORKS</td>
<td>Transfer Center</td>
<td>First Year Experience</td>
<td></td>
</tr>
<tr>
<td>Learning Communities</td>
<td>Project Success</td>
<td>Honors Transfer Program</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Computer Labs &amp; Tutoring:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LMTC Computer Commons</td>
<td>SRC High Technology Center</td>
<td>Other Computer Lab: Please list.</td>
<td>Writing Center</td>
</tr>
<tr>
<td>CAI MAC Lab</td>
<td>Writing Lab</td>
<td></td>
<td>LRC Tutorial Program</td>
</tr>
<tr>
<td>CAI Windows Lab</td>
<td>Math &amp; Science Lab</td>
<td></td>
<td>Math Tutoring</td>
</tr>
<tr>
<td>X TOP Lab</td>
<td>Keyboarding Center</td>
<td></td>
<td>SRC Tutorial Program</td>
</tr>
<tr>
<td>Hawthorne BTC</td>
<td></td>
<td></td>
<td>EOP&amp;S Tutoring</td>
</tr>
<tr>
<td>Inglewood Center</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty Support Services:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>X Graphic Arts</td>
<td>Copy Center</td>
<td>Distance Education</td>
<td>Other (Please list.)</td>
</tr>
<tr>
<td>X Media Services AV Production</td>
<td>Tech Services Help Desk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X Media Services AV Equipment Distribution</td>
<td>Support Staff</td>
<td>Webconferences</td>
<td></td>
</tr>
<tr>
<td>ECC Vehicles</td>
<td>ECC hosted Websites</td>
<td>Staff Development</td>
<td></td>
</tr>
<tr>
<td>X ECC E-mail</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Do you have some instructional support needs that are not being met? ____ Yes ____ X__ No
Comment.

3. Should a recommendation be written to address your needs? ____ Yes ____ X__ No
(If yes, list.)

B. Facilities and Equipment

1. Does the program make effective use of its facilities and equipment? Explain.
Yes, we have a good open and shared lab relationships with several department in the Tech Arts building to maximize efficiency and keep overall costs low.

2. Are adequate facilities, equipment and supplies available for the program? ____ X__ Yes ____ No
Explain.
The yes answer applies only for the present semester. We are thoroughly dependent on upgrading our technology to keep up with local industry specifications.

3. Are the facilities and equipment adequately maintained? ____ X__ Yes ____ No
Explain.
ECC Support Services maintains our computers and software adequately

4. Should a recommendation be written addressing the data? ____ X__ No
(If yes, list.)

C. Staffing

Instructions: Analyze the data on FTEF, adjunct FTEF, and the FT/PT ratio for the most recent fall semester and answer the following questions:

FTEF (full-time equivalent faculty): # ____ 3 ____

Number of full-time FTEF: # ____ 3 ____
Number of adjunct FTEF: # ____ 6 ____

FT/PT load ratio: ____ 0.5 ____
1. How do the program numbers compare to a like semester (Fall to Fall) three years ago or the previous program review?
   
   **Similar ratio since last program review**

2. What do the program data indicate? Comment on any trends or unusual data.
   
   **No comment**

3. How does the FT/PT ratio benefit or harm the program?
   
   **The FT/PT mix, includes faculty from various “real world” backgrounds and expert knowledge, which benefits the student population and provides diverse knowledge and opinion.**

4. Do you have a faculty mentoring program? _____ Yes ___X___ No
   
   **Describe.**

5. How do faculty maintain currency in their field?
   
   **Seminars, Training, Work**

6. Fill in the faculty status data below and answer the questions that follow.

<table>
<thead>
<tr>
<th>Name</th>
<th>Reassigned time (how much in %)</th>
<th>Currently on leave (check)</th>
<th>Retired in last 2 years (check)</th>
<th>FT hired last 3 years (check)</th>
<th>Anticipated to retire in next 3 years (check)</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Carr</td>
<td>33%</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Rick Hughes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Douglas Glenn</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glenna Johnson</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Dan Valledares</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charles Hamilton</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hector Morales</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jerry Karpinski</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sue Wenzlaff</td>
<td></td>
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</tr>
</tbody>
</table>

6a. How does this data impact the program?

   **No comment**

6b. Will this data affect the program in the future?

   **No**
7. From this information, can you identify present and future staffing needs?  __X__ Yes  

No  
**Pending retirements may require the hiring of Full Time faculty**

8. What is the department doing to address any future staffing needs?  

**Part Time faculty hired as needed.**

9. Should a recommendation be written addressing the data?  _____ Yes  ____X__ No  

(If yes, list.)

**D. Planning**

1. Do the program faculty and other personnel have a clear idea of what is happening in the program, where it is headed, what external changes are affecting it, and what changes need to be made in order to enable the program to adapt and continue to be successful?  

**Current Faculty and Personnel understand the challenges**

2. What data, not currently provided, would be needed in order to improve planning for the development of the program?  

**None**

3. What major external changes or trends do you expect to be of particular relevance to your discipline in the next five years?  

**Increase in “non-traditional” class structure including “online” and “as needed” course data.**  

**Increase in an open lab environment. All of these changes brought on by increases in technology, demographics, and student expectations.**

4. What will the implications of these changes or trends be for the program and how will the program need to respond?  

**ECC as a whole will need to address these issues, Make funding available for this environment, and reduce the time needed to “green light” new methods and technologies**

5. Based upon the information above, how would you like the program to evolve within the next five years?  

**A flexible learning environment including:**  

- open labs (24/7)  
- Flexible lecture dissemination – classroom, online, podcast, hybrid  
- All classes converted to (8) week  

6. Should a recommendation be written addressing the data?  _____ Yes  ____X__ No
(If yes, list.)
V. Conclusion

1. Prioritized Recommendations

   Need Additional Data

2. Major Needs

   Need Additional Data

3. Strategies

   Need Additional Data