

PROGRAM NAME: Computer-Aided Drafting and Design Program Information

ACADEMIC YEAR: 2013-2014

INSTRUCTIONAL PROGRAM REVIEW

The timeframe of program review is five years, including the year of the review. Data being reviewed for any item should go back the previous four years, unless not available. Questions regarding forms, calendars & due dates should be addressed to the I.E. Department.

I. PROGRAM RELATIONSHIP TO THE COLLEGE MISSION & STRATEGIC PLAN

- A. Describe how the program supports the college [mission](#) and [core values](#).

Collin County Community College District is a student and community-centered institution committed to developing skills, strengthening character, and challenging the intellect. We have a passion for: Learning, Service and Involvement, Creativity and Innovation, Academic Excellence, Dignity and Respect, and Integrity.

1. Collin College's Computer-Aided Drafting and Design Program is designed to impart within successful students a fundamental knowledge of Computer-Aided Drafting and Design. Throughout the program students are intellectually challenged to learn the most up to date CADD standards and new technology to become workforce ready. A fundamental component of the CADD program is the development of skill sets, abilities and behaviors that mold the professional character that our Advisory Board Members seek in potential employees.

- B. Describe how the program supports the college [strategic plan](#).

Strategic Goal #1 - Improve academic success by implementing strategies for completion. The CADD department supports this by directly working one-on-one with an Academic Advisor. This advisor is in direct contact with the Full Time CADD Faculty to ensure the students receive personalized degree plans including declaring a major and degree/certificate goal when first enrolling in the Collin College CADD program.

Strategic Goal #2 - Provides access to innovative higher education programs that prepare students for constantly changing academic, societal and career/workforce opportunities. At the request of the program's industry advisory board, the CADD department implemented a new Mechanical CADD Certificate into the program during the 2011-2012 academic year. This certificate supports the needs of local businesses that require their CADD drafters to demonstrate some skills that are closely aligned with mechanical engineering. The CADD department is working with the The CADD Advisory Board on how to bring Building Information Modeling (BIM) into the courses along with faculty attending the annual BIM 4 & 5D Scheduling and Project Delivery Platform Symposium at Texas A&M Commerce. Currently we are using BIM

software in two of our courses. The program is using the most current software available to start embedding BIM within the program. Recently, the CADD program began teaching DFTG1309-Basic CADD online and the program is planning to begin teaching DFTG1305-Technical Drafting and DFTG2319-Intermediate CADD online (pending approval from the Online Advisory Board) in Fall 2014. These courses are two introductory courses and one intermediate course that will increase access to the courses by a larger number of students. This initiative is directly related to increased enrollment and completers.

The CADD department has partnered with Allen and Prosper Independent School District to expand the program by offering dual credit. This allows student to attain credit prior to high school graduation while allowing students to be exposed to potential careers that require CADD expertise. Finally, the department has provided oppertunities for local employers to come and Interview students and evaluate projects. This has provided job oppertunities and interview skills for the students.

Stategic Goal #4 - Enhance the College's presence in the community by increasing awareness, cultivating relationships, building partnerships and developing resourses to respond to currect and future needs. The CADD department has initiated new partnerships between Advisory Board members and the college's Co-Op department. This has increased our Co-op oppertunities to help ensure students are completing our program and being awarded degrees and certificates. Our Co-Op oppertunities are leading into employment oppertunities for our students on full-time bases. We designed new CADD brochures and pop up banners to use in the farious technology fairs around the community.

II. PROGRAM CURRICULUM

Sections A, B & C apply only to workforce programs.

- A. Attach all course syllabi with SCANS included. ***(Workforce Programs only)(Please See Appendix A)***
- B. Show evidence that the THECB standards listed below have been met. For any standard not met, describe the plan for bringing the program into compliance. ***(Workforce Programs only)***
 1. Credit Hour Standard: There are no more than 60 credit hours in the program plan.

Number of semester credit hours (SCH) in the program plan: 64-65 of SCH .

If there are more than 60 SCH in the plan, show revision of curriculum. Work with the program's curriculum coordinator

to bring the revised program plan to the Curriculum Advisory Board (CAB).

At the time of the CADD Program Review the plan to reduce the AAS degree to 60 Semester Credit Hours is being developed for review and approval by CAB. The plan for CADD will involve two steps as we complete this program review. We have identified one course that appears to be a barrier to completion in the program, and we feel that we will need to bring that to the attention of the program Advisory Board. Please see section D.

2. Completers Standard: Average 25 completers over the last five years or five completers per year.

Number of completers: 61 AAS degrees and certificates were awarded during the review period, placing the program above the state standard. Additionally, 73 Marketable Skills Achievement Awards and 35 workforce core completion certificates were also awarded during the program review period.

If below the state standard, attach a plan for raising the number of completers by addressing barriers to completion and/or by increasing the number of student enrolled in the program. Definition of completer—Student has met the requirements for a degree or certificate (Level I or II)

N/A

3. Licensure Standard: 90 % of first time test takers pass the Licensure exam.

If applicable, include the licensure pass rate: N/A

For any pass rate below state standard, attach a plan for raising the pass rate.

N/A

C. Current Curriculum (*Workforce Programs only*)

1. Is the program curriculum up-to-date? Please review Collin College's program curriculum at the following levels:
 - a. Compared to similar programs at peer schools,

- b. Compared to the first two years of baccalaureate requirements in related fields at Collin College's top ten transfer institutions or existing articulation agreements, and
- c. Any professional association standards or guidelines that may exist relevant to the program.

If the program curriculum differs significantly from these benchmarks, explain how the Collin College curriculum benefits students and other college constituents.

a.) SUMMARY OF COLLIN COLLEGE'S CADD PROGRAM COMPARED TO PEER INSTITUTIONS

A survey was made of CADD Programs offered by five colleges, including Collin College. Collin College and Mountainview-Eastfield College offer five awards; Texas State Technical College and Richland College offer four awards; and Grayson College offers three awards. McLennan Community College was found to no longer be offering CADD courses.

All five Colleges offer AAS awards but vary in fields of study. Richland College concentrates on Manufacturing Technologies; Mountainview/Eastfield College addresses Manufacturing Technologies, Architecture, and general CADD studies; Grayson County College focuses upon general CADD studies; Texas State Tech. College offers Architectural and Mechanical/Electronic CADD studies; and Collin concentrates on Architectural and Mechanical CADD studies. Compared to these Colleges, Collin College has a balanced program that does not compete with the others who concentrate on technologies that are not offered at Collin. Collin College has partnered with industry, through periodic CADD Advisory Board meetings, in making sure that the CADD program meets their needs.

The numbers of CADD Courses listed for the Colleges studied are: Collin College 19, Richland College 7, Mountainview/Eastfield 27, Grayson College 16, and Texas State Technical College 14.

Geographically, Collin College's Preston Ridge Campus is situated from between 20 and 113 miles from the colleges studied. It is located far enough from other Colleges so as not to be in competition with their programs.

Owing to its location, available Awards, and number of courses, Collin College's CADD program provides Collin County students ample opportunity for a CADD education that is in tune with industry.

Reference material supporting this study is located in **Appendix B**.

b.) For the most part, Workforce courses do not transfer to baccalaureate programs. However, many University bound students take our Computer Aided Drafting and Design courses in preparation for Architectural and Engineering baccalaureate programs.

c.) Our AAS Computer Aided Drafting and Design degree as well as our Computer Aided Drafting and Design Certificates are recognized by Industry as evidence of capability in the Computer Aided Drafting and Design profession. Our Computer Aided Drafting and Design courses are often recognized as meeting professional “Continuing Education” requirements. Discussions with the Industry Advisory Board

2. Advisory Committee

- a. How many employers does your Advisory Committee have? 13.

How many attended the last two meetings? average of 7 different employers attended.

Have they contributed any resources to the program (time, equipment, supplies, money, co-op spots)?

Yes No If Yes, briefly describe contributions in Table V.

- b. Status of Advisory Committee curriculum recommendations:

Briefly summarize the curriculum recommendations made by the Advisory Committee over the last five years. In the Fall 2011 Advisory Committee Meeting it was reported that the Mechanical Engineering CADD Certificate had been added to the program based upon the recommendation of the Advisory Board at the prior meeting. This certificate was included in the 2011-2012 College Catalog. Also, at the Fall 2011 meeting, it was reported that DFTG1333-Parametric Modeling and Design had been added to the AAS Computer Aided Drafting and Design degree based on prior committee discussions. Finally at this same meeting, it was reported that DFTG 2321 Topographical Drafting was incorporated into the elective options for the degree in order to provide students with an opportunity to learn Civil 3D skills at the request of the committee, and the course was successfully offered that semester. A discussion about whether this course should be taught as a two semester sequence or to keep it a one semester course occurred. During the spring of 2012 Advisory Committee Meeting it was suggested that Collin should offer a Strength of Materials course and a Geometric Dimensioning and Tolerancing course in the CADD program to enhance the engineering content of the program. The department asked for assistance with identifying instructors to develop curriculum and/or teach the courses. At the Fall of 2012 Advisory Committee Meeting credentials for potential Associate Faculty members to teach both courses were transmitted to the

Director. During the Spring 2013 Advisory Committee Meeting an Engineering Associate Faculty member was contracted this Fall semester to do curriculum development of the course. During the spring 2014 semester ENTC 1323 Strength of Materials is offered and being taught by a Civil Engineer with a doctoral degree. It was also discussed that DFTG1305/ENGR1304 and DFTG2319 be developed online and or hybrid for Fall 2014. Advisory Board meeting minutes attached as **Appendix C**.

Briefly explain why any Advisory Committee recommendations were not followed (budget limitations, prohibited by accrediting bodies or regulations, not feasible, not appropriate for college mission, lack of qualified faculty, etc.).

During the Fall 2013 Advisory Committee Meeting the importance of offering A GD & T course (Geometri Dimensioning and Tolerencing) was discussed as a follow up to previous meeting. The course was put up during the Fall 2013 semester and did not have enough students to run. We are bound by the minimum 15 student per class to make the class run.

How might these barriers to implementation be overcome, if appropriate?

We are pursuing a Raytheon Engineer as an associate faculty member to teach the course. Moreover, the requirement for a minimum of 15 students for a class to run should be reviewed. Students are not getting the advanced upper level courses the Advisory Board has recommended during the semester they need the course and they are having to extend time to graduation. If we change the class size for Workforce to 13 than we feel the classes would have a better chance making and successfully running during the semester schedule.

3. Provide the program-level SCANS matrix or a curriculum map that shows every program outcome is supported by at least two courses and every course supports at least one program outcome to demonstrate that the program curriculum sufficiently addresses the acquisition of the foundational skills and knowledge required for students to achieve competency in the program outcomes? **(See Appendix D)**

D. What are the completion barriers in the program curriculum?*(All instructional programs)*

Go to the Program Review page on CougarWeb and select the program course history for each of the program awards. Links to the Program Review page are found on both the Institutional Effectiveness and Teaching & Learning pages.

1. Review the course retention rate, course success rate, course enrollment and periodic scheduling to identify barriers to program completion.

- a. Program course retention rate: Attach print out and identify any courses that have a retention rate below the state standard. http://inside.collin.edu/institutionaleffect/Measures_and_Definitions.html

All courses in the program have retention rates that are in excess of 75%. The lowest course success rates are consistently shown to be PHYS 1401-College Physics I and PHYS 1402-College Physics II. Both of these courses have success rates of 37 - 48%, passing rates of 40 – 47%, and retention rates in excess of 95% over the last three academic years. (Please see **Appendix E** for Data on program retention, passing and success rates.)

- b. Is there sufficient course enrollment to support a stable cycle of required course offerings?

Yes No

Show course enrollment for technical or field of study courses.

(Please see Appendix F)

For any required program courses with enrollment below 15, explain a plan to grow enrollment or revise the curriculum.

The only required course in the AAS degree that appears to have considerable difficulty with enrollment is ENTC 1323. This course has finally had curriculum developed and is being offered during spring 2014. We anticipate that this course will now be offered routinely for students to complete the program in a timely fashion.

- c. Are the required courses in the program offered at intervals appropriate to enable students to complete “on time” if a student was enrolled full-time and followed the degree plan? Yes No
- d. Identify any required program courses which frequently require course substitutions to enable students to complete an award.

ENTC 1323 has required course substitutions in the past due to the difficulty the department has had in locating an associate faculty member to develop curriculum and teach the course. This should be resolved now that a

faculty member has been identified, the curriculum has been developed, and the course is being offered in spring 2014.

2. Considering the course retention information gathered from step 1 above, explain program changes planned to remove or mitigate any observed barriers.

PHYS 1402 represents a barrier to student completion. This course does not support the Advisory Board's initiative to incorporate more mechanical engineering concepts into the program, and as a result it does not support the current program curriculum in a meaningful way. Removal of this course will be discussed with the Program Advisory Board this spring as part of the plan to reduce the program to 60 SCH to reach compliance with the recent legislative mandate to reduce the length of associates degrees.

III. PROGRAM INFORMATION: ARE THE PROGRAM LITERATURE AND ELECTRONIC SITES CURRENT AND DO THEY PROVIDE AN ACCURATE REPRESENTATION?

- A. Provide program website url: <http://www.collin.edu/academics/programs/cadd.html>
- B. List all program literature (course descriptions, degree plans, catalog entries, etc.) in the table III below.
- C. Provide the review date (within the last three months) in Table III below that shows the elements of information listed on the website and in brochures were checked and updated for accuracy (current academic calendars, grading policies, course syllabi, program handouts, program tuition costs and additional fees, description of articulation agreements, availability of courses and awards, and local job demand in related fields) are accurate and available to the public.

(Table III-Program Literature Review

Title	Type	Date Last Reviewed and Updated
ARCE 1352 Structural Drafting	A study of structural systems including concrete foundations and frames, wood framing and trusses, and structural steel framing systems. Includes detailing of concrete, wood, and steel to meet industry standards including the American	Fall 2013

	Institute of Steel Construction and The American Concrete Institute. Lab required. Prerequisite: DFTG 1309. 3 credit hours. (W)	
ARCE 2352 Mechanical and Electrical Systems	The properties of building materials (assemblies), specifications, codes, vendor references, and uses of mechanical, plumbing, conveying, and electrical systems as they relate to architecture for residential and commercial construction. Lab required. Prerequisite: DFTG 2328. 3 credit hours. (W)	Fall 2013
DFTG 1305 Technical Drafting	Introduction to the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections, auxiliary views. Lab required. 3 credit hours. (W)	Fall 2013
DFTG 1309 Basic Computer-Aided Drafting	An introduction to computer-aided drafting. Emphasis is placed on setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinating systems; and plot/print to scale. Lab required. 3 credit hours. (W)	Fall 2013
DFTG 1317 Architectural Drafting -Residential	Architectural drafting procedures, practices, terms, and symbols. Preparation of detailed working drawings for residential structures. Emphasis on light frame construction methods. Lab required. 3 credit hours. (W)	Fall 2013
DFTG 1333 Mechanical Drafting	Study of mechanical drawings using dimensioning and tolerances, sectioning techniques, orthographic projection, and pictorial drawings. Lab required. Prerequisite: DFTG 1309. 3 credit hours. (W)	Fall 2013
DFTG 1345 Parametric Modeling and Design	Parametric-based design software for 3D design and drafting. Lab required. Prerequisite: DFTG 1371. 3 credit hours. (W)	Fall 2013
DFTG 1358 Electrical/Electronics Drafting	Electrical and electronic drawings stressing modern representation used for block diagrams, schematic diagrams, logic diagrams, wiring/assembly drawings, printed circuit	Fall 2013

	board layouts, motor control diagrams, power distribution diagrams, and electrical one-line diagrams. Lab required. 3 credit hours. (W)	
DFTG 1371 Mechanical Drafting -Fundamentals of Sheetmetal Design	The Fundamentals of Sheetmetal Design course teaches the skills required in designing sheetmetal parts and assemblies, trouble shooting and creating production drawings. All functions needed to create sheetmetal parts, drawings and assemblies are taught in this course. The lesson modules are structured to maximize hands-on interaction with the Pro/Sheetmetal module in Pro/Engineer. Lab required. Prerequisite: DFTG 1333. 3 credit hours. (W)	Fall 2013
DFTG 1380 Cooperative Education - Drafting and Design Technology/ Technician, General	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)	Fall 2013
DFTG 2300 Intermediate Architectural Drafting - Residential	Continued application of principles and practices used in residential construction. Lab required. Prerequisite: DFTG 1317. 3 credit hours. (W)	Fall 2013
DFTG 2312 Technical Illustration and Presentation	Pictorial drawing including isometrics, obliques, perspectives, charts, and graphs. Emphasis on rendering and using different media. Lab required. Prerequisite: DFTG 2319. 3 credit hours. (W)	Fall 2013
DFTG 2319 Intermediate Computer-Aided Drafting	A continuation of practices and techniques used in basic computer-aided drafting including the development and use of prototype drawings, construction of pictorial drawings, extracting data and basics of 3D. Lab required. Prerequisite: DFTG 1309. 3 credit hours. (W)	Fall 2013
DFTG 2321 Topographical Drafting	Plotting of surveyors field notes. Includes drawing elevations, contour lines, plan and profiles, and laying out traverses. Lab required. Prerequisite: DFTG 1309. 3 credit hours. (W)	Fall 2013
DFTG 2328 Architectural Drafting -Commercial	Architectural drafting procedures, practices, governing codes, terms and symbols including the preparation of detailed working drawings for a commercial building, with emphasis on commercial construction methods. Lab required.	Fall 2013

	Prerequisite: DFTG 1309. Prerequisite/Concurrent enrollment: DFTG 2319. 3 credit hours. (W)	
DFTG 2332 Advanced Computer-Aided Drafting	Application of advanced CAD techniques. Lab required. Prerequisite: DFTG 2319. 3 credit hours. (W)	Fall 2013
DFTG 2335 Advanced Technologies in Mechanical Design and Drafting	Use parametric-based software (Pro/Engineer) for mechanical assembly design and drafting for advanced modeling and analysis. In this course the student will learn how to create and fully detail a multi-view drawing and create reports to contain additional design documentation details. Drawings for both parts and assemblies will be addressed, with emphasis on view management and design details. Lab required. Prerequisite: DFTG 1345 or consent of Instructor or Program Director. 3 hours. (W)	Fall 2013
DFTG 2336 Computer-Aided Drafting Programming	Use of programming language to enhance CAD software. Lab required. Prerequisite: DFTG 2319. 3 credit hours. (W)	Fall 2013
DFTG 2350 Geometric Dimensioning and Tolerancing	Geometric dimensioning and tolerancing, according to standards, application of various geometric dimensions and tolerances to production drawings. Lab required. Prerequisite: DFTG 1309. 3 credit hours. (W)	Fall 2013
DFTG 2381 Cooperative Education - Drafting and Design Technology/ Technician, General	Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)	Fall 2013
Program Brochures	See Appendix I (inserts are updated every year)	Fall 13

IV. EMPLOYMENT FOR PROGRAM GRADUATES

Some relevant data is available on [Career Coach](#).

- A. Provide evidence of local demand for program graduates.

According to Career Coach local demand for Civil and Architectural Drafters is 54 annual estimated job openings. Mechanical Drafters is 49 annual estimated job openings.

If there is low current demand, as evidenced by few AAS-level job postings, explain why and show evidence that near-term future demand will improve local demand for graduates of this program.

N/A

- B. What percent of graduates secure employment in the field. 36.375% employed average over 4 yr (Measure 3)

If the employment rate is below 75% within 12 months of graduation, explain the plan to increase employment of the program's graduates through relationship building.

With so few identified graduates being reported under the THECB Gainful Employment Rate data set, it is difficult to draw conclusions. The department has recently hosted one potential employer for on-campus interviews, and other potential employers have agreed to come to campus to observe and comment upon final student presentations at the end of the fall and spring semesters. The department will continue to build relationships such as these to assist with marketing the skills of our program graduates to potential employers.

- C. Average salary of program graduates. \$34 -36k/year

If average salary is at or below minimum wage plus 15%, explain how the program will be modified to add economic value for graduates.

N/A

D. Average number of months to employment. We do not have that data.

If the average time to employment exceeds six months after graduation, describe the plan to support employment searches for upcoming (and recent) graduates.

N/A

E. What actions do the program personnel take to assist the college in obtaining the information required by Title IV and Gainful Employment so that students enrolled in this program are able, if otherwise eligible, to receive federal financial aid?

Upon request, program faculty relay information regarding the employment of recent program graduates to the college's Institutional Research Office.

F. What additional actions, if any, are needed to improve the quality of this programs' information needed for college federal reporting requirements?

Enter additional actions here.

Program Data:

Unduplicated, actual, annual enrollment data;

Definitions of data elements can be found on CougarWeb under Teaching & Learning/Program Review/Institutional Research Files for Program Review

- Student/Faculty Ratios (**4.55 full time equivalent students/1 full time equivalent faculty**) (**Measure 4**) The abnormally low number here reflects the large number of part-time students enrolled in the program's courses.
- Average Class Size (**16.7**) (**Measure 5**) Average class sizes in all program courses have ranged from 15.6 in the 2010-2011 academic year to 18.3 during the 2011-2012 academic year. Overall this is a relatively stable number, reflecting solid enrollments in the program's courses.

- Course Enrollment History for all program courses (workforce programs may exclude reporting core course enrollments)(**Please See Appendix F**) Generally the required courses for the AAS degree or for the Certificates have demonstrated good enrollment. The lone exception is DFTG 2350-Geometric Dimensioning and Tolerancing. This is a course that the department is searching for an associate faculty member to develop and teach. Currently this course is only required in the Mechanical CADD Certificate. In the case of the courses that are generally electives, there are three that have not been demonstrated solid enrollments. DFTG 1317-Architectural Drafting-Residential and DFTG 2300-Intermediate Architectural Drafting-Residential have not made in recent years due to very little employment demand in the local homebuilding industry. DFTG 2335-Advanced Technologies in Mechanical Drafting and Design is an elective in the Mechanical CADD Certificate. This program is fairly new and is working on gaining traction with local employers. As this occurs, we would expect the Mechanical Certificate to see more demand from students.
- Grade Distributions (Measure 6a and 6b, please see **Appendix G**) Examination of the grade distributions for technical courses in the CADD program reveal fairly consistent results over the last few years. In any given semester, course success rates vary between 64.0% (in Fall 2011) and 82.0% (in Spring 2012). The Fall 2011 value seems abnormally low given that the next lowest value for a long semester is 74.8% (in Spring 2013). Summer semesters demonstrate consistently higher success rates, reflecting the much smaller number of courses and the general tendency for more motivated students to take courses in the summer. Course completion rates in the long semesters range from 83.9% to 93.6% indicating that students in the CADD program are consistently seeing their courses through to completion. Visual inspection of the grading distributions during the long semesters reveals a fairly consistent pattern. Students taking DFTG 1309-Basic CAD have generally lower overall grades, indicating that many students are attempting this course to learn more about the field. This assumption is supported by the larger annual enrollments observed for DFTG 1309. Grades improve quite a bit for DFTG 2319-Intermediate CAD, reflecting the continuation of more serious students beyond the entry-level course. Moreover, the grades stay consistently higher throughout the higher level courses in the program. Overall, in any given long semester, the CADD students earn approximately 50% A's, 20% B's, 5-10% C's a few D's and about 5% F's. This distribution has consistently been in place since Fall 2008, and it seems to be a reasonable distribution for a workforce program.
- Contact Hours Taught by Full-Time and Part-Time Faculty (Measure 7, please see **Appendix H**) Prior to Fall 2010, contact hours taught by FT faculty comprised 35% (Fall 2009) of all program contact hours. With the addition of a new FT faculty member in Fall 2010 that ratio has consistently been nearly 90% in each fall semester since then.

V. PROGRAM RESOURCES SINCE LAST PROGRAM REVIEW

- A. Partnerships and Relationship Building: List all university/business and industry partnerships. Include co-op or internship sites, visiting class presenters, tours of facilities' use, equipment donors, dedicated program scholarship donors, mentors.

Table V-A: Partnership Resources

University/Business & Industry	Partnership Type	Estimated Market Value, if any
Susan Berger, Glenn Ihde & Co.	Provided full DSize Scans of Blue Prints for .pdf use in class. This allowed us to attached to Blackboard so students could review during Final Projects	
Dennis Chovan, Halff	Provided the use and demo of the Leica High Definition Scanner to scan the Gym for the ARCE2352 MEP Class Project	
Allen ISD	Provided use of Computer Classroom with AutoDesk software along with a 3D Printer and HP Plotter	
Prosper ISD	Provided use of Computer Classroom complete with AutoDesk software and access to a printer and an HP plotter.	

- B. Employees: List program employees (full-time and part-time), their role, credentials, and known professional development activity since the last program review.

Table V-B: Employee Resources

Employee Name	Role in Program	Credentials	Professional Development since last Program Review
Andrea Szlachtowski	Full Time, CADD	A.O.S Drafting Technology/CAD State University of New York Delhi B.S Vocational Technical Education/Trade and Industry Education State University of New York Oswego ACI AutoDesk Certified Instructor Inventor #07651217 AutoDesk Inventor 2013 Certified Professional #00314643	Autodesk University 2012; Autodesk Virtual Events: cadlearning, and Global_e_training; Texas A&M Commerce BIM 4 & 5D Scheduling and Project Delivery Platform Symposium; Cert.of Completion MEPAutodesk Revit Training.
Warner Richeson	Full Time, CADD	B.S Electrical Engineering Oklahoma State University	Autocad 2011 Design On line Tutorials; Autocad 2012 Design On line Tutorials; Autocad 2013 Design On line Tutorials; Inventor 2012 3-D Design On line Tutorials

Walter Laviolette	Part-Time CADD	M.S. Computer Science, Southern Methodist Univ.; B.S., Electrical Engineering University of Florida	
Thomas Longnecker	Part-Time CADD	A.A.S. Design Drafting Technology, Oklahoma State University, Okmulgee.	Annual attendance at Autodesk University, a national conference centering upon the AutoCAD suite of software packages.
Ray Sebastian	Part-Time CADD	B.A.A.S. University of North Texas; A.A.S. Drafting Technology, North Central Texas College.	
Karl Zimmerman	Part-Time Engineering/CADD	B.S. in Civil Engineering, University of Oklahoma; M.S. in Civil Engineering, University Nebraska-Lincoln; Ph.D. in Civil Engineering, Texas A&M University	

C. Facilities and Resources: Describe any resources acquired in the last five years, including grants, facilities, and equipment.

Table V-C-1: Facilities Resources

Room/Office Location and Designation	Size	Type	Special Characteristics (i.e. permanent like ventilator hood)	Meets current needs: Y or N	Will meet needs for next five years: Y or N	Describe additional needs for any "N" answer in columns 5 or 6.
Heritage Hall-PRC, Room H137	1103 sf	Classroom	Outfitted with 23 Computer terminals with AutoDesk software installed and a Smartboard.	Y	Y	
Heritage Hall-PRC, Room H139	1120 sf	Classroom	Outfitted with 23 Computer terminals with AutoDesk software installed.	Y	Y	
SCC, Room I230	Unk	Classroom	Outfitted with 22 Computer terminals and AutoDesk software installed. Also has a plotter that can handle 8.5" x 11" and 11" x 17" paper.	Y	Y	

Table V-C-2: Equipment, Supplies, Maintenance/Repairs *List all equipment required by the program that you do not consider supplies*

Current Equipment Item or Budget Amount	Meets current needs: Y or N	Will meet needs for next five years: Y or N	For any no in columns 2 or 3, justify needed equipment or budget change
Dimension S2447 3-D Printer	Y	Y	

Table V-C-3: Financial Resources

Source of Funds (i.e. college budget, grant, etc.)	Meets current needs: Y or N	Will meet needs for next five years: Y or N	For any no in columns 2 or 3, explain why	For any no in columns 2 or 3, identify expected source of additional funds
College Budget	Y	Y		

VI. PROGRAM PLANNING

- A. Link or attach the last two CIPs. (See Appendix J)

- B. Next CIP (See Appendix K)

1. Attach the next CIP with the data and findings on which it is based. Note: Revisions may be made to the CIP to reflect feedback from the Steering Committee or the Leadership Team.
2. Based on the program data and the results and finding in the past two CIPs, explain how the program action plans logically flow from the data presented.

For the 2011-2012 Continuous Improvement Plan, all program level outcomes had results that met the standard. In an effort to assist students with the final projects in DFTG 1305 students were counseled prior to reviewing drawing assignment and provide extra instruction in terms of collision and parts list requirements. The final projects were started and ended earlier in the semester. The projects were ended 1-2 weeks prior to Finals week to enable feedback and review.

- C. Within the program's base budget, what are the plans to do one or more of the following within the next five years? Check all that apply.

- | | |
|--|---|
| <input type="checkbox"/> Increase and retain enrollment | <input type="checkbox"/> Increase transfers to related baccalaureate institutions |
| <input checked="" type="checkbox"/> Increase completes | <input type="checkbox"/> Increase effectiveness and/or efficiency |
| <input checked="" type="checkbox"/> Develop resources | <input type="checkbox"/> Improve student performance levels |
| <input type="checkbox"/> Update facilities | <input type="checkbox"/> Expand services |
| <input type="checkbox"/> Expand curricular opportunities | <input type="checkbox"/> Transform services |
| <input checked="" type="checkbox"/> Partner to increase post-graduation employment opportunities | <input type="checkbox"/> Anything else? Briefly describe
Enter response here. |

- D. What continuous improvement plans do you have, if any, that require additional resources beyond the program's base budget? Briefly describe what resources you will develop to secure these funds.
Enter response here.

VII. PROGRAM REVIEW REPORT PATHWAY

Completed Program Review Reports will be evaluated by the appropriate deans and Program Review Steering Committees. Following approval by the Steering Committee, Program Review Reports will be evaluated by the Leadership Team who will approve the reports for posting on the intranet. At any point prior to Intranet posting, reports may be sent back for additional development.

Leadership Team members will work with program supervisors to incorporate Program Review findings into program planning and program activity changes during the next five years.