Drafting Program Review
2011-2012

1. Program Description

A. Description

A comprehensive set of undergraduate courses fulfill the general education and transfer requirements of students through onsite as well as hybrid (online/onsite) offerings. Students may obtain an AA or AS in chemistry; both major requirements optimize preparation for advanced degrees in chemistry at four-year institutions. A background in chemistry is essential for many high-paying, challenging careers. Opportunities await the chemist in such fields as medicine and pharmaceuticals, metals and polymers, petroleum, electrochemistry, nanotechnology, forensics, aerospace, paper, food technology, business, and education.

B. Program Student Learning Outcomes   -   Successful students in the program are able to:

1. Demonstrate an understanding of drawing methods and graphic composition techniques.
2. Prepare technical drawings using computer-aided drafting (CAD) and design software.
3. Analyze technical drawings and provide appropriate solution.

C. College Level Student learning Outcomes

1. Critical Thinking and Problem Solving
2. Communication
3. Information Competency

D. Estimated Costs (Required for Certificate of Achievement ONLY)

	Cost
Enrollment Fees	
Books	
Supplies	
Total	

E. Criteria Used for Admission

None.

F. Vision

Ventura College will be a model community college known for enhancing the lives and economic futures of its students and the community.

The Drafting Program will provide students the opportunity to develop skills to model or present a wide array of components according to the latest standards and advances in technology. Students will be prepared for advanced education or direct employment in fields such as CAD Drafters, Component Designers, Parts Managers or Presentation Specialists. Instructors will offer continued advising to each student in the program.

G. Mission

Ventura College, one of the oldest comprehensive community colleges in California, provides a positive and accessible learning environment that is responsive to the needs of a highly diverse student body through a varied selection of disciplines, learning approaches and teaching methods including traditional classroom instruction, distance education, experiential learning, and co-curricular activities. It offers courses in basic skills; programs for students seeking an associate degree, certificate or license for job placement and advancement; curricula for students planning to transfer; and training programs to meet worker and employee needs. It is a leader in providing instruction and support for students with disabilities. With its commitment to workforce development in support of the State and region's economic viability, Ventura College takes pride in creating transfer, career technical and continuing education opportunities that promote success, develop students to their full potential, create lifelong learners, enhance personal growth and life enrichment and foster positive values for successful living and membership in a multicultural society. The College is committed to continual assessment of learning outcomes in order to maintain high quality courses and programs. Originally landscaped to be an arboretum, the College has a beautiful, park-like campus that serves as a vital community resource.

H. Core Commitments

Ventura College is dedicated to following a set of enduring Core Commitments that shall guide it through changing times and give rise to its Vision, Mission and Goals.
- Student Success
- Respect
- Integrity
- Quality
- Collegiality
- Access
- Innovation
- Diversity
- Service
- Collaboration
- Sustainability
- Continuous Improvement

I. Degrees/Certificates

Program's courses are designed to articulate to UC and CSU for transfer students.
Associates in Science Degree
Certificate of Achievement – Drafting Technology
Electronic Drafting and Manufacturing Option
Industrial Design and Manufacturing Option

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J. Program Strengths, Successes, and Significant Events

1. The Drafting Program provides drafting students with skills necessary for higher education or employment in a wide array and diverse area of employment. Students may choose a specific area of study or to gain broad knowledge to use in diverse fields.
2. The Drafting Program provides drafting students with the skills necessary to model or present a wide array of components according to the latest standards and advances in technology. The use of state of the art parametric modeling programs provide students with employment and advanced education skills
3. The Drafting Program uses some of the most modern software and modeling techniques in "real world" design problem applications providing students with the knowledge and skill of the advancing science of computer generated models, model 3D printing and model testing.
4. The Drafting Program faculty continue to represent Ventura College on committees such as the Basic Skills Subcommittee of the WIB- Ventura County Workforce Investment Board, the Hueneme High School Advisory Board for the Engineering and Design Careers Pathway Program, other program-focused high school advisory boards, and local professional groups.
5. This is the third year of faculty participation in the NSF National Science Foundation ATE grant STEM Education through the design and manufacture of solid body electric guitars. This project provides innovative professional development to high school and college faculty in collaborative design and rapid manufacturing.
6. Continued local high school relationships provide access for underserved populations in Ventura County.
7. The Drafting Program has just completed its move to the new MCE building. The move to the new facility allowed the program a state of the art facility and provides the program with 90% new equipment.
8. The Drafting Program supports students in various programs at Ventura College, such as: Engineering, Architecture, Manufacturing, Construction Technology, and Welding.

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K. Organizational Structure

President: Robin Calote
      Executive Vice President: Ramiro Sanchez
          Dean: Jerry Mortensen
              Department Chair: Casey Mansfield

Instructors and Staff

Name	Ralph Fernandez	
Classification	Professor	
Year Hired	1989	
Years of Work-Related Experience	28	
Degrees/Credentials	B.A.	

Name	Scot Rabe	
Classification	Professor	
Year Hired	1984	
Years of Work-Related Experience	30	
Degrees/Credentials	B.A.	

Name	Casey Mansfield	
Classification	Professor	
Year Hired	1991	
Years of Work-Related Experience	30	
Degrees/Credentials	B.A., M.A.	

Name	Chiiho Terada	
Classification	Adjunct Professor	
Year Hired	1971	
Years of Work-Related Experience	40	
Degrees/Credentials	B.A.	

Name	Rick Leduc	
Classification	Adjunct Professor	
Year Hired	2001	
Years of Work-Related Experience	20	
Degrees/Credentials	B.A.	

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2. Performance Expectations

A. Program Student Learning Outcomes   -   Successful students in the program are able to:

1. Demonstrate an understanding of drawing methods and graphic composition techniques.
2. Prepare technical drawings using computer-aided drafting (CAD) and design software.
3. Analyze information to develop solutions to technical aspects of a design problem

B. Student Success Outcomes

1. The program will maintain or improve its retention rate from the average of the **program's** prior three-year retention rate. The retention rate is the number of students who finish a term with any grade other than W or DR divided by the number of students at census.
2. The program will maintain or improve its retention rate from the average of the **college's** prior three year retention rate. The retention rate is the number of students who finish a term with any grade other than W or DR divided by the number of students at census.
3. The program will maintain or improve the student success rates from the average of the **program's** prior three-year success rates. The student success rate is the percentage of students who receive a grade of C or better.
4. The program will maintain or improve the student success rates from the average of the **college's** prior three-year success rates. The student success rate is the percentage of students who receive a grade of C or better.
5. The program will work to improve the number of Students earning certificates, degrees and/or transferring.

C. Program Operating Outcomes

1. The program will maintain WSCH/FTEF above the 450 goal set by the district.
2. Inventory of instructional equipment is in need of review and revision to make it functional, current, and otherwise adequate to maintain a quality-learning environment.
3.   Inventory of all equipment over $200 will be maintained and a replacement schedule will be developed. Service contracts for equipment over $5,000 will be budgeted if funds are available.

D. Courses to Student Learning Outcomes Map

Course to Program-Level Student Learning Outcome Mapping (CLSLO)
>   **I:** This program-level student learning outcome is **INTRODUCED** is this course.
>   **P:** This program-level student learning outcome is **PRACTICED** in this course.
>   **M:** This program-level student learning outcome is **MASTERED** in this course.
>   Leave blank if program-level student learning outcome is not addressed.

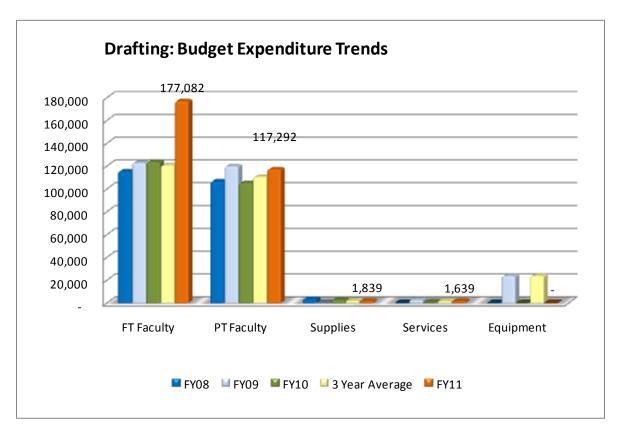| Courses	PLSLO #1	PLSLO #2	PLSLO #3
Drft v02A	M		I
Drft v02B	M		I
Drft v03	P	I	P
Drft v04			I
Drft v05A	I	M	I
Drft v05B	I	M	I
Drft v10A	M	P	P
Drft v10B	M	P	P
Drft v14A	M	P	P
Drft v14B	M	P	P
Drft v16		I	P
Drft v18		P	P
Drft v41	P	I	P
Drft v42	P	M	P
Drft v43	I	M	P
Drft v44	I	P	M
Drft v50	I	I	M
Drft v51	I	P	I
Drft v88	P	P	P
Drft v99	P	P	P

3. Operating Information

A1: Budget Summary Table

To simplify the reporting and analysis of the Banner budget detail report, the budget accounts were consolidated into nine expense categories. The personnel categories include employee payroll expenses (benefits). The "3 Year Average" was computed to provide a trend benchmark to compare the prior three year expenses to the FY11 expenses.   The "FY11 College" expense percentages are included to provide a benchmark to compare the program's expenses to the overall college expenses.

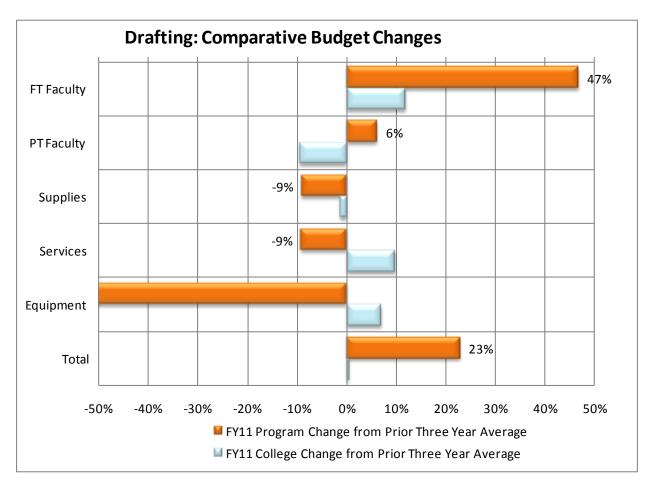| Category	Title	FY08	FY09	FY10	3 Year Average	FY11	FY11 Program	FY11 College
1	FT Faculty	115,493	122,897	123,720	120,703	177,082	47%	12%
2	PT Faculty	106,673	119,855	105,204	110,577	117,292	6%	-10%
7	Supplies	3,413	101	2,559	2,024	1,839	-9%	-1%
8	Services	-	2,910	703	1,807	1,639	-9%	10%
9	Equipment	-	23,749	-	23,749	-	-100%	7%
	Total	**225,579**	**269,512**	**232,186**	**242,426**	**297,852**	**23%**	**0%**

A2: Budget Summary Chart

This chart illustrates the program's expense trends. The data label identifies the FY11 expenses (the last bar in each group).   The second-to-last bar is the program's prior three year average.

Drafting: Budget Expenditure Trends

A3: Comparative Budget Changes Chart

This chart illustrates the percentage change from the prior three year average expense to the FY11 expenses. The top bar for each budget category represents the program's change in expenses and includes the data label. The second bar represents the college's change in expenses.

Drafting: Comparative Budget Changes

- FT Faculty: 47%
- PT Faculty: 6%
- Supplies: -9%
- Services: -9%
- Equipment
- Total: 23%

Legend:
- ■ FY11 Program Change from Prior Three Year Average
- ■ FY11 College Change from Prior Three Year Average

A4: Budget Detail Report

The program's detail budget information is available in *Appendix A – Program Review Budget Report*. This report is a PDF document and is searchable. The budget information was extracted from the District's Banner Financial System. The program budget includes all expenses associated to the program's Banner program codes within the following funds: general fund (111), designated college equipment fund (114-35012), State supplies and equipment funds (128xx), and the technology refresh fund (445).   The *Program Review Budget Report* is sorted by program (in alphabetical order) and includes the following sections: total program expenses summary; subtotal program expenses for each different program code; detail expenses by fund, organization and account; and program inventory (as posted in Banner). To simplify the report, the Banner personnel benefit accounts (3xxx) were consolidated into employee type benefit accounts (3xxx1 = FT Faculty, 3xxx2 = PT Faculty, 3xxx3 = Classified, etc.).

A5: Interpretation of the Program Budget Information

Operational information provided in Table 1 and Charts 2 and 3 do not accurately reflect the program's operating budget information. Further analysis of the program's budget information will need to be assessed.

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B1: Program Inventory Table

This chart shows the inventory (assets) as currently posted in the Banner Financial System. This inventory list is not complete and will require review by each program. Based on this review an updated inventory list will be maintained by the college. A result of developing a complete and accurate inventory list is to provide an adequate budget for equipment maintenance and replacement (total-cost-of-ownership). The college will be working on this later this fall.

Item	Vendor	Org	Fund	Purchased	Age	Price	Perm Inv #	Serial #
HP Designjet 20 PS	Sehi Computers	34091	793	5/6/2004	7	1,382	N00011161	SSG37L274CP
Optiplex GX 260 P4	Dell Computer C	34091	793	5/14/2003	8	2,169	N00003346	c9djr21
Optiplex GX260 P4	Dell Computer C	34091	793	5/14/2003	8	2,169	N00003347	59djr21
Optiplex Gx260 Dell Computer F	Dell Computer C	34091	793	5/14/2003	8	2,169	N00003344	h9djr21
Optiplex GX260 P4	Dell Computer C	34091	793	5/14/2003	8	2,254	N00003343	8s2kr21
Optiplex GX260 P4	Dell Computer C	34091	793	5/14/2003	8	2,169	N00003345	j8djr21
						12,312		

B2: Interpretation of the Program Inventory Information

The equipment list provided by Banner is incomplete and does not accurately reflect the program's holdings. An inventory survey will need to be completed to provide an accurate equipment list. A quick survey of existing equipment will show that the equipment has a value of over $350,000, of which approximately 90% is new, having been replaced with our current move to the new MCE building. Most of the additional equipment was purchased through VTEA funds provided to support technology students and programs.

C1: Productivity Terminology Table

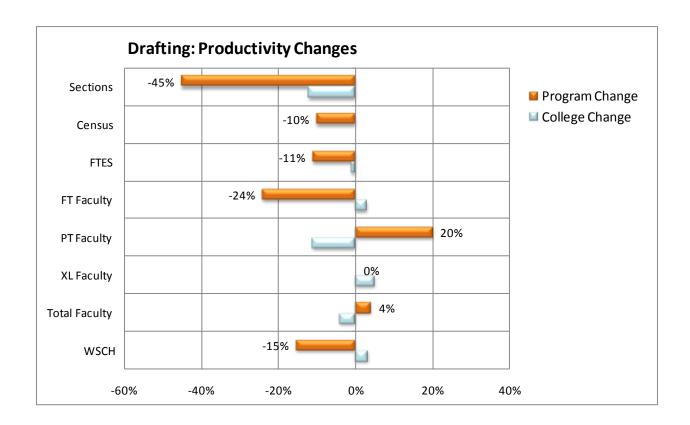|	
Sections	A credit or non-credit class. Does not include not-for-credit classes (community education).
Census	Number of students enrolled at census (typically the 4th week of class for fall and spring).
FTES	Full Time Equivalent Students A student in the classroom 15 hours/week for 35 weeks (or two semesters) = 525 student contact hours. 525 student contact hours = 1 FTES. Example: 400 student contact hours = 400/525 = 0.762 FTES. The State apportionment process and District allocation model both use FTES as the primary funding criterion.
FTEF	Full Time Equivalent Faculty A faculty member teaching 15 units for two semesters (30 units for the year) = 1 FTE. Example: a 6 unit assignment = 6/30 = 0.20 FTEF (annual). The college also computes semester FTEF by changing the denominator to 15 units. However, in the program review data, all FTE is annual. FTEF includes both Full-Time Faculty and Part-Time Faculty. FTEF in this program review includes faculty assigned to teach extra large sections (XL Faculty). This deviates from the district practice of not including these assignments as part of FTEF. However, it is necessary to account for these assignments to properly produce represent faculty productivity and associated costs.
Cross Listed FTEF	FTEF is assigned to all faculty teaching cross-listed sections. The FTEF assignment is proportional to the number of students enrolled at census. This deviates from the practice of assigning load only to the primary section. It is necessary to account for these cross-listed assignments to properly represent faculty productivity and associated costs.
XL FTE	Extra Large FTE: This is the calculated assignment for faculty assigned to extra large sections (greater than 60 census enrollments).The current practice is not to assign FTE. Example: if census>60, 50% of the section FTE assignment for each additional group of 25 (additional tiers).
WSCH	Weekly Student Contact Hours The term "WSCH" is used as a total for weekly student contact hours AND as the ratio of the total WSCH divided by assigned FTEF. Example: 20 sections of 40 students at census enrolled for 3 hours per week taught by 4.00 FTEF faculty. (20 x 40 x 3) = 2,400 WSCH / 4.00 FTEF = 600 WSCH/FTEF.
WSCH to FTES	Using the example above: 2,400 WSCH x 35 weeks = 84,000 student contact hours = 84,000 / 525 = 160 FTES (see FTES definition). Simplified Formulas: FTES = WSCH/15 or WSCH = FTES x 15
District Goal	Program WSCH ratio goal. WSCH/FTEF The District goal was set in 2006 to recognize the differences in program productivity.

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C2: Productivity Summary Table

This table is a summary of the detail information provided in the *Program Review Productivity Report*. The "3 Year Average" was computed to provide a trend benchmark to compare the results of the prior three years to the FY11 results. The "FY11 College" percentages are included to provide a benchmark to compare the program's percentages.

Title	FY08	FY09	FY10	3 Year Average	FY11	Program Change	College Change
Sections	41	42	31	38	21	-45%	-12%
Census	339	327	331	332	299	-10%	0%
FTES	52	49	49	50	44	-11%	-1%
FT Faculty	0.70	0.64	0.58	0.64	0.48	-24%	3%
PT Faculty	1.11	1.27	1.11	1.17	1.39	20%	-11%
XL Faculty	-	-	-	-	-	0%	5%
Total Faculty	1.81	1.91	1.69	1.81	1.88	4%	-4%
WSCH	431	385	435	414	351	-15%	3%

C3: Comparative Productivity Changes Chart

This chart illustrates the percentage change from the prior three year average productivity to the FY11 productivity. The top bar for each budget category represents the program's change in productivity and includes the data label. The second bar represents the college's change in productivity.

Drafting: Productivity Changes

C4: Interpretation of the Program Productivity Information

The C2 and C3 Charts indicate that the program's offerings have decreased 45% over the past three years, while the college offerings have decreased 12% over the same period. This decrease in course offerings was primarily caused by the program being directed to eliminate offering courses that were historically co-listed courses. This has occurred in FY10-FY11. Co listed courses had been the standard method of instruction for as long as the program has existed.

The chart also shows full time faculty as 0.48 with the three year average as 0.64 with a change of -24% which is extremely minor. The chart also shows an increase of 20% part time faculty over the three year average which reflects the decrease in the full time number. The Chart shows part time faculty as 1.39, compared to a three year average of 1.17, the change was minor. The chart does not show that section offerings have remained relatively stable in the program.

Although the program's numbers appear to be acceptable, cross list course with other programs appear to be detrimental to the WSCH/FTEF ratio. The program will be looking at ways to correct this issue.

Due to space and equipment limitations, typical drafting classes are limited to 24 seats. The program offers courses with lecture and lab content. The program is operated with laboratory constraints and space limits of 24 students per course. With the move to a new facility the program will be looking at ways to increase seating capacity where possible and re-establish students tracking through the program. Over the next few years with stabilized course offerings and a new facility the program expects to see a rise in enrollment and a rise in WSCH/FTEF.

While the number of course sections over the past few years in particular, have declined (FY09-FY11 sections), the number of course offerings has remained the same. There are no course duplicate offerings other than Introduction to Drafting and Introduction to AutoCAD.

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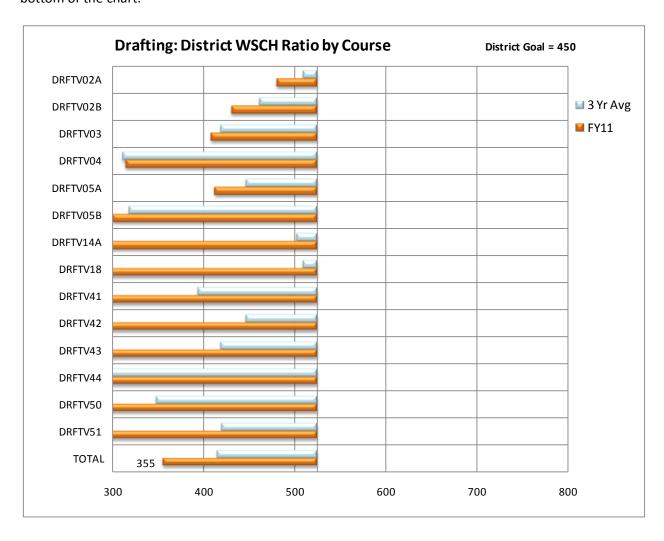D1: District WSCH Ratio Productivity Table

This table shows the District WSCH ratio (WSCH/FTEF) for each course by year for this program. Courses not offered during FY11 (last year) or without faculty load (independent study) are excluded. Because these are ratios, the combined average is computed using total WSCH and total FTEF (not the average of ratios). The formula used in this table distributes FTEF to all cross-listed sections (proportional to census enrollment) but does not include the associated faculty costs of extra large assignment.
District WSCH Ratio = WSCH / (PT FTE + FT FTE).

District WSCH Ratio: Weekly Student Contact Hours/(FT FTE+PT FTE)									
Course	Title	FY08	FY09	FY10	3 Yr Avg	FY11	Change	Dist Goal	% Goal
DRFTV02A	Blueprint Reading: Manufactrng	300	510	735	509	480	-6%	450	107%
DRFTV02B	Blueprnt Read:Arch/Construct	494	427	485	461	430	-7%	450	95%
DRFTV03	Drafting Fundamentals	455	365	439	419	408	-3%	450	91%
DRFTV04	Measurements and Computatio	288	280	338	311	314	1%	450	70%
DRFTV05A	Introduction to Autocad	413	443	505	446	412	-8%	450	92%
DRFTV05B	Advanced Operations of Autoca	320	400	240	318	300	-6%	450	67%
DRFTV14A	Technical Illustration I	485	600	495	502	-	-100%	450	0%
DRFTV18	Drafting Projects	510	495	560	509	-	-100%	450	0%
DRFTV41	Intro Industry Design Graphics	414	331	436	394	-	-100%	450	0%
DRFTV42	Design & 3D Solid Modeling	398	458	477	446	150	-66%	450	33%
DRFTV43	Introduction to Solidworks	475	422	371	419	291	-31%	450	65%
DRFTV44	Rapid Design and Prototyping	383	200	-	238	-	-100%	450	0%
DRFTV50	Flexible Mfg Applicatn:CAD/CAN	383	259	467	348	214	-38%	450	48%
DRFTV51	Introduction to 3D Studio Max	420	-	-	420	-	-100%	450	0%
TOTAL	**Annual District WSCH Ratio**	**430**	**382**	**436**	**415**	**355**	**-14%**	**450**	**79%**

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D2: District WSCH Ratio Productivity Chart

This chart illustrates the course level District WSCH ratio. The top bar shows the program's three year average. The second bar shows the program's FY11 WSCH ratio. The axis represents the District WSCH ratio goal set in 2006. The program's (or subject's) total WSCH ratio is shown as the TOTAL at the bottom of the chart.

Drafting: District WSCH Ratio by Course   **District Goal = 450**

Legend: ☐ 3 Yr Avg   ■ FY11

Courses (top to bottom): DRFTV02A, DRFTV02B, DRFTV03, DRFTV04, DRFTV05A, DRFTV05B, DRFTV14A, DRFTV18, DRFTV41, DRFTV42, DRFTV43, DRFTV44, DRFTV50, DRFTV51, TOTAL (355)

Axis: 300, 400, 500, 600, 700, 800

D3: College WSCH Ratio Productivity Table

This table shows the College's WSCH ratio (WSCH/FTEF) for each course by year for the program. Courses not offered during FY11 (last year) or without faculty load (independent study) are excluded. Because these are ratios, the combined average is computed using total WSCH and total FTEF (not the average of ratios). The formula used in this table includes the associated faculty costs of extra large sections. Faculty teaching extra large sections are paid stipends equal to 50% of their section FTE assignment for each group of 25 students beyond the first 60 students (calculated in this table as XL FTE). This College WSCH Ratio is a more valid representation of WSCH productivity. The College WSCH Ratio will be used in the program review process.
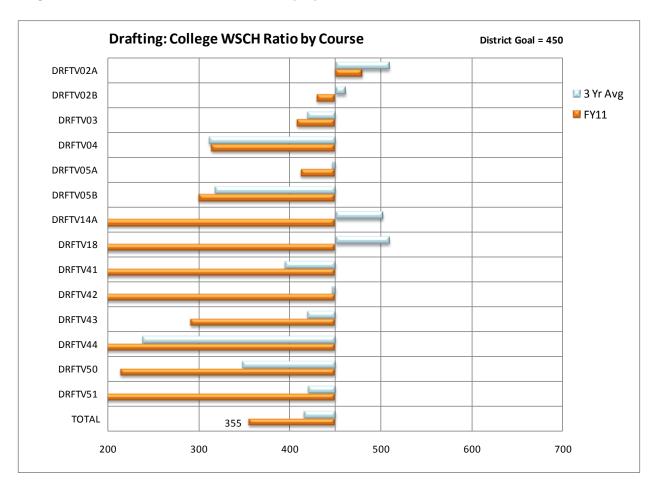
College WSCH Ratio = WSCH / (PT FTE + FT FTE + XL FTE)

College WSCH Ratio: Weekly Student Contact Hours/(FT FTE + PT FTE + XL FTE)									
Course	Title	FY08	FY09	FY10	3 Yr Avg	FY11	Change	Dist Goal	% Goal
DRFTV02A	Blueprint Reading: Manufactrng	300	510	735	509	480	-6%	450	107%
DRFTV02B	Blueprnt Read:Arch/Construct	494	427	485	461	430	-7%	450	95%
DRFTV03	Drafting Fundamentals	455	365	439	419	408	-3%	450	91%
DRFTV04	Measurements and Computatio	288	280	338	311	314	1%	450	70%
DRFTV05A	Introduction to Autocad	413	443	505	446	412	-8%	450	92%
DRFTV05B	Advanced Operations of Autoca	320	400	240	318	300	-6%	450	67%
DRFTV14A	Technical Illustration I	485	600	495	502	-	-100%	450	0%
DRFTV18	Drafting Projects	510	495	560	509	-	-100%	450	0%
DRFTV41	Intro Industry Design Graphics	414	331	436	394	-	-100%	450	0%
DRFTV42	Design & 3D Solid Modeling	398	458	477	446	150	-66%	450	33%
DRFTV43	Introduction to Solidworks	475	422	371	419	291	-31%	450	65%
DRFTV44	Rapid Design and Prototyping	383	200	-	238	-	-100%	450	0%
DRFTV50	Flexible Mfg Applicatn:CAD/CAM	383	259	467	348	214	-38%	450	48%
DRFTV51	Introduction to 3D Studio Max	420	-	-	420	-	-100%	450	0%
TOTAL	Annual College WSCH Ratio	430	382	436	415	355	-14%	450	79%

D4: College WSCH Ratio Productivity Chart

This chart illustrates the course level College WSCH ratio. The top bar shows the program's three year average. The second bar shows the FY11 WSCH ratio. The axis represents the District WSCH ratio goal set in 2006. The program's (or subject's) total WSCH ratio is shown as the TOTAL at the bottom of the chart. The computation used for the College WSCH Ratio includes XL FTE (extra-large sections) and the assignment of FTEF to all cross-listed sections (proportional to census enrollment).

D5: Productivity Detail Report

The program's detail productivity information is available in *Appendix B – Program Review Productivity Report*. This report is a PDF document and is searchable. The productivity information was extracted from the District's Banner Student System. The productivity information includes all information associated with the program's subject codes. The *Program Review Productivity Report* is sorted by subject code (alphabetical order) and includes the following sections: productivity measures and WSCH ratios by course by year.

D6: Interpretation of the Program Course Productivity Information

Tables D1-D4 show the program remains strong with the three year average overall WSCH at over 92% of the district goal. The individual courses show a FY11 decline in weekly student contact hours as expected when course offerings were changed to eliminate the co-listing of classes, as do the FY11 numbers. Some individual courses show 0% of the WSCH goals as they were not offered on a regular basis due to mandated scheduling changes. The program will be looking at the practice of cross-listing classes with other departments as this may not provide the college with accurate information on individual courses. As course offerings stabilize again the WSCH is expected to rise. The program moving into its new facility with state of the art equipment is also expected to have a positive effect on enrollment and WSCH.

E1: Student Success Terminology

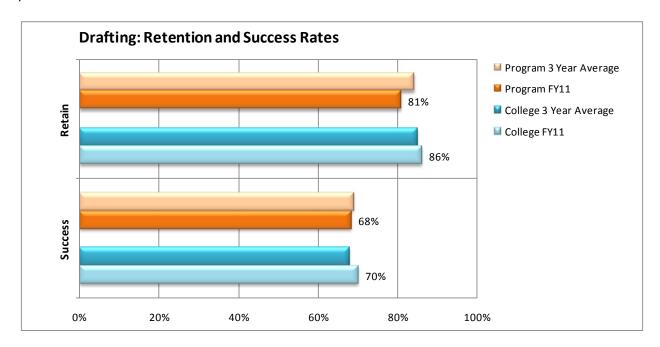|	
Census	Number of students enrolled at Census (typically the 4th week of class for fall and spring). Census enrollment is used to compute WSCH and FTES for funding purposes.
Retain	Students completing the class with any grade other than W or DR divided by Census Example: 40 students enrolled, 5 students dropped prior to census,35 students were enrolled at census, 25 students completed the class with a grade other than W or DR: Retention Rate = 25/35 = 71%
Success	Students completing the class with grades A, B, C, CR or P divided by Census Excludes students with grades D, F, or NC.

E2: Student Success Summary

The following two tables summarize the detail information provided in the *Appendix C - Program Review Student Success Report*. The first table shows the number of students. The second table shows the percentage of students. Both tables show the distribution of student grades by year for the program (subject). They show the number of students who were counted at census, completed the class (retention), and were successful. The "3 Year Average" was computed to provide a trend benchmark to compare the prior three year expenses to the FY11 success measures. The "College" success percentages are included to compare the results of the program to the results of the college.

Subject	Fiscal Year	A	B	C	P/CR	D	F	W	NC	Census	Retain	Success
DRFT	FY08	138	43	27	13	5	32	73	5	336	263	221
DRFT	FY09	136	59	32	2	8	42	42	1	322	280	229
DRFT	FY10	127	63	37	-	7	52	38	-	325	286	227
DRFT	3 Year Avg	134	55	32	5	7	42	51	2	328	276	226
DRFT	FY11	130	46	26	-	4	20	56	14	296	239	202

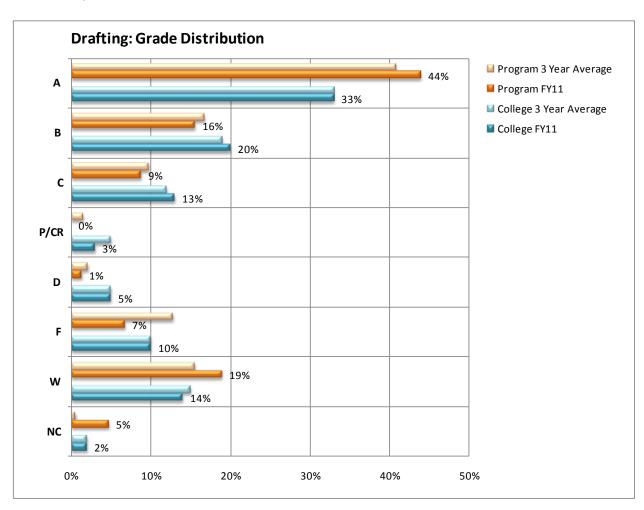| Subject	Fiscal Year	A	B	C	P/CR	D	F	W	NC	Census	Retain	Success
DRFT	FY08	41%	13%	8%	4%	1%	10%	22%	1%		78%	66%
DRFT	FY09	42%	18%	10%	1%	2%	13%	13%	0%		87%	71%
DRFT	FY10	39%	19%	11%	0%	2%	16%	12%	0%		88%	70%
DRFT	3 Year Avg	41%	17%	10%	2%	2%	13%	16%	1%		84%	69%
DRFT	FY11	44%	16%	9%	0%	1%	7%	19%	5%		81%	68%
College	**3 Year Avg**	**33%**	**19%**	**12%**	**5%**	**5%**	**10%**	**15%**	**2%**		**85%**	**68%**
College	FY11	33%	20%	13%	3%	5%	10%	14%	2%		86%	70%

E3: Retention and Success Rates

This chart illustrates the retention and success rates of students who were counted at census. Each measure has four bars. The first bar represents the program's prior three year average percent. The second bar shows last year's (FY11) percent. The third and fourth bars represent the overall college percents.

E4: Grade Distribution

This chart illustrates the program's distribution of grades (by subject). Each grade has four bars. The first bar represents the program's prior three year average percent of grades. The second bar shows last year's (FY11) grade distribution percents. The third and fourth bars represent the overall college distribution percents.

Drafting: Grade Distribution

Legend:
- Program 3 Year Average
- Program FY11
- College 3 Year Average
- College FY11

Grade	Program FY11	College FY11
A	44%	33%
B	16%	20%
C	9%	13%
P/CR	0%	3%
D	1%	5%
F	7%	10%
W	19%	14%
NC	5%	2%

(X-axis: 0%, 10%, 20%, 30%, 40%, 50%)

E5: Student Success Detail Report

The program student success detail information is available in *Appendix C – Program Review Student Success Report*. This report is a PDF document and is searchable. The student success information was extracted from the District's Banner Student System. The student success information includes all information associated with the program's subject codes. The *Program Review Student Success Report* is sorted by subject code (alphabetical order) and includes the following sections: comparative summary and course detail by term. The following table defines the terminology.

E6: Interpretation of Program Retention, Student Success, and Grade Distribution

In a vocational program students understand that success is measured on the demonstration of skill, knowledge and ability. Successful students strive to consistently generate portfolio quality work. Gainful employment and/or successful articulation of classes to universities are dependent on the quality of work students generated in the program. Students work to achieve success in the program which is shown in Charts E1-E4. The three year average retention and success rates mirror the college's three year average.
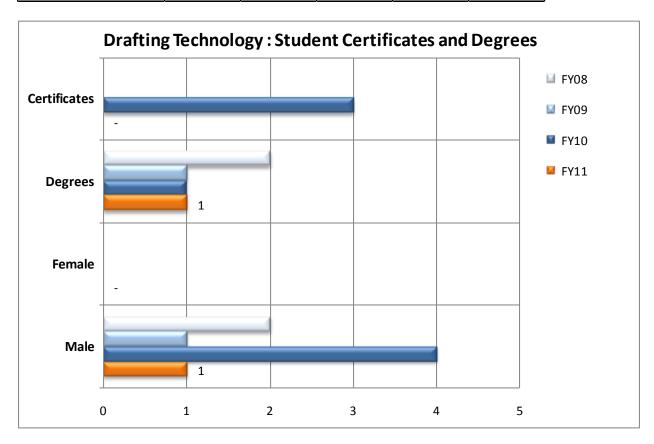
Grade Summary Chart E4 shows the effort extended by students in the program. The graphs do not show the number of current and former students gainfully employed in local industry or the number of successful transfer students from the program. The program always seeks to improve courses and course offerings based on student needs and will continue this practice.

F1: Program Completion – Student Awards

This table shows the number of students who completed a program certificate or degree during the fiscal year. Gender distribution is included. The following chart illustrates this information.

Program	FY	Certificates	Degrees	Female	Male
Drafting Technology	FY08	-	2	-	2
Drafting Technology	FY09	-	1	-	1
Drafting Technology	FY10	3	1	-	4
Drafting Technology	FY11	-	1	-	1
Total Awards in 4 Years		**3**	**5**	**-**	**8**

Drafting Technology : Student Certificates and Degrees

F2: Interpretation of the Program Completion Information

 Co listed courses had been the standard method of instruction for as long as the program has existed. The program has been directed to eliminate historically co-listed course offerings. The elimination of co-listed courses has made it difficult for students to achieve success. The program will re-evaluate its certificate and degree requirements and course offerings to make successful completion of the program more attainable to students.

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G1: Student Demographics Summary Tables

This table shows the program and college census enrollments for each demographic category. It also shows the average age of the students. The program FY11 results can be compared to its prior three year average, the college FY11 results, and the college prior three year average.

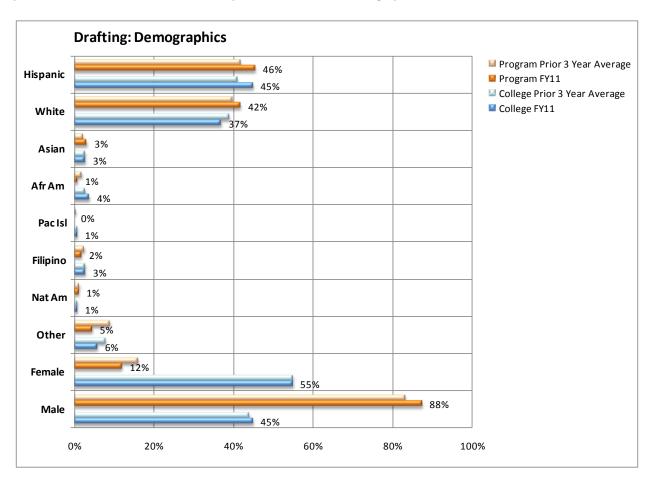| Subject	FY	Hispanic	White	Asian	Afr Am	Pac Isl	Filipino	Nat Am	Other	Female	Male	Other	Avg Age
DRFT	FY08	144	120	12	4	3	11	6	36	61	273	2	32
DRFT	FY09	136	136	7	7	1	10	4	21	54	264	4	31
DRFT	FY10	131	133	6	10	2	6	4	33	45	279	1	30
DRFT	**3 Year Avg**	**137**	**130**	**8**	**7**	**2**	**9**	**5**	**30**	**53**	**272**	**2**	**31**
DRFT	**FY11**	**135**	**124**	**10**	**3**	**-**	**6**	**4**	**14**	**36**	**259**	**1**	**29**
College	3 Year Avg	11,806	11,169	988	1,005	217	827	403	2,302	15,888	12,694	134	27
College	**FY11**	**13,034**	**10,566**	**977**	**1,040**	**196**	**886**	**402**	**1,688**	**15,734**	**13,014**	**40**	**24**

This table shows the program and college percentage of census enrollments for each demographic category.

Subject	FY	Hispanic	White	Asian	Afr Am	Pac Isl	Filipino	Nat Am	Other	Female	Male	Other	Avg Age
DRFT	FY08	43%	36%	4%	1%	1%	3%	2%	11%	18%	81%	1%	32
DRFT	FY09	42%	42%	2%	2%	0%	3%	1%	7%	17%	82%	1%	31
DRFT	FY10	40%	41%	2%	3%	1%	2%	1%	10%	14%	86%	0%	30
DRFT	3 Year Avg	42%	40%	2%	2%	1%	3%	2%	9%	16%	83%	1%	31
DRFT	**FY11**	**46%**	**42%**	**3%**	**1%**	**0%**	**2%**	**1%**	**5%**	**12%**	**88%**	**0%**	**29**
College	3 Year Avg	41%	39%	3%	3%	1%	3%	1%	8%	55%	44%	0%	27
College	**FY11**	**45%**	**37%**	**3%**	**4%**	**1%**	**3%**	**1%**	**6%**	**55%**	**45%**	**0%**	**24**

G2: Student Demographics Chart

This chart illustrates the program's percentages of students by ethnic group. . Each group has four bars. The first bar represents the program's prior three year percent. The second bar shows last year's (FY11) percent. The third and fourth bars represent the overall college percents.

Drafting: Demographics

Legend:
- Program Prior 3 Year Average
- Program FY11
- College Prior 3 Year Average
- College FY11

Group	Value
Hispanic	46% / 45%
White	42% / 37%
Asian	3% / 3%
Afr Am	1% / 4%
Pac Isl	0% / 1%
Filipino	2% / 3%
Nat Am	1% / 1%
Other	5% / 6%
Female	12% / 55%
Male	88% / 45%

G3: Student Demographics Detail Report

The program student success detail information is available in *Appendix D – Program Review Student Demographics Report*. This report is a PDF document and is searchable. The student success information was extracted from the District's Banner Student System. The student demographic information includes all information associated with the program's subject codes. The *Program Review Student Demographics Report* is sorted by subject code (alphabetical order) and includes the following sections: comparative summary by year, and detail demographics by term and course.

G4: Interpretation of the Program Demographic Information

The ethnic and gender distribution in the Drafting Program has remained relatively constant over the past three years. The ethnic distribution roughly mirrors the college distribution, while the program's gender distribution shows a greater number of males than the college average. From the data it can be seen that the program serves many under-represented students.

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4. Performance Assessment

A1: Program-Level Student Learning Outcomes

Program-Level Student Learning Outcome 1	Performance Indicators
Demonstrate an understanding of drawing methods and graphic composition techniques.	Students complete projects using industry standard drawing methods and techniques. Students will complete graphic compositions at a professional level.
Operating Information	
In courses with a graphic element, projects are reviewed for format, content and graphic composition. Students view methods and techniques used by other students and learn from examples and instructor reviews. Students are able to refine their presentation ability through increasing projects complexities.	
Analysis – Assessment	
Project work is evaluated for graphic composition, drawing methods, completeness and professional industry standards.	

Program-Level Student Learning Outcome 2	Performance Indicators
Prepare technical drawings using computer-aided drafting (CAD) and design software.	Students create concept and detailed drawings and/or models using professional methods and standards.
Operating Information	
Students create technical drawings using the latest computer-aided software. Students will develop technical drawings from 2D drawings and 3D models they complete from information provided. .	
Analysis – Assessment	
Student work is evaluated for technical ability, drafting skills and professional standards.	

Program-Level Student Learning Outcome 3	Performance Indicators
Analyze technical drawings and provide appropriate solution.	Students evaluate and select appropriate method of solutions to technical problem.

Operating Information
Students develop problem solutions to technical problems using appropriate software, graphic drawings and/or model creation. Instructor will guide student in appropriate solution selection.

Analysis – Assessment
Student work is evaluated for appropriate solution to given problem, technical methods and professional standards.

4B: Student Success Outcomes

Student Success Outcome 1	Performance Indicators
The program will maintain or improve its retention rate from the average of the **program's** prior three-year retention rate. The retention rate is the number of students who finish a term with any grade other than W or DR divided by the number of students at census.	The program will maintain or improve the retention rate by 2% or more above the average of the **program's** retention rate for the prior three years.
Operating Information	
The Drafting Program's average three year retention rate is 84%. The college's three year average retention rate is 85%. The program is a mirror of the college's three year average retention rate.	
Analysis – Assessment	
An increase of 2% or more in retention rate will require the program to attain a retention rate of 86% or more. The program will work to attain this goal.	

Student Success Outcome 2	Performance Indicators
The program will maintain or improve its retention rate from the average of the **college's** prior three-year retention rate. The retention rate is the number of students who finish a term with any grade other than W or DR divided by the number of students at census.	The program will maintain or improve the retention rate by 2% or more above the average of the **college** retention rate for the prior three years.
Operating Information	
The Drafting Program's average three year retention rate is 84%. The college's three year average retention rate is 85%. The program is a mirror of the college's three year average retention rate.	
Analysis – Assessment	
The program will work to increase its retention rate by 2% or more above the college average.	

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Student Success Outcome 3	Performance Indicators
The program will maintain or improve the student success rates from the average of the **program's** prior three-year success rates. The student success rate is the percentage of students at census who receive a grade of C or better.	The program will maintain or improve student success rate by 2% or more above the **program's** average student success rate for the prior three years.

Operating Information
The Drafting Program's three year average success rate is 69%. The college's three year average success rate is 68%.

Analysis – Assessment
An increase of 2% or more above the program's three year average success rate will require a success rate of 71% or more for the program. The program will work to attain this.

Student Success Outcome 4	Performance Indicators
The program will maintain or improve the student success rates from the average of the **college's** prior three-year success rates. The student success rate is the percentage of students at census who receive a grade of C or better.	The program student success will maintain or improve by 5% over the average of the **college's** student success rate for the prior three years.

Operating Information
The Drafting Program's three year average success rate is 69%. The college's three year average success rate is 68%.

Analysis – Assessment
The program above the three year average success rate of the college. The program will work to increase its success rate.

Student Success Outcome 5	Performance Indicators
Students will complete the program earning certificates and/or degrees.	Increase the number of students earning a certificate, degree, an/or transferring with a goal of 20% of the number of students enrolled in second-year courses.

Operating Information
The program will evaluate the scheduling of classes to make it easier for students to track through the program certificate requirements.

Analysis – Assessment
As a program we will be re-evaluating degree and certificate requirements. An evaluation will need to be conducted of students only seeking to upgrade job or life learning skills. The program will work to attain a certificate/degree rate of 20% or more of students enrolled in second year courses.

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C. Program Operating Outcomes

Program Operating Outcome 1	Performance Indicators
The program will maintain WSCH/FTEF above the 450 goal set by the district.	The program will work to exceed the efficiency goal of 450 set by the district by 2%.
Operating Information	
The Drafting Program has a three year average WSCH/FTEF of 92% of the district goal.	
Analysis – Assessment	
The Drafting Program will work to exceed the goal set by the district by a number greater than 2%.	

Program Operating Outcome 2	Performance Indicators
Inventory of instructional equipment is functional, current, and otherwise adequate to maintain a quality-learning environment. Inventory of all equipment over $200 will be maintained and a replacement schedule will be developed. Service contracts for equipment over $5000 will be budgeted if funds are available.	A current inventory of all equipment in the program will be maintained. Equipment having a value over $5000 will have a service contract. A schedule for service life and replacement of outdated equipment will reflect the total cost of ownership.
Operating Information	
The inventory list is out of date and needs to be reviewed (3B1)	
Analysis – Assessment	
The equipment list provided by Banner is incomplete and does not accurately reflect the program's holdings. An inventory survey will need to be done to provide an accurate equipment list. A quick survey of existing equipment will show that the equipment has a value of over $350,000, of which approximately 90% is new, having been replaced with the current move to the new MCE building. Much of the program's equipment has a long term life span (+ 15 years) and was just purchased with the program's current move to the MCE building. Additional equipment used in the program has been purchased through VTEA funds to support technology students and programs.	

Program Operating Outcome 3	Performance Indicators
Operating Information	
Analysis – Assessment	

Program Operating Outcome 4	Performance Indicators
Operating Information	
Analysis – Assessment	

5. Findings

Finding 1

The program mirrors the college success and retention rates even with the current restrictions on scheduling and reductions on the number of sections. The schedule must be carefully setup to help students complete certificate or degree options.

Finding 2

In a vocational program students understand that success in the Drafting Program is measured on the demonstration of ability. Successful students strive to consistently generate portfolio quality work. Gainful employment and/or successful articulation of classes to universities are dependent on the quality of work students generated in the program. Students work to achieve success in the program which is shown in Charts E1-E4. The Grade Summary Chart E4 shows the effort extended by students in the program. The graphs do not show the number of successful university transfers or the number of students, or former students, gainfully employed in local industry. As a program we are always looking at ways to improve courses and course offerings based on student needs.

Finding 3

The program will need to re-evaluate the degree and certificate requirements so that degrees/certificates are more attainable to students. It must be recognized that many students may be only taking specific classes to gain employment or to upgrade their employment skills. The program will work to attain a certificate/degree rate of 20% or more of students enrolled in second year courses. As a practice evaluations will need to be done of the goals of the students in the program

Finding 4

90% of the equipment used in the program is new, having been replaced with the program's current move to the new MCE building. Much of the program's equipment has a long term life span (+ 15 years). VTEA funds are used to support technology students and program.

Finding 5

The program serves many under-represented students and offers them a method of attaining a higher education degree that may otherwise not be attainable to them. The program offers them a method of admittance to a university program and the ability to gain career and lifelong learning skills.

Finding 6

The program is a valuable asset to the community and has both professional and community support. Professional and former students donate their time in support of the program.

6. Initiatives

Initiative
Curriculum Improvement

Initiative ID Drafting Program

Links to Finding 1, 2 and 6
Continuous curriculum changes based on changing industry and educational standard and requirements
will increase student retention rate. Curriculum will be continuously evaluated for relevance with
industry and educational requirements

Benefits:
Improved curriculum will provide students with employment and/or transfer skills.

Request for Resources
None at this time, requirements may change based on course requirements.

Funding Sources

No new resources are required (use existing resources)	X
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	
Requires computer equipment funds (hardware and software)	
Requires college equipment funds (other than computer related)	
Requires college facilities funds	
Requires other resources (grants, etc.)	

Initiative

Continuous technology updates

Initiative ID Drafting Program

Links to Finding 1,2 and 6

Continuous hardware and software updates will provide the most current resources for students. Current technology will provide the method for students to achieve further success and retention in the program.

Benefits

Students are trained in the most current technology.

Request for Resources

Continuous technology updates

Funding Sources

Please check one or more of the following funding sources.

No new resources are required (use existing resources)	
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	
Requires computer equipment funds (hardware and software)	
Requires college equipment funds (other than computer related)	
Requires college facilities funds	
Requires other resources (grants, etc.) VTEA Funds	X

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Initiative
Instructional skills upgrades

Initiative ID Drafting Program

Links to Finding 1, 2 and 6
Continuous training on software update.
Benefits
Students are trained on the most current software.

Request for Resources
Annual software training classes ($3000).

Funding Sources

No new resources are required (use existing resources)	
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	
Requires computer equipment funds (hardware and software))	
Requires college equipment funds (other than computer related)	
Requires college facilities funds	
Requires other resources (grants, etc.)VTEA Funds	X

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Initiative

Evaluation of the degree and certificate requirements.

Initiative ID Drafting Program

Links to Finding 3 and 5

Benefits

Degrees/certificates are more attainable to students.

Request for Resources

None.

Funding Sources

No new resources are required (use existing resources)	X
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	
Requires computer equipment funds (hardware and software)	
Requires college equipment funds (other than computer related)	
Requires college facilities funds	
Requires other resources (grants, etc.)	

Initiative

The program will need to re-evaluate its practice of cross-listing classes.

Initiative ID Drafting Program

Links to Finding 1

Benefits

The program data will be more reflective of actual student data.

Request for Resources

None.

Funding Sources

No new resources are required (use existing resources)	X
Requires additional general funds for personnel, supplies or services (includes maintenance contracts)	
Requires computer equipment funds (hardware and software)	
Requires college equipment funds (other than computer related)	
Requires college facilities funds	
Requires other resources (grants, etc.)	

6A: Initiatives Priority Spreadsheet

The following blank tables represent Excel spreadsheets and will be substituted with a copy of the completed Excel spreadsheets.

Personnel –Faculty Requests

Other	Program	Program Priority (0, 1, 2, 3…)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (R, H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost	No New Resources Requested	General Fund	Other
1												
2												
3												
4												
5												

Personnel – Other Requests

Personnel - Other	Program	Program Priority (0, 1, 2, 3…)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (R, H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost	No New Resources Requested	New General Funds	Other
1												
2												
3												
4												
5												

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Computer Equipment and Software

	Equipment - Computer Related	Program	Program Priority (0, 1, 2, 3...)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (R, H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost	No New Resources Requested	Technology Fund	Other
1													
2													
3													
4													
5													

Other Equipment Requests

	Equipment	Program	Program Priority (0, 1, 2, 3...)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (R, H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost	No New Resources Requested	Equipment Fund	Other
1													
2													
3													
4													
5													

Facilities Requests

	Facilities	Program	Program Priority (0, 1, 2, 3...)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (R, H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost	No New Resources Requested	Facilities Fund	Other
1													
2													
3													
4													
5													

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Other Resource Requests

Other Resources	Program	Program Priority (0, 1, 2, 3...)	Division Priority (R,H,M,L)	Committee Priority (R, H, M, L)	College Priority (R, H, M, L)	Initiative ID	Initiative Title	Resource Description	Estimated Cost	No New Resources Requested	General Fund	Other
1												
2												
3												
4												
5												

6B: Program Level Initiative Prioritization
All initiatives will first be prioritized by the program staff. If the initiative can be completed by the program staff and requires no new resources, then the initiative should be given a priority 0 (multiple priority 0 initiatives are allowed). All other initiatives should be given a priority number starting with 1 (only one 1, one 2, etc.).

6C: Division Level Initiative Prioritization
The program initiatives within a division will be consolidated into division spreadsheets. The dean may include additional division-wide initiatives. All initiatives (excluding the '0' program priorities) will then be prioritized using the following priority levels:

    R: Required – mandated or unavoidable needs (litigation, contracts, unsafe to operate conditions, etc.).
    H: High – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)
    M: Medium – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)
    L: Low – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)

6D: Committee Level Initiative Prioritization
The division's spreadsheets will be prioritized by the appropriate college-wide committees (staffing, technology, equipment, facilities) using the following priority levels.

    R: Required – mandated or unavoidable needs (litigation, contracts, unsafe to operate conditions, etc.).
    H: High – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)
    M: Medium – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)
    L: Low – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)

6E: College Level Initiative Prioritization

Dean's will present the consolidated prioritized initiatives to the College Planning Council. The College Planning Council will then prioritize the initiatives using the following priority levels.

R: Required – mandated or unavoidable needs (litigation, contracts, unsafe to operate conditions, etc.).
H: High – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)
M: Medium – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)
L: Low – approximately 1/3 of the total division's initiatives by resource category (personnel, equipment, etc.)

7A: Appeals

After the program review process is complete, your program has the right to appeal the ranking of initiatives.

If you choose to appeal, please complete the form that explains and supports your position.
The appeal will be handled at the next higher level of the program review process.

7B: Process Assessment

In this first year of program review using the new format, programs will be establishing performance indicators (goals) for analysis next year. Program review will take place annually, but until programs have been through an entire annual cycle, they cannot completely assess the process. However, your input is very important to us as we strive to improve, and your initial comments on this new process are encouraged.