Advanced Technology Division

Drafting Technology

Unit Plan

2004 - 2005

Lane Community College SM

Lane Community College
Drafting Technology Unit Plan 2004 - 2005

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Part I. Alignment with the College

1) Core Values

The drafting technology program is a credit instructional program and has been offered at Lane Community College since 1976. The program is administered under the Office of Instruction and Student Services through the Advanced Technology Division. This program is centrally aligned with the College's strategic directions, core values, and learning centered principles.

Learning: Learning is both theoretical and applied. Student learning progresses from basic to advanced technical, academic and employability skills.

Diversity and Accessibility: The program faculty welcome students from diverse backgrounds. Students with special needs are accommodated with appropriate supplemental learning technologies and experiences.

Innovation: Faculty maintain their expertise in the field and incorporate advanced technologies in the curriculum. The faculty has made a commitment to maximize the use of innovative instructional technologies to transform the curriculum.

Collaboration and Partnership: The faculty work very closely with their program advisory committee. This committee is a representation of active community business partners who provide advice and program support. The drafting technology faculty work very closely with other divisional programs.

Integrity: The program faculty has demonstrated a high degree of integrity. They are openly accountable to perform according to the policies, procedures and expectations of the College, the division, the advisory committee and most importantly, the students.

2) Strategic Directions

Transforming Students' Lives Foster the personal, professional, and intellectual growth of learners by providing exemplary and innovative teaching and learning experiences and student support services. Commit to a culture of assessment of programs, services and learning. Position Lane as a vital community partner by empowering a learning workforce in a changing economy.	The drafting technology program is a professional technical education credit program that provides career learning and counseling. The program includes both classroom and industry equivalent laboratory instruction using current equipment and technologies. The curriculum provides instruction in employability, applied academic and technical skills. The program and course outcomes are assessed using multiple measures including: attainment of program outcomes, core abilities and learning college principles. Each course has identified specific assessment methods including: technical skill demonstration, group projects, research, portfolios, written tests, etc. The program has an active advisory committee, with representation from the employer community. The program works closely with other credit and non-credit programs to facilitate training a "learning workforce".
Transforming the Learning Environment	This is an inclusive learning-centered program that

Create a diverse and inclusive learning college: develop institutional capacity to respond effectively and respectfully to students, staff, and community members of all cultures, languages, classes, races, genders, ethnic backgrounds, religions, sexual orientations, and abilities. Create, enhance, and maintain inviting and welcoming facilities that are safe, accessible, functional, well-equipped, aesthetically appealing and environmentally sound.	actively seeks and responds to diversity in its students and staff. The faculty create and maintain the best learning environments possible, within their existing resource constraints, to support students in obtaining their educational goals. Instructors in this program must constantly renew and improve their curriculum and learning environments to align to the industry training standards.
Transforming the College Organization Achieve and sustain fiscal stability. Build organizational capacity and systems to support student success and effective operations. Promote professional growth and provide increased development opportunities for staff both within and outside the College	The drafting technology program is constantly assessing its operational efficiency and effectiveness. The program has been developing operating benchmarks (performance indicators) by which it can compare its actual to its planned operations. This methodology provides the basis for analyzing deviations and trends, identifying causes, and formulating solutions. The faculty in the program have continuously developed their knowledge, skills and abilities as instructors and as industry experts.

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3) <u>Learning Centered Principles</u>

Lane provides opportunities for transformation through learning.	The primary learning outcome of the Drafting Technology program is to provide instruction and hands-on training to enable students to obtain career employment. The program prepares students by focusing on both technical and employability skill development. Qualifying for entry-level and advanced employment transforms the student's life.
Lane engages learners as active partners in the learning process.	Students must actively demonstrate their technical and employability skills. Students initiate and manage their progress through the learning process.
Lane creates a learning environment that motivates and inspires students to recognize their responsibility for their own learning.	Students recognize their active involvement may lead to high-paying career positions. The learning environment includes both classroom and laboratory experiences that emulate the workplace.
Lane offers multiple options for learning based on proven and innovative theories and methods that address the needs of diverse learners.	Learning methods include lectures, reading, writing, demonstrations, laboratories, problem solving, researching, building, diagnosing, repairing, modeling, computer-based, cooperative work experiences, group/team projects, formal and self-assessment. Students receive appropriate learning accommodations to ensure success in the program.
Lane commits to a culture of assessment of programs, services and learning, honoring the values of intellectual freedom, community responsibility and student need.	The drafting technology program conducts both formative assessment of a student's knowledge, employ-abilities, technical skills and academic skills; and, summative assessment based on

	industry or national standards. Faculty assess the stated achievement of the program learning and operational outcomes. Advisory committees provide additional assessment on the relevancy of the curriculum and the quality of the student completers.
Lane fosters knowledge and appreciation of diversity among staff and students and encourages pluralism and intercultural competence. Lane engages learners from diverse cultural and social contexts.	The mission of the drafting rechnology program is to transform student lives through learning. The "student" should be representative of the diversity of the community. The program faculty work closely with the college's cultural and diversity programs and initiatives.
Lane is committed to both individual and organizational learning.	Program students, faculty, staff, administrators and community members are committed to learning. Each organizational member gains knowledge and intrinsic reward for actively engaging in learning.
Lane students and staff are a community of learners, all of whom contribute to learning.	The program faculty are continuously engaged in keeping current with the new advances in the industry. They are active learners engaged with students and other colleagues to promote a community of learners.
Lane promotes open communication among staff, students and the community within and across organizational and physical boundaries.	The students, faculty and staff have open access to many forms of operational and governance communications: e-mail, The Daily, the web, meetings, forums, governance councils, etc.

Part II. Unit Description

1) Unit Mission/Vision

The Drafting Technology program aligns with the College's mission. *Lane is a learning-centered community college that provides affordable, quality, lifelong educational opportunities that include: Professional technical and lower divisional college transfer programs.*

The Drafting Technology program's vision is the same as the College's vision: *Transforming lives through learning.*

2) Catalog Description

Program Description

The Drafting program is an occupational, preparatory, two-year Associate of Applied Science degree and/or a one-year certificate of completion program.

The Drafting program features state-of-the-art laboratories where students prepare for careers in architectural, mechanical or civil drafting. The advanced expertise of the faculty make Lane's Drafting program the best way to enter the field.

Faculty in the program bring considerable experience to the classroom and regularly attend workshops to help them keep up with changes in the industry.

The program provides classroom training in the mathematical, visual and communication skills needed to demonstrate proficiency in the use of at least one CAD software program. Students will set up a drawing, create and modify text and geometry, use associative dimensioning correctly, create, store and use blocks or symbols, manage object properties including line type and layer, create objects in three dimensions and print or plot drawings using a correct scale. Second-year students learn to use the most current version of at least one solid modeler software program.

Program course work for all students includes: Graphic Concepts; Engineering Information; Computer Fundamentals; Mechanical and Architectural Drafting; Survey Applications and a seminar in workplace skills. Program course work for second-year students includes Statics, Strength of materials, Structural Steel Detailing, Technical Report Writing, a cooperative education work experience and 18-21 credits of specialized training in either architectural, mechanical, or civil drafting

Architectural drafters may work for residential designers, structural engineers, architects, cabinet shops or construction firms. Mechanical drafters may work in the manufacture of electronics, precision sheet metal, heavy equipment steel fabrication, process piping or plastics. Civil drafters may work for a structural engineer or for city, county, state or federal agencies.

This training can lead to employment for experienced drafters earning approximately $37,000 annually. Employment opportunities for architectural and civil drafters are affected by short-term fluctuations in construction industry activity, and opportunities for mechanical drafters are affected by short-term business cycle fluctuations. Drafters must have post-secondary training to gain the necessary skills for this occupation. Those with an associate degree have a competitive advantage in this labor market.

Normal program entry is fall term. A program orientation is held for new students for fall term (dates available in counseling or the Students First! Center). Contact the department advisor/counselor for assistance for winter and spring term entry. Applicants complete placement testing (Assessment & Testing Office, Building 1) in reading, writing and math. A minimum score of 68 in Reading and 64 in Writing is required. Basic computer literacy skills are a prerequisite to any CAD course.

Purpose
To prepare students for careers in architectural and mechanical drafting. The profession requires attention to detail and the ability to learn mathematical, visual, and communication skills.

Architectural drafters may work for a residential designer, a structural engineer, an architect, a cabinet shop, or a construction firm.

Mechanical drafters may work in the manufacture of electronics, precision sheet metal, heavy equipment, steel fabrication, process piping, and plastics.

Learning Outcomes
The graduate of the one-year program will:

- demonstrate basic competence in the use of at least one CAD software program. (Setup a drawing, create and modify text and geometry, use associative, dimensioning correctly, create, store, and use blocks or symbols, manage object properties including linetype and layer, create objects in three dimensions, and print or plot drawings using a correct scale.)
- demonstrate basic graphical literacy. explain basic standard practices in architectural and mechanical drafting.
- access information from public libraries, research libraries, online sources, appropriate codes and standards, professional organizations, and vendor catalogs.
- interpret the concepts of a problem-solving task and translate them into mathematical language, and solve using mathematical operations.
- In addition to the above outcomes, the graduate of the two-year program will:
- use graphic principles in the solution of problems relating to drafting and/or design.
- produce drawings in accordance with industry standards appropriate to their particular emphasis area (architectural or mechanical drafting), e.g., ANSI/ASME, AIA, building codes.

Employment Trends
Employment in this industry is estimated to be much larger than average. Employment opportunities for architectural and civil drafters are affected by short-term fluctuations in construction industry activity, and opportunities for mechanical drafters are affected by short-term business cycle fluctuations. Drafters must have post-secondary training to gain the necessary skills for this occupation. Those with an associate degree have a competitive advantage in this labor market.

Wages
Statewide $11 hourly (one-year certificate, $7-8, hourly), $17 median hourly, $14-20 middle range, and $36,909 average annually

Costs in Addition to Tuition (estimates)
Books - $1,250
Tools - $25
Fees - $600 Total -$1,875
Fees are subject to change without notice.

Prerequisites
Minimum placement scores - Reading 68, Writing 64. A high school diploma or equivalent is recommended for all applicants to this program. Basic computer literacy skills are a prerequisite to any CAD course.

Criteria used for admission
Normal program entry is fall term. A program orientation is held for new students for fall term (dates available in Counseling or the Students First! Center). Contact advisor/counselor for assistance for winter and spring term entry.

3) History/Significant Program Events

How did your instructional unit evolve at Lane?
This program has been offered at the college since 1976.

What significant events have marked your growth?

Do you have a system for maintaining an archival history of your unit?
General historical information relies on oral transmission. Hard copy documentation is limited to instructors' record keeping of student class performance and classified personnel's recordation of budgetary information.

Do you have annual events that are representative of your unit's goals or teaching methods?

4) Degrees and Certificates

Two-Year Associate of Applied Science Degree	*Credits*
AAS Program Total	**97-104**
First Year	
Fall	
CAD 1 DRF 167	4
Graphic Concepts DRF 142	2
Engineering Information DRF 141	2
Applied Geometry for Technicians MTH 076 or Geometry MTH 097	4
Concepts of Computing CS 120 or Computer Fundamentals CIS 101	3-4
Total Credits	**15-16**
Winter	
CAD 2 DRF 168	4
Mechanical Drafting DRF 121	4
Applied Algebra for Technicians MTH 086 or Intermediate Algebra MTH 095	4-5
English Composition: Exp & Intro to Argument WR 121	3
Total Credits	**16-17**
Spring	
CAD 3D DRF 170	4
Architectural Drafting - Plans DRF 137	4
Survey Applications for Civil Drafting DRF 163	4
College Algebra MTH 111 or Science/Math/Computer Science elective	4-5
Cooperative Education: Drafting Seminar DRF 206	1
Total Credits	**17-18**
Second Year	
Fall	
Statics DRF 205	3
Human Relations requirement	3
Technical Report Writing WR 227	3
Emphasis electives	6-8
Total Credits	**15-17**
Winter	
Strength of Materials DRF 207	3
Principles of Technology 1 PGS 199A	4
Workplace Safety HE 125 or First Aid HE252 or PE/Health requirement	3
Structural Steel Detailing DRF 240	4
Emphasis electives	6
Total Credits	**20**

Spring	
Customizing AutoCAD DRF 243	2
Principles of Technology 2 PGS 199B	4
Cooperative Education: Drafting DRF 280 or Intro to Drafting: Special Projects DRF 255	2-3
Emphasis electives	6-7
Total Credits	**14-16**

Fall Term Emphasis electives
Architectural
Residential Buildings DRF 208 – 4 credits
Architectural Desktop DRF 209 – 3 credits
Mechanical
Mechanical Design DRF 232 - 4 credits
Mechanical Desktop DRF 244 or Inventor DRF 245 - 3 credits
Pipe Drafting DRF 247 - 1 credit
Civil Mapping & Platting DRF 261 - 3 credits
Geographical Information System DRF 265 - 3 credits

Winter Term Emphasis electives
Architectural
Commercial Buildings DRF 210 - 4 credits
Construction Codes CST 122 - 2 credits
Mechanical
Geometric Tolerancing DRF 233 - 4 credits
Descriptive Geometry & Sheet Metal Layout DRF 246 - 2 credits
Civil
Civil Engineering Drafting DRF 264 - 3 credits
Advanced Geographical Information Systems DRF 266 - 3 credits

Spring Term Emphasis electives Credits
Architectural
Mechanical Systems & Environmental Design DRF 211 - 4 credits
Site Plans & Landscape Drafting DRF 212 - 3 credits
Mechanical
Power Trains DRF 234 - 4 credits
Electrical Drafting DRF 203 - 2 credits
Hydraulics Drafting DRF 248 - 1 credit
Civil
Land Development Desktop DRF 267 - 4 credits
Structural Concrete Detailing DRF 268 - 2 credits

One-Year Certificate of Completion	*Credits*
One-year Certificate of Completion	**46-48**
First Year	
Fall	
CAD 1 DRF 167	4
Graphic Concepts DRF 142	2
Engineering Information DRF 141	2
Applied Geometry for Technicians MTH 076 or Geometry MTH 097	4
Concepts of Computing CS 120 or Computer Fundamentals CIS 101	3-4
Total Credits	**15-16**
Winter	
CAD 2 DRF 168	4
Mechanical Drafting DRF 121	4
Applied Algebra for Technicians MTH 086 or Intermediate Algebra MTH 095	4-5
Human Relations requirement	3
Total Credits	**15-16**
Spring	
CAD 3D DRF 170	4
Architectural Drafting - Plans DRF 137	4
Survey Applications for Civil Drafting DRF 163	4
Introduction to College Writing: Workplace Emphasis WR 115W or higher	3
Cooperative Education: Drafting Seminar DRF 206	1
Total Credits	**16**

Cooperative Education (Co-op) offers students college credit and a grade for on-the-job work experience related to their educational and career goals. Through Co-op a student can integrate theory and practice, develop skills, expand career knowledge, and make contacts for the future. Work schedules and work sites vary. Under the supervision of the Drafting Technology Co-op Coordinator and with instructor consent, a maximum of 18 Co-op credits may be earned in lieu of required fabrication/technology course credits.

5) Organizational Structure

Board of Education
President
Vice President of Instruction
Associate Vice President of Instruction
Division Chair Advanced Technology
Faculty Drafting Technology Program

6) Staff/Faculty

Name	Margaret Robertson
Classification	Full-Time Faculty
Year Hired	
Degrees/Credentials	

Name	Jon Bridges
Classification	Full-Time Faculty
Year Hired	
Degrees/Credentials	

7) Student Profile

Please refer to the Program Learning Outcomes, Goals and Performance Indicators on page 10.

8) Facilities and Equipment

The Drafting Technology program is housed in building 18.

What are its strengths?
The program has very good facilities, computers and software.

Its challenges?
The program has $113,500 in existing equipment. It is very difficult to maintain, replace and upgrade this equipment. Additionally, the program must keep current with new advances in the industry and in instructional technologies. The program is reliant upon Carl Perkins and the local business for support.

What are your utilization ratios?
This program is exceeding the expected student to faculty ratio (expected is 26 : 1, actual is 24.51 : 1)

Provide a copy of your equipment inventory.
Please refer to the Equipment Inventory Spreadsheet on page 28.

What are your equipment strengths?
Students learn on well equipped computers running the industry standard software.

Challenges?
It has been challenging to continuously upgrade the computers and software.

Do you have any plans in place for equipment replacement?
Refer to the Existing Equipment Inventory Spreadsheet on page 28.

9) Budget Profile

Refer to the Program Operations charts on pages 14 and 15**.**

Program Learning Outcomes, Goals and Performance Indicators

Program Learning Outcomes/Goals	Performance Indicators
1) Demonstrate employability skills required for initial employment and advancement in the industry that include: attendance, proper attire, customer relations, following directions, working in teams, and understanding work rules and ethics.	80% of the first year students will qualify for the "select student" status by receiving a recommendation from a full-time contracted faculty member. 90% percent of the second year students will complete their programs as "select students". Criteria to qualify for the "select" status will be determined and published by the faculty prior to the start of the academic year.
2) Demonstrate safe work practices and equipment usage while performing operations in a workstation environment.	90% of all students will pass a safety written and demonstration test.
3) Demonstrate basic competence in the use of at least one CAD software program: setup a drawing, create and modify text and geometry, use associative dimensioning correctly, create, store and use blocks or symbols, manage object properties including line type and layer, create objects in three dimensions, and print or plot drawings using a correct scale.	90% of the students who complete the program will have gained the necessary competencies to obtain entry level employment in a drafting related occupation.
4) Explain basic standard practices in architectural and mechanical drafting.	90% of the students who complete the program will pass an industry certification examination.
Interpret the concepts of a problem-solving task and translate them into mathematical language, and solve using mathematical operations.	90% of the program completers will pass a final program computations examination with a 70% or better score.
Demonstrate technical abilities in researching, accessing and interpreting written, computer program or web-based reference materials for construction and carpentry.	All students will conduct research with citations in a written report in both the first and second year of the program.
Student Success Goals	**Performance Indicators**
Students will have access to the program.	The program will achieve the following student to faculty ratios: R-SFTE / FFTE = 26 : 1 CH-SFTE / FFTE = 16 :1 This means for every funded faculty position 26 reimbursable student full-time equivalents should be enrolled or 16 credit hour student full-time equivalents. The program did not meet this student access goal achieving a 24.51 to 1 R-SFTE/FFTE ratio, and a 14.7 to 1 CH-SFTE to FFTE ratio.
Students who declare their major in this program will increase as a percentage of the total students enrolled.	FY2004 was the base year. 87 of the unduplicated headcount were declared majors.

Program graduates will increase as a percentage of the total students enrolled.	No data available
The percentage of enrolled female students in the program will exceed the percentage of females in the division programs.	12% of students enrolled in the advanced technology division were female. 27.6% of the Drafting Technology students were female.
The percentage of enrolled non-Caucasian program students will exceed the percentage of the non-Caucasian students in the college.	19% of the Drafting Technology students are non-Caucasian.
The percentage of program students who complete each term will exceed the college completion rate.	The college completion rate was 83.24%. The program completion rate was 85.45%.
The percentage of program term completers who receive a C- or greater will exceed the college "success" rate.	The college "success" rate was 79.08%. The program "success" rate was 83.48%.
Students will complete the program within three years.	90% of the students who complete the two-year drafting program will have completed within nine terms.
Student completers will be asked to evaluate their overall satisfaction with the program training.	95% of the students who complete the Drafting Technology program will express satisfaction with the level of training provided.
Employers will be satisfied with the job performance of the prior year's program completers.	90% of employers will express job performance satisfaction with the program's student completers. On a five point Likert scale, satisfaction is greater than the midpoint.

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Program Learning Outcomes Assessment Matrix

	Program Core Courses														General Education													
Drafting Technology	DRF 167 CAD 1	DRF 142 Graphic Concepts	DRF 141 Engineering Information	DRF 168 CAD 2	DRF 121 Mechanical Drafting	DRF 170 CAD 3D	DRF 137 Architectural Drafting - Plans	DRF 163 Survey Applications for Civil Drafting	DRF 206 Cooperative Education: Drafting	DRF 205 Statics	DRF 207 Strength of Materials	DRF 240 Structural Steel Detailing	DRF 243 Customizing AutoCAD	DRF 255 Drafting Special Projects	ENGR 280D Cooperative Education: Drafting	HE 125 Workplace Safety	PH 091 Principles of Technology 1	PH 092 Principles of Technology 2	Human Relations Requirement	WR 121 English Composition	WR 227 Technical Report Writing	WR 115 Intro to College Writing: Workforce	CIS 101 Computer Fundamentals	CS 120 Concepts of Computing	MTH 076 Applied Geometry for Techs	MTH 097 Geometry	MTH 086 Applied Algebra for Techs	MTH 095 Intermediate Algebra	MTH 111 College Algebra	Math, Science Comp Science Distribution
Associate Degree (103 Total Credits)	4	2	2	4	4	4	4	4	1	3	3	4	2	3		3	4	4	3	3	3		4		4		5		5
One-Year Certificate (45 Total Credits)	4	2	2	4	4	4	4	4	1													3	4		4		5		
Program Learning Outcomes																													
Demonstrate employability skills required for initial employment and advancement in the industry that include: attendance, proper attire, customer relations, following directions, working in teams, and understanding work rules and ethics.	P	P	P	P	P	P	P	P	P	P	P	P	P	P		P													
Demonstrate basic graphical literacy.	P	P	P	P	P	P	P	P	P	P	P	P	P	P															
Demonstrate basic competence in the use of at least one CAD software program: setup a drawing, createe and modify text and geometry, use associative dimensioning correctly, create, store and use blocks or symbols, manage object properties including linetype and layer, create objects in three dimensions, and print or plot drawings using a correct scale.	P	P	P	P	P	P	P	P	P	P	P	P	P	P															
Explain basic standard practices in architectural and mechanical drafting.	S	S	S	S	P	S	P	S	S	P	P	P	S	S															
Use appropriate library and information resources to research professional issues and support lifelong learning.	S	S	S	S	S	S	S	S	S	S	S	S	S	S						P	P	P							
Interpret the concepts of a problem-solving task and translate them into mathematical language, and solve using mathematical operations.	S	S	P	S	S	S	S	S	S	P	P	S	S	S			P	P							P	P			P
Core Abilities																													
Communicate effectively.	P	P	P	P	P	P	P	P	P	P	P	P	P	P		S													
Think critically and solve problems effectively.	S	S	S	S	S	S	S	S	S	S	S	S	S	S			P	P											
Increase understanding of the relationship between self and community, including self-awareness and personal responsibility.									P										P										
Explore academic disciplines of liberal arts, social sciences, and physical sciences.																P	P	P	P	P	P	P	P	P	P	P	P	P	P
Learning College Principles																													
Learners are active partners in the learning process.	P	P	P	P	P	P	P	P	P	P	P	P	P	P															
Learners are self-directed.	P	P	P	P	P	P	P	P	P	P	P	P	P	P															
Multiple learning options for diverse learners.	P	P	P	P	P	P	P	P	P	P	P	P	P	P															
Learning is promoted across organizational boundaries.														S		P	P	P	P	P	P	P	P	P	P	P	P	P	P
Learning is substantive and documented.	P	P	P	P	P	P	P	P	P	P	P	P	P	P															
Assessment Methods																													
Technical Skill Performance Observation/Evaluation	P	P	P	P	P	P	P	P	P	P	P	P	P	P															
Employability Skills Evaluation	S	S	S	S	S	S	S	S	P	S	S	S	S	S															
Group Project																													
Journaling																													
Library Research																													
Oral Report/Presentation	S	S	S	S	S	S	S	S		S	S	S	S	S															
Peer Assessment																													
Portfolio	P	P	P	P	P	P	P	P		P	P	P	P	P															
Pre and Post Test																													
Project Evaluation	P	P	P	P	P	P	P	P		P	P	P	P	P															
Quizzes																													
Self Assessment																													
Written Report																													
Written Tests/Examinations																													

P = this is a primary course for meeting the program learning outcome, core ability, learning college principle, or assessment method.

S = this course meets some of the program learning outcome, core ability, learning college principle or assessment method.

	Architectural Emphasis						Mechanical Emphasis							
Drafting Technology	DRF 208 Residential Buildings	DRF 209 Architectural Desktop	DRF 210 Commercial Buildings	CST 122 Construction Codes	DRF 211 Mechanical Systems and Envir Design	DRF 212 Site Plans & Landscape Drafting	DRF 232 Mechanical Design	DRF 245 Inventor	DRF 247 Pipe Drafting	DRF 233 Geometric Tolerancing	DRF 246 Descriptive Geometry Sheet Metal Layout	DRF 234 Power Trains	DRF 203 Electrical Drafting	DRF 248 Hydraulics Drafting
Associate Degree (103 Total Credits)	4	3	4	2	4	3	4	3	1	4	2	4	2	1
One-Year Certificate (45 Total Credits)														
Program Learning Outcomes														
Demonstrate employability skills required for initial employment and advancement in the industry that include: attendance, proper attire, customer relations, following directions, working in teams, and understanding work rules and ethics.	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Demonstrate basic graphical literacy.	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Demonstrate basic competence in the use of at least one CAD software program: setup a drawing, createe and modify text and geometry, use associative dimensioning correctly, create, store and use blocks or symbols, manage object properties including linetype and layer, create objects in three dimensions, and print or plot drawings using a correct scale.	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Explain basic standard practices in architectural and mechanical drafting.	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Use appropriate library and information resources to research professional issues and support lifelong learning.	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Interpret the concepts of a problem-solving task and translate them into mathematical language, and solve using mathematical	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Core Abilities														
Communicate effectively.	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Think critically and solve problems effectively.	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Increase understanding of the relationship between self and community, including self-awareness and personal responsibility.														
Explore academic disciplines of liberal arts, social sciences, and physical sciences.														
Learning College Principles														
Learners are active partners in the learning process.	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Learners are self-directed.	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Multiple learning options for diverse learners.	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Learning is promoted across organizational boundaries.														
Learning is substantive and documented.	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Assessment Methods														
Technical Skill Performance Observation/Evaluation	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Employability Skills Evaluation	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Group Project														
Journaling														
Library Research														
Oral Report/Presentation	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Peer Assessment														
Portfolio	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Pre and Post Test														
Project Evaluation	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Quizzes														
Self Assessment														
Written Report														
Written Tests/Examinations														

P = this is a primary course for meeting the program learning outcome, core ability, learning college principle, or assessment method.

S = this course meets some of the program learning outcome, core ability, learning college principle or assessment method.

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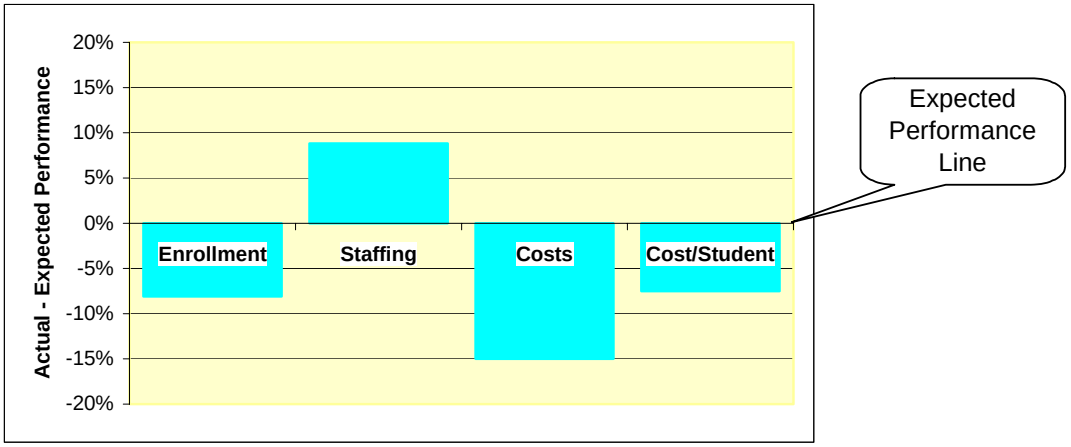
Unit Performance

Program Operations – Actual to Expected Analysis

Drafting Technology

	2003 - 2004 Outcomes	Expected*	Actual	Difference	Analysis
1	**Enrollment**				
2	Reimbursable Student FTE	99.733	91.660	92%	
3	Credit Hour Student FTE	59.840	54.996	92%	**Enrollment is lower than expected.**
4	Student Head Count	150	87	58%	
5	**Staffing**				
6	Full-time Equivalent Faculty	2.750	2.000	73%	
7	Part-time Equivalent Faculty	0.687	1.740	253%	
8	**Total Faculty FTE**	**3.437**	**3.740**	**109%**	**Faculty Staffing is higher than expected.**
9	**Budget**				
10	FT Faculty Dollars	131,703	95,791	73%	
11	PT Faculty Dollars	23,716	60,027	253%	
12	Lab Assistant Dollars	14,960	-	0%	
13	Other Payroll Expenses	73,467	67,188	91%	
14	Materials and Supplies	24,061	4,731	20%	
15	**Direct Instruction Costs**	**267,906**	**227,737**	**85%**	**Expenses are lower than expected.**
16	**Operating Ratios**				
17	R-SFTE/Faculty FTE	29.02	24.51	84%	
18	CH-SFTE/Faculty FTE	17.41	14.70	84%	**Faculty are serving fewer students.**
19	Cost / R-SFTE	2,686.23	2,484.58	92%	
20	Cost / CH-SFTE	4,477.04	4,140.97	92%	**Cost per student is lower than expected.**
21	**Non-tuition Revenues**				
22	Course Fees				
23	Differential Fees				
24	Program Fees				
25	Sales				
26	Donations				

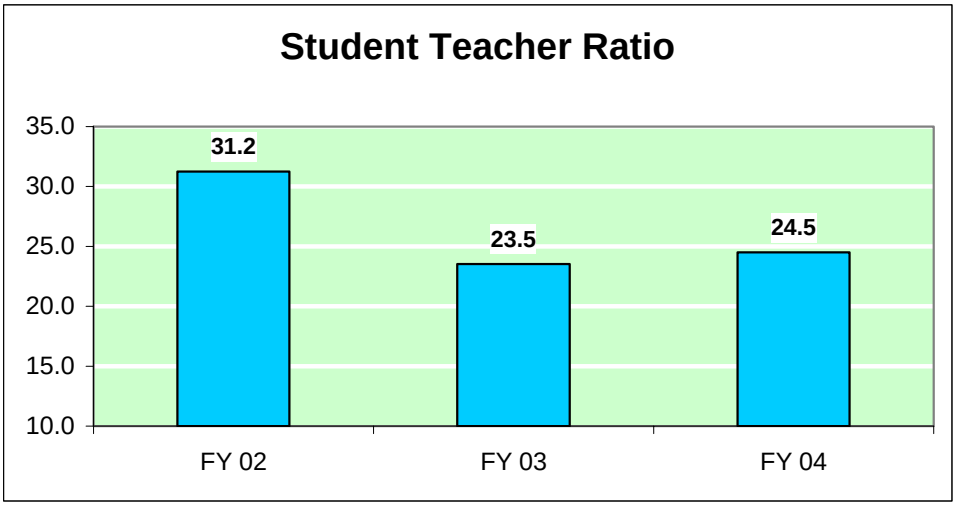
* Expected calculations are based on the instructional program benchmarks model.
* This program is a medium cost program in the benchmark model.

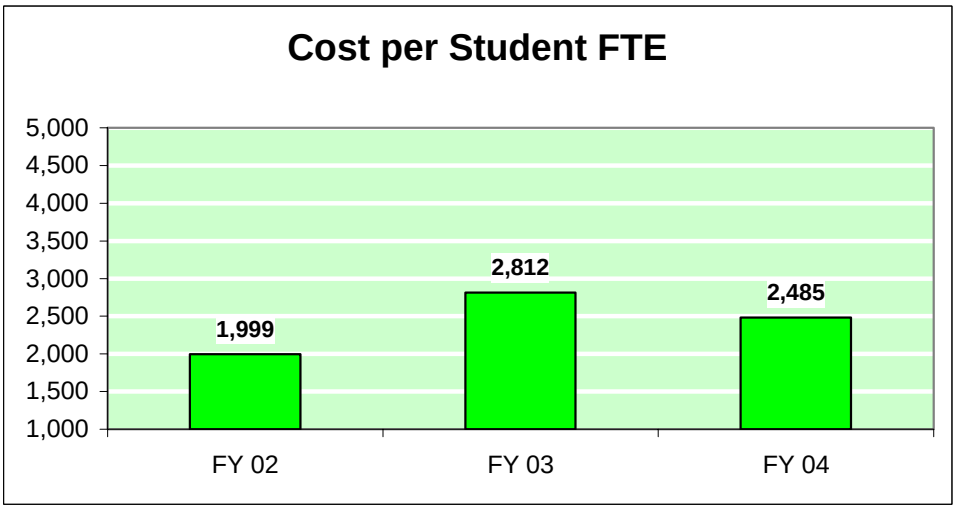


Program Operating Trends

Drafting Technology

	Operating Data	FY 02 Actual	FY 03 Actual	FY 04 Actual
1	Full-Time Faculty FTE	2.000	2.000	2.000
2	Part-Time Faculty FTE	1.633	1.633	1.740
3	Total Faculty FTE	3.633	3.633	3.740
4	Student FTE	113.490	85.456	91.660
5	SFTE / FFTE	31.239	23.522	24.508
6				
7	Full-Time Faculty	86,074	91,263	95,791
8	Part-Time Faculty	71,358	78,270	60,027
9	Lab Assistant	3,006	0	0
10	Other Payroll Expenses	62,418	56,648	67,188
11	Materials and Supplies	4,000	14,090	4,731
12	Total	226,856	240,271	227,736
13	Cost per Student FTE	1,999	2,812	2,485





Program Outcomes Analysis

1. How effectively did you fulfill your unit's mission?

The program served 87 students who were declared majors (91.66 reimbursable student FTE). The program suspended offering the civil engineering emphasis last year as an effort to improve operating efficiency. The program identified learning outcomes, goals and performance indicators which will be used in future unit plans to better respond to this question.

2. How well did students meet your learning outcomes?

Refer to the Program Learning Outcomes (pages 10 and 11) for the performance indicators. We Identified the performance indicators this year. It is our intent to measure these goals in next year's unit plan.
The drafting program learning outcomes are in alignment with current industry standards provided by the drafting advisory committee.

Students are completing the program and obtaining employment.

3. How well did students meet the Core Abilities outcomes?

Refer to the Program Learning Outcomes Assessment Matrix on pages 12 and 13. The students demonstrated their ability to communicate effectively, think critically and solve problems, plus show a mastery of knowledge in the drafting field.

4. How efficiently did you use the resources you were given?

Please refer to the Program Operations: Actual to Expected Analysis on page 14.
In summary:

Enrollment: 8% less than expected.
Staffing: 9% higher than expected.
Budget: 5% less than expected.
Cost per Student: 8% less than expected.

The best indicator for the program's efficiency is the cost per student ratio. The program is expending less per student than expected and less than the previous year (refer to page 15). The program staff have additional capacity to serve more students which should yield a smaller cost per student ratio.

5. How well are you utilizing current technology?

The drafting program has always been driven to provide students with the newest drafting technologies. Students have access to two computer laboratories equipped with the latest CAD and drafting software.

6. How effective was your relationship with your advisory committee in achieving unit goals?

Advisory committee members review the drafting program curriculum during the year. One of the goals of the advisory committee is get involved in the unit planning process before the plan is due in December. New members are added to ensure diversity and innovation within our local industry.

7. How well did you meet faculty and staff goals?

The Drafting program instructors meet their basic goals of updating course textbooks, creating new classroom presentations and adding new instructional materials.

The faculty is responsive to the recommendations of the advisory committee and are keeping the program in stride with current and changing technologies.

8. Did last year's funded initiatives meet your goals?

The program did not receive initiative funding last year.

9. What are the overall unit's strengths?

Providing quality and relevant instruction is the strength of the program.

10. What are the overall unit's challenges?
The program needs to increase enrollment and maintain the existing computer laboratories (especially the software licensing).

11. Program Analysis Findings

Finding 1: The drafting technology program needs to increase student enrollment while maintaining its current operating efficiencies.
Finding 2: The drafting technology program needs to maintain its laboratory equipment and software.
Finding 3: The drafting technology program needs to continuously improve its curriculum and operations. The program should acquire new technologies to keep current with advances in drafting and instructional technologies.

Part IV: Projected Performance

Program Initiatives

1. 1. Initiative Title and Identifier (Unit Abbreviation, Fiscal Year, Type, Sequence Number)
Division Priority: 9

Initiative 1: Marketing and Curriculum Revision
Drafting Technology, FY 2005, Enhancement, 01 = **DR05E01**

2. Linkage to Program Analysis Findings

Finding 1: The drafting technology program needs to increase student enrollment while maintaining its current operating efficiencies.

3. Describe the Initiative

What is the need or intended use?
The drafting technology program needs to continuously improve its program to keep current with advances in the industry.

How was that need assessed?
Enrollment projections are less than expected.

What is your evidence of the need?
Enrollment is 8% lower than expected. Staffing levels are 9% higher than expected.

Given college resources, is it feasible?
Yes. *Faculty have the capacity to enroll more students without increasing recurring costs.*

Is it an efficient use of college resources?
Yes. A current and relevant program will attract and retain more students. Students who complete a current and relevant program are much more employable.

What would be the campus location of this request/project?
The drafting technology program is located on the main campus building 18.

How many students (per year) will benefit?
The program serves approximately 87 students (majors) per year. (91.66 R-SFTE).

How will students benefit?
A current and relevant program will attract and retain more students. Students who complete a current and relevant program are much more employable.

4. Requested Resources

1) Market Research = $3,500

Concept:

- Enrollment rate shows fluctuations. Research will attempt to identify causes.
- Low enrollment may be due to a depressed economy.
- If research shows that the profession is shifting due to changing technology we will adapt accordingly to keep our program on the cutting edge.

Requirements:

- 80 hours faculty time
- Assistance from division chair
- Assistance from R & D staff
- Communication costs: travel or long distance telephone
- Food for Advisory Committee meetings
- Travel to meet with colleagues at peer institutions

2) Curriculum Development = $4,000
Concept:
- If research indicates the profession is shifting due to changing technology, the Drafting program needs to adapt. The nature of the program requires it to stay "on the cutting edge."

Requirements:
- Curriculum Development time, amount to be determined. Minimum estimate 120 hours.

3) Revise First-year Program = $1,400
Concept:
- New curriculum was implemented 2002-2003. As with any new program, some small revisions could make it even better.

Requirements:
- 40 hours planning and curriculum development

4) Curriculum Development (new course) = $5,000
Concept:
- Interdisciplinary initiative, in collaboration with Science Department
- Develop GE 115, Engineering Graphics.
- Transferable to Oregon State University
- Form of course taught at LCC in the past is no longer current or usable.

Requirements:
- 120 hours curriculum development time

5. Funding Sources

Carl Perkins
Curriculum Development

5.1 Alignment to Carl Perkins Act goals?

Student Skills Goal
This initiative will improve technical skills of students by providing opportunity for those students to learn how to operate safe and reliable equipment of a type that they will be expected to operate by their future employers

Work-based Learning Goal
Students should be trained on equipment similar to what they will work with when employed. Employers are seeking employees with knowledge and training on the equipment they have.

Effect on Profession Technical Education student success?
Students will gain industry specified skills which lead to higher paying employment.

Brief Carl Perkins funding history
The drafting technology program has utilized Perkins funding over the last 20 years to enhance its capability to offer effective, efficient training through purchase of equipment. In that time, Perkins money has allowed the program to align its capabilities with the needs of the industry for which it trains students. The result is better qualified students, a better and broader relationship with industry and more efficient use of educational time.

5.2 Alignment to Student Technology Fees.

This initiative is not seeking Student Technology Fees.

5.3 Curriculum Development

How will this initiative improve learning?
By researching the needs of employers and students to increase student enrollment.

What specific curricular materials will be produced?
New course laboratory training materials, projects and tests.

Why is this curriculum development and not just curriculum maintenance?
These items are new to the curriculum. The faculty must become proficient with the equipment/software and prepare new learning materials.

6. Organization and Program Codes

612100 112000

7. Alignment to the College's goals

This initiative aligns with the following college goals:

- Transforming Students' Lives
- Transforming the Learning Environment

Program Initiatives

2. 1. Initiative Title and Identifier (Unit Abbreviation, Fiscal Year, Type, Sequence Number)
Division Priority: 19

Initiative 2: Replace or Upgrade Existing Program Equipment and Software
Drafting Technology, FY 2005, Maintenance, 01 = **DR05M01**

2. Linkage to Program Analysis Findings

Finding 2: The drafting technology program needs to maintain its laboratory equipment and software. The total equipment inventory value is $113,500. The average annual replacement and upgrade cost should average $33,660.

3. Describe the Initiative

What is the need or intended use?
The program has an existing inventory of equipment and software that needs to be replaced or upgraded. Students should have current and operational equipment to ensure they are appropriately trained.

How was that need assessed?
There is a life cycle cost for all equipment and software. Equipment and software required for instructional program must eventually be replaced or upgraded (refer to the Existing Equipment Inventory on page 28).

What is your evidence of the need?
The program has an equipment inventory.

Given college resources, is it feasible?
Yes. The College should strive to maintain or improve its level of quality in the instructional programs.

Is it an efficient use of college resources?
Yes. Funding the life-cycle costs of equipment will minimize the cost of funding critical failures.

What would be the campus location of this request/project?
The Drafting Technology program is located on the main campus building 18.

How many students (per year) will benefit?
The program serves approximately 87 students (majors) per year. (91.66 R-SFTE).

How will students benefit?
Students will benefit by learning to industry entry-level how to operate equipment that they will be expected to operate as they obtain employment in the field for which they are being trained. They will benefit by having access to dependable, safe and current technology. They will benefit by learning to work efficiently with efficient equipment.

4. Requested Resources

Maintenance initiatives are requests for resources to maintain the existing levels of program efficiency and effectiveness. Maintenance initiatives respond to:

- any mandatory changes in the program (recurring contracts, change in credits, implementing accreditation or other curriculum standards), and,
- costs to maintain the existing curriculum and program equipment.

1) AutoCad software license = $7,000
This is the annual software license cost.

2) ESRI software license =$1,700
This is the annual software license cost.

3) Upgrade two computer LCD projectors = $8,000
The current projectors are old and do not provide adequate presentations.

4) Upgrade the computer laboratories workstations (60) = $84,000
These computer stations should be upgraded every four years to remain current with the advances to the CAD software.

5) Upgrade three classroom printers = $7,500
These printers should be upgraded when the computer stations are upgraded to remain current with the advances to the CAD software.

6) Upgrade a CAD plotter = $2,000
This plotter should be upgraded every five years.

7) Upgrade the codes and standards reference materials = $4,800
These materials should be upgraded every five years.

5. Funding Sources

Carl Perkins
Technology Fees

5.1 Alignment to Carl Perkins Act goals?

Student Skills Goal
This initiative will improve technical skills of students by providing opportunity for those students to learn how to operate safe and reliable equipment and software of a type that they will be expected to operate by their future employers

Work-based Learning Goal
Students should be trained on equipment and software similar to what they will work with when employed. Employers are seeking employees with knowledge and training on the equipment and software they have.

Effect on Profession Technical Education student success?
Students will gain industry specified skills which lead to higher paying employment.

Brief Carl Perkins funding history
The Drafting Technology program is reliant upon Carl Perkins funding to maintain and enhance its equipment and other instructional resources. This funding has allowed the program to align its capabilities with the needs of the industry for which it trains students. The result is better qualified students, a better and broader relationship with industry and more efficient use of educational time.

5.2 Alignment to Student Technology Fees.

This initiative is seeking student technology fees (TACT).

5.3 Curriculum Development

6. Organization and Program Codes

612100 112000

7. Alignment to the College's goals

This initiative aligns with the following college goals:

- Transforming Students' Lives
- Transforming the Learning Environment
- Transforming the College Organization
    - o implementing a "life-cycle" approach for funding equipment

Program Initiatives

3. 1. Initiative Title and Identifier (Unit Abbreviation, Fiscal Year, Type, Sequence Number)
Division Priority: 32

Initiative 3: Acquiring New Equipment, Software and Curriculum to Improve the Program
Drafting Technology, FY 2005, Enhancement, 02 = **DR05E02**

2. Linkage to Program Analysis Findings

Finding 3: The drafting technology program needs to continuously improve its curriculum and operations. The program should acquire new technologies to keep current with advances in drafting and instructional technologies.

3. Describe the Initiative

What is the need or intended use?
The drafting technology program needs to continuously improve its program to keep current with advances in the industry.

How was that need assessed?
Faculty assess the need to adapt and or create new instructional opportunities. This assessment involves investigating the emerging technology needs of local industries. Additionally, the faculty research national and regional trends through reviewing the literature and talking with other professional colleagues.

What is your evidence of the need?
There is a discrepancy between what the program can teach and what an entry level graduate will be required to know. Industrial training modules, mobile shop computers, a vertical mill and a parts cleaning oven are examples of new technology needs.

Given college resources, is it feasible?
Yes. The College should strive to improve its level of quality in the instructional programs.

Is it an efficient use of college resources?
Yes. A current and relevant program will attract and retain more students. Students who complete a current and relevant program are much more employable.

What would be the campus location of this request/project?
The Drafting Technology program is located on the main campus building 18.

How many students (per year) will benefit?
The program serves approximately 87 students (majors) per year. (91.66 R-SFTE).

How will students benefit?
A current and relevant program will attract and retain more students. Students who complete a current and relevant program are much more employable.

4. Requested Resources

1) Faculty Professional Development = $10,000

Concept:

- Drafting program uses and teaches rapidly-changing technology.
- Faculty need a more consistent method of staying aware of changes in the field and of future trends.
- Faculty need to keep software skills current in a rapidly-changing field.

Requirements:

- Funding for travel to Portland four times per year (two per contracted faculty) for software training.
- Funding for out-of-state travel four times per year (two per contracted faculty) for conferences, software trade shows, and training.
- Funding for substitute faculty.
- Professional memberships

- Professional journal subscriptions

2) Tutors and Classroom Assistants for Software Courses = $3,000

Concept:

- In classes of 20-30, students do not receive adequate individualized attention to optimize learning.
- Some students need tutors in order to succeed.
- Many students master skills far more quickly and thoroughly when they have access to assistants in computer labs.
- Having lab assistants on staff will allow labs to be available longer hours and will contribute to a welcoming environment.

Requirements:

- Funding for student assistants
- Staff to coordinate process

3) Teaching Aids and Hand-On Learning Tools = $1,500

Concept:

- Students learn best when they have access to three-dimensional objects related to the drawings they create.
- Students learn best when they can employ a variety of learning modes, including haptic modes.

Requirements:

- Provide concrete teaching aids and tools for hands-on learning.
- Purchase handbooks, codes, and standards as needed to allow students access to current knowledge.
- Purchase National CAD Standard, $465

5) Virtual Field Trips = $1,500

Concept:

- Allow students to "visit" multiple worksites.
- Students learn best when they see concepts of manufacturing, construction, and engineering actually applied in the real world.

Requirements:

- Purchase video camera.
- Purchase video editing software.
- Train faculty in use of camera and software.
- Occasional student support from Multimedia Department may be possible.

5. Funding Sources

Carl Perkins

5.1 Alignment to Carl Perkins Act goals?

Student Skills Goal

This initiative will improve technical skills of students by providing opportunity for those students to learn how to operate safe and reliable equipment of a type that they will be expected to operate by their future employers

Work-based Learning Goal

Students should be trained on equipment similar to what they will work with when employed. Employers are seeking employees with knowledge and training on the equipment they have.

Effect on Profession Technical Education student success?

Students will gain industry specified skills which lead to higher paying employment.

Brief Carl Perkins funding history

The drafting technology program has utilized Perkins funding over the last 20 years to enhance its capability to offer effective, efficient training through purchase of equipment. In that time, Perkins money has allowed the program to align its capabilities with the needs of the industry for which it trains students. The result is better qualified students, a better and broader relationship with industry and more efficient use of educational time.

5.2 Alignment to Student Technology Fees.

This initiative is not seeking Student Technology Fees.

5.3 Curriculum Development

How will this initiative improve learning?
By incorporating new technologies and training materials into the curriculum.

What specific curricular materials will be produced?
New course laboratory training materials, projects and tests.

Why is this curriculum development and not just curriculum maintenance?
These items are new to the curriculum. The faculty must become proficient with the equipment/software and prepare new learning materials.

6. Organization and Program Codes

612100 112000

7. Alignment to the College's goals

This initiative aligns with the following college goals:

- Transforming Students' Lives
- Transforming the Learning Environment

Lane Community College
Drafting Technology Unit Plan 2004 - 2005

Initiatives Spreadsheet

Priority	Initiative ID	Expected completion date	Initiative Title	Resource Description	$$	Recurring / Nonrecurring	Resource Type (mark with an "X")				Funding Sources (mark with an "X")					
							Payroll (w/OPE)	Equipment	Space	Other	Existing	New GF	Carl Perkins	Stud Tech	Curr Dev	Other
1	DR05E01	12/7/2005	Marketing and Curriculum Revision	Market Research	$3,500.00	NR	x			x			x			
2	DR05E01	12/7/2005	Marketing and Curriculum Revision	Curriclum Development (based on the market research)	$4,000.00	NR	x						x		x	
3	DR05M01	9/7/2005	Replace/Upgrade Existing Equipment	AutoCad Software License	$7,000.00	R		x						x		
4	DR05M01	9/7/2005	Replace/Upgrade Existing Equipment	ESRI Software License	$1,700.00	R		x						x		
5	DR05M01	9/7/2005	Replace/Upgrade Existing Equipment	2 LCD Computer Projectors	$8,000.00	NR		x						x		
6	DR05M02	9/7/2005	Replace/Upgrade Existing Equipment	Upgrade Codes and Standards Reference Materials	$4,800.00	NR		x					x			
7	DR05M01	9/7/2005	Replace/Upgrade Existing Equipment	Upgrade CAD Plotter	$2,000.00	NR		x					x	x		
8	DR05M01	9/7/2005	Replace/Upgrade Existing Equipment	Upgrade Classroom Printers (3)	$7,500.00	NR		x						x		
9	DR05M01	9/7/2005	Replace/Upgrade Existing Equipment	Upgrade Computers Labs	$84,000.00	NR		x						x		
10	DR05E01	12/7/2005	Marketing and Curriculum Revision	Develop an Engineering Graphics Course	$5,000.00	NR	x						x		x	
11	DR05E01	12/7/2005	Marketing and Curriculum Revision	Revise First-year Progam	$1,400.00	NR	x						x		x	
12	DR05E02	9/7/2005	New Resources to Improve the Program	Professional Development	$10,000.00	NR	x								x	x
13	DR05E02	9/7/2005	New Resources to Improve the Program	Tutors and Assistants	$3,000.00	R	x				x	x				
14	DR05E02	9/7/2005	New Resources to Improve the Program	Teaching Aids and Tools	$1,500.00	NR		x					x			
15	DR05E02	9/7/2005	New Resources to Improve the Program	Virtual Field Trips	$1,500.00	NR		x					x			

Equipment Inventory Spreadsheet

Existing Equipment Inventory

Program	Description	#	Unit Cost	Total Cost	Years of Life	Annual Cost
DR	Codes and standards	1	4,800	4,800	5	960
DR	AutoCad Software License	1	7,000	7,000	1	7,000
DR	ERSI software license	1	1,700	1,700	1	1,700
DR	Computer Stations	60	1,400	84,000	4	21,000
DR	Plotter	1	2,000	2,000	10	200
DR	Printer	2	3,000	6,000	5	1,200
DR	LCD Projectors	2	4,000	8,000	5	1,600
	Existing Equipment Total			**113,500**		
	Annual Replacement Costs					**33,660**

Projected FY06 Program Outcomes

1. What program level outcomes do you expect to achieve?

The program has developed a set of learning outcomes and operational goals. Assessment of these program outcomes will be based on the measurement of the actual performance to the performance indicators. Please refer to the Program Learning Outcomes, Goals and Performance Indicators chart on page 10. Specifically, student enrollment should increase.

2. How will your program enhance your students' abilities to meet Core Abilities outcomes?

The program has developed a Learning Outcomes Assessment Matrix that maps the program and general education courses required to compete an associates degree against the program's learning outcomes, core abilities and learning college principles. The primary and secondary assessment methods are also identified. Please see this chart on pages 12 and 13.

3. What course level outcomes do you expect to achieve?

What goals do you wish to set for 2004-2005?
Program goals remain as indicated for 2003-2004. That is that students would receive competent instruction in an effective and efficient learning environment that will lead to the acquisition of industrial entry-level skills. To accomplish this on-going goal the program will continue to prioritize equipment replacement needs and review its curriculum.

How will your courses grow, change or adapt?
We would like to adapt the courses to reflect the findings of the market research. Also, if funded, we would like to develop an engineering graphics course.

How will your instructional methods change or adapt?
If the initiatives are funded, the students will have better access to the instructors in a better laboratory environment.

What goals do you have for your instructional environment (classrooms and/or technologies and equipment)?
We are seeking to maintain and enhance our instructional equipment.

4. What plans do you have for enhancing your use of current technologies?

The program is requesting upgraded instructional lab stations, tools and equipment. Refer to initiative 2.
The program is request new instructional lab stations, tools and equipment. Refer to initiative 3.

5. What plans do you have for working more effectively with your Advisory Committee?

A goal of program staff is to recruit additional members to its advisory committee. If we are successful in reaching this goal we will have a broader based, more effective committee, representing more drafting technology disciplines.

6. How will you set faculty and staff goals?

The faculty and staff in this program will use this unit plan to help set goals. The inclusion of learning outcomes and operating goals provide the basis for assessment. The faculty and staff must continuously maintain and improve the program.

7. Enrollment Projections

We expect the enrollment to increase while maintaining the recurring operating costs.

8. Student Success Projections

The student success projections are part of the Program Learning Outcomes, Goals and Performance Indicators (page 9). Additional measures of student success will be developed during the year and added to the chart.

9. Facilities and Equipment Need Projection

This program has sufficient facility but requires the continuous upgrading and acquisition of new equipment to conform to the advances in the industry and in instructional technologies.

10. Budget Projections

Carl Perkins and Technology Fee dollars will be required to maintain and enhance the equipment.

_____ _____
Advisory Committee Chair Date

_____ _____
Division Chair Date