Part I. Alignment with College

Chapter 0: Unit Alignment
Key Question: How is your unit aligned with the college's goals and values?

1) Core Values

Review the work your unit did on core values in 2003-2004. [NOTE: errors in the year dates in the original template document were not "fixed", the year being clear in context…] Does the alignment you described remain accurate? Please update by removing commentary that no longer applies and, where appropriate, adding commentary that reflects changes or additions you have made since last year's Unit Plan.

In addition to the alignment as described in its 2003-2004 Unit Plan, the Computer Technology Department's alignment with institutional core values is characterized by:

- **Learning**

  The CIT department operates in a fast-moving context that demands constant learning from a student, faculty and organizational perspective. Ongoing efforts to work together to create a learning environment include:

  - development of lecture/lab classes that support varied learning styles
  - strengthening the tutoring focus in both open and classroom lab facilities
  - explicit tutoring training for lab staff at the initiative of the faculty lab coordinator
  - development of a common core curriculum for the professional/technical programs
  - reinforcing collaborative and adaptive faculty culture

  The efforts to provide effective tutoring and to support varied learning styles demonstrates a commitment to recognizing and respecting the unique needs of each learner, and to create a culture of achievement in a caring community.

- **Diversity**

  The CIT department has unique challenges in supporting diversity, both in teaching technical material that is challenging in its modalities (e.g. computer use for blind students) and in its culture (e.g. gender inequities).

  The areas addressed by this core value, welcoming diversity, creating an inclusive environment, working effectively in different cultural contexts, and understanding issues of power, privilege and difference, these are all addressed by a wide range of efforts that include:

  - continuously evolving efforts to support for CIT students with disabilities: hardware, software, staff training, collaboration with Disability Services

- faculty leadership role in leading the Women in Technology program
- active encouragement for female high-school students (career fairs, College Now articulations)
- minority populations represented in faculty and on the CIT advisory committee
- pioneer in development/use of ADA-compliant templates for department web pages

Innovation

The CIT department's work is characterized by constant innovation in technology, curriculum and culture. Evidence that the department supports creativity, anticipates and responds to challenges, and acts courageously in the face of challenges:

- creation of a common professional/technical core program, with innovative faculty collaboration between the different degree programs
- refocusing of the Computer Program degree on web technologies
- purchase of new Network program server to improve file system support and data sharing processes to support students in their classwork
- purchase of a new Computer User Support (CUS) program server to both support improved student service directly (help system) as well as provide a platform for student work in the CUS capstone course.
- commitment to upgrading instructional software (OS & Applications)
- encouraging students to obtain Microsoft software for use at home, as allowed under our MSDNAA License.

Collaboration and Partnership

The CIT department continues to manifest the core value of collaboration and partnership in many areas, including student, program, department, institutional and community contexts. Recent and ongoing aspects of this include collaboration and partnership with:

- continuing education - development of a model for integrating credit/non-credit course offerings, collaborative work in curriculum definition, collaborations in space usage
- College Now – new articulation policy and process, new articulations, creation of new faculty certification policy and process, advocacy and leadership in fee policy change
- counseling & advising – working closely in partnership to support students
- area high schools – creation of new College Now articulations
- library, Business Technologies (BT) – development of model for cross-departmental information literacy curriculum design and delivery
- faculty webmasters, LCC webmasters, Distance Learning – ongoing collaboration and support around a wide range of issues
- Coop, area businesses – development of coop opportunities in the community
- advisory committee, area businesses – shared efforts to maintain an effective curriculum

- Marketing and Public Relations – collaboration and partnership in advertising campaign development, web design resource development, improved marketing in a variety of contexts
- Advanced Technology – assisting with curriculum & necessary hardware for ELT287
- Consulting with Multimedia and Graphic Design on service courses they use, e.g. CIS140S.

▪ Integrity

The CIT department continues to conduct its work and cultivate relationships with professional and ethical integrity. This value is pervasive – some characteristic examples:

- honestly evaluating need, e.g. returning Bond funds that could have benefited the department, but were not truly *needed* and so were likely more needed elsewhere
- creating/supporting transparency in relationships, e.g. college business, around curriculum boundary issues
- self-governing model based on departmental charter

▪ Accessibility

The CIT department continues to aggressively support the core value of Accessibility, by strategically growing learning opportunities, and by minimizing barriers to learning:

- support for extended bench lab and open lab hours for students who don't have equipment at home
- a core curriculum that supports all CIT students who find themselves unable to attend beyond the first year obtaining a Computer Applications Specialist certificate.
- ongoing work to create distance learning options
- use of quiet study and group rooms to support students who may have barriers to learning

2) Strategic Directions

The Strategic Directions for Lane have been updated and expanded since the 2003-2004 Unit Plan. Please review the changes and provide specific examples of how your unit works to further these goals.

▪ Transforming Students' Lives

Transforming student lives starts with fostering the personal, professional, and intellectual growth of learners:

- program and course development, providing rigorous and appropriate courses for students

- creating curriculum that adapts to changing market conditions and supports students in their search for a career
- a coordinated support system for students outside the classroom, including the CIT instructional labs with a tutoring focus.
- a student-centered pedagogical style, with a commitment to offering instruction in both online and face-to-face classes
- support for students who have difficulty learning to operate in an academic environment, personal attention, quiet individual and group study rooms
- attention to detail in administrative details like scheduling, being available to serve students, and providing clear and timely support in an approachable way.

The department is committed to student transformation in other ways. It is committed to maintaining great student relations, going beyond what is required in creating a supportive environment and working to help students showing signs of academic or personal stress. Faculty engage and mentor students, and to model professional behavior, curiosity and commitment. The department also works to create the professional contacts that help a student get started, e.g. in extensive coop work.

▪ Transforming the Learning Environment

Being an agent for change in transforming the learning environment is a challenge that is central to what Lane does, but is especially visible in professional/technical programs. The students in these programs oFTEn have not yet built a comfortable and effective relationship with an educational institution as their learning ally, and it is by transforming the learning environment for these students that they are able to engage in their education and succeed in their goals.

The Computer Information Technology department helps create a culture of diverse and inclusive learning in all that it does by working effectively and respectfully with students, staff, and community members of all cultures, languages, classes, races, genders, ethnic backgrounds, religions, sexual orientations and abilities.

The CIT department helps transform the learning environment by:

- providing informal technology support in a wide range of contexts
- supplying a technologically informed users perspective in areas of technological objectives in almost all areas of the college's work
- collaborating widely across campus in areas of technology use and instruction
- piloting the instructional uses of different technologies
- modeling ADA compliance in its departmental website and in classrooms & labs

▪ Transforming the College Organization

The Computer Information Technology department's successes in achieving and sustaining fiscal stability are essential to its role in helping transform the College organization. These successes include:

- consistently operating within budget

- effectively implementing college financial policies and working to eliminate waste
- spending prudently, or not at all if it's not called for (e.g., returning Bond project equipment dollars)
- requesting resources wisely (e.g. making responsible and conservative equipment and personnel requests)

The Computer Information Technology department also works to build organizational capacity and systems to support student success and effective operations through:

- working effectively with Instructional Computing to support and build needed lab resources
- participating actively in a wide range of organizational systems, including: curriculum committees, TACT, Web Steering Committee, leadership role in Faculty Council, governance councils.
- conducting test pilot of student access to network

The Computer Information Technology Department promotes professional growth and provides increased development opportunities for staff both within and outside the College, as is evident from the range of these activities that faculty and staff have engaged in. Some characteristic examples:

- Workshop on teaching computer literacy subjects. (W04)
- Workshop on articulation of transfer courses. (F04)
- Daylong training on the architecture and configuration of RequestTracker software
- Interface 2004 Conference seminars and trade show
- Multiple textbook reviews, including object-oriented design and computer literacy
- Regular reading in trade journals, catalogs and online news groups and newsletters
- Participation in LCC's in-service activities
- Attended National Council for Staff, Program and Organizational Developers Conference
- Attended
- Engaged in a range of activities to learn new areas, e.g. PHP, Windows XP, Windows 2003 Server, VB.NET and ASP.NET

3) Learning Centered Principles

The Learning Centered Principles for Lane have also been updated and expanded since the 2003-2004 Unit Plan. Please review and provide specific examples of how your unit works to integrate these principles into your unit's methods and outcomes.

Learning Centered Principles

- Lane provides opportunities for transformation through learning. The Computer Information Department integrates this principle in its work through:

  - its methodologies for teaching (use of experiential and interactive learning methods, innovative use of technology, strong curriculum and program development efforts)

- providing support for students outside the classroom (instructor availability, support resources like the student work room, tutoring room, tutoring culture in instructional and bench labs)
- the professional development of faculty and staff (additional professional and academic certifications earned by faculty)
- community relationships and college business.

- Lane engages learners as active partners in the learning process. The Computer Information Technology Department integrates this principle in its work by:

  - experiential and interactive pedagogy
  - oFTEn requiring independent work in writing, library and web assignments
  - extensive coop requirements and opportunities

- Lane creates a learning environment that motivates and inspires students to recognize their responsibility for their own learning. The Computer Information Technology Department integrates this principle in its work:

  - each of the pedagogical and program elements that make students active partners, as listed above.
  - syllabi with clearly defined outcomes and measures of assessment, group assignment process.
  - creating an explicit climate of faculty availability, creating a rewarding and responsive climate to student initiative; being responsible for learning

- Lane offers multiple options for learning based on proven and innovative theories and methods that address the needs of diverse learners. The Computer Information Technology Department integrates this principle in its work:

  - the Computer Information Technology Department offers classes as online, in-class, and in many cases as a combination of these.
  - within many courses there are diverse opportunities for learning (kinesthetic, oral, and visual) and multiple methods of assessment (testing, writing, projects, and presentations).
  - all courses have a strong experiential component (e.g. as lab requirement)
  - there is required coop-based learning that is practical and realistic in its context and scope
  - the curriculum of each program includes group work and skills.

- Lane commits to a culture of assessment of programs, services and learning, honoring the values of intellectual freedom, community responsibility and student need. The Computer Information Technology Department integrates this principle in its work:

  - the department faculty conduct student evaluations beyond the minimum of what is required. Faculty use the data collected via that process to continually enhance curriculum and streamline educational processes.
  - faculty have a wide latitude and significant professional responsibility in assessing the success of programs through staying current with the workplace, industry needs and assessing student placement success.

- faculty undertake frequent periodic reviews of the outcomes of each program and the best methods of assessing those outcomes.

- 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 department faculty are above national averages in representation by women professionals, and faculty have taken a leadership role in the Women In Technology and Women in Transition programs – these are characteristic examples of how the Department promotes an environment where all learners are encouraged to develop their full potential.

- Lane is committed to both individual and organizational learning. The Computer Information Technology Department integrates this principle in its work through:

  - attention to core values, especially learning, collaboration/partnership, and innovation.
  - support for personal transformation, as evidenced by the significant amount of professional development engaged in by faculty and staff.
  - support for student learning, as documented in the section on learning as a core value.
  - transforming itself, as evidenced by a rapid rate of program evolution.
  - transforming its curriculum, as evidenced by its active course creation and modification.
  - transforming its business processes, as evidenced by its cultivation and development of active relationships with the business community, area high schools and other departments at Lane.

- Lane students and staff are a community of learners, all of whom contribute to learning. The Computer Information Technology department integrates this principle in its work through:

  - constructing systems of support for student learning outside the classroom. These systems include staff as well as faculty.
  - ample evidence of professional development.
  - active participation in College processes, helping them be learning processes for the institution.

- Lane promotes open communication among staff, students and the community within and across organizational and physical boundaries. The Computer Information Technology department integrates this principle in its work through:

  - effective use of internet technologies, e.g., being first on campus in creating a new departmental website under the new template, with updated information and new maintenance processes.
  - accessible culture, as evidenced by frequent student contact with faculty
  - strong support processes for students outside the classroom where open communication is the basis for support, as evidenced by the work done in the bench and instructional labs.
  - a culture of collaboration and consensus, where departmental issues are discussed openly and easily among faculty and staff.
  - very active participation among faculty and staff in college work, facilitating communication between the department and other areas at Lane, and also informing and

motivating communication between those serving as representatives in college work and the rest of the department.

Part II. Unit Description

Chapter 1: Unit Description

Key Question: Who are you? Answer this question by providing the following information about your unit.

1) Unit Mission/Vision

Does your unit have a Vision or Mission Statement? Yes ***When was it written or updated? 2000***
Do you have a process for regular review? The faculty of the CIT Department are integrally involved in a collaborative manner with decisions about if/how to create something like a unit vision/mission statement.

Computer Information Technology Department

Mission/Vision

The Computer Information Technology (CIT) Department provides current, quality education in the computer information technology field.

The following six areas represent the focus of the CIT mission:

- Professional/Technical Programs
- Lower Division transfer programs
- Computer competency courses
- Professional Renewal/Retraining education
- General Interest
- Coordination of education computing needs

2) Catalog Description

How do you describe your unit and instructional offerings in the college catalog?

Computer Application Specialist 1-year Certificate

Prepares specialists in the use of computer information systems. Specialists use a computer's capabilities as a problem-solving tool for positions that require end-user knowledge of computer hardware, software, and operating procedures.

Computer User Support AAS Degree

Prepares graduates for entry-level positions that provide technical support, assistance, troubleshooting, training and documentation to computer end users. Positions include Help Desk Agent, User Support Specialist, Customer Support Representative, and Software Trainer.

Computer Networking Operations AAS Degree

Trains entry-level network support technicians and administrators in specific computer networking skills and general troubleshooting of hardware and software related problems.

Computer Programming AAS Degree

Prepares technicians for entry-level positions as web developers.

How does your unit manage the review of catalog copy each year?

Lead faculty work with department staff in making any edits that are required. The most recent process was much more extensive than usual, given the program revision that took place as a result of creating a first-year core for professional/technical programs, and in modifying the second-year study to follow the core.

3) History/Significant Program Events

How did your instructional unit evolve at Lane?

The Data Processing Department granted its first Computer Programming AAS degree in 1969 following with its first Computer Operations degree graduates in 1971. The department established its first fulltime faculty position in 1978 increasing to four positions in the next 4 years. In the early '80's the 2-yr Microcomputer Certificate was developed to enhance student skills in computer application tools. In the late 80's we changed the department name to Computer Information Technology and began providing computer service and transfer courses to the whole college community. By the early '90's the Computer Operations program was changed to Computer Networking. In the mid-90's the Microcomputer certificate evolved into the Computer Applications Specialist certificate and the AAS degree in Computer End-User Support was established.

What significant events have marked your growth?

The professional/tech programs were very stable at approx. 25FTE/yr until the late '70s when the personal computer became popular. Our student population exploded, topping out at 325FTE (300 graduates) in 1983. But the local job market became saturated and FTE declined to 178 by 1987. During the '90's, with the dramatic growth of I.T. fueled by distributed processing, the Internet, and a good business climate, we enjoyed a high, steady rate of growth topping out at 725 FTE/yr by 2002. The recent collapse of the "Dot-Com" bubble and the emergence of outsourcing as a federally supported business model have significantly reshaped the IT ob market resulting in a decline of student majors.

Do you have a system for maintaining an archival history of your unit?

The Computer Information Technology department history is maintained in a file system in the Division Chair's office.

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

Not currently.

4) **Degrees and Certificates**
What degrees or certificates does your unit provide?

- **Two-Year Associate of Applied Science Degree**
  Computer User Support
  Computer Network Operations
  Computer Programming

- **Two-Year Certificate of Completion**
  N/A

- **One-Year Certificate of Completion**
  Computer Application Specialist

- **Cooperative Education**
  Computer User Support
  Computer Network Operations
  Computer Programming

If you are a transfer program and don't offer degrees or certificates:

- ***How do your instructional offerings serve the AAOT, AS, AGS, or AAS degrees?*** All CS courses provide science credit for these degrees

- ***Do any of your courses support Professional Technical Programs?*** Many tech programs require one or more CS or CIS courses. CS120, CIS101, CS160, CIS125H, CIS125S are among them.

5) **Organizational Structure**
Please provide a description of how your unit is administratively organized within Lane's instructional structure.

The Administrative Coordinator and Faculty report directly to Division Chair. The Division Chair reports to the Associate Vice President of Instruction.

6) **Staff/Faculty**
Please provide a list of your faculty and staff. For faculty, indicate FTE appointment, educational credentials, and primary area of expertise/instruction. For staff, indicate FTE appointment and primary job responsibility.

Name	FTE	Educational Credentials	Expertise/Instruction
Bailey, Jim	1.0	PhD, Oregon Graduate Institute	Programming/Computer Science
Barber, Bob	1.0	PhD, Univ. of Oregon	Computer User Support
Bricher, Gary	1.0	MS, Univ. of Oregon	Networking/Programming
Good, Mari	1.0	MS, Univ. of Oregon	Programming
Little, Ron	1.0	MS, Portland State Univ.	Networking/Programming
Loft, Linda	1.0	MS, Univ. of Oregon	Computer Science/Programming
Ross, Jerry	1.0	MA, Univ. or Oregon	Computer Science/Programming
Seaman, Jason	1.0	MS, Clemson Univ.	Computer Science

Name	FTE	Primary Job Responsibility
Mikkelsen, Helen	1.0	Administrative

7) Student Profile

Please provide demographic data for your student population.

		Gender		Ethnicity					Special Populations						Satisfact Progress	
Major_Desc	#	F	F%	Intl	Wh	Min	Unk	%Min	Dis	AcD	EcD	Ac+Ec	SP #	SP%	#	%
Computer & Information Science	15	1	6.7%		11	1	3	8%		6	5	8	8	53%	12	80%
Computer Network Operations	2	0	0.0%		1	0	1	0%			1	1	1	50%	2	100 %
Computer Programming	118	31	26.3%	4	88	9	17	9%	4	37	49	71	71	60%	111	94%
Computer User Support	92	27	29.3%		71	5	16	7%	3	28	41	50	52	57%	89	97%

8) Facilities and Equipment

Describe your campus space.

CIT occupies the NE corner of the ground floor of building 19. composed of:

- one specialized classroom with computers (Rm 120)
- two specialized classrooms equipped with carts with laptop computers (Rms 126, 128)
- two "bench" labs that support the Network Operations and Computer User Support programs (Rms 130, 132)
- one open tutoring lab (Rm 135)
- study ("group") rooms (Rms 127, 129, 131, 133)
- offices & staff workroom (Rms 138-158)

- a server room with storage (Rm 124)

What are its strengths?

Being part of Bldg 19 it is a new (occupied in 2002) and attractive space with sufficient room for department work. The design that includes group study rooms opposite instructional spaces helps create an instructional environment that supports students. Having a server room that is near instructional and faculty spaces creates a technical environment that allows faculty to support the curriculum in a timely and efficient way.

Room 120 and the bench labs provide the ability to teach hands-on classes from a number of perspectives, ranging from computer user to system administrators responsible for maintaining workstations, servers and routers.

Its challenges?

The design that placed offices in a separate hallway with fire doors that are required to be kept closed works against faculty accessibility. The other fire door provides the opportunity for injury when someone opening the door from one side risks hitting someone near the door on the other side.

Having the faculty library and informal meeting area constantly used as a conference room by other departments/areas disrupts our ability to communicate amongst ourselves.

What are your utilization ratios?

73%

Provide a copy of your equipment inventory.

(attached)

What are your equipment strengths? Challenges? Do you have any plans in place for equipment replacement?

Strengths:

Our equipment inventory is driven by our curricula, and teaching methods. Our equipment infrastructure allows students to successfully complete Network administration exercises, and develop web applications that they otherwise could not.

Additionally our current equipment infrastructure, and the department system staff, have allowed faculty to develop innovate assignments that they other wise could not.

Challenges:

Our current challenges with the equipment infrastructure concern both providing for anticipated growth and stabilizing and growing systems and staff to better utilize the equipment we have.

Replacement:

Equipment replacement is a continuing process because of the fast-moving nature of our industry, and the corresponding changes our curricula, and teaching methods. A current challenge is to operate with increasingly tight budgets to have sufficient equipment to support high-quality courses.

Possible future purchases include Macromedia's Homesite (part of DreamWeaver), and hardware and software to support teaching network security.

9) Budget Profile

Provide a profile of your General Fund Budget. If appropriate, provide a profile of Restricted Fund 8 (grants, etc.) and Restricted Fund 9 (tuition-based sections).

Computer Information Technology 2004-2005 Budget

Description	Total Budget	Notes
Personnel Total	894,889	
M & S Total	26,974	
Tech Fee	44,284	926500
ICP Total	55,188	
Carl Perkins	64,458	8%
Tuition Based	172,446	920100
TOTAL DEPT BUDGET	1,685,532	All funds, including non-recurring budget adjustments

(note: dept. had funds including non-recurring to cover everything spent.)

Part III. Performance 2003-2004

Chapter 2: Program Outcomes Data, 2003-2004

Key Question: What were the results of providing your program in 2003-2004 as demonstrated by student enrollment, student success, and cost efficiencies? ***Using the provided spreadsheet****, please include assessment of program outcomes as defined in your 2003-2004 Unit Plan.*

1) Enrollment data

Please provide the following enrollment data for 2003-2004:

- Unit Level Student FTE
  w/o Coop: 403
  w/ Coop: 434

- Unit Level Student FTE/Unit Level Faculty FTE ratio
  (note: only 7 full-time faculty FTE at time of Student FTE data)
  w/o Coop: 58
  w/ Coop: 62

- Capacity Analysis: Actual annual enrollment (headcount) / maximum possible
  w/o Coop: 73%
  Coop: Average Headcount is 8.5 (no meaningful maximums for max. %)

2) Student Success Data – N/A

3) Budget (Unit Level)

Please provide the following budget information:

Description	Total Budget	Notes
General Fund Allocation	825,022	(Accounted Budget, incl. non-recurring adjustments)
Actual Costs of Unit Operation	921,862	(Note dept. had budget authority for all expenditures)
Revenues (Course Fees, etc.)	55,188	(96,607-41,419 spent)
Cost per Student FTE (w/o Coop)	2,151	=(921862-55188)/403
Cost per Student FTE (w Coop)	1,997	=(921862-55188)/434

Chapter 3: Program Outcomes Analysis, 2003-2004

Key Question: Please provide a summary analysis of your projected program outcomes for 2003-2004. Please include assessment of program outcomes as defined in your 2003-2004 Unit Plan.

Approaches you might take include:

1. *Needs Assessment*
2. *Satisfaction Assessment*
3. *Assessing Learning Outcomes*
4. *Environmental Assessment*
5. *Assessing Cost Effectiveness*
6. *Dropouts Assessment (program or college)*
7. *Post-Completion Follow-up Assessment*

Methods of assessment you might use include:

1. *Qualitative Assessment*
2. *Quantitative Assessment*
3. *Pre tests/post tests*
4. *Portfolio Assessment*

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

What approach did you take to gather evidence of your performance? What method of assessment did you use? What does the evidence you gathered tell you about your strengths and/or weaknesses in fulfilling your mission in 2003-2004?

Computer Information Technology remains very effective in fulfilling its mission to provide program majors with the competencies needed to be successfully employed in the business community, and to provide the college and greater community with continuing technical skills and life-long learning opportunities based on the direct feedback received from students, the business community, from other areas of LCC and from the community at large. Both qualitative and quantitative measures of needs, satisfaction and outcomes provide evidence of an instructional department that is strong, deeply engaged and central to Lane's success.

CIT Faculty are strongly committed to student satisfaction, work hard to create a climate that supports students, and students consistently provide the feedback that confirms this. Student satisfaction feedback is central to any assessment of being effective as an instructional department.

One crucial assessment of performance for the department's professional/technical programs is the feedback gained from the department's Advisory Committee. These volunteer members of the business community are in an excellent position to help define needs and to give perspective on student success, both as employers and as partners in education through coop opportunities. The feedback from the CIT Advisory Committee has consistently been both favorable and productive in determining and improving student success.

For 2003-2004 the overall completion and success rates for CIT were:

	Completion	Success
Fall 03	84%	78%
Winter 03	82%	76%
Spring 03	85%	81%
Average	84%	78%

These rates reflect the challenging technical aspect of the material presented.

Computer User Program Successes

The Computer User Support program works specifically to train people to provide end user support in computer environments. The successes of this program over the past year include developing and partially implementing a comprehensive survey of hundreds of area businesses, integrating trouble-ticket software into capstone coursework, and working together in program design with Computer Network Operations.

Computer Network Operations Program Successes

A critical measure of success is employment, and this program in particular has a record of having students hired shortly aFTEr graduating from the program. E.g. a woman with little IT experience before entering the program was able to finish the degree, was hired by Symantec, and aFTEr three years rose to a management position.

Network degree has been very successful in acquiring Carl Perkins grants over the past four years. The degree's importance is recognized beyond the CIT department.

Computer Programming Program Successes

Within 3 months of program completion 33% of last year's graduates obtained "living wage" programming related jobs. Every year, several students who are working in the field come back to the program to update their technical skills.

Department Successes

The department continues its long history of success at Lane, successfully engaging across a wide front both internally and externally as it quickly adapts and responds to volatile technical and job market conditions. Evidence of successes are many: improving student support, surveying the community, aggressively pursuing professional development, implementing sweeping and strategic curriculum and program reform, generating close practical and strategic ties with high school and non-credit partners, developing efforts to work with the advisory committee as a partner with common goals, and in continuing to work as a leader and partner across the Lane community.

The department has also succeeded in a less visible way by meeting the many challenges facing public education and the department with a spirit of cohesion and shared goals. Nowhere is this more in evidence as in the creation of a common first-year professional/technical core, because this required serious collective work both in design to address short-term and strategic challenges, and because its implementation required a sustained and supportive dialog.

Computer User Support Program Strengths/Challenges

This degree program strengths include a carefully developed emphasis on problem-solving concepts and practice, a comprehensive approach to training in applications and application

support, and the integration of an experiential, hands-on approach in first- and second-year classes.

A new server that supports a comprehensive trouble ticketing system has been purchased and configured to support and extend the instruction and usage modeling for user request and response workflow.

The support aspects of technology in the marketplace have been changing as quickly as technology, with the recent emphasis on outsourcing only the latest in a string of market-driven challenges.

Computer Network Operations Program Strengths/Challenges

The program provides practical hands-on experience with contemporary hardware and software, supported by an appropriate conceptual foundation. Students learn how to set up and manage a comprehensive network from client machines to servers to internetworking devices.

The enrollment in the network degree has been least affected by market changes, and has been the largest of the three degrees offered by the CIT department (averaging nearly twice the combined enrollment in the other two degrees over the past six years).

The consistently fast pace of change of the technical areas covered by this curriculum remains a significant challenge.

Computer Programming Program Strengths/Challenges

This program has successfully engaged 2-year students in enterprise-level programming, and in so doing has created a strong culture of programming:

- uses modern tools and technologies
- integrates theory and practical application
- dedicated faculty and staff

The advent of competitive "outsourced" programmer communities and the volatility of the technical market domestically have created significant challenges.

Department Strengths/Weaknesses

In all areas of the CIT Department faculty leadership in the curriculum has been a particular strength. In particular the CUS and Programming Faculty have been addressing in a focused and creative manner the significant challenges in changing market demands. Faculty leadership has been a strength in the creation of a first-year core for all professional/technical programs. This new curriculum provides the flexibility needed to respond to market conditions and better support students in their career exploration and choices. Faculty are engaged in a wide range of institutional issues.

The department's facilities and servers are a notable strength. Significant work over the past few years gives the department high-quality bench, instructional and classroom labs. Recent

purchases of servers have kept the curriculum well-supported by the network/server infrastructure.

The department does well at creating a supportive atmosphere for students, whether in staff support for practical matters, lab support for student-directed work and conversations/contact with faculty outside the classroom. The department continues its efforts to excel in these areas.

Because of both technical and job market pressures the department is facing a significant challenge in a recent trend of decreasing student FTE in a context of decreases across the state and at Lane. This challenge has in turn made the departments essential strength and resilience evident in the breadth and creativity of its responsiveness to current challenges.

2) How well did students meet your learning outcomes at both the Program Level and Course Level?

What approach did you take to gather evidence of your performance? What method of assessment did you use? What does the evidence you gathered tell you about your strengths and/or weaknesses in helping students meet their learning outcomes in 2003-2004?

CIT excels in helping students meet their learning outcomes at both the program and course levels. The establishment and assessment of learning outcomes depends on the professional efforts of faculty in leading, mentoring and assessing students in their efforts to learn.

The obvious and traditional method of establishing of course-level outcomes is entrusting faculty with making a professional and personalized assessment in assigning course grades. The general levels of success (and even excellence) in CIT courses provides evidence of successful outcomes, and the caliber and dedication of the CIT faculty lends a high degree of confidence to this method.

Students are routinely assessed based on labwork, examinations and in-class participation which demonstrate theoretical concepts, skills and teamwork. A grading rubric involves an assigned percentage for each of these areas based on the course, and exemplifies how grading legitimately serves as an assessment tool for learning outcomes for both department and student:

Computer Literacy – CS120

200 pts exams
200 pts labs
100 pts written papers
240 pts study quizzes

Computer Programming – CS161

45% labs
45% exams
10% teamwork activities

Another critical assessment of meeting course-level outcomes is in the dependencies between courses – students completing prerequisites should be able to function effectively in subsequent courses.

For example:

Success In	**Depends on …**
2nd yr troubleshooting: CIS 227A	1st yr Application Sequence (CIS 125S, CIS 125D, CIS 135)
2nd yr troubleshooting sequence	CIS 225, CIS 227A, CIS 227N, CIS227H, CIS 226.
User Support capstone CIS 226	CIS 125S, CIS 125D, CIS 135
Networking degree	CIS227N, CS279, CS288, CS289 sequence

The establishment and assessment of learning outcomes depends on faculty defining the curricula and programs of study that function effectively for students and in the community.

Computer User Support Program

CUS Learning Outcomes
• set up, install, configure, and troubleshoot hardware
• use, install, configure, upgrade, maintain, and trouble-shoot software
• solve problems using recognized problem-solving methods
• design and operate help desk environments
• write and edit user documentation
• prepare training materials and train end-users
• administer and support computer networks
• assess user needs and recommend computer solutions
• perform computer facilities management tasks
• use appropriate library and information resources to research user support issues, concepts, and tools and to support lifelong technical learning
• interpret the concepts of a problem-solving task and translate them into mathematical formulas and algorithms
• manipulate variables using computer software applications
• collect and display data as lists, tables, reports, and charts using computer software
• design Web pages and post them to the Internet

Computer Network Operations AAS Degree Program

Learning Outcomes The graduate of the two-year degree program will be able to:
• install and configure workstations, servers and networked printers
• install and configure internetworking devices such as switches and routers
• install and configure a variety of network operating systems and provide for interoperability between them
• administer an organization's computer network infrastructure.
• monitor network performance and troubleshoot network problems
• understand fundamental networking theory, terminology, and industry recognized standards

Computer Programming AAS Degree Program

Learning Outcomes The graduate of the two-year degree program will be able to:
• Write desktop, client/server and web-based computer programs using a variety of current tools and technologies
• Understand the relationship between comuter programs and organizational processes.
• Analyze a software related problem and design and appropriate solution
• interpret the mathematical concepts of a programming related problem-solving task and translate them into programming logic and expressions
• use appropriate library and information resources to research programming tools and technologies and support lifelong technical learning

Strengths/Weaknesses:

The department has done an excellent job overall of revising programs and courses in a way that supports students in their learning objectives. The current challenge is to become more outcome driven in a manner that supports assessment and in understanding how to do this meaningfully and comprehensively.

3) How well did students meet Core Ability outcomes?

What approach did you take to gather evidence of your performance? What method of assessment did you use? What does the evidence you gathered tell you about your strengths and/or weaknesses in helping students meet Core Ability outcomes in 2003-2004?

CIT has worked to systematically integrate the identified Core Abilities throughout the curriculum. The extent of successful integration coupled with successful course and program outcomes provides both direct and indirect evidence of meeting Core Ability outcomes.

- Core Ability: communicating effectively (either orally or in writing):
  - Computer User Support: CIS225, CIS227A, CIS247
  - Computer Network Operations: CS179, CIS225, WR121, WR227, CIS277N, CS279, CS288, CG203, Speech Course
  - Computer Programming: CIS244, CIS270
  - Transfer classes: CS120, CS160
- Core Ability: critical thinking and problem-solving abilities:
  - Computer User Support: CIS125S, CIS125D, CIS225, CIS227A, CIS227N, CIS227H, CIS247
  - Computer Network Operations: CIS125S, CIS125D, CS133, CIS227N, CS279, CS288, CS289, CS240U
  - Computer Programming: CS161, CS 162, CS 233, CS195, CS 275, CS 244 and CS 270

- Transfer classes: CS160, CS161, CS162, CS260

- Core Ability: development of cultural and social competence.

  - Computer User Support: CS160, CIS243, CIS225
  - Computer Network Operations: CS199-IS, CG203, CS280CN
  - Computer Programming: CIS244
  - Transfer classes: CS120, CS101

- Core Ability: Exploring academic disciplines.

  - Computer User Support:
  - Computer Network Operations: MTH95, WR121, WR227, CG203, PE Course, Speech course
  - Computer Programming: Specialty Electives
  - Transfer classes: CS120, CS160

Strengths

- integration through the curriculum
- courses with direct relevance

Challenges

It is a strength that there are many courses integrated throughout the curriculum that address the goal of helping students learn Core Abilities. It remains a challenge to do this better, with the immediate goals of characterizing this work in detail at the level of assessed outcomes.

4) <u>How efficiently did you use the resources you were given?</u>

What approach did you take to gather evidence of your performance? What method of assessment did you use? What does the evidence you gathered tell you about your strengths and/or weaknesses in using resources efficiently in 2003-2004?

Strengths/Challenges

In broad terms the department has always operated within budget and worked to make resources at hand support current efforts. Because of the quickly changing nature of the department's work there is a need to build resources slightly beyond current abilities to use them so that the department isn't overly constrained in its efforts to be flexibly and quickly adaptive. To a large extent this goal has been met with ICP funds.

The department has as part of its defined work over the upcoming year to better define/assess methodologies that provide measurable evidence of our performance, to better be able to communicate our ongoing needs and request resources in meeting those needs.

5) How well are you utilizing current technology?

What approach did you take to gather evidence of your performance? What method of assessment did you use? What does the evidence you gathered tell you about your strengths and/or weaknesses in utilizing current technology in 2003-2004?

Strengths/Challenges:

By the nature of its programs the department makes intense and effective use of current technology. All teachers in the department use a teaching station (computer, LCD projector) in the classroom. Most dept. faculty have websites and a good percentage use 'blended' courses for their course materials.

The department uses software tools provided by the faculty webmasters (e.g. TestPilot), and has one computer (the rm135 tutor's computer) that is part of the group of Social Science's testing computers.

Though the department remains a leader at LCC in use of online technologies, it does so many times in ways that are not highly visible outside of the programs. Given the constraints of supporting instruction, also finding ways to support online technologies on campus (e.g., helping support the use of data-driven web page creation) remains a challenge.

6) If your program works with and Advisory Committee, how effective was that relationship in helping you meet your program goals?

What approach did you take to gather evidence of your performance? What method of assessment did you use? What does the evidence you gathered tell you about your strengths and/or weaknesses in working with your Advisory Committee in 2003-2004?

Strengths/Challenges:

The advisory committee has been a remarkable resource over the years. Simply finding time for reflection with a group of highly qualified and committed professionals and entrepreneurs has been a very valuable source of insight and feedback.

Some specific ways that the CIT Department Advisory Committee has supported programs has been in providing valuable input about the computer user support needs of local employers and a sounding board for curriculum changes.

One challenge that the department hopes to address in the upcoming year is the need to provide the committee with specific goals that they can address, helping move beyond periodic discussions and into focused work on shared objectives. Two specific objectives have been identified:

i. using online tools for communication between meetings
ii. identifying faculty professional development needs and helping to meet them

Another challenge that's been experienced is in get specific enough feedback, e.g. could use an entire web programming advisory committee for the Programming degree.

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

What approach did you take to gather evidence of your performance? What method of assessment did you use? What does the evidence you gathered tell you about your strengths and/or weaknesses in meeting faculty and staff goals in 2003-2004?

Faculty and staff goals are frequently curricular in nature, and so are expressed and evaluated in the context of program review. The focused and innovative program work evidenced by the department is a direct result of faculty ownership and goal achievement.

Similarly the department's high profile in college business and in building organizational capacity is a direct result of faculty engaging on a personal level.

Faculty professional development goals are not captured in the program, departmental and institutional level, and in this area the department has evidence of active work by all faculty.

8) Overall, what strengths do you believe your unit demonstrated in 2003-2004?

The department plays a significant role both instructionally and institutionally at LCC, as was evident in the '03-04 academic year. Overall the department's strength instructionally is that it has succeeded in maintaining a high level of quality in its professional and technical programs, and in preparing students well for work as computer professionals. This strength is due to faculty modeling their dedication, enthusiasm, continuous learning and professional skill for the students.

The department staff directly contributed to its instructional strength by cultivating a professional and friendly relationship with students, creating a climate of constructive and responsive support for students, helping them feel that they belong and contributing significantly to department successes.

Another departmental strength is its contributions in the context of institutional work and goals. The department played a key role and made significant contributions to the college's accreditation effort. The department staff continue to contribute a resilient professionalism working within the college systems. And students, faculty and staff all participate wholeheartedly in key committees and teamwork.

Any overview of specific instructional and institutional strengths is bound to be incomplete. Those who share enough direct experience with the department's work know that there are brief references that don't begin to describe the breadth and depth of work involved (e.g. accreditation), that there are seemingly mundane references that involve great personal dedication and effort (e.g. staff support for students), and that quality instruction remains a difficult task requiring great skill.

9) Overall, what challenges do you believe your unit faced in 2003-2004?

The department's greatest challenge is in meeting the needs of students in the context of both a rapidly evolving professional domain and quickly changing market conditions. The particularly rapid changes in computer technology pose a twofold puzzle: how to stay professionally current and how to define professional and transfer programs that weather the changes.

Market conditions remain volatile: job markets exhibit wide swings in relatively short timeframes, and business market changes add another layer of instability on top of baseline technology changes. This situation creates the potential for boom/bust enrollment cycles that pose organizational and operational challenges for the department.

10) What conclusions do you draw from this analysis about needed improvements or changes in 2004-2005?*

i. To meet technology and market challenges and grow FTE in the professional/technical and transfer programs, the department needs to aggressively develop its courses.

The particular stresses created by quickly changing technology and markets require multifaceted improvements to program and curriculum development, professional development and organizational support systems. The department has already adapted by instituting a significant change in program definition, creating the common first-year core for its professional/technical programs.

ii. There is a need for professional development to respond to immediate market demands.

The pace of technical change is fast in all areas of computing, but particularly acute in the technical areas of computing with the rapid emergence of whole new technologies and specializations. The faculty have professional development needs that go beyond the typical need every faculty member has to stay current in their field.

iii. There is a need for supporting and evolving student support systems.

From the student's perspective the rapid pace of technology and markets can seem daunting. The department needs to further develop its support systems for students, and specific goals for the upcoming year in this regard include integrating support for the bench labs into the open lab and further developing the tutorial character of the labs.

An important part of cultivating programs and growing FTE is in good retention. Creating excellent resources, facilities, and systems for student support are an integral part of this effort.

iv. There is a need for effectively implementing the core, including publicity.

A number of factors require a deliberate effort in implementing and publicizing the core. Increasing competition from both public and private school means that the department cannot

assume that just because it builds a new program it will succeed on its merit. The program must also be aggressively marketed and there must be effective recruitment efforts.

*** Please remember that any initiatives proposed for 2004-2005 must be linked to these conclusions.**

Part IV. Projected Performance 2004-2005

1) Initiative Title **Division Priority: 30**

Create an Introduction to Linux Course and enhance the CS 240U Operating Systems Unix/Linux course

2) How is the initiative linked to your Program Outcomes Analysis for 2003-2004?

- *What is the challenge you are trying to address?*
  10.i. Build curriculum that is responsive to technology, market and growth needs
- *How will this initiative address the challenge?*
  Development of the core curriculum is seen as essential to developing all of the department's FTE and curriculum development/alignment challenges. It directly addresses the need to develop the core curriculum and 2nd-year curriculum built on the core.

3) Describe the initiative

- *What will the product, innovation, or change of this initiative be? Please be as specific as possible.* [see full answer below]
- *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*
- *Given college resources, is it feasible?* YES *Is it an efficient use of college resources?* YES
- *What would be the campus location of this request/project?* CIT Dept.
- *How many students (per year) will benefit?* CIT Core+, ~210/yr (based on '03-'04 140,240 enrollment)
- *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*

  We need to create a four-credit introduction to Linux course to prepare students for the more advanced material in CS 240U Operating Systems Unix/Linux. Currently, there is introductory material on Linux in CIS 140, but as part of the CIT Core curriculum implementation, that course would change to an entirely Windows format. Having two courses for the Linux and Windows material will provide the students who take both with more information on each operating system, and also allow students who already have knowledge of one or the other, or who don't need training in both to take only one course.

  Since Linux is currently not as well known as Windows and its use in the industry is on the rise, this course will likely bring in students from the community who are not enrolled in CIT degree programs.

  There would be no pre-requisites for the introductory course, and it would cover basic operating system functions from the end-user's point of view, such as file management and the use of standard applications, as well as an introduction to system administration by covering such topics as Linux installation, account creation, shell scripts, and file

system security. The intention is to take the five weeks of Linux material taught in the current CIS 140 course and supplement it with material taken from the current CS 240U course. This would provide room in the CS 240U course for more advanced material. Additional topics planned for CS 240U include security, performance monitoring, and more troubleshooting information.

The introduction to Linux course would become a Network Degree requirement for the second year, and be taught in the CIT Network Bench lab (building 19, room 130). In addition to the 35 to 45 students we usually have in the Network Degree, these courses would be available to other CIT majors and technical support personnel working in the community.

Since many organizations use Linux, the addition of the introductory course and enhancements to the advanced course will increase Network Degree major's knowledge and thus make them more employable.

4) **Describe the resources needed**

Attach the Initiative Spreadsheet to this chapter

No funding requested. Included to document related work we were able to fund in 04-05.

5) **List possible funding sources - SEE INITIATIVE SPREADSHEET**

- *Can this project be partially funded?*
- *If so, what portion could be funded at what minimum cost?*

6) **Provide ORG & PROG codes (Org: 641000) (Prog: 112000)**

7) **How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals - CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.**

Not only does this project improve the Network Operations professional technical program, it provides the opportunity for community employees to upgrade their skills. It meets the learning and innovation core values.

1) Initiative Title (2) Security Certification **Division Priority: 10**

2) How is the initiative linked to your Program Outcomes Analysis for 2003-2004?

- *What is the challenge you are trying to address?*
  10.i. Build curriculum that is responsive to technology, market and growth needs
- *How will this initiative address the challenge?*
  Development of the core curriculum is seen as essential to developing all of the department's FTE and curriculum development/alignment challenges. It directly addresses the need to develop the core curriculum and 2nd-year curriculum built on the core.

3) Describe the initiative

- *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*
- *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*
- *Given college resources, is it feasible?* YES *Is it an efficient use of college resources?* YES
- *What would be the campus location of this request/project?* CIT Dept.
- *How many students (per year) will benefit?* ~65/yr + noncredit extensions
- *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*

  This initiative will utilize instructional and computer lab resources more efficiently. It will focus on collaborating with Business, Workforce Development & Extended Learning to create and offer a series of security and firewall courses that could be taken by both noncredit and credit students. The series would focus on certification. This project would be used to produce a working model for collaboration (between CIT and BWEL) on technical content courses. These courses would be taught in the CIT Network Bench lab (building 19, room 130). The CIT advisory committee has recommended that we have more security material required in the Network program, therefore these courses would be required for Network majors.

  It is also anticipated that these courses would generate considerable interest from previous Network degree graduates, and attract members of the community wanting to supplement their technical knowledge in this area. Since most organizations use network firewalls and require a secure network, the Network Degree majors will be more employable.

4) Describe the resources needed

Attach the Initiative Spreadsheet to this chapter

Two to three hundred (200-300) hours of curriculum development funds would be required to develop the curriculum.

5) **List possible funding sources - SEE INITIATIVE SPREADSHEET**
   - *Can this project be partially funded?* YES
   - *If so, what portion could be funded at what minimum cost?* 100 hours of curriculum development for one course.

     Curriculum development funds and Carl Perkins.

6) **Provide ORG & PROG codes**
   (Org: 641000) (Prog: 112000)

7) **How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals - CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.**

   Not only does this project improve the Network Operations professional technical program, it provides the opportunity for community employees to upgrade their skills. It meets the learning, innovation, and collaboration and partnership core values

1) Initiative Title (3) Wireless Networking **Division Priority: 16**

2) How is the initiative linked to your Program Outcomes Analysis for 2003-2004?

- *What is the challenge you are trying to address?*
  10.i. Build curriculum that is responsive to technology, market and growth needs
  10.ii. Core, Professional Development to meet new market demand
- *How will this initiative address the challenge?*
  Development of the core curriculum is seen as essential to developing all of the department's FTE and curriculum development/alignment challenges. It directly addresses the need to develop the core curriculum and 2nd-year curriculum built on the core.
  The core curriculum must be accompanied by ability to respond quickly to market demand, both by integrating new material into existing courses as well as designing new programs built on the core. This ability depends on significant faculty professional development.

3) Describe the initiative

- *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*
- *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*
- *Given college resources, is it feasible?* YES *Is it an efficient use of college resources?* YES
- *What would be the campus location of this request/project?* CIT Dept.
- *How many students (per year) will benefit?* ~65/yr + possible noncredit extensions
- *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*

  Many networks have recently added wireless capabilities. We need to evaluate how best to integrate wireless networking theory and hands-on activities into the Network Degree. This would give us the background to develop the necessary curriculum. The course would be taught in the CIT Network Bench lab (building 19, room 130). Since many organizations use wireless networking, this project would make the Network Degree graduates more employable. The course would also attract members of the community wanting to supplement their technical knowledge in this area.

4) Describe the resources needed

Attach the Initiative Spreadsheet to this chapter

Professional development funds to train faculty. Estimated cost is $2,500.

One hundred (100) hours of curriculum development funds would be required to develop the curriculum.

The hardware needed would include 25 wireless routers and 25 wireless NICs. Estimated cost is $10,000.

5) **List possible funding sources - SEE INITIATIVE SPREADSHEET**
   - *Can this project be partially funded?* No.
   - *If so, what portion could be funded at what minimum cost?*
     Professional development funds, curriculum development funds, and Carl Perkins or TACT for the wireless devices.

6) **Provide ORG & PROG codes (Org: 641000) (Prog: 112000)**

7) **How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals - CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.**

   Not only does this project improve the Network Operations professional technical program, it provides the opportunity for community employees to upgrade their skills. It meets the learning and innovation core values.

1) Initiative Title **Division Priority: 23**

Wide Area Networking Theory and Troubleshooting

2) How is the initiative linked to your Program Outcomes Analysis for 2003-2004?

- *What is the challenge you are trying to address?*
  Build curriculum that is responsive to technology, market and growth needs
  Core, Professional Development to meet new market demand
- *How will this initiative address the challenge?*
  Development of the core curriculum is seen as essential to developing all of the department's FTE and curriculum development/alignment challenges. It directly addresses the need to develop the core curriculum and 2nd-year curriculum built on the core.
  The core curriculum must be accompanied by ability to respond quickly to market demand, both by integrating new material into existing courses as well as designing new programs built on the core. This ability depends on significant faculty professional development.

3) Describe the initiative

- *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*
- *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*
- *Given college resources, is it feasible?* YES *Is it an efficient use of college resources?* YES
- *What would be the campus location of this request/project?* CIT Dept.
- *How many students (per year) will benefit?* ~65/yr + possible noncredit extensions
- *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*

  We need to add theory and hands-on activities covering Wide Area Networking (WAN) and troubleshooting to the Network Degree curriculum. The CIT advisory committee has recommended that we have more WAN curriculum in the Network program. We need to evaluate how best to integrate more WAN theory and troubleshooting curriculum into the degree. This would give us the background to develop the necessary curriculum. The course would be taught in the CIT Network Bench lab (building 19, room 130). Since many organizations use WAN technology this project would make the Network Degree graduates more employable. The course would also attract members of the community wanting to supplement their technical knowledge in this area.

4) Describe the resources needed

Attach the Initiative Spreadsheet to this chapter

Professional development funds to train faculty. Estimated cost is $2,500.

One hundred (100) hours of curriculum development funds would be required to develop the curriculum.

The WAN hardware needed would include an integrated access device for simulating various WAN technologies. Estimated cost is $6,000.

5) **List possible funding sources - SEE INITIATIVE SPREADSHEET**
   - *Can this project be partially funded?* No.
   - *If so, what portion could be funded at what minimum cost?*
     Professional development funds, curriculum development funds, Carl Perkins or TACT for the WAN devices.

6) **Provide ORG & PROG codes (Org: 641000) (Prog: 112000)**

7) **How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals - CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.**

   Not only does this project improve the Network Operations professional technical program, it provides the opportunity for community employees to upgrade their skills. It meets the learning and innovation core values.

1) Initiative Title (6) "State of the Art" in Web Programming **Division Priority: 4**

2) How is the initiative linked to your Program Outcomes Analysis for 2003-2004?

- *What is the challenge you are trying to address?*
  10.i. Build curriculum that is responsive to technology, market and growth needs
  10.ii. Core, Professional Development to meet new market demand
- *How will this initiative address the challenge?*
  Development of the core curriculum is seen as essential to developing all of the department's FTE and curriculum development/alignment challenges. It directly addresses the need to develop the core curriculum and 2nd-year curriculum built on the core.
  The core curriculum must be accompanied by ability to respond quickly to market demand, both by integrating new material into existing courses as well as designing new programs built on the core. This ability depends on significant faculty professional development.
  Changing the focus of the "programming" degree to programming specifically for the web is intended to address the migration of entry level programming opportunities toward small scale web development. This initiative will provide the foundation for all other computer programming initiatives.

3) Describe the initiative

- *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*
- *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*
- *Given college resources, is it feasible?* YES *Is it an efficient use of college resources?* YES
- *What would be the campus location of this request/project?* CIT Dept.
- *How many students (per year) will benefit?* CIT Core+, ~160/yr (based on '03-'04 140 enrollment)
- *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*

While some of the CIT faculty have learned one or more specific web development technologies, none of the CIT faculty has been formally educated in the field of web development nor worked as a professional web developer. Developing an understanding of the range of tools and technologies that are most commonly used and are likely to be become necessary skills in the near future is an essential first step toward developing a coherent set of curriculum objectives for the computer programming degree as a whole as well as for individual computer programming courses.

The initiative would involve the program coordinator in research related to the field of web development. That research could involve: reading professional web development materials, attending conferences and workshops, organizing and facilitating a web development advisory committee, completing an internship with one or more organizations that specialize in programming for the web.

4) **Describe the resources needed**

Attach the Initiative Spreadsheet to this chapter

Conference fees - $2500.00
Professional library materials - $500.00

5) **List possible funding sources - SEE INITIATIVE SPREADSHEET**

- *Can this project be partially funded?* YES

If so, what portion could be funded at what minimum cost?

Partial funding at a minimum of $500 for professional library materials is possible.

6) **Provide ORG & PROG codes (Org: 641000) (Prog: 112000)**

7) **How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals - CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.**

Not only does this project improve the Computer Programming professional technical program, it meets the learning and innovation core values.

1) Initiative Title (7) CS133W – Beginning Programming: JavaScript **Division Priority: 31**

2) How is the initiative linked to your Program Outcomes Analysis for 2003-2004?

- *What is the challenge you are trying to address?*
  10.i. Build curriculum that is responsive to technology, market and growth needs
- *How will this initiative address the challenge?*
  Development of the core curriculum is seen as essential to developing all of the department's FTE and curriculum development/alignment challenges. It directly addresses the need to develop the core curriculum and 2nd-year curriculum built on the core.
  Changing the focus of the "programming" degree to programming specifically for the web is intended to address the migration of entry level programming opportunities toward small scale web development.
  The entry point into programming curriculum has traditionally been either CS160 or CS161. Both of these courses have only "limited accessibility" and low retention rates for students because of their math prerequisite and computer science emphasis. Replacing those courses with CS133W should increase enrollment and retention in programming courses while providing students with an introduction to the concepts and skills that are required for programming for the web.

3) Describe the initiative

- *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*
- *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*
- *Given college resources, is it feasible?* YES *Is it an efficient use of college resources?* YES
- *What would be the campus location of this request/project?* CIT Dept.
- *How many students (per year) will benefit?* CIT Core+, ~160/yr (based on '03-'04 140 enrollment)
- *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*

This initiative develops the only programming course in the CIT "core" curriculum – the first of a sequence of computer programming courses. It will combine some of the concepts in the existing CS 160, CS 133 JS and CS 195 courses but will target students who have little or no programming experience.

The course will be offered for the first time in Spring 2006 and should be offered both spring and summer terms. Expected annual enrollment in the course is 120 students in 4 sections.

4) Describe the resources needed

Attach the Initiative Spreadsheet to this chapter

No funding requested. Included to document related work we were able to fund in 04-05.

5) **List possible funding sources - SEE INITIATIVE SPREADSHEET**
   - *Can this project be partially funded?* No
   - *If so, what portion could be funded at what minimum cost?*

6) **Provide ORG & PROG codes (Org: 641000) (Prog: 112000)**

7) **How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals - CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.**

Not only does this project improve the Computer Programming professional technical program, it meets the learning and innovation core values.

Initiative Title (8) Second Year Web Development Courses **Division Priority: 8**

1) **How is the initiative linked to your Program Outcomes Analysis for 2003-2004?**
   - *What is the challenge you are trying to address?*
     10.i. Build curriculum that is responsive to technology, market and growth needs
     10.ii. Core, Professional Development to meet new market demand
   - *How will this initiative address the challenge?*
     Development of the core curriculum is seen as essential to developing all of the department's FTE and curriculum development/alignment challenges. It directly addresses the need to develop the core curriculum and 2nd-year curriculum built on the core.
     The core curriculum must be accompanied by ability to respond quickly to market demand, both by integrating new material into existing courses as well as designing new programs built on the core. This ability depends on significant faculty professional development.
     Changing the focus of the "programming" degree to programming specifically for the web is intended to address and the migration of entry level programming opportunities toward small scale web development. The courses involved in this initiative, CS 195 and CS 233 should provide students with a strong foundation in state-of-the-art web development technologies. Elimination of CS 161, CS 162 and CS 260 from the first year of the programming degree should increase enrollment and retention in programming courses in general. The content of these courses should make them attractive to community members who are looking for professional development opportunities. This should also increase CIT enrollment.

2) **Describe the initiative**
   - *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*
   - *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*
   - *Given college resources, is it feasible?* YES *Is it an efficient use of college resources?* YES
   - *What would be the campus location of this request/project?* CIT Dept.
   - *How many students (per year) will benefit?* Programming sequence+, ~65/yr
   - *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*

   This initiative develops knowledge and skills of the CIT faculty relative to specific web development technologies identified in the **"State of the Art" in Web Programming** initiative and then develops the three (3) programming courses that form the major sequence of web development courses in the second year of the degree – CS 195, CS 233 and CIS 270.

   These courses will be offered for the first time in Fall 2006, Winter 2007 and Spring 2007 respectively.

3) Describe the resources needed

Attach the Initiative Spreadsheet to this chapter

Conference and/or class fees – 2500 * 2 new technologies

Three hundred (300) hours of curriculum development funds would be required to develop course materials and communicate with CIT program coordinators, other departments across campus and advisory committee members about the course. No additional faculty resources, hardware or software should be required for the new course.

4) List possible funding sources - SEE INITIATIVE SPREADSHEET

- *Can this project be partially funded?* Yes.
- *If so, what portion could be funded at what minimum cost?*

Professional Development
Curriculum Development
Partial funding for 2005-2006 is reasonable only if the remainder of the funding is provided for 2006-2007. The professional development funds and 100 hours of curriculum development funds are a reasonable minimum funding level for 2005-2006.

5) Provide ORG & PROG codes (Org: 641000) (Prog: 112000)

6) How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals - CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.

Not only does this project improve the CIT "core" and the Computer Programming professional technical program, it meets the learning and innovation core values. It also provides the opportunity for community employees to upgrade their web development skills.

Initiative Title (9) Marketing Web Programming Courses **Division Priority: 22**

1) **How is the initiative linked to your Program Outcomes Analysis for 2003-2004?**
   - *What is the challenge you are trying to address?*
     10.iv. Core, Effective Implementation
   - *How will this initiative address the challenge?*
     The department does not have a history of needing to aggressively get the word out about what programs are offered. In a more competitive market, the strength of the new core is something that the department can't assume will be obvious to all students, and so it is essential that we start focusing attention on this aspect of delivering successful and growing programs.

2) **Describe the initiative**
   - *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*
   - *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*
   - *Given college resources, is it feasible?* YES *Is it an efficient use of college resources?* YES
   - *What would be the campus location of this request/project?* CIT Dept.
   - *How many students (per year) will benefit?* CIT Core+, ~160/yr (based on '03-'04 140 enrollment)
   - *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*

     The goal of this initiative is develop and carry out a coherent plan for communicating with local employers, high schools and potential students about the change in the content of the degree program as a whole as well as individual web development courses.

3) **Describe the resources needed**

Attach the Initiative Spreadsheet to this chapter

Marketing – develop and implement a coherent marketing plan.
Communication/Coordination – meet with local high schools, employers, agencies that refer students for training.
Approximately $3000 in advertising/promotional materials and work.

4) **List possible funding sources - SEE INITIATIVE SPREADSHEET**
   - *Can this project be partially funded?* Yes
   - *If so, what portion could be funded at what minimum cost?* Anything will help…

5) **Provide ORG & PROG codes (Org: 641000) (Prog: 112000)**

7) **How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals - CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.**

1) Initiative Title (10) Lab Equipment update **Division Priority: 20**

2) How is the initiative linked to your Program Outcomes Analysis for 2003-2004?

- *What is the challenge you are trying to address?*
  10.i. Build curriculum that is responsive to technology, market and growth needs
  10.iii. Core, Student Support systems, FTE through retention
- *How will this initiative address the challenge?*
  There are two aspects to this proposal for lab equipment updates. The department has made a number of changes in the curriculum that should help to build student FTE., and we need to be ready for this increased demand. The need to anticipate this capacity is by itself sufficient to motivate this initiative, but it also serves the quality of our support systems, an integral part of both the quality of our programs and in our efforts at retention – keeping our students provided with adequate quantities of quality equipment.

3) Describe the initiative

- *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*
- *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*
- *Given college resources, is it feasible?* YES *Is it an efficient use of college resources?* YES
- *What would be the campus location of this request/project?* CIT Dept.
- *How many students (per year) will benefit?* CIT Core+, ~200/yr (based on '03-'04 140 enrollment)
- *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*

In the past students who needed to complete system administrations assignments, could complete them in the same teaching lab as where they were taught. In this way all the necessary hardware remained in the same room. Unfortunately this caused that teaching lab to be significantly under utilized and limited where those classes could be taught. Now, with the updated CIT curriculum, and the anticipated increased student FTE, we need to be able to move the necessary hardware between rooms as necessary.

We propose that we place similar computers in two or three teaching labs and in the CIT Main lab, and then move hard drives between rooms. All of the student hard drives will be stored in the main lab, and then an instructor would move 25 hard drives to the appropriate teaching lab before class, and return them aFTErwards.

4) Describe the resources needed

Attach the Initiative Spreadsheet to this chapter

There are two options for computer upgrades which will allow us to meet the needs of our students.

Option	Resource Description	Qty	Unit Cost	$$	Equip	Capital	CP	TACT
1	Computers	125	1,000	$125,000	X		X	X
	CRU HD rails	25	60	$1,500	X		X	X
	KVM Switch	25	60	$1,500	X		X	X
	Monitors	25	350	$8,750	X		X	X
	Chairs	10	100	$1,000		X		
	Cases to hold hard drives	10	100	$1,000		X		
	Cart to move hard drives	3	325	$975		X		
	Cabinets to hold the cases	2	425	$850		X		
			Total	**$140,575**				
Option 2								
	Computers	100	1,000	$100,000	X		X	X
	KVM Switch	25	60	$1,500	X		X	X
	KVMs	25	60	$1,500	X		X	X
	Computer Cubbies	25	92	$2,300		X		
	Cases to hold hard drives	10	100	$1,000		X		
	Cart to move hard drives	3	325	$975		X		
	Cabinets to hold the cases	2	425	$850		X		
			Total	**$108,125**				

5) **List possible funding sources - SEE INITIATIVE SPREADSHEET**
   - *Can this project be partially funded?* Yes
   - *If so, what portion could be funded at what minimum cost?* Option 2

TACT and Carl Perkins

6) **Provide ORG & PROG codes**
   Org: 641000 Prog: 112000

7) **How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals - CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.**

We are transforming student's lives thru learning, our program is Professional/Technical by nature, and most students enroll to upgrade skills and enhance career development.

We offer a computer lab for all students but especially for those whose financial or social situation does not allow them to own the necessary computer equipment to gain the knowledge to gain employment in this field.

Thru these labs we are empowering a learning workforce in a changing environment.

Vision: We transform lives thru learning as far as we have current equipment necessary for students to use to complete course assignments to upgrade skills and enhance career development.

Mission: All the equipment in question supports Professional technical and lower division college transfer programs, in the CIT department.

Core Values:
Innovation: we are acting intentionally to increase student FTE by changing our curriculum, and this initiative is a natural result of that change.

Accessibility: we are minimizing barriers to learning by maintaining a computer lab with current equipment that is available many hours. This access accommodates many students' schedules, and is critical for those whose situation does not allow them to own the necessary computer equipment.

Strategic Directions:
Transforming Students' Lives, by having current equipment available for student learning, while minimizing the cost.

1) Initiative Title (11) Faculty Professional Development – Security **Division Priority: 12**

2) How is the initiative linked to your Program Outcomes Analysis for 2003-2004?

- *What is the challenge you are trying to address?*
  10.ii. Core, Professional Development to meet new market demand
- *How will this initiative address the challenge?*
  The core curriculum must be accompanied by ability to respond quickly to market demand, both by integrating new material into existing courses as well as designing new programs built on the core. This ability depends on significant faculty professional development.

3) Describe the initiative

- *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*
- *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*
- *Given college resources, is it feasible?* YES *Is it an efficient use of college resources?* YES
- *What would be the campus location of this request/project?* CIT Dept.
- *How many students (per year) will benefit?* ~65/yr + noncredit extensions
- *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*

  The CIT department plans to increase in a major way the amount of computer security information provided for our majors. This is consistent with industry trends. Knowledge of desktop and enterprise security concepts is critical in today's information technology field. These course security changes are considered critical in order to maintain technical currency for our students.

  It is very important that the faculty involved in incorporating this security information into the curriculum have knowledge of current security practice. For this reason, the internships and professional development classes listed below are needed.

  a) Two internships with local companies at $3000 each $6,000
     i. One would focus on desktop and enterprise security
     ii. One would focus on Linux system and firewall security
  b) Two professional development classes at $3000 each $6,000
     i. One would focus on Linux system and firewall security
     ii. One would focus on desktop and enterprise security

4) Describe the resources needed

Attach the Initiative Spreadsheet to this chapter

Professional development funds to train faculty. Estimated cost $12,000.

5) **List possible funding sources - SEE INITIATIVE SPREADSHEET**
   - *Can this project be partially funded?* No
   - *If so, what portion could be funded at what minimum cost?*

   Faculty professional development funds and Carl Perkins.

6) **Provide ORG & PROG codes**
   Org: 641000 Prog: 112000

7) **How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals - CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.**

   Not only does this project improve the three professional technical programs, it provides the opportunity for community employees to upgrade their skills. It meets the learning and innovation core values.

Initiative Title**(25) Lab Staff Personnel Funding Plan* ***Division Priority: 2

1) How is this initiative linked to your Program Outcomes Analysis for 2003-2004

- *What is the challenge you are trying to address?*
  10.i. Build curriculum that is responsive to technology, market and growth needs
  10.iii. Core, Student Support systems, FTE through retention
- *How will this initiative address the challenge?*
  The CIT programs have a support structure built around integrated bench and open labs with qualified help in specialized areas of study and a strong tutorial focus. This is an integral part of all programs, providing the ability to flexibly create the needed specialized curriculum, and simultaneously provide appropriate support for what is a challenging field of study.

2) Describe the Initiative

NOTE: this initiative was submitted last year. While we are working on securing stable funding, that has not materialized, hence we are asking for funding for one more year.

We seek to improve the quality of our staff support for our computer labs.

Many CIT class assignments require access to hardware or software that many students do not own. Thus we equip and staff a computer lab during regular school hours and evenings and weekends. We need a responsible competent people in our computer labs to assist students with problems as well as for safety and security. This has been for the past 7 years.

Students will to continue benefiting from using our computer labs; especially those who do not have computers of their own, or cannot run software at home.

This is all on Main Campus. There are approximately 1000+ students enrolled in CIT classes each term. CIT has about $350,000 in equipment, including 200 computers for students, and multiple servers.

This initiative has two objectives:

1) Update work roles and relations as the relate to the lab, specifically the CIT Lab Aides, who staff the lab all the hours it is open; and the CIT Lab Coordinator, the Faculty member with special assignment to manage the lab and the department infrastructure.

2) Find sufficient recurring funds to pay time sheet hourly CIT Lab Aides

This initiative spans multiple years.

2004 – 2005:

1) Update work roles and relations of the CIT Lab Coordinator, the Lab Aides, and others as related.
2) Fill the temporarily filled CIT Lab Coordinator position.
3) Acquire sufficient stable recurring funding for Lab Aides

2005 – 2006:

1) Pay Lab Aides, either from
    a. stable recurring funds, or
    b. non-recurring funds, as we have in the past.

3) Describe resources needed

2005 – 2006:

Resource Description	$ / Hr (OPE)	Hrs / wk	Wks / year	Annual Cost$$	Recur / Non	Payroll (w/OPE)	Equip	Existing	New G-F	CP	TACT
CIT Lab Aides	13.90	75	41	$43,000	R	X			X	X	X

4) List the possible funding sources - SEE INITIATIVE SPREADSHEET

a. *Can this project be partially funded? NO*
b. *If so, what portion could be funded at what minimum cost?*

In the short-term: TACT & Carl Perkins
In the long-term: New General Fund, or ICP
Note: CIT receives about $30,000 ICP funds annually; CIT students pay $26 per term.

5) Provide ORG & PROG codes (Org: 641000) (Prog: 112000)

6) How does this project articulate with the college's vision, mission and goals and contribute toward meeting the President's/Board's approved goals

- CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.

Vision: We transform lives thru learning by having adequate staff to support the labs and equipment that we use in our courses.

Mission: All staff in question support Professional technical and lower division college transfer programs, in the CIT department.

Core Values:

Learning: we foster a learning-centered environment by staffing the lab adequately, and by having enough staff to meet the demands of our evolving curriculum. We are trying to foster a caring community by paying people appropriately for the work that they do.

Innovation: We are *systematically responding to change* by having sufficient staff to meet the continuing needs of our curriculum.

Integrity: We are fostering an environment of respect, fairness, honesty and openness by recognizing realistically our staffing needs and finding funding to accommodate them.

Strategic Directions:

Place students at the heart of what we do, by making the CIT labs the best learning environment possible, which includes adequate trained staff. *Mainstream innovation*, by re-considering work roles and relations and how well they meet our needs presently.

1) Initiative Title(12) Modify the CIS 140 and CIS 227N core courses **Division Priority: 32**

2) How is the initiative linked to your Program Outcomes Analysis for 2003-2004?

- *What is the challenge you are trying to address?*
  10.i. Build curriculum that is responsive to technology, market and growth needs
- *How will this initiative address the challenge?*
  Development of the core curriculum is seen as essential to developing all of the department's FTE and curriculum development/alignment challenges. It directly addresses the need to develop the core curriculum and 2nd-year curriculum built on the core.

3) Describe the initiative

- *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*
- *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*
- *Given college resources, is it feasible?* YES *Is it an efficient use of college resources?* YES
- *What would be the campus location of this request/project?* CIT Dept.
- *How many students (per year) will benefit?* CIT Core, ~210/yr (based on '03-'04 140,227N enrollment)
- *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*

  This initiative modifies the existing CIS 140 and CIS 227N courses which will be part of the new CIT first year core. The CIS 140 course (which is currently about four weeks of Windows) will be modified by replacing the five weeks of Unix/Linux material with more Microsoft Windows material. The majority of this new CIS 140 material is currently taught in CIS 227N. However one to two weeks of it is new material not previously taught. The CIS 227N course (which is a more advanced course on supporting Windows) will be modified by replacing the four weeks that is moved to CIS 140 with new material not previously taught. This initiative adds more than five weeks of new material on supporting Windows. All CIT students will be more capable of supporting the Windows desktop.

  The existing Linux/Unix material from CIS 140 will be moved into a new course, CIS 140U. See the initiative to "Create an Introduction to Linux Course".

  The modified CIS 140 will be taught the first time in Fall 2005. The modified CIS 227N will be taught the first time in Spring 2006. Enrollment will increase since all CIT majors will now be required to take CIS 227N.

4) Describe the resources needed

Attach the Initiative Spreadsheet to this chapter

No funding requested. Included to document related work we were able to fund in 04-05.

5) **List possible funding sources - SEE INITIATIVE SPREADSHEET**
   - *Can this project be partially funded?*
   - *If so, what portion could be funded at what minimum cost?*

6) **Provide ORG & PROG codes** Org: 641000 Prog: 112000

7) **How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals - CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.**

   Not only does this initiative meet the needs of the CIT degree programs, it provides the opportunity for community employees to upgrade their skills. It meets the learning and innovation core values.

1) Initiative Title **Division Priority: 33**

Redesign CS160 Orientation to Programming for ACM CS0 curricula.

2) How is the initiative linked to your Program Outcomes Analysis for 2003-2004?

- *What is the challenge you are trying to address?*
  10.i. Build curriculum that is responsive to technology, market and growth needs
- *How will this initiative address the challenge?*
  By providing the foundation course for the core.

3) Describe the initiative

- *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*
- *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*
- *Given college resources, is it feasible?* YES *Is it an efficient use of college resources?* YES
- *What would be the campus location of this request/project?* CIT Dept.
- *How many students (per year) will benefit?* CIT Core, ~210/yr (based on '03-'04 160 enrollment)
- *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*
  The 160 course has been brought into alignment with standards in the state, and now provides the fundamental conceptual framework for the core curriculum and even for the student's entire program of study. It functions as the grounding that allows for exploration of computer career choices and from which a flexibly adaptive core curriculum and selection of 2-year programs can be built.

4) Describe the resources needed

Attach the Initiative Spreadsheet to this chapter

No funding requested. Included to document related work we were able to fund in 04-05.

5) List possible funding sources - SEE INITIATIVE SPREADSHEET

- *Can this project be partially funded?*
- *If so, what portion could be funded at what minimum cost?*

6) Provide ORG & PROG codes (Org: 641000) (Prog: 111000)

7) How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals - CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.

This project provides the foundational academic learning in the field of Computer Science. It meets the learning and innovation core values by anticipating and responding to internal (redirection of the professional/technical programs) and external challenges (alignment with the ACE/IEEE curricula), and it expand partnerships with other educational organizations through articulation of courses.

1) **Initiative Title** (14) Realignment of CIT service & transfer courses. **Division Priority: 14**

2) **How is the initiative linked to your Program Outcomes Analysis for 2003-2004?**
   - *What is the challenge you are trying to address?*
     10.i. Build curriculum that is responsive to technology, market and growth needs
   - *How will this initiative address the challenge?*
     A very significant growth potential exists in the transfer area. Changes to the core will allow courses no longer needed by the professional/technical core to better meet the needs of transfer students as well as general members of the community – this is expected to generate additional student demand for department courses.

3) **Describe the initiative**
   - *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*
   - *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgment of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*
   - *Given college resources, is it feasible?* YES *Is it an efficient use of college resources?* YES
   - *What would be the campus location of this request/project?* CIT Dept.
   - *How many students (per year) will benefit?* ~1432 dupl. hdcnt 03-04 for cs120, cis101, cs133js, cs160, cis131
   - *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*

     This initiative is to re-align several of our courses which were formerly taken by CIT majors but are no longer a part of the CIT major core. As such they are courses in service to other professional/technical majors as well as transfer majors. To ensure their viability for both these types of majors this project will include a study of both the curriculum needs of other PT programs and the ability to articulate these courses to four-year institutions. It will focus on making recommendations for possible consolidation of courses, and/or redesigning of courses for the above target audiences. Some, but not all, of these courses are CS120, CIS101, CS133JS, CS160, and CIS131. It is also anticipated that these courses would generate considerable interest from members of the community wanting to supplement their computer knowledge.

4) **Describe the resources needed**

Attach the Initiative Spreadsheet to this chapter

One hundred (100) hours of curriculum development funds would be required for this study and the modifications to the curriculum necessitated by the outcomes of the study.

5) **List possible funding sources - SEE INITIATIVE SPREADSHEET**
   - *Can this project be partially funded?* No.
   - *If so, what portion could be funded at what minimum cost?*

Professional development funds and curriculum development funds

6) **Provide ORG & PROG codes** (Org: 641000) (Prog: 111000)

7) **How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals - CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.**

This meets the accessibility core value of strategically growing learning opportunities. It also meets the innovation, and collaboration and partnership core values.

1) Initiative Title **Division Priority: 18**

Coordination with programs requiring CIT service courses.

2) How is the initiative linked to your Program Outcomes Analysis for 2003-2004?

- *What is the challenge you are trying to address?*
  10.i. Build curriculum that is responsive to technology, market and growth needs
- *How will this initiative address the challenge?*
  One significant potential area for curricular responsiveness and program growth is in meeting "market" demand that is internal to the college.

3) Describe the initiative

- *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*
- *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*
- *Given college resources, is it feasible?* YES *Is it an efficient use of college resources?* YES
- *What would be the campus location of this request/project?* CIT Dept.
- *How many students (per year) will benefit?* Unknown, approx. ~1400 in service courses dupl. hdcnt 03-04
- *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*

  The various departments and programs at LCC that require their students to take one of the CIT service courses need to have good communications and coordination with the CIT Department to ensure that the courses are meeting the needs of the programs. Students will be able to better understand the fundamental usage of computers as applied to their fields of study and their future professional area. This initiative provides the basis for fundamental knowledge and skill development in computing for students. This initiative also directly strengthens student's core ability to use technology and be better prepared in their discipline of study. The appropriate level of skills enables students to meet career enhancement goals

4) Describe the resources needed

Attach the Initiative Spreadsheet to this chapter

Reduction of a faculty member's workload by one class per year enabling time for this

5) List possible funding sources - SEE INITIATIVE SPREADSHEET

- *Can this project be partially funded?* No.
- *If so, what portion could be funded at what minimum cost?*

Professional development funds, curriculum development funds, and Carl Perkins

6) **Provide ORG & PROG codes** (Org: 641000) (Prog: 111000)

7) **How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals - CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.**

This project improves the quality of the many technical programs that require computer-based skills by helping ensure that the appropriate courses and their content are applicable to the programs. It meets the innovation, collaboration, and partnership core values.

1) **Initiative Title** **Division Priority: 29**

Participation of students in computer science professional organizations.

2) **How is the initiative linked to your Program Outcomes Analysis for 2003-2004?**
   - *What is the challenge you are trying to address?*
     10.iii. Core, Student Support systems, FTE through retention
   - *How will this initiative address the challenge?*
     An essential aspect of retaining students lies in cultivating mentorship and professional development for them. This initiative attempts to address this with dedicated faculty involvement in providing this for students.

3) **Describe the initiative**
   - *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*
   - *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*
   - *Given college resources, is it feasible?* YES *Is it an efficient use of college resources?* YES
   - *What would be the campus location of this request/project?* CIT Dept.
   - *How many students (per year) will benefit?* Unknown, ~40 / yr
   - *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*

     Computer Science Transfer students could belong to computer science professional organizations such as the ACM and IEEE Computer Societies. Membership in these organizations provide students with the opportunity to better understand a career in computer science, understand topics more in depth, broaden their understanding of the field of computer science, and develop connections to academic and community organizations involved in computer science in the state of Oregon.

4) **Describe the resources needed**

Attach the Initiative Spreadsheet to this chapter

Part of a contracted faculty member's workload.

5) **List possible funding sources - SEE INITIATIVE SPREADSHEET**
   - *Can this project be partially funded?* No
   - *If so, what portion could be funded at what minimum cost?*

Professional development funds for the faculty member for participation in professional societies, and student body funds for student chapters of these organizations.

6) **Provide ORG & PROG codes** Org: 641000 Prog: 111000

7) **How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals - CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.**

This initiative directly impacts the options available to Computer Science Transfer students and increases knowledge and skill development for students. This initiative indirectly strengthens a student's ability to understand careers in computer science and be better prepared in their discipline of study. The appropriate level of skills enables students to meet career enhancement goals. It meets the learning and innovation core values.

1) **Initiative Title** **Division Priority: 24**

Revitalize the Computer Architecture course(s).

2) **How is the initiative linked to your Program Outcomes Analysis for 2003-2004?**
   - *What is the challenge you are trying to address?*
     10.i. Build curriculum that is responsive to technology, market and growth needs
   - *How will this initiative address the challenge?*
     This initiative attempt to fill a hole in the curriculum, meeting an ongoing well-defined need that transfer students currently must wait to satisfy until they are at a 4-yr institution.

3) **Describe the initiative**
   - *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*
   - *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*
   - *Given college resources, is it feasible?* YES *Is it an efficient use of college resources?* YES
   - *What would be the campus location of this request/project?* CIT Dept.
   - *How many students (per year) will benefit?* Unknown, approx 70/yr dupl. headcnt, 2-course 171 sequence
   - *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*

     Oregon State University and Portland State University both require majors to take computer architecture classes. These courses are specified by the ACM/IEEE computer curriculum. Computer science and computer engineering transfer students currently must take these lower-division courses aFTEr they transfer to OSU and PSU because we have been unable to offer them for the past ten years. This would provide students with the opportunity to broaden their knowledge in the field of computer science, and provide core requirements for transfer.

4) **Describe the resources needed**

Attach the Initiative Spreadsheet to this chapter

One hundred (100) hours or one class release time for curriculum development.

5) **List possible funding sources - SEE INITIATIVE SPREADSHEET**
   - *Can this project be partially funded?* No
   - *If so, what portion could be funded at what minimum cost?*

Curriculum development funds

6) **Provide ORG & PROG codes** (Org: 641000) (Prog: 111000)

7) **How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals - CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.**

This initiative directly supports the college's mission of enabling student career development through providing affordable, quality, lifelong educational opportunities that include lower division college transfer programs

7) Initiative Title **Division Priority: 21**

Develop a learning community for CS161, 162, 260 & MATH 231, 232, 233

8) How is the initiative linked to your Program Outcomes Analysis for 2003-2004?

- *What is the challenge you are trying to address?*
  10.i. Build curriculum that is responsive to technology, market and growth needs
  10.iii. Core, Student Support systems, FTE through retention
- *How will this initiative address the challenge?*
  Building a learning community will function both to strengthen and integrate the curriculum and also to provide a better learning context for students, providing them with better support and because of that, better retention.

9) Describe the initiative

- *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*
- *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*
- *Given college resources, is it feasible?* YES *Is it an efficient use of college resources?*
- *What would be the campus location of this request/project?* CIT Dept.
- *How many students (per year) will benefit?* 35-50/yr
- *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*

  This initiative is to create a Learning Community for Computer Science Transfer students. Students in computing majors transferring to a four-year institution are expected to have an integrated knowledge of programming and discrete mathematics that students in the professional/technical CIT majors are not required. By creating a learning community we can create more collaboration between the computer science and discrete mathematics sequences of courses. . This initiative will better prepare computer science transfer students to think critically and solve problems effectively. Students will get more out of the related sequences and be better prepared for their discipline of study at four year institutions, therefore being more likely to succeed. The class sections are already being taught, so no new sections will be required.

10) Describe the resources needed

Attach the Initiative Spreadsheet to this chapter

Three hundred (300) hours or one class release time for curriculum development for one faculty each from CIT and Math.

11) List possible funding sources - SEE INITIATIVE SPREADSHEET

- *Can this project be partially funded?* No

- *If so, what portion could be funded at what minimum cost?*

SLI funds for Learning communities and Curriculum Development funds.

12) Provide ORG & PROG codes (Org: 641000) (Prog: 111000)

7) How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals - CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.

This initiative directly supports the college's Mission to provide quality lower division college transfer programs. This initiative is an example of the learning core value of working together to create a learning-centered environment. This initiative also supports the innovation core value of the college by creating a new synergism between disciplines that will make our transfer students more successful at four-year institutions

1) **Initiative Title** CUS Job Market Survey Implementation **Division Priority: 25**

2) **How is the initiative linked to your Program Outcomes Analysis for 2004-2005?**

- *What is the challenge you are trying to address?*
  10.i. Build curriculum that is responsive to technology, market and growth needs
  10.iii. Core, Student Support systems, FTE through retention
- *How will this initiative address the challenge?*
  This initiative addresses both the need to provide market grounding to curricular decisions and also to create better integration with the business community, affording the students additional cooperative education, internship and employment opportunities.
  During the 2004-5 academic year, the CUS program undertook an initiative to update its understanding of the local job market for CUS graduates. A survey targeted smaller employers of user support staff. The survey used a combination of interviews, questionnaires and focus groups to learn how the CUS degree program can be improved to better meet the needs of small-to-medium size companies that hire one or a small number of user support staff. The purpose of this initiative is to identify and implement changes in the CUS degree program course requirements or the curriculum in specific courses to address the findings of the survey.

3) **Describe the initiative**

6) *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*
7) *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*
8) *Given college resources, is it feasible? Is it an efficient use of college resources?*
9) *What would be the campus location of this request/project?* CIT Dept.
10) *How many students (per year) will benefit?* 20-40/yr
11) *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*

This initiative may result in changes to degree requirements for CUS or changes in the curriculum in specific courses to better meet the needs of students and employers in the local job market. Changes are based on an employer survey conducting during 2004-5. Secondary objectives of the initiative is to increase student retention, increase flexibility in degree requirements for students, and increase FTE in the CIT department.

4) **Describe the resources needed**

Attach the Initiative Spreadsheet to this chapter. Please be specific about the actual equipment/resource that you need.

The initiative will primarily require administrative support available through the CIT department M&S budget.

5) List the possible funding sources - SEE INITIATIVE SPREADSHEET

- *Can this project be partially funded?* Yes.
- *If so, what portion could be funded at what minimum cost?* Any funding will help.

6) Provide ORG & PROG codes Org: 641000 Prog: 112000

13) How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals

CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.

1) Initiative Title: Revise Troubleshooting curriculum (CIS 227 sequence) **Division Priority: 23**

2) How is the initiative linked to your Program Outcomes Analysis for 2004-2005?

- *What is the challenge you are trying to address?*
  10.i. Build curriculum that is responsive to technology, market and growth needs
- *How will this initiative address the challenge?*
  The CIT department has revised its curriculum for all degree programs to incorporate a common first year core curriculum beginning Fall, 2005. A part of the revision will increase the number of elective courses second year CUS majors may take in order to increase flexibility in degree programs and permit majors to tailor more of their degree requirements to their specific interests. One sequence that will be impacted by the revision is CIS 227 System Support, which is a troubleshooting, problem solving sequence in which students get hands on experience with hardware, applications software, and network/operating systems troubleshooting. This sequence needs to be redesigned to allocate some topics to other courses and to strengthen the role of CIS 227 in the second year CUS curriculum.

3) Describe the initiative

12) *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*

13) *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgment of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*

14) *Given college resources, is it feasible? Is it an efficient use of college resources?*

15) *What would be the campus location of this request/project?* CIT Dept.

16) *How many students (per year) will benefit?* CIT Core+, ~160/yr (based on '03-'04 140 enrollment)

17) *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*

The result of this initiative will be a plan to allocate troubleshooting and problem solving exercises and activities among CIT courses. In some cases, troubleshooting and problem solving skills will be articulated with other courses (ELT 287 and CIS 227N). In other cases troubleshooting and problem solving skills will continue to be the focus of a revised CIS 227 in the second year CUS curriculum.

4) Describe the resources needed

Attach the Initiative Spreadsheet to this chapter. Please be specific about the actual equipment/resource that you need.

This initiative is primarily a curriculum development project, and will seek funds from Lane curriculum development funds and Carl Perkins grants.

5) List the possible funding sources - SEE INITIATIVE SPREADSHEET

- *Can this project be partially funded?* No
- *If so, what portion could be funded at what minimum cost?*

If the funding source is Carl Perkins:
1. How does the request meet one or two of the Carl Perkins act goals?

6) **Provide ORG & PROG codes** (Org: 641000) (Prog: 112000)

How does this project articulate with the college's vision, mission & goals and contribute toward meetingthe President's/Board's approved goals

CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.

1) **Initiative Title:** (21) CIT Graduate Tracking System **Division Priority: 26**

2) **How is the initiative linked to your Program Outcomes Analysis for 2004-2005?**

- *What is the challenge you are trying to address?*
  10.i. Build curriculum that is responsive to technology, market and growth needs
  10.ii. Core, Professional Development to meet new market demand
  10.iii. Core, Student Support systems, FTE through retention
- *How will this initiative address the challenge?*
  Because this initiative integrates student and business employment and skill needs, and because it provides a needed assessment tool for curricular design, it addresses all three of 10i, 10ii, and 10iii areas of need.
  The CIT degree programs have graduated well over 500 majors in recent years. In some instances, the faculty have maintained contact with graduates. However, this effort has been largely piecemeal. The feedback about our the degree programs from recent graduates has been anecdotal, at best. This initiative is designed to implement a tracking system for graduates. The primary purpose of such a system is to maintain better contact with graduates in order to learn about how their job market experiences can improve the CIT degree program requirements and course curriculum. A secondary benefit is to learn why some graduates do not find employment in the information technology.

3) **Describe the initiative**

18) *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*

19) *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*

20) *Given college resources, is it feasible? Is it an efficient use of college resources?*

21) *What would be the campus location of this request/project?* CIT Dept.

22) *How many students (per year) will benefit?* CIT Core+, ~160/yr (based on '03-'04 140 enrollment)

23) *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*
The initiative should result in a tracking system for CIT graduates. The system will be based on both manual and automated (database) procedures to maintain contacts with recent graduates. The first step in this initiative is a feasibility study to determine whether the project is one that is viable given CIT resources. The results of a successful CIT graduate tracking system include 1) an information resource for making curriculum revisions, 2) possible development of networking opportunities for CIT majors seeking Co-op internships and jobs, and 3) potential marketing opportunities for CIT courses in the local information technology industry.

4) **Describe the resources needed**

Attach the Initiative Spreadsheet to this chapter. Please be specific about the actual equipment/resource that you need.

An important resource is identification of successful graduate tracking systems operated by other degree programs at Lane to use as a model. Another resource is the LCC Foundation, which may offer a graduate tracking system that would be compatible with the needs of the CIT department.

5) List the possible funding sources - SEE INITIATIVE SPREADSHEET

- *Can this project be partially funded?* No
- *If so, what portion could be funded at what minimum cost?*

6) Provide ORG & PROG codes Org: 641000 Prog: 112000

How does this project articulate with the college's vision, mission & goals and contribute toward meetingthe President's/Board's approved goals

CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.

1) Initiative Title **Division Priority: 27**

Industry certification correspondence with CIT and CUS degree programs

2) How is the initiative linked to your Program Outcomes Analysis for 2004-2005?

- *What is the challenge you are trying to address?*
  10.i. Build curriculum that is responsive to technology, market and growth needs
  10.iii. Core, Student Support systems, FTE through retention
- *How will this initiative address the challenge?*
  This initiative provides both a structure for curriculum and program development as well as a support service for students, helping them gain certification aFTEr completion of their formal studies.
  As the role of certification increases in importance in the job market, the role of certification and its impact on CIT degree programs generally, and the CUS degree program, specifically, needs to be researched. This initiative will attempt to research and resolve these issues:
  1) In what ways do CUS and CIT degree program curricula correspond to popular industry certifications, such as MOS, A+ or MCDST?
  2) Is a closer linkage between CUS and CIT degree programs and industry certification feasible? Desirable? Implementable?
  3) In what ways does the CUS degree program curriculum map to the IT associates degree curriculum recommended by the ACM?
  4) Are changes to the CUS degree program or course curricula needed to strengthen the correspondence between the CUS degree and the ACM curriculum?

3) Describe the initiative

What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]
What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.
Given college resources, is it feasible? Is it an efficient use of college resources?
What would be the campus location of this request/project? CIT Dept.
How many students (per year) will benefit? CIT Core+, ~160/yr (based on '03-'04 140 enrollment)
How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.
The initiative is a study of the impact of certification on the degree programs and curriculum of the CIT department and the CUS degree program. The research could result in an initiative to modify the CUS degree curriculum to articulate it with either industry certification or ACM curriculum guidelines. The results may be useful to academic advisors who counsel CUS majors about job market requirements.

4) Describe the resources needed

Attach the Initiative Spreadsheet to this chapter. Please be specific about the actual equipment/resource that you need.

200 hours of curriculum development.
Primary resources needed are administrative support.

5) List the possible funding sources - SEE INITIATIVE SPREADSHEET

- *Can this project be partially funded?* No
- *If so, what portion could be funded at what minimum cost?*

If the funding source is Carl Perkins:
1. How does the request meet one or two of the Carl Perkins act goals?

6) Provide ORG & PROG codes Org: 641000 Prog: 112000

7) How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals

CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.

1) **Initiative Title:** (23) CIT certification of non-major computer user skills **Division Priority: 28**

2) **How is the initiative linked to your Program Outcomes Analysis for 2004-2005?**

- *What is the challenge you are trying to address?*
  10.i. Build curriculum that is responsive to technology, market and growth needs
  10.ii. Core, Professional Development to meet new market demand
  10.iii. Core, Student Support systems, FTE through retention
- *How will this initiative address the challenge?*
  This initiative provides both a structure for curriculum and program development in areas internal to the college, and in doing so provides a support service for students, helping them gain "specialty" certifications in the context of their formal studies that provide an edge when seeking employment.
  As the role of certification increases in importance in the job market, the CIT department may be able to respond to computer skill certification by identifying and offering packages of existing CIT courses which qualify certification as a skilled computer user. The purpose of the initiative is to research the feasibility of a computer user skills certificate, based on models at other Oregon community colleges. If feasible, initial packages of skill-building courses would be identified and marketed.

3) **Describe the initiative**

- *What will the product, innovation, or change of this initiative be? Please be as specific as possible. [see full answer below]*
- *What is the need or intended use? How was that need assessed? What is your evidence of the need? Need is based on the professional judgement of faculty and feedback from students, community and advisory committee. CIT will be implementing systems that will allow both qualitative and quantitative assessments of need.*
- *Given college resources, is it feasible? Is it an efficient use of college resources?*
- *What would be the campus location of this request/project?* CIT Dept.
- *How many students (per year) will benefit?* Unknown, ~1000 dupl. headcount 03-04 for representative service classes
- *How will students benefit? How specifically will it address Core Abilities or Learning Outcomes of your program? The core abilities and learning outcomes are well integrated into all curricular and program efforts, including those affected by this initiative.*

The study could result in the CIT department offering computer skill certificates to non-majors who take identified sequences of CIT courses. A consequence of the initiative may be increased FTE in CIT service courses. To the extent computer skill certificates are offered to non-majors, the initiative would impact unknown numbers of students with majors in other departments.

4) **Describe the resources needed**

Attach the Initiative Spreadsheet to this chapter. Please be specific about the actual equipment/resource that you need.

100 hours of curriculum development
The feasibility study requires primarily administrative support. If computer skill certificates can be offered, marketing funds may be sought.

5) **List the possible funding sources - SEE INITIATIVE SPREADSHEET**

- *Can this project be partially funded?* No
- *If so, what portion could be funded at what minimum cost?*

6) **Provide ORG & PROG codes** Org: 641000 Prog: 112000

How does this project articulate with the college's vision, mission & goals and contribute toward meeting the President's/Board's approved goals

CIT is an instructional department meeting the needs identified in 10i, 10ii, 10iii and 10iv, all of which align perfectly with approved goals.

Chapter 5: Expected Unit/Program Outcomes for 2004-2005
What program outcomes do you expect to achieve in 2004-2005?

1) What program level outcomes do you expect to achieve?
What goals do you wish to set for 2004-2005? How will your program grow, change or adapt? How will you address the need to meet program accreditation standards or national standards if applicable?

The department has made a significant change recently in the development of a core curriculum for all professional/technical programs, and is aggressively engaged in curriculum development for transfer courses in line with national standards (ACM guidelines) and developments throughout the state. The primary goal is to effectively implement these changes.

Because of market conditions the department has experienced a decline in FTE over the past few years. The department has implemented a broad range of changes that are designed to restore a pattern of program growth to all existing programs, and to enable growth both in new areas for the department (e.g., College Now) as well as positioning the department for program-level collaboration within the college, and for the growth of new programs.

The department is also engaged in a wide range of efforts designed to increase community connections, for students in a program through coop as well as for faculty in program design and faculty professional development.

2) How will your program enhance your students' abilities to meet Core Abilities outcomes?
What changes, if any, do you expect to implement in 2004-2005?

i. curriculum development for the core first-year professional/technical curriculum that explicitly addresses these objectives at both the course and program level
ii. the development of a "Course X Abilities" matrix giving a more comprehensive picture of how the Core Abilities are integrated into the curriculum.

3) What course level outcomes do you expect to achieve?
What goals do you wish to set for 2004-2005? How will your courses grow, change or adapt? How will your instructional methods change or adapt? What goals do you have for your instructional environment (classrooms and/or technologies and equipment)?

This restructuring should allow for creating an effective schedule of classes that positions the department for growth. It creates a common first-year cohort, providing a focus and concentration of resources that forms an optimal context for developing online classes. The department is also exploring creative scheduling solutions for hybrid classes.

The curricular changes also allow for more effective program development, creation of new programs, and integration of CIT curriculum with that of other departments. Current efforts at curricular integration include efforts with Business, the Library and Media Arts in defining a core set of "Information Literacy" classes, in addition to work with Business in evolving the E-Business degree.

The department is committed to further developing online learning, and in being a creative leader in web technologies.

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

The Computer Information Technology department faculty continue to play a leading role in developing the use of current technologies, as reflected in the initiatives for security hardware for laptops. Efforts to develop web delivery methods will continue.

The department is also an early adopter of the College's templates for department use, and is dedicated to improving online support for department business and committee work:

i. departmental web site: use of templates, process for updates, data-driven dynamic pages
ii. committee/workgroup communication: goals, objectives, history and communication

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

i. online communication
ii. setting goals for committee to help with: faculty professional development

6) How will you set faculty and staff goals?

How will you ensure the participation of faculty and staff in all phases of Unit Planning?
The CIT faculty and staff have a strong culture of collaborative work, and the processes for setting faculty and staff goals, and participating in Unit Planning will be collectively determined this year.

7) Enrollment Data
Please provide your projected goals for 2004-2005:

Program Level: Student FTE

Growth is expected in all areas, in large part because of the restructuring of the curriculum to have a common first-year core in the professional/technical programs. Some of the specific goals we are attempting to meet with the core curriculum:

- a completable goal in the first year of every professional/technical program: students who find themselves unable to finish the two-year program can easily complete a Computer Applications Specialist Certificate with a core set of knowledge and skills that should prove valuable in the job market. This in turn should lead to increased FTE with better retention toward the end of a full year.
- better support for career counseling: students with professional/technical career goals make their program choice at the end of the first year, rather than at the beginning, allowing them to make an informed decision.

- better scheduling: because first-year professional/technical students have a common core, the department will have demand to offer classes in a range of times that better supports the varied needs of the student population.
- more comprehensive studies: the content areas covered in CIT programs is growing in both size and complexity, posing a challenge for what can effectively be learned in two years. The curriculum redesign addresses this in part by increasing the CIT course content in these programs with the side effect of increasing student FTE as well.

Beyond the curricular changes, the department is simultaneously increasing its marketing, in part by working more closely with Lane's Marketing and Public Relations department, in part by working more closely with the Foundation, and through an aggressive series of community outreach and visibility efforts, most notable to high school students through the College Now program.

The department currently does not feel that it or the college has processes and data in place to accurately set specific program-level target student FTE goals.

Course Level: Student FTE

Growth expected in the core courses because of the reasons outlined in the previous section, providing both better retention and increase visibility and recruitment.

The department currently does not feel that it or the college has processes and data in place to accurately set specific program-level target student FTE goals.

Student FTE/Faculty FTE ratios

In a general analysis the numerator is expected to increase with a fixed denominator, and because our target growth for Student FTE is likely to increase significantly we anticipate an overall increase in this ratio.

The department currently does not feel that it or the college has processes and data in place to accurately set specific program-level target student FTE goals.

Capacity Analysis

The CIT Department's goal is to increase it's effectiveness in utilizing institutional capacity through innovative scheduling and development of online classes.

Future capacity analyses are expected to differ significantly, and therefore be difficult to compare to past analyses. E.g.:

i. development of effective capacity metrics for coop, online and hybrid classes
ii. development of method to factor in campus capacity (e.g., how to assess capacity of a class that is half full at an off time when campus classrooms are largely unused?)

8) <u>Student Success Data</u>
Please provide your projected goals for 2004-2005:

- Student Retention ratios 88%
- Student Completion ratios 88%

(Note: achieving this is complicated by the department's current inability to have comprehensive access to student instructor/course evaluations as an assessment tool.)

9) Facilities and Equipment

What facilities or equipment goals do you wish to set for 2004-2005?

The department's primary facilities goals are represented in the initiatives.

10) Budget

Please provide projected goals for 2004-2005:

- General Fund:
  - General Fund Allocation 922,000
  - Actual Costs of Unit Operation 922,000
  - Revenues (Course Fees, etc.) (we have not set a specific student FTE goal)
  - Cost per Student FTE (we have not set a specific student FTE goal)

_____ _____

Advisory Committee Chair Date

_____ _____

Division Chair Date