

Program Review Year 2010 – 2011

Name of Program:

**Computer and Information Science – Information Technology Degree
Option**

Program Review Team Members

<u>Name</u>	<u>Title</u>
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Input from a number of sources in particular Derek Barth (alumni), Demetria Williams (alumni), Professor Barbara Stachniewicz, Michael Kolotila (alumni, adjunct, IT), Colin Williams (Web), Jim Garvin (IT Admin), Larry Frost (IT)

DATE: May 14, 2011

SECTION SIX: SUMMARY

I. CONCLUSIONS: PROGRAM STRENGTHS AND WEAKNESSES

A. List and describe the program's major strengths, based on information obtained in the Program Review. Cite evidence for each identified strength.

AREA OF STRENGTH	EVIDENCE
Computer and Information Sciences Faculty: a diverse faculty (adjuncts) drawing from many areas of expertise	
Computer Labs and spaces: well-designed classrooms and labs that enable the students to learn and experience the latest technologies	
Financial Support: an administration that supports the need for the faculty to stay current with regards to technology, with development, workshops and participation in outside activities	SECTION FOUR, Part V, Financial Resources
Community Service: Faculty and students who participate in programs that connect and present the college to the community at large	SECTION ONE, Part III, Caring College SECTION THREE, Part I C, Curriculum Development
A diverse student population, many cultures, older and younger students, a broad range of technological experience	
Course delivery in multiple modes – on-line, hybrid and traditional	
Consistent demand for IT skills, job market	

B. List and describe the program's weaknesses or areas in which improvement is desirable, based on information obtained in the Program Review. Cite evidence for each identified weakness or area for improvement.

WEAKNESS OR AREA FOR IMPROVEMENT	EVIDENCE
Too many application courses, 3 courses required for the degree	Input from faculty, students, alumni and corporate experts.
CIS 110 Computer applications, lack of assessment, students often come in with this level of skill	Input from faculty, students, alumni and corporate experts.
Overlap in CIS 112 and CIS 113, arose historically and not adequately separated	Input from faculty, students, alumni and corporate experts.
CTE 210 Microcomputers out of place in an IT degree	Input from faculty, students, alumni and corporate experts.
Review, organize and update the current course content	Input from faculty, students, alumni and corporate experts.
Program electives not run on a consistent basis (Not offered or cancelled)	Input from faculty, students, alumni and corporate experts.
Soft skills (written and oral communication, teamwork and professionalism) inadequately covered	Input from faculty, students, alumni and corporate experts, Research
Co-op training/internships have difficulty finding opportunities, logistics	Input from faculty, students, alumni and corporate experts.

Evening course schedules. Four credit course are often scheduled from 5:30-10:00	Input from faculty, students, alumni and corporate experts.
Lack of accelerated programs, Friday/Saturday opportunities, working with alternative venues High schools and corporations	Input from faculty, students, alumni and corporate experts.
Consistent way to update curriculum, courses ot include new and coming technologies	Input from faculty, students, alumni and corporate experts.
Lab limitations, particularly outside of the TC Building	Input from faculty, students, alumni and corporate experts.
Misplaced students. Students who wish to transfer to a Computer Science program are misplaced into the IT option or LA-Comp Sci degree. Neither are suitable for transfer.	Input from faculty, students, alumni and corporate experts.
Misplaced students (part 2) Students who are placed in the IT degree but have career goals that better match the Application option	Input from faculty, students, alumni and corporate experts.
Student tracking is insufficient both for retention and after graduation.	Input from faculty, students, alumni and corporate experts.
Full time faculty is aging, reliance on adjunct faculty	

II. ACTION PLAN

For each identified weakness or area in which improvement is desirable, submit an Action Plan. *(When designing the Action Plan, a suggested plan would include the elements of Process Management using a Plan-Do-Study-Act (PDSA) cycle.)(Note: Add as many of the following tables as necessary.)*

Problem	Improvement Activity	Person Responsible	Date of Activity	Findings
Too many application courses, 3 courses required for the degree	Adjust the curriculum.	CIS dept with division approval	Spring 2011	See Curriculum and Summary of curriculum in appendices
Analysis:				

Problem	Improvement Activity	Person Responsible	Date of Activity	Findings
CIS 110 Computer applications, lack of assessment, students often come in with this level of skill	Adjust the curriculum.	CIS dept with division approval	Spring 2011	See Curriculum and Summary of curriculum in appendices
Analysis:				

Problem	Improvement Activity	Person Responsible	Date of Activity	Findings
Overlap in CIS 112 and CIS 113, arose historically and not adequately separated	Rewrite the descriptions and objectives for the courses	Cis Dept and faculty who teach the courses	Spring 2011	With input from faculty, the course descriptions have been revised, objectives rewritten
Analysis:				

Problem	Improvement Activity	Person Responsible	Date of Activity	Findings
CTE 210	Adjust the	CIS dept with division	Spring	See Curriculum and

Microcomputers out of place in an IT degree	curriculum.	approval	2011	Summary of curriculum in appendices
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Analysis:

Problem	Improvement Activity	Person Responsible	Date of Activity	Findings
Review, organize and update the current course content	Adjust the curriculum.	CIS dept with division approval	Spring 2011	See Curriculum and Summary of curriculum in appendices

Analysis: Curriculum review has to be done on a more consistent basis recognizing the pace of change in IT

Problem	Improvement Activity	Person Responsible	Date of Activity	Findings
Program electives not run on a consistent basis	Develop a schedule of rotating program electives and a	The department, division and academic office need to agree on a plan that works for all	Fall 2011	Needs to be a priority for the next academic year

(Not offered or cancelled)	schedule on which they can be consistently run.			
Analysis:				

Problem	Improvement Activity	Person Responsible	Date of Activity	Findings
Soft skills (written and oral communication, teamwork and professionalism) inadequately covered	Help desk course was modified to include explicit teaching of soft skills	The department in conjunction with English and communications departments	Spring 2011 through Fall 2012	An explicit list of soft skills was developed (see appendix), initial discussions with the English Department
Analysis: Fall 2011 work with English department to develop lesson plans and exercises Spring 2012 run a pilot program with one section of the Help Desk course Fall 2012 incorporate soft skills into all sections of the help desk course with multiple faculty				

Problem	Improvement Activity	Person Responsible	Date of Activity	Findings
Co-op training/internships have difficulty finding opportunities, logistics	Co-op has worked well in the past but is breaking down. One of the keys is developing relationships with companies	The department needs to assign a task to review and develop a co-op plan	Fall 2011	Needs study, a plan needs to be developed and implemented

Analysis:				

Problem	Improvement Activity	Person Responsible	Date of Activity	Findings
Evening course schedules. Four credit course are often scheduled from 5:30-10:00	Evening courses need to be hybrids to accommodate a more reasonable schedule if only for competitive reasons	The arcane rules for on-line courses have been a significant hindrance. Department and division need to develop a plan, prioritize courses and find a better implementation solution	Fall 2011	
Analysis:				

Problem	Improvement Activity	Person Responsible	Date of Activity	Findings
Lack of accelerated programs, Friday/Saturday opportunities, working with alternative venues High schools and corporations	Begin planning alternative scheduling, presentation of courses and programs perhaps starting with certificate programs that emphasize job skills such as Networks and help desk	Initial discussions in the department, followed by discussions with administration	Fall 2011	

Analysis:

Problem	Improvement Activity	Person Responsible	Date of Activity	Findings
Consistent way to update curriculum, courses ot include new and coming technologies	Regular review of curriculum, proactively approach new technologies	Department and division	Fall 2011	See appendix – Change agent

Analysis:

Problem	Improvement Activity	Person Responsible	Date of Activity	Findings
Lab limitations, particularly outside of the TC Building	Assigning specific labs for IT accessibility and management, investigate virtual machines	Department and division	Fall 2011	See appendix -- Labs

Analysis:

Problem	Improvement Activity	Person Responsible	Date of Activity	Findings
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<p>Misplaced students. Students who wish to transfer to a Computer Science program are misplaced into the IT option or LA-Comp Sci degree. Neither are suitable for transfer.</p>	<p>Develop a computer transfer program that satisfies typical Computer Science 4 yr programs such as UMass/Lowell, UMass/Amherst and Merrimack College</p>	<p>Department curriculum development, working closely with division and advising</p>	<p>Spring 2011</p>	<p>See appendices on curriculum proposals</p>
<p>Analysis:</p>				

Problem	Improvement Activity	Person Responsible	Date of Activity	Findings
<p>Misplaced students (part 2) Students who are placed in the IT degree but have career goals that better match the Application option</p>	<p>Need better advising, assessment and monitoring of students</p>	<p>CIS department needs to develop a plan</p>	<p>Fall 2011</p>	<p>Needs to include working with Advising</p>
<p>Analysis:</p>				

Problem	Improvement Activity	Person Responsible	Date of Activity	Findings
Student tracking is insufficient both for retention and after graduation.	Degree Works should help with internal tracking, the alumni office may be able to assist with follow-ups	Department needs to do an annual assessment	Fall 2011	
Analysis:				

Problem	Improvement Activity	Person Responsible	Date of Activity	Findings
Full time aging faculty, reliance on adjunct faculty	Need more (and younger) full time faculty, need to recruit adjunct faculty	Department needs to develop needs list and work with division and administration	Fall 2011	
Analysis:				