

5-2-2005

# Changes to Requirements for the Information Systems Track of the Computer Science Major

The College at Brockport, College Senate

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# SUNY BROCKPORT

College Senate  
State University of New York  
College at Brockport  
350 New Campus Drive  
Brockport, NY 14420-2925  
(585) 395-2586 (Fax) 395-2246

## Resolution # 26 2004-2005 COLLEGE SENATE

TO: Dr. John B. Clark, Interim College President

FROM: The Faculty Senate Meeting on: **May 2, 2005**

RE: ⇒ I. Formal Resolution (*Act of Determination*)  
II. Recommendation (*Urging the Fitness of*)  
III. Other, For Your Information (*Notice, Request, Report, etc.*)

COLLEGE SENATE  
SUNY College at Brockport  
MAY 26 2005  
350 New Campus Drive  
Brockport, NY 14420-2925

SUBJ: **Changes to the Requirements for the Information Systems (IS)  
Track of the Computer Science Major (#30 04-05 UC)**

Signed: Dawn M. Jones Date: May 6, 2005  
(Dr. Dawn M. Jones, 2004-2005 College Senate President)

Please fill out the bottom portion and return document to the College Senate Office.

TO: The College Senate

FROM: Dr. John B. Clark, Interim College President

RE: ⇒ I. Decision and Action Taken on Formal Resolution (circle choice)

a. Accepted. Effective Date: 5/22/05

b. Deferred for discussion with the College Senate on \_\_\_/\_\_\_/\_\_\_

c. Unacceptable for the reasons contained in the attached explanation

II, III. Response to Recommendation or Other/FYI

a. Received and acknowledged \_\_\_/\_\_\_/\_\_\_

b. Comment: \_\_\_\_\_

DISTRIBUTED BY PRESIDENT'S OFFICE TO: Executive Council

DISTRIBUTED BY PROVOST'S OFFICE TO: Deans Council

DISTRIBUTED ALSO TO: Originator, Academic Advisement, Registrar (as appropriate)

Signed: John B. Clark Date: 5-23-05  
(Dr. John B. Clark, Interim College President, SUNY College at Brockport)

COLLEGE SENATE OFFICE

ROUTING NUMBER*	#30 04-05 UC
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# RESOLUTION PROPOSAL COVER PAGE

NUMBER TO BE ASSIGNED BY SENATE OFFICE

DEADLINE FOR SUBMISSIONS: FEBRUARY 23 - Proposals received after the deadline may not be reviewed until next semester.

Submit all proposals in **Word format** to the College Senate President **electronically or on a disk** with a hard copy.

Please provide cover page information requested.

[facprez@brockport.edu](mailto:facprez@brockport.edu), [fsenate@brockport.edu](mailto:fsenate@brockport.edu)

College Senate Office, 426 Allen Building

## 1. PROPOSAL TITLE:

Please be somewhat descriptive, for example, *Graduate Probation/Dismissal Proposal* rather than *Graduate Proposal*.

**Changes to the Requirements for the Information Systems (IS) Track of the Computer Science Major**

## 2. BRIEF DESCRIPTION OF PROPOSAL:

**The Department of Computer Science has offered the Information Systems Track in the Computer Science major since 1998 and has successfully graduated 107 students. We now plan to seek CAC/ABET accreditation for the IS Track, similar to the accreditation we already have for the AC Track. Towards this end, we propose a number of changes to the curriculum. The impact of these changes on the College's resources is expected to be minimal, since all necessary courses, computing facilities and personnel are already in place.**

## 3. SUBMISSION & REVISION DATES: PLEASE DATE ALL UPDATED DOCUMENTS and resubmit to the Senate Office electronically prior to Senate review and vote at [fsenate@brockport.edu](mailto:fsenate@brockport.edu).

First Submission	Updated on	Updated on	Updated on
March 10, 2005	April 07, 2005	April 14, 2005	

## 4. SUBMITTED BY: (contact person)

Name	Department	Phone	Email
Dr. Kad Lakshmanan	Computer Science	395-5181	KLakshma@brockport.edu

## 5. COMMITTEES TO COPY: (Senate office use only)

Standing Committee	Forwarded To	Date
<input type="checkbox"/> Enrollment Planning & Policies	Committee Chair	3/11/05
<input type="checkbox"/> Faculty & Professional Staff Policies	Executive Committee	4/11/05
<input type="checkbox"/> General Education & Curriculum Policies	Senate Floor	4/18/05
<input type="checkbox"/> Graduate Curriculum & Policies	College President	5/6/05
<input type="checkbox"/> Student Policies	Other	
<input checked="" type="checkbox"/> Undergraduate Curriculum & Policies		

\*(ROUTING NUMBER WILL BE A CHRONOLOGICAL NUMBER SEQUENCE FOLLOWED BY COMMITTEE INITIALS)

Department of Computer Science

SUNY College at Brockport

# Proposal to the College Senate

Changes to the Requirements for the

Information Systems (IS) Track

Of the Computer Science Major

March 10, 2005

Revised April 7, 2005

Revised April 14, 2005

**Expected Date of Implementation: Fall 2006**

## **Contents**

Executive Summary

Introduction

Proposed changes to the IS Track

Resource Implications

Side by side comparison table of the existing and proposed programs

Extracts from CAC/ABET Accreditation Criteria and IS 2002 Curriculum Model

Letters of Support

# 1. Executive Summary

The Department of Computer Science has offered the Information Systems (IS) Track of the Computer Science major since 1998. As of Spring 2004, we have graduated 107 students in this program, 28 of who completed a minor in Business Administration, 3 in Criminal Justice and one in Communication. From the time of its inception, the Department has made continuous program improvements through assessment of student learning outcomes and program objectives, in order to bring it to a level that can be accredited by the Computing Accreditation Commission of the Accreditation Board for Engineering and Technology (CAC/ABET). The Department intends to apply for IS accreditation in conjunction with the Advanced Computing (AC) Track, during the accreditation cycle (2008-09). To this end, the Department proposes a number of changes in the requirements for the IS Track.

Computer Science is a continuously evolving discipline. As technologies and processes associated with software and hardware development change, the curriculum offered by a Computer Science program must accommodate these changes. Almost all of the changes we propose are necessary to meet the requirements of the accreditation commission, and result from a detailed study of the accreditation criteria and the IS 2002 Model Curriculum developed by ACM and IEEE, two leading professional societies in the computing field. Please find extracts from relevant sections of the CAC/ABET accreditation criteria and the IS 2002 Curriculum Model in Appendix A. The proposed changes to the IS Track are:

- A. Replace CSC 104 by CIS 106 as a prerequisite to the IS Track
- B. Remove CIS 304 (3 credits) as a required course
- C. Add a new required 1-credit, lab-oriented, "IT Tools" course (CIS 206)
- D. Add a new required 1-credit, lab-oriented, "UNIX Tools" course (CSC 209)
- E. Add a 1-credit lab component to the existing 3-credit CIS 317 course
- F. Add a required course "Electronic Commerce Technology" (CSC 442)
- G. Restrict elective courses further
- H. Strengthen the mathematics requirement by adding a required MTH course
- I. Remove the required course ACC 280 (3 credits) and introduce a 15-credit IS Environment requirement instead (ACC 280 becomes a part of the new IS Environment requirement, if a student chooses BUS to satisfy the IS Environment requirement)
- J. Ensure 30 credits of study in general education to broaden the background of the student.

The impact of these changes on the College's resources is expected to be minimal, since all necessary courses, computing facilities and personnel are already in place. No new faculty lines are requested. The newly introduced restrictions on the major electives and IS Environment requirement will utilize existing courses provided by the College, and will require no new resources. The Department had indicated its desire to make these revisions to the IS Track curriculum and seek CAC/ABET accreditation of the program in its Periodic Program Review (PPR) Joint Action Plans. Both the Dean of Letters and

Sciences and the Academic Priority Committee (APC), headed by the Provost, have approved our plans.

## 2. Introduction

The Department of Computer Science currently offers three different tracks within the Computer Science major:

Advanced Computing (AC)	Accredited by the Computing Accreditation Commission (CAC) of the Accreditation Board for Engineering and Technology (ABET), since 1994
Software Development (SD)	Requirements are very similar to AC Track; does not have the science requirement, and has fewer math requirements. Recommended for transfer students.
Information Systems (IS)	Track for which the current changes are proposed with the intention of seeking CAC/ABET accreditation.

The AC and SD tracks in the major emphasize the development of software and hardware, and focus on problem-solving skills that apply to the actual design of systems. For students in these tracks, the computer itself is an object of study. These students are interested in creating new software and hardware that is more efficient, effective, and reliable.

IS Track, on the other hand, is concerned with the relationship between computer information systems and the organizations they serve, extending from theory and principles to application and development. This includes system development and deployment. The IS program focuses on the broader role of the computer in enabling information utilization and organizational processes in a wide range of enterprises. IS students learn how to assess and evaluate organizational information needs, specify information requirements, and design practical systems to satisfy those requirements.

In order to ensure that the Department stays “current” and meets nationally recommended curriculum standards, the Department decided to seek accreditation of its program in 1993. The AC Track of the program was accredited in 1994, and was re-accredited in 1997 and 2003. As of Fall 2004, the Department is one of only three SUNY schools to receive this accreditation. It is the Department’s intention to continue maintaining the accredited status of the AC Track. In addition, the department wishes to obtain a similar accreditation from CAC/ABET for the IS Track. No other SUNY school has IS Track accreditation at this stage and the Department believes that we can become the first SUNY school to receive IS Track accreditation. Our plan is to apply for IS accreditation in conjunction with the next accreditation cycle (2008-09) for the Advanced Computing (AC) Track. But the curriculum revisions have to be carried out now to ensure that we graduate at least one student under the revised program before we seek accreditation.

### 3. Proposed Changes to the IS Track

**Proposed Change A:** Replace CSC 104 by CIS 106 as a prerequisite for the IS Track.

**Current Situation:** CSC 104: Computers in Business World, is a course that provides an introduction to office automation tools such as Word, Excel, and PowerPoint. Currently this is a pre-requisite to the IS Track.

**Proposed Change:** Replace CSC 104 by CIS 106 (End User Computing) as a prerequisite for the IS Track.

**Rationale:** Several years ago, CSC 104 was the course that most students took to satisfy their “computer literacy” requirement. Currently this requirement is met by taking a competency test. We also offer CIS 106 as a prerequisite for Business majors. In an effort to better utilize our resources, we plan to discontinue CSC 104 and use CIS 106 as a prerequisite.

**Proposed Changes B and C:** Remove CIS 304 as a required course; add a new, required 1-credit IT Tools course (CIS 206).

**Current Situation:** CIS 304: Computers and Office Productivity is a required course that covers some advanced aspects of the office automation software such as Word, Excel, and Power Point.

**Proposed Change:** Remove CIS 304 as a required course; and add a new, required, 1-credit IT Tools course.

**Rationale:** The department plans to discontinue CIS 304 in the future. Instead, we plan to introduce a new required, lab-oriented, 1-credit course CIS 206: IT Tools. This new intensive course will cover the same material using a laboratory-based hands-on approach. We feel that the material can be taught in a more compact and focused way as the enrollees are expected to be mainly Computer Science majors with considerable out-of-class experience with these software products.

**Proposed Change D:** Add a new required 1-credit, lab-oriented, “UNIX Tools” course (CSC 209).

**Current Situation:** Currently we offer CSC 319 (Introduction to UNIX Programming, 3 credits), which teaches both UNIX and the C programming language. It is an elective for all three tracks of the major.

**Proposed Change:** Discontinue offering CSC 319 in the current form and offer a 1-credit required UNIX course (CSC 209) instead.

**Rationale:** The UNIX operating system runs on many workstation-type computers and is the primary operating system on many Internet servers. Linux, a version of UNIX, has gained considerable popularity in recent years. Experience with UNIX will improve the job prospects for all Computer Science students. The CSC 319 course, as offered now, is an elective and has

become unwieldy. While the UNIX component of it is essential for all three tracks of the major, the C component may not be required for all students. This change is an attempt to redistribute the material in a way that is advantageous to our students. We propose to discontinue offering the 3-credit CSC 319 elective course and instead offer a 1-credit UNIX course that will be required for all three tracks. A suitable C language component will be added to another required course for the AC and SD tracks. The proposed change also addresses the accreditation requirement that students be exposed to more than one computing platform (MS Windows and UNIX).

**Proposed Change E: Add a 1-credit lab component to the existing 3-credit course CIS 317: Analysis and Design of Information Systems.**

**Current Situation:** CIS 317: Analysis and Design of Information Systems is a required course for the IS Track. It does not have a lab component.

**Proposed Change:** Add a new one-credit lab component to the CIS 317 course.

**Rationale:** Systems Analysis is a subject that uses many tools in the development of process and data models. Like in a beginning programming course, students benefit from a guided, hands-on instruction in the use of these tools. The guidelines for interpreting the CAC/ABET accreditation criteria strongly suggest that this information systems course include a laboratory component. Teaching of these tools in CIS 317 would also enhance advanced courses such as CIS 422 (Database Systems) and CIS 427 (Project Management).

**Proposed Change F: Make CSC 442 “Electronic Commerce Technology” a required course.**

**Current Situation:** CSC 442: Electronic Commerce Technology is not a required course, but is an elective.

**Proposed Change:** Make CSC 442: Electronic Commerce Technology a required course.

**Rationale:** The recently revised model curriculum for information systems (IS 2002) includes a required course in Electronic Commerce (see Appendix A). During the recent visit in 2002, the CAC/ABET accreditation team suggested that we offer an Electronic Commerce course as a CSC elective. A new course CSC 442: Electronic Commerce Technology was introduced in Fall 2003 and has been offered every fall since then. We propose to make this course required for the IS Track.

**Proposed Change G: Restrict the CIS elective courses further.**

**Current Situation:** The IS Track requires 2 elective courses (6 credits). Of these, as many as three credits may be earned from MTH 441, 461, BUS 461, 464, and CIS courses numbered 490 – 499.

**Proposed Change:** Restrict the CIS elective requirement to CIS/CSC 400-489 courses (excluding CSC 411, 419, 422, 427, and 434). This eliminates MTH 441, 461, BUS 461, 464, and CIS courses 492 (Internship), 493 (Senior Thesis), 495 (Topics in IS) and 499 (Independent Study) as IS Track electives.

**Rationale:** In the most recent evaluation of our AC Track program by CAC/ABET, the visiting team indicated that only classroom-based Computer Science courses should be counted towards the elective requirement. We expect the same policy to apply for the IS Track. We are requesting this change to bring the IS Track requirements in line with the accreditation expectations. This does not mean that these courses will be discontinued. Students will in fact be encouraged to pursue internships to improve their chances in the job market, and to pursue senior theses and independent studies to enhance their chances of entering graduate studies.

**Proposed Change H: Strengthen the Mathematics requirements.**

**Current Situation:** MTH 243: Elementary Statistics (or ECN 204) and MTH 281: Discrete Mathematics are required.

**Proposed Change:** Require an additional mathematics course selected from the list: MTH 201, 221, 343, 439, 441, 461, and 481.

**Rationale:** The ABET accreditation criteria require a 9-credit mathematics component beyond Pre-calculus (see Appendix A). This change is necessary to comply with that requirement.

**Proposed Change I: Remove the required course ACC 280 (3 credits) and introduce a 15-credit IS Environment requirement instead (ACC 280 becomes a part of the new IS Environment requirement, if the student chooses BUS to satisfy the IS Environment requirement).**

**Current Situation:** We require a 3-credit accounting course, but there is no IS Environment requirement.

**Proposed Change:** Remove the required course ACC 280 and introduce a 15-credit IS Environment requirement that provides more choices to students.

**Rationale:** ABET accreditation criteria require 15 credits in a “cohesive body of knowledge to prepare the student to function effectively as an IS professional” in an “Information Systems Environment” (see Appendix A). Possible disciplines include (but not limited to): Business Administration, Communication Studies, Criminal Justice, Health Care Administration, Recreation and Leisure, and Sports Management. If a student chooses BUS as the discipline to satisfy the IS Environment requirement, ACC 280 may become a part of it. Note that students are completely free to choose the IS Environment discipline. The accreditation criteria only require that the students pursue a cohesive body of knowledge. We believe students will be interested in completing a minor in their chosen IS Environment disciplines. Sample course-clusters from each discipline mentioned above are given in Appendix B. Students will be allowed to create new clusters of their own with the prior approval of the Computer Science department.

**Proposed Change J:** Ensure 30 credits of study in general education to broaden the background of the student. (See accreditation criteria in Appendix A.)

**Current Situation:** For most students, this requirement is already met through the College general education component. The purpose of stating this requirement explicitly is to ensure that no student graduates with less than 30 general education credits since many courses carry multiple general education codes.

#### **4. Resource Implications**

The impact of the proposed changes on the College’s resources is expected to be minimal, since all necessary courses, computing facilities and personnel are already in place.

- a. Faculty lines. Since the changes we propose only require repackaging of the material taught already we are not requesting additional faculty lines in the Department of Computer Science to implement the above changes. CSC 442 Electronic Commerce Technology is being currently offered on a regular basis, as an elective with sufficient capacity to accommodate IS students.
- b. Computing and Library Facilities. The Department of Computer Science works closely with the Information Technology Support Services (ITSS) and the Library to ensure that necessary computing and library faculties are available for our students. Since the IS Track program has been offered since 1998, and no totally new courses are proposed, we do not believe that there are any resource implications.
- c. Effect of the IS Environment requirement on other departments. The IS Track of the Computer Science program currently has about 90 students in the four years. We do not expect this number to go up. Since we have provided several options for meeting the IS Environment requirement, we expect the enrollment in the

classes listed under IS environment to go up by about 5 students, which would not place undue burden on most departments.

## SIDE BY SIDE COMPARISON OF THE EXISTING AND PROPOSED PROGRAMS

EXISTING PROGRAM		PROPOSED NEW PROGRAM		
Course# and Name	# cr	Course# and Name	# cr	Change
<b>PRE-REQS</b>	<b>(9)</b>	<b>PRE-REQS</b>	<b>(9)</b>	
MTH122: Pre-Calc	3	MTH122: Pre-Calc	3	
CSC104: Comp. in Business	3	CIS 106: End User Computing.	3	<b>REPLACED</b>
CSC120: Intro to CS	3	CSC120: Intro to CS	3	
<b>REQUIRED</b>	<b>(32)</b>	<b>REQUIRED</b>	<b>(35)</b>	
CSC203: Fundamentals CS I	4	CSC203: Fundamentals CS I	4	
CSC205: Fundamentals CS II	4	CSC205: Fundamentals CS II	4	
		<b>CSC209: Unix Tools</b>	<b>1</b>	<b>ADDED</b>
		<b>CSC442: E-com. Technology</b>	<b>3</b>	<b>ADDED</b>
CSC486: Jun/Sen Seminar	3	CSC486: Jun/Sen Seminar	3	
CIS202: Fundamentals IS	3	CIS202: Fundamentals IS	3	
		<b>CIS206: IT Tools</b>	<b>1</b>	<b>ADDED</b>
CIS303: IT H'ware/S'ware	3	CIS303: IT H'ware/S'ware	3	
CIS304: Comp. Offc. Prod.	3			<b>DELETED</b>
CIS317: A&D of IS	3	<b>CIS317: A&amp;D of IS</b>	<b>4</b>	<b>LAB ADDED</b>
CIS419: Networks	3	CIS419: Networks	3	
CIS422: Database Mgmt	3	CIS422: Database Mgmt	3	
CIS427: Project Mgmt	3	CIS427: Project Mgmt	3	
<b>ELECTIVE</b>	<b>(6)</b>	<b>ELECTIVE</b>	<b>(6)</b>	
CIS334: Decision Sup Sys	3	<b>CIS434: Decision Sup Sys</b>	3	<b>RENUMBERED</b>
CIS404: Multimedia Appl.	3	CIS404: Multimedia Appl.	3	
MTH 441, MTH 461 BUS 461, BUS 464, CIS 490-499 course	3			<b>NOT ALLOWED AS ELECTIVES</b>
300-499 CSC Course (with restrictions)	3	400-489 CSC Course (with restrictions)	3	
<b>MATH CO-REQ</b>	<b>(6)</b>	<b>MATH CO-REQ</b>	<b>(9)</b>	
MTH243: Ele. Statistics	3	MTH243: Ele. Statistics	3	
MTH281: Discrete Math I	3	MTH281: Discrete Math I	3	
		MTHXXX: Select from 201, 221, 343, 439, 441, 461, 481	<b>3</b>	<b>ADDED</b>
<b>BUS CO-REQ</b>	<b>(3)</b>			
ACC280: Intro Acctg	3			<b>DELETED</b>
		<b>IS ENVIRONMENT CO-REQ</b>	<b>(15)</b>	
		Selected from (but not limited to) the following disciplines: Business Administration, Communication Studies, Criminal Justice, Health Care Administration, Recreation and Leisure and Sports Management	<b>15</b>	<b>ADDED</b>
<b>Total (including pre-reqs)</b>	<b>56</b>		<b>59</b>	
<b>Total Including IS ENV</b>	<b>-</b>		<b>74</b>	

**Changes are highlighted**

## APPENDIX A

### **Extract from Criteria for Accrediting Information Systems Programs Effective for Evaluations during the 2004-2005 Accreditation Cycle** (<http://www.abet.org/images/Criteria/C001%2005-06%20CAC%20Criteria%2011-29-04.pdf>)

#### **Curriculum**

##### Intent

The curriculum combines professional requirements with general education requirements and electives to prepare students for a professional career in the information systems field, for further study in information systems, and for functioning in modern society. The professional requirements include coverage of basic and advanced topics in information systems as well as an emphasis on an IS environment. Curricula are consistent with widely recognized models and standards.

##### Standards

Curriculum standards are specified in terms of semester-hours of study. Thirty semester-hours generally constitutes one year of full-time study and is equivalent to 45 quarter-hours. A course or a specific part of a course can only be applied toward one standard.

#### **General**

- IV-1. The curriculum must include at least 30 semester-hours of study in information systems topics.
- IV-2. The curriculum must contain at least 15 semester-hours of study in an information systems environment, such as business.
- IV-3. The curriculum must include at least 9 semester-hours of study in quantitative analysis as specified below under quantitative analysis.
- IV-4. The curriculum must include at least 30 semester-hours of study in general education to broaden the background of the student.

#### **Information systems**

- IV-5. All students must take a broad-based core of fundamental information systems material consisting of at least 12 semester hours.
- IV-6. The core materials must provide basic coverage of the hardware and software, a modern programming language, data management, networking and telecommunications, analysis and design, and role of IS in organizations.
- IV-7. Theoretical foundations, analysis, and design must be stressed throughout the program.
- IV-8. Students must be exposed to a variety of information and computing systems and must become proficient in one modern programming language.
- IV-9. All students must take at least 12 semester hours of advanced course work in information systems that provides breadth and builds on the IS core to provide depth.

## **Information Systems Environment**

IV-10. The 15 semester hours must be a cohesive body of knowledge to prepare the student to function effectively as an IS professional in the IS environment.

### **Quantitative Analysis**

IV-11 The curriculum must include at least 9 semester-hours of quantitative analysis beyond pre-calculus.

IV-12 Statistics must be included.

IV-13 Calculus or discrete mathematics must be included.

### **Additional Areas of Study**

IV-14. The oral and written communications skills of the student must be developed and applied in the program.

IV-15. There must be sufficient coverage of global, economic, social and ethical implications of computing to give students an understanding of a broad range of issues in these areas.

IV-16 Collaborative skills must be developed and applied in the program.

## **Extract from IS 2002 Curriculum Model**

(<http://www.is2002.org/>)

### **Figure 5. IS Curriculum Presentation Areas and Courses**

#### **P. Prerequisite**

IS 2002.P0 Personal Productivity with IS Technology

#### **A. Information Systems Fundamentals**

IS 2002.1 Fundamentals of Information Systems

IS 2002.2 Electronic Business Strategy, Architecture and Design

#### **B. Information Systems Theory and Practice**

IS 2002.3 Information Systems Theory and Practice

#### **C. Information Technology**

IS 2002.4 Information Technology Hardware and Software

IS 2002.5 Programming, Data, File and Object Structures

IS 2002.6 Networks and Telecommunications

#### **D. Information Systems Development**

IS 2002.7 Analysis and Logical Design

IS 2002.8 Physical Design and Implementation with DBMS

IS 2002.9 Physical Design and Implementation in Emerging Environments

#### **E. Information Systems Deployment and Management Processes**

IS 2002.10 Project Management and Practice

## APPENDIX B

### Sample Course-clusters for the IS Environment Requirement

#### *Business Administration*

One of the following

ECN 100: Contemporary Economic Problems

ECN 201: Principles of Microeconomics

ECN 202: Principles of Macroeconomics

and

ACC 280: Introduction to Accounting

BUS 325: Principles of Finance

BUS 335: Principles of Marketing

BUS 365: Principles of Management

Note:

1. To complete the minor, ECN 204 (or MTH 243, taken as part of the IS Track) and one additional BUS/ECN 300/400-level course, excluding BUS 366 are required.
2. In the past five years, we have graduated 28 IS Track students with a minor in Business Administration.

#### Communication Studies

CMC 202: Principles of Communication

CMC 209: Speech, Composition and Presentation

CMC 312: Argumentation and Debate

CMC 317: Interviewing

CMC 319: Propaganda and Persuasion

Note: These courses are part of the Communication Studies program, and do not lead to a minor.

#### *Criminal Justice*

CRJ 101: Introduction to Criminal Justice

CRJ 203: The Police Process or CRJ 207: The Correction Process

CRJ 305: The Adjudication Process

and

Six hours of upper division (300/400 level) selected from the Criminal Justice department course offerings with the advice and prior approval of the student's advisor.

Note:

1. To complete the minor, three additional CRJ credits are required.
2. In the past five years we have graduated 3 IS Track students with a minor in Criminal Justice.

### **Health Care Administration**

HLS 410: Introduction to Health Care Administration (F)

HLS 411: Management Communications (F)

HLS 412: Health Care Administration Planning (S)

HLS 413: Health Risk Management (S)

HLS 488: Applied Biostatistics and Epidemiology (S)

Note: HLS 410 – 413 are offered only at SUNY Brockport Metro Center. These courses are part of the Health Care Administration program, and do not lead to a minor.

### **Recreation and Leisure**

REL 302: Leisure and the Individual and Society

REL 307: Applied Studies in Recreation and Leisure

REL 308: Recreation Leadership and Programming

REL 312: Management of Recreation and Leisure Services

and, one of the following:

REL 303: Corporate and Commercial Recreation

REL 305: Introduction to Therapeutic Recreation

REL 314: Principles of Tourism

REL 320: Leisure Education in Therapeutic Recreation

REL 414: Planning, Design, and Management of Recreation and Leisure Facilities

REL 416: Management of Nonprofit Leisure Service Organizations

REL 430: Special Event Planning

Note: To complete the minor, three additional REL credits are required.

### **Sports Management**

PEP 360: Introduction to Sport Management Theory

PEP 460: Administrative Practices in Sport Management

PEP 461: Problems in Sport Management

PEP 467: Internship in Sport Management (6 credits)

Note: These courses are part of the Sport Management program, and do not lead to a minor.

***MEMO***

**TO:** Faculty Senate

**FROM:** Susan C. Petersen, EdD,  
Interim Chair, Department of Physical Education and Sport

**DATE:** March 10, 2005

**RE:** CSC IS Track Proposal

On behalf of the Department of Physical Education and Sport I would like to express my support for the proposed changes to the requirements for the IS Track of the CSC Major. I believe these changes will be beneficial to the CSC Department as they prepare for an upcoming accreditation.

I have reviewed the proposal and I have asked the Coordinator of our Sport Management program, Dr. William Stier, to review the proposal as well. After discussion, we agree that the changes proposed will not cause undue burden on our resources and Dr. Stier has indicated his willingness to work with the students involved to ensure their success in the culminating experience in sport management, the "exit interview".

The Department of Physical Education and Sport is pleased to support this program and pleased that CSC has determined Sport Management to be an appropriate cluster for the IS track. If you need any further information please contact me at 395-5341 or [speterse@brockport.edu](mailto:speterse@brockport.edu)

To: Dr. Kad Lakshmanan  
Professor and Chair  
Computer Science

From: Dr. Doug Scheidt  
Assoc. Professor & Chair  
Health Science

Date: 3/10/05

Re: CSC IS Track Proposal

Having reviewed the CSC IS Proposal, with specific focus on the potential 15 Credits in the Health Science Health Care Administration Program (HLS/HLA), and having discussed it with the Coordinator of HLS/HLA, I can support the inclusion of our course work in the proposed program.

Although the HLS is currently over-enrolled, the focus of that over-enrollment is our Liberal Arts Program (HLS/HLL). By contrast, HLS/HLA is functioning under its capacity. Because most of the HLS/HLA classes are not part of HLS/HLL, changes in enrollment in one program will not affect the other. Given the current enrollment patterns in HLS/HLA, there exists capacity for an additional 5 students in those courses, as indicated in the CSC IS Track proposal.

It should be noted, however, that HLS majors using majors reservation will have first opportunity to enroll in these classes. Should the HLS/HLA enrollments increase, or should CSC enroll more students interested in using the HLS/HLA courses, the CSC students may find the classes full. However, at current enrollment levels there should be no difficulty in accommodating 5 students per year.



**SUNY BROCKPORT**

**Drake Memorial Library**

To: Dr. Kad Lakshmanan, Chair, Department of Computer Science

From: Frank M. Wojcik, Dean for Information Resources

Date: March 10, 2005

Subject: Drake Memorial Library Support for Department of Computer Science Programs

Drake Memorial Library's collection of information resources currently supports course offerings by the Department of Computer Science, and will be able to support new offerings by the Department in the future. The Library has extensive print holdings for books, journals, and government documents. Currently it contains approximately 642,650 books, 123,000 bound journal volumes, and over 2 million units of microforms. In addition to its traditional print and media holdings, the Library provides access to over 14,000 electronic journals and numerous databases. Drake is also a selective federal depository library.

Interlibrary Loan and reciprocal arrangements with local institutions, such as the University of Rochester and Rochester Institute of Technology, make available almost any title needed by departmental faculty and students. In addition, the Library participates in IDS, a SUNY program that makes available circulating resources of the various SUNY schools in two days or less. Through the adoption of OCLC's ILLIAD and ODYSSEY services, the Library will soon make available electronic delivery of some documents directly to the user's desktop via email.

We fully expect that Drake Library's resources and services will provide the necessary support for the IS track of the CSC major. In addition, the College's information infrastructure, including the campus network, are adequate to support this program.



**SUNY BROCKPORT**  
*Department of Business Administration and Economics*

*March 15, 2005*

*To: Kad Lakshmanan, Chair, Computer Science*

*From: Bill Dresnack, Chair, Business Administration and Economics*

**Re: Letter of Support, Proposal for Information Systems (IS) Track in Computer Science Major**

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I have reviewed the proposed changes to the IS track in the CSC major. The Department of Business Administration and Economics supports the initiatives of the Department of Computer Science, and we applaud your plan to develop an IS niche in the SUNY system. As several courses offered or required by my department may be impacted, I have several concerns, explained below.

**Issue #1: CIS106**

Under the proposal, IS students in your department will be required to complete CIS106, End User Computing, instead of CSC104, and you will discontinue offering CSC104. As CIS106 is a required course for virtually all majors in the Department of Business Administration and Economics, and as it was developed principally for the Business/Economics Department, a concern is whether this proposed change will adversely impact available seats for Business/Economics majors. Current demand for Business/Economics majors is approximately 150 seats each semester for Fall and Spring. Your proposal implicitly represents that this change in the IS track will not adversely affect available seats for Business/Economics majors or the ability of Business/Economics majors to complete their degree on a timely basis. As long as enough sections and seats are available to meet demand, we support this change in your curriculum. We will need to work together to ensure that only qualified, approved (by one of our departments) students are enrolled in the various sections of CIS106, but that should not be difficult given the good relationship between our departments.

Issue #2: ACC280, the Minor in Business, and the Business Cluster

Under the proposal, ACC280, Introduction to Accounting, would be eliminated as a required course. Instead, a 15-credit "IS Environment" would be implemented. One of the proposed methods of meeting this requirement is for IS students to complete a 15-credit "business cluster," to include one course each in economics, accounting, finance, marketing, and management. You assert that this is in lieu of the current expectation or common practice of IS majors completing a Minor in Business. Two concerns arise:

- 1) *Each option for completing these courses requires completion of a course that is in great demand.* As you note, in the past five years you have graduated as many as 28 IS students with a Business Minor. The Business Minor includes the 15-credit cluster courses mentioned above, so there would be no substantial change affecting the Business/Economics Department. As long as the Department of Business Administration and Economics is able to continue to offer a comparable number of seats in these courses, and as long as staffing support of recent years continues to be maintained, I see no problem accommodating the same number of IS students in our courses. Should any of these variables change (i.e., should the entrance requirements for a Minor in Business be changed allowing more students to declare the Minor, or should the support for staffing these courses diminish), this may affect the Department's ability to continue to offer seats to IS students. As your proposal includes several clusters, including non-business clusters, should the number of IS students allowed to take the business courses decrease these students will have other viable options.

- 2) *ACC280 and BUS365*: These two courses, Introduction to Accounting and Principles of Management, no longer count toward any degree requirement in the Department of Business Administration and Economics. Both of these courses currently exist solely to serve the needs of other departments. Should a need arise to reduce course offerings, these two courses would likely be considered for elimination. How your department would handle any such change is up to you, of course. We could, at that time, explore substituting other business courses for those in question.

Issue #3: ECN204:

IS students are currently required to complete an introductory statistics class. Your proposal specifically mentions MTH243 “or ECN204.” ECN204 is consistently subscribed at close to or over capacity. The same concern arises here as for CIS106: as long as current staffing support levels continue, I see no reason why this should be a problem. However, if we are compelled to reduce the number of sections without commensurate reductions in enrollment, this too could pose a problem in ensuring sufficient space for IS majors.

Other:

Since we have acknowledged the existence of course equivalencies among and between our programs, I include the following for the record. Kindly indicate that students may complete their requirements for your program with courses offered by the Department of Business Administration and Economics, as per the following table:

- BUS 317 = CIS 304
- BUS 415 = CIS 422
- BUS 417 = CIS 317
- BUS 464 = CSC 442

Summary:

Subject to the concerns and issues raised in this document, principally related to ensuring sufficient seats and sections in various courses, the Department of Business Administration and Economics support the Department of Computer Science’s proposal to change the requirements for the Information Systems Track of the Computer Science major. We believe the proposal complements our proposed MIS major, and benefits the College in myriad ways. We enthusiastically endorse the proposal to the College Senate.

Email copy:                   Dr. Christine Murray , Dean, School of Professions  
  Dr. Stuart Appelle, Dean, School of Letters and Sciences  
  Dr. David Brannigan, Chair, Senate Undergraduate Curriculum Committee