Indiana University of Pennsylvania   December 2, 1987
Computer Science Department

SUBJECT: Curriculum Changes for Computer Science

TO: Dr. Hal Sommer, Co-Chair
          Senate Undergraduate Curriculum Committee

          Dr. Hilda Richards, Co-Chair
          Senate Undergraduate Curriculum Committee

FROM: Thomas P. Cunningham, Chairman   T.P.C.
          Computer Science Department

The Computer Science Department would like to request approval for the following change to our degree requirements. This change has been approved by the Computer Science Department Faculty and Dean of the College of Natural science and Mathematics.

Add the following minors in Geography and Economics to the list of alternatives under "Other Requirement" necessary to obtain the B.S. Degree rather than the B.A. Degree.

Other Requirements:

Completion of one of the following:

  a) Minor from the College of Natural Science
      and Mathematics,

  b) Minor (Concentration) from designated Business
      courses (18 minimum),

  c) Minor from designated Geography courses (15 minimum),

  d) Minor from designated Economics courses (15 minimum),

  e) Nine additional hours of Computer Science controlled
      electives, including 4 hours of O 485 or CO 493.

The approved minor in Geography* is:

1. At least one course from the following (3 credits):

    GE 230   Cultural Geography
    GE 241   Physical Geography

2. At least three courses from the following (9 credits):

    GE 313   Cartography
    GE 314   Map and Photography Interpretation
    GE 331   Population Geography
    GE 361   Planning: Basic Studies and Analysis
    GE 415   Remote Sensing
    GE 416   Computer Assisted Cartography

3. At least one other Geography course.

The approved minor in Economics* is:

1. Must take (12 credits)

    EC 121   Principles of Economics I
    EC 122   Principles of Economics II
    EC 356   Introduction to Econometrics
    EC 334   Economics of Corporate Decisions

2. At least one other Economics Course except:

    EC 101   Basic Economics

* Since these are both minors, the student will also have to have at least a
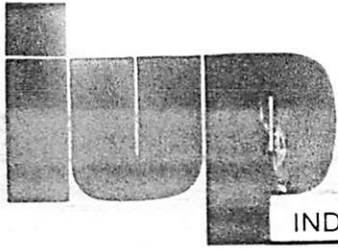 2.0 QPA and completed at least six credits at IUP.

For Information:

The approved Business Minor (Concentration) is:

A student wishing to obtain a B.S. in Computer Science by fulfilling a business concentration as part of his requirements, must complete at least 18 semester hours from the following list of courses (with at least a 2.0 quality point average and at least 6 credits completed at IUP).

AD 235   Introduction to Business Law

AG 201   Accounting Principles I

AG 202   Accounting Principles II
        Prerequisite: 2.0 GPA in AG 201

FI 310   Finance I
        Prerequisite: AG 201

IM 251   Business Systems Analysis and Design
        Prerequisites: AG 201 and FS 240 (or FS 241 or CO 110)

IM 451   System Analysis
        Prerequisites: FS 350, FS 370, or FS 352
                 (CO 300, CO 315 or CO 220 may be
                 acceptable)

MG 311   Human Behavior in Organizations
        Prerequisite: PC 101

MG 360   Management and Production Concepts
        Prerequisites Upper division students only

MK 320   Principles of Marketing

TPC/cam

Attachments

6 April 1987

SUBJECT: Minor in Geography for Computer Science
Majors

TO: Thomas P. Cunningham, Chair
Curriculum Committee
Computer Science Department

FROM: Ruth I. Shirey, Chair
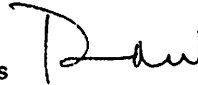Geography and Regional Planning

This memorandum is to inform you of this department's
support for the proposed minor in geography for the computer
science major. We look forward to working with both the
students from Computer Science who minor, as well as those
who major in geography.

There is one change to a course title about which we need to
inform you. GE 416 will be approved by the Senate with the
title: Computer-Assisted Cartography.

SUBJECT: Minor in Economics for Computer Science Majors

TO: Dr. Thomas P. Cunningham, Chairperson
Curriculum Committee
Computer Science Department

FROM: Donald A. Walker
Chairperson, Department of Economics

DATE: April 11, 1987

Thank you for your memo dated April 1, 1987.

The composition of the economics minor that you have proposed has been reviewed by the Department of Economics Curriculum Committee and the Department of Economics as a whole.

Our conclusion is that it is very soundly constructed from an academic point of view, and from the viewpoint of the skills that a computer science student will find useful after he or she has graduated from college. We wish to express our strong support of the proposed minor precisely as it is described in your memorandum, and we hope that your students elect to take it.

SUBJECT: Minors in Geography and Economics Approved for
Computer Science Majors to Qualify for the B.S. Degree

TO: Mr. Gary Buterbaugh, Chairperson
Computer Science Department

FROM: Charles R. Fuget, Dean
College of Natural Sciences & Mathematics

The Advisory Committee of the College of Natural Sciences &
Mathematics has recommended that minors in Geography and
Economics are appropriate to qualify a student majoring in
Computer Science to receive the B.S. Degree rather than the B.A.
Degree. The Advisory Committee has recommended to me that the
minors in Geography and Economics listed below be forwarded to
the University Senate Curriculum Committee as minors appropriate
to the B.S. Degree in Computer Science. The Advisory Committee
has also recommended that letters of support from the department
chairpersons in Geography and Economics accompany the formal
request presented to the Curriculum Committee. I endorse the
recommendation of the Advisory Committee and request that you
forward the appropriate number of copies along with the
supporting letters to the University Senate Curriculum Committee
for their review and approval.

The approved minors in Geography and Economics are the
following:

Minor in Geography (15 credits) including:

1. At least one course from the following (3 cr):
   GE 230 Cultural Geography
   GE 241 Physical Geography

2. At least three courses from the following (9 cr):
   GE 313 Cartography
   GE 314 Map and Photography Interpretation
   GE 331 Population Geography
   GE 361 Planning: Basic Studies and Analysis
   GE 415 Remote Sensing
   GE 416 Computer Mapping

3. At least one other Geography course.

Minor in Economics (15 credits) including:

1. Must take (12 cr)
   EC 121 Principles of Economics I
   EC 122 Principles of Economics II
   EC 356 introduction to Econometrics
   EC 334 Economics of Corporate Decision

2. At least one other Economics Course except:
   EC 101 Basic Economics

CRF/clg

Indiana University of Pennsylvania   April 1, 1987
Computer Science Department

SUBJECT: Minor in Economics for Computer Science Majors

TO: Donald A. Walker, Chair
           Economics Department

FROM: Thomas P. Cunningham, Chair *TPC.*
           Curriculum Committee
           Computer Science Department

        As you may recall, we had a telephone conversation last
Spring semester regarding the appropriate courses for a minor in
economics for computer science majors. If a student completes
the requirements for the computer science major (B.A.)* and a
minor approved by the Computer Science Department, he is then
awarded a B.S. in Computer Science.

        The following economics minor has been approved by the
Computer Science faculty and the College of Natural Sciences and
Mathematics.

        A Minor in Economics (15 semester hours minimum with at
least a 2.0 quality point average) including:

        i.   The following four courses:

              EC 121   Principles of Economics I
              EC 122   Principles of Economics II
              EC 334   Economics of Corporate Decisions
              EC 356   Introduction to Econometrics
                       (Prerequisite: EC 355 or its mathematical
                                       equivalent)

        ii.   At least one additional Economics course excluding
              EC 101.

        Before this proposal is presented to the University Senate's
Curriculum Committee we will need a letter of support from your
department. As I indicated to you last spring, I would only
expect one or two students per year to elect this option.

        Thank you for your cooperation.

*The requirements for a B.A. in Computer Science are:

1. The University's General Education requirement,
2. The College's Foreign Language requirement (language III and IV)
3. The Department's Math requirement (Finite Math, Calculus, Statistics), and
4. 30 credits of selected Computer Science Courses

Enclosure

Indiana University of Pennsylvania   April 1, 1987
Computer Science Department

SUBJECT: Minor in Geography for Computer Science Majors

TO: Ruth J. Shirey, Chair
           Geography and Regional Planning

FROM: Thomas P. Cunningham, Chair   *T.P.C.*
           Curriculum Committee
           Computer Science Department

        As you may recall, we had an exchange of memoranda last
Spring semester regarding the appropriate courses for a minor in
Geography for computer science majors. If a student completes
the requirements for the computer science major (B.A.)* and a
minor approved by the Computer Science Department, he is then
awarded a B.S. in Computer Science.

        The following geography minor has been approved by the
Computer Science faculty and the College of Natural Sciences and
Mathematics.

        A Minor in Geography (15 semester hours minimum with at
least a 2.0 quality point average) including:

        i.   At least one course from the following list:

              GE 230   Cultural Geography
              GE 241   Physical Geography

        ii.   At least three courses from the following list:

              GE 313   Cartography
              GE 314   Map and Photograph Interpretation
              GE 331   Population Geography
              GE 361   Planning: Basic Studies and Analysis
                       (Prerequisite: GE 360 Introduction to Planning)
              GE 415   Remote Sensing
              GE 416   Computer Mapping

        Before this proposal is presented to the University Senate's
Curriculum Committee we will need a letter of support from your
department. As I indicated to you last spring, I would only
expect one or two students per year to elect this option.

        Thank you for your cooperation.

*The requirements for a B.A. in Computer Science are:

1. The University's General Education requirement,
2. The College's Foreign Language requirement (language III and IV)
3. The Department's Math requirement (Finite Math, Calculus, Statistics), and
4. 30 credits of selected Computer Science Courses

Enclosure