

College of Arts and Science

**DEPARTMENT OF COMPUTER AND INFORMATION SCIENCES** 103 Smith Hall, University of Delaware, Newark, DE 19716

<b>TO</b> :	Dan Rich University Provost
	Dallas G. Hoover, President University Faculty Senate
FROM:	CIS Undergraduate Committee Department of Computer and Information Sciences
DATE:	January 18, 2007
SUBJECT:	Permanent Status Program Review BS with a major in Information Systems (INSY)

Through the Department of Computer and Information Sciences the University offers a Bachelors Degree in Information Systems (INSY). This major was given Provisional Approval and was first made available to students entering the University in the Fall of 2003. The INSY major has been a success and at this time we are requesting that INSY be given Permanent Status. Accordingly, this memo provides the documentation required for the Permanent Status Program Review. The memo is organized into several sections: Why INSY; Enrollment; Student Quality; Resources; and Letters of Support.

**Why INSY**: The INSY major is oriented toward students interested in the design of new software systems for business and consumer needs. The major was developed in tandem with the Management Information Systems (MIS) major of the College of Business. These majors were designed to provide University of Delaware students with a range of options in regard to computation, information, and business. Prior to the introduction of the INSY and MIS majors, students were restricted to the very technical Computer Science (CS) major or to a standard Business major. For many students, neither major fit their educational or eventual employment needs. The INSY and MIS majors provide suitable combinations of business and information technology subjects, with INSY leaning more heavily toward the computer science end of the spectrum, and MIS leaning toward the business end.

**Enrollment**: As expected, we have seen some migration to and from INSY vis a vis the CS and MIS majors. This is a good development as INSY provides a place to go for those students who: a) find the more emphatically technical CS major not their cup of tea; or b) find that they want more technical courses than the MIS major enables. The first substantial group of INSY majors will graduate this coming Spring. The Registrar's

Office reports<sup>1</sup> that there are presently 11 seniors, 9 juniors, 3 sophomores and 11 freshman in the INSY major. Aside from the anomalous number of sophomores, these enrollments are in the range expected for the initial classes. Recall that the major is capped (as is MIS) at a maximum of 20 per year to avoid issues with resource requirements.

**Student Quality**: The quality of the INSY majors is very good. The average SAT scores (as available to us via online transcripts) for current INSY majors are 592 Verbal and 620 Math. Both scores are above the University averages of 586 Verbal and 605 Math for the classes entering in 2003-2006. And, these students have done well in the program, as the average University GPA for current INSY seniors is 2.90.

**Resources**: One new course was created in the CIS department explicitly for the INSY and MIS majors. That course is CISC250 Business Telecommunication Networks. This course examines the technologies of information transmission currently utilized in business environments, and has a prerequisite of CISC181 (the second programming course for CIS and INSY students). This course is offered one semester each year. There were 33 students registered in Spring 2006 and 31 are pre-registered for this Spring. Aside from CISC250, the instructional resource needs for the INSY major are spread among existing courses. At current enrollment levels, these needs are being met by the faculty line that was established when the INSY major was created.

It would be very beneficial to both the INSY and CIS majors to have additional lab sections of certain introductory courses. We are presently evaluating such lab options, and are hopeful that in the future there will be properly equipped teaching labs in Smith Hall and/or the proposed undergraduate science bldg.

**Letters of support**: The only departments affected by the introduction of the INSY (and MIS) majors are Accounting and MIS, and Computer and Information Sciences. Letters of support from the Chairs of both departments are attached. Also attached is the required letter from the Dean of Arts and Science.

In conclusion, the INSY major has been well received since its introduction in the Fall of 2003. It is filling an important need in providing student education that spans both information technology and business. In a recent email exchange, one of our faculty asked an INSY student (Michael Barugel) to share his thoughts on the major. Here is a portion (his complete email is attached) of what he had to say:

I feel that the INSY major offers courses that are strong in teaching both the core of programming/computer science as well as a lot of useful and practical knowledge in business operation. The combination of the two can really help students thrive once they go out into the business world because they will have a wide spectrum in that of technology and overall business. I believe that one of the keys to success is the ability to adapt to different environments quickly and to be open-minded in terms of your work. I

<sup>&</sup>lt;sup>1</sup> The Registrar's Office is unsure about the quality of the data due to problems with the new UDSIS system. We believe the cited enrollment numbers to be in the correct ballpark.

think it's obvious that the INSY major would help to jump start a student in that direction ... If I would have known more about the program when I applied to the university, it is likely that I would have entered in it from the start. It has a lot two (sic) offer, combining the best of both worlds. Combining a great sense of technology with a good business background seems to be the perferct (sic) duo for success in the real world.

We urge the approval of Permanent status for the major in Information Sciences.

Attachments: Letter from David Saunders, Chair of Computer and Information Sciences Letter from Jeff Gillespie, Chair Accounting and MIS Letter from the Art and Science Dean's Office Copy of email from Michael Barugel