

PROGRAM REVIEW COMMITTEE REPORT SYNOPSIS
DEPARTMENT OF COMPUTER SCIENCE AND OPERATIONS RESEARCH
REPORTING PERIOD: JUNE 2008 TO MAY 2015

PROGRAMS: The Department of Computer Science and Operations Research (CSOR) offers a BA in CS, BS degrees in CS, CS and Physics, CS and Statistics, and CS and Mathematics, MS degrees in CS, Software Engineering, Master of Software Engineering (plan C), MS-level Certificate of Software Engineering, and PhD degrees in CS and in Software Engineering. The Department also contributes to four required courses of the Management Information Systems (MIS) program.

FACULTY RESOURCES, STUDENTS, AND RESEARCH OUTPUTS: The Department has 14 full-time faculty (four female, ten male), of which five are at the Full Professor level and the remaining nine at the Associate Professor level. CSOR also has two Assistant Professors of Practice, two Senior Lecturers, and three Lecturers (one halftime), one Systems Administrator, two Research Technicians (both halftime), and four Office Staff personnel (two halftime). At the time of the self-study, the Department had 344 undergraduates, and conferred 28 and 7 BS and BA degrees, respectively. Also, in 2014-2015, CSOR had a total of 199 graduate students, and conferred 11 MS degrees in CS and 11 MS degrees in Software Engineering, in addition to 1 and 3 PhD degrees in CS and Software Engineering, respectively. Currently, there are 35 students enrolled in the Master of Software Engineering, effectively a Plan C program. During the past five years faculty scholarship has ranged from 73 to 143 publications (journals, proceedings, and other publications), and total departmental grants have ranged from \$250K to \$1,277K per year during the last seven years.

STRENGTHS:

- Faculty have been widely recognized for their achievements and awards.
- Graduates are highly recruited, employable, and compensated after graduation.
- Research productivity and quality of teaching have steadily increased.

CHALLENGES:

- Controlling enrollment in their undergraduate courses.
- Computer laboratory space across campus is limited.
- Retaining MS students to graduation as these students are highly skilled and employable.
- Recruiting international students who have met TOEFL requirements.

RECOMMENDATIONS:

- To consider redesigning the BA program to make it less technically oriented and to increase the differentiation between the BA and the BS.
- To work with the Dean to acquire funds for a full-time student advisor.
- To explore LANG 701 (3 credit) and LANG 702 (1 credit) as a potential option for incoming graduate students who need additional help with English.
- To re-visit the current graduate curriculum to see if the substitution of courses related to professional skills for some research-related courses could be a better curricular fit for certain groups of MS students whose career aspiration lies in industry rather than in research, thus allowing their increased retention and graduation.

- To review the departmental PTE policies to safeguard against potential differential expectations with those at the College level.