

FS P&BC Report to FS APC (11/10/2023)
on Proposed new MS in Artificial Intelligence in Medicine (AIM) in SSoE

Overview (taken from revised formal Proposal and revised Budget spreadsheet):

This proposed 30-cr-hr MS degree program “Artificial Intelligence in Medicine AIM” focuses on the application of computational methods and machine learning techniques to the analysis of medical and public health data and will be offered both as fully Face-2-Face and as fully On-Line programs. The intended audience are students with undergraduate degrees in Bioengineering or Public Health and healthcare professionals seeking advanced knowledge in the field of Artificial Intelligence with application to medical problems. This proposed MS in AIM will emphasize skills to analyze patient and public health medical data, including skills related to big data, medical imaging, biostatistics, experimental data (clinical and laboratory), and healthcare information. Students will acquire skills and knowledge in computation, modeling and simulation, machine learning, medical data management, and advanced statistical analysis, with specialized training in the automated analysis of medical data and statistical information.

This proposed program involves 12 required cr-hrs of graduate courses in Bioengineering of the Speed School of Engineering (SSoE), 12 required cr-hrs of graduate courses in Bioinformatics and Biostatistics of the School of Public Health and Information Sciences (SPHIS), and 6 elective graduate courses (mostly in Bioengineering), with significant teaching by current faculty in both SSoE and SPHIS.

Assessment:

The proposed revised budget spreadsheet (dated Nov 9, 2023) now has details on calculations, description, and justifications for budget items including the proposed 1 new Graduate Teaching Assistant starting in year 3 with stipend, tuition (assumes out-of-state), and fringe (8%). The official Certificate proposal now has corrected and consistent projections of full-time and part-time student headcount for first five years with Unit tuition-share at 75%.

There is significant interaction in course teaching between SPHIS and SSoE, but tuition-share will “officially accrue” to the home Unit of the graduate degree program (SSoE). The support letters from the respective deans now contain specific agreements that the Unit tuition-share will be divided with 45% to SSoE, 45% to SPHIS, and 10% to SSoE for program administration.

Comments:

The P&BC finds that this proposed MS degree program (AIM) is likely to be a profit operation for both SSoE and SPHIS, with little chance that it will become a net cost operation since the 3rd - year proposed GTA is contingent on the program meeting enrollment projections.

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