Bachelor of Electrical Engineering and Master of Science in Data Science

The Master of Science in Data Science (MSDS) is being combined with the Bachelor of Electrical Engineering offered by the Department of Electrical and Computer Engineering in a 4+1 Bachelor/Master combination.

The Department of Mathematical Sciences and the Department of Computer and Information Sciences are expected to approve all of their respective majors being offered in 4+1Bx/MSDS combinations as well.  There will be a separate proposal for each of those department's majors.  The program policy statement uploaded with this proposal initially anticipates that these degree programs will be approved.

In all cases, the Bx degree requirements must be satisfied, the MSDS requirements must be satisfied, six graduate credits from the MSDS may be applied towards the Bx degree, and the Bx degree must be completed before the start of the +1 year.

* WHEREAS, the University of Delaware has established an interdisciplinary Master of Science in Data Science (MSDS) which has already admitted a small number of students for its first semester, and

WHEREAS, all such national and regional data suggest a significant demand for the training in data science, which requires expertise in mathematics, computer science, statistics, as well as a domain (or application) field, and

WHEREAS, the program allows students to take courses in three departments and in application domains; such flexibility allows training in different categories of positions, and

WHEREAS, the proposed master in data science program can offer training with breadth and depth, placing graduates from the program in a better position to lead in new techniques in data science and analytics, and

WHEREAS, the proposed program will contribute to a strategic initiative in data science on campus, and

WHEREAS, the program could provide well-prepared applicants for those data intensive Ph.D. programs such as Financial Service Analytics or Bioinformatics, or for Ph.D. programs in Mathematics, Computer Science, and Statistics, as well as other application fields,

WHEREAS, a number of majors around campus give excellent background for the new MSDS program, including all of the majors from the Department of Mathematical Sciences, the Department of Computer and Information Sciences, and the Department of Electrical and Computer Engineering, and

WHEREAS, the three departments named above have all approved the offering of 4+1 Bachelors/MSDS options for all of their undergraduate majors, and

WHEREAS, the executive committee of the MSDS has approved the offering of 4+1 Bachelors/MSDS options for all of those undergraduate majors, and

WHEREAS, students in the program can be expected to pay for their courses of study, which will generate revenue for the university; be it therefore

RESOLVED, that the Faculty Senate recommends provisional approval of the establishment of 4+1 Bachelors/MSDS degree for all of the Bachelors degrees offered by these departments.