

**Professional Science Master's Programs:
An Opportunity for Engineering Schools and Students**

Beverly Karplus Hartline, Ph.D.

Acting Dean of Engineering and Applied Sciences,
Associate Provost for Research,
Dean of Graduate Studies, University of the District of Columbia

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The Professional Science Master's (PSM) degree prepares students with a strong foundation in natural science, computation, engineering, and/or mathematics for a broad range of professional career options in business, industry, government, and non-profit organizations.

Each PSM is an innovative degree program, designed in close consultation with interested employers, in which the students undertake an internship or team project, rather than a thesis or comprehensive exam. The PSM curriculum combines rigorous graduate-level coursework in science, engineering, computer science, and/or mathematics with workplace-oriented coursework in management, communications, law, marketing, entrepreneurship, or other, so-called "plus" fields. In 2010, the PSM scope was broadened to include engineering-based specialties, though not aimed toward professional licensure or certification. PSM degrees are offered in such specialties as bioinformatics, nanomaterials, science/engineering entrepreneurship, water resources, and renewable energy, among others. Graduates are well paid and in high demand.

UDC leads the HBCU Mid-Atlantic PSM Alliance, and was the first HBCU to join the ranks of PSM institutions. This presentation will introduce the PSM, the process for curriculum development with industry, and the myriad opportunities for engineering-based PSM that spur employment, economic development, and business partnerships in the broad region around any campus.