COUNCIL OF GRADUATE SCHOOLS

Guidelines for CGS Recognition as a Professional Science Master’s Program

The Professional Science Master’s (PSM) degree is a unique professional degree grounded in natural science and/or mathematics and designed to prepare students for a variety of career options in industry, business, government, or non-profit organizations. The degree combines advanced coursework in science and/or math with an appropriate array of professional skill-development activities to produce graduates highly valued by employers and fully prepared to progress toward leadership roles. The PSM is designed to be self-contained and prepares students for direct entry into the workforce; it is not a traditional master’s degree or a degree earned automatically en route to or from a PhD degree.

The following criteria are deemed important for a master’s program to qualify for PSM status and are intended to provide guidance to faculty and administrators planning new PSM programs, to assist leaders of existing professional science programs who feel their programs meet the criteria to be recognized as a PSM and to provide guidance to faculty and institutions that wish to modify their programs and be recognized as a PSM.

- The total number of credits should be at least equivalent to a standard master’s degree (approximately 2 years, full-time equivalent, including projects and internships).
- A natural science and/or mathematics core should constitute the majority of the course content and should come from fields in which knowledge is commonly advanced by an active research community engaged in peer-reviewed exploratory research. This core may be ‘interdisciplinary,’ i.e., may be based in several different disciplinary areas as traditionally defined or described by existing institutional organizational structures. An interdisciplinary curriculum is highly desirable.
- The program should include a professional skills component (often called the “plus” component of a “science-plus degree”) that may consist of a variety of relevant courses and activities. This component should be developed in consultation with prospective employers. Examples of plus-components include business basics, legal and regulatory issues, finance and marketing, organizational behavior, ethics, communication and teamwork. They are often developed in collaboration with appropriate academic units outside the sciences or taught by adjunct faculty from the targeted employment sector. In addition to courses and workshops, professional skills are usually enhanced by internships and problem-based projects sponsored by employers. The professional component should result in a portfolio of experiences recognized by and involving the client employers.
- Program quality assurance should be provided using the faculty-based mechanisms normally used by the institution for graduate programs in order to ensure institutional integration and sustainability. It is understood that the professional nature of the program may lead to substantial participation by non-academic practicing professionals, for example as adjunct faculty course instructors or student internship mentors.
- A Professional Science Master’s Program requires an active and engaged employer advisory board. Examples of board and/or individual-member functions include providing advice on the program curriculum, assisting with internships and placement, assisting with project-identification, and/or interacting individually with students.
- PSM status includes a commitment to report enrollment and degrees annually and attempt to track the employment history of every graduate in order to help assess program outcomes and success.
- PSM programs agree to use the name “Professional Science Master’s” and the PSM logo on Websites and advertising brochures. In turn the program will be listed on CGS national PSM websites and data bases, and will be included in CGS PSM promotional activities.

PSM designation is intended to provide a mechanism for recognition of this new type of degree by offering assurance that the program conforms to nationally recognized standards. Ordinarily, master’s degree programs with existing accrediting bodies or those that have been traditionally offered as training toward professional licensure or certification (such as public health, most genetic counseling, some engineering degrees) are not appropriate for PSM designation. Programs aimed at training educators are not eligible for PSM designation.

In order to use the trade-marked title and logo “PSM,” institutions must apply to the Council of Graduate Schools for recognition as a Professional Science Master’s program by addressing each of the above stated criteria and by submitting an application to profmasters@cgs.nche.edu. If you have any questions, please contact 202-223-3791 or profmasters@cgs.nche.edu.