

PROFESSIONAL SCIENCE MASTER'S IN NATURAL SCIENCES, BIOLOGICAL DATA ANALYTICS SPECIALIZATION

The Professional Science Master's (PSM) program with a specialization in Biological Data Analytics is a graduate degree program that was designed in coordination with leaders in the biotechnology industries in order to ensure that students will have the scientific, business, and communication skills required to be competitive for jobs in these industries. Students will develop skills that will allow them to analyze data from genomic, transcriptomic, proteomic, and metabolomic studies to find statistically relevant information, while interfacing with biologists in data interpretation and experimental design.

The PSM in Natural Sciences, Biological Data Analytics Specialization is an affiliated Professional Science Master's (PSM) degree. Affiliation is administered by the Commission on Affiliation of PSM Programs (<https://www.professionalsciencemasters.org/>) (formerly named PSM National Office) to ensure a strong and distinctive PSM brand. The PSM is designed for students who are seeking a graduate degree in science or mathematics and understand the need for developing workplace skills valued by top employers.

Students interested in graduate work should refer to the Graduate and Professional Bulletin (<https://catalog.colostate.edu/general-catalog/graduate-bulletin/>).

Learning Objectives

Upon successful completion of this program, students will be able to:

1. Describe how quantitative biological data are generated;
2. Computationally analyze large biological data sets;
3. Analytically interpret results; and
4. Integrate the above aspects into a business setting.