

The California State University Systemwide PSM Initiative

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The Professional Science Master's Program (PSM) is a system-wide graduate education and workforce initiative within the California State University (CSU). The system's development of the PSM reflects a strategic commitment to building alliances with industry and forming partnerships that advance the state's workforce development, and reflects the priorities of the CSU long-term academic plan, Access to Excellence.

There are currently 22 PSM programs within the CSU, located on 17 CSU campuses. The programs are in assistive and rehabilitative technologies, bioengineering, bioinformatics and medical informatics, biostatistics, biotechnology, communication and photonics, computer hardware and software, computational science, environmental sciences, forensic science, genetic counseling, and stem cell research training, and are distributed throughout the state.

The CSU initiative is expected to train more than 1,200 professionals in the state's highest growth sectors over the next five years. The initiative directly addresses the state's need for educational programs that advance the state's economic development. Partnerships with industry are focused on meeting workforce needs. As an

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Overview of CSU PSM

CSU PSM: Serving Diverse Industries Throughout California

CSU PSM: Quality and Affordability

CSU PSM: Rapid Expansion

CSU PSM Programs: What Our Industry Partners Have to Say...

Acknowledgments

For More Information

example, in the life sciences sector, the programs are designed to meet critical needs of California's pharmaceutical, diagnostics, medical devices, and applied bioscience research firms.

The industry-relevant training provided by PSMs benefits both employers and students, for whom it provides significant career opportunities and mobility. Many employers see the programs as particularly valuable for enabling their current employees to gain training needed for advancement. As a result, employers often provide support to their workforce through tuition reimbursement that may pay part or all of program fees.

The CSU has established a top level Executive Board to provide guidance to its PSM programs. The Board includes industry leaders from Abbott, BD-Biosciences, Cisco, Edison International, Genentech, Hewlett-Packard, Life Technologies, Pacific Gas and Electric, Pfizer, Sony, and Qualcomm. The members are highly supportive, reflecting their view that the PSM, combining rigorous academic training with industry-relevant internships, prepares the human capital needed for the state's future economic success.

A key priority of the CSU PSM initiative is to prepare students in the responsible conduct of research and to be ready for the challenging ethical issues they may face at the workplace. Another key objective is to advance diversity within the STEM workforce. Campuses are addressing this in a variety of ways, including pipeline partnerships with community colleges. Curricular alignment creates seamless pathways for students from community colleges, including substantial numbers from underrepresented groups, into upper division study at CSU campuses that prepares them for PSM programs.

The system-level implementation includes a focus on achieving significant efficiencies and on campus sharing of resources. For example, a number of bioscience programs are collaboratively developing online instructional resources featuring expert guest speakers, enabling all of them to feature outstanding industry experts in the programs.

The Professional Science Master's initiative aligns closely with the mission and priorities of the California State University. The initiative is continuing to grow substantially in response to the needs of the state's employers and is becoming an increasingly significant dimension of graduate education in the CSU.