Insights into Post-baccalaureate Certificates

CGS Research in Brief, February 2025 Enyu Zhou, Senior Research Analyst

Nationally, microcredentials are receiving increasing attention as avenues for reskilling and upskilling. Postsecondary institutions have begun to explore new models of master's education built on "micromaster's" degrees or other stackable credentials. Over the last several years, there has been an increased enrollment in graduate certificate programs. Using data from the Council of Graduate Schools' Master's Exit Survey project, this brief provides insights into post-baccalaureate certificates and the role they play in entry into master's degree programs.



Key Takeaways

• Certificate students represent a diverse group in terms of gender and race/ethnicity.

• By field of study, certificates are particularly concentrated in data analytics, data science, project management, and teaching.

• Students are pursuing certificates in fields that meet workforce demands, particularly in fields like data analytics and data science. Certificates likely play a role as credentials for entering the workforce as well as reskilling and upskilling to meet current workforce needs.

• Earning credentials can be a way for students to initiate a master's degree and earn credits toward the degree. However, findings from this study suggest that very few students used this pathway to enter master's programs. Only 10% of survey respondents held certificates before pursuing a master's degree and 6.5% of those reported transferring certificate credits toward the master's degree. The idea that earning credentials could be a cost-effective way of moving into a master's program may not be the case. It's important for higher education institutions to pay more attention to how certificate programs and master's programs could align.

• Master's students pursued graduate certificates while enrolled in their master's program. As such, only 9% of survey respondents indicated that they were interested in pursuing certificates after completing a master's degree.

Who is pursuing a certificate?

Among master's student respondents (n=10,332) surveyed in the CGS Master's Exit survey, about 21% indicated that they were pursuing a certificate. A larger share of African American master's students reported pursuing certificates (25%), compared to other racial and ethnic groups. A larger share of women master's students reported pursuing certificates (23%) compared to men. Women and African American students are doing certificates as an "add on" to their master's degree is similar to the phenomenon of more women and URM's participating in PhD professional development opportunities (Garcia & Zhou, 2022). These professional development opportunities may serve not only to upskill doctoral students, but also to provide validation and support in forming a professional identity among minoritized students.



What certificates are master's students pursuing?

The survey asked respondents to report the name of the certificate they were currently pursuing, resulting in more than 1,600 open-ended responses. Certificates in data analytics and data science (e.g., AWS, Python, data visualization, etc.) were the most common certificates being pursued among survey participants. This aligns with findings from an earlier CGS project showing that data science and technology was one of the most common certificates pursued (Linton, Zhou, Allum, & Rowe, 2024).

The Project Management Professional (PMP) certificate was another common credential that master's students pursued. Other popular certificates were certificates in teaching, library administration, management, security, and health, as well as licensing for Certified Public Account (CPA), social work, and counselor.

Do certificates transfer to master's programs?

Approximately 10% of students responding to the survey held certificates prior to starting their master's program. Of those, only about 6.5% transferred credits earned in those programs to their current master's degree.

As part of your current master's program, did you transfer any previous graduate credits from another college/university?

6.5%	93.5%	
Yes	No	

Do students earn master's credit?

Over one-half (53%) of students who earned certificates did so in conjunction with their master's degree and the credits earned through the certificate program did not count toward the master's degree requirements. However, almost half of the participants (47%) reported that the credits they earned through their certificate program counted towards their master's degree requirements. This suggests that students pursued certificates for a variety of reasons, including for the purpose of upskilling and reskilling, regardless of whether the credits would be counted toward their master's degree requirements.

Do credits earned through this certificate program count towards your current master's degree requirements?			
47%	53%		
Yes	No		

What is the demand for credentials?

Among those who planned to pursue additional degrees, when asked what degree they plan to pursue after earning their master's degree, nine percent of master's students reported an interest in pursuing a graduate certificate in the future. A large proportion of master's students plan to pursue a research doctorate (45%) degree and professional doctorate (22%) upon completion of their master's degree.



Conversation Starters for Master's Program Improvement

We encourage graduate schools to engage in conversations about how to best serve certificate students. Some of the questions that you may begin asking your campus colleagues (e.g., graduate school staff, college deans, graduate program directors, etc.) and others include:

- How does your institution make sure the credentials are of high quality and have lasting value?
- How does your institution make sure that credentials meet student demands and labor market needs?
- What are your institution and graduate programs doing to foster partnerships with industry, government, and other institutions to develop certificate programs?
- How can your institution create an environment that is supportive of certificate students?
- How can certificates provide a pathway to graduate degrees?

References

- Linton, M., Zhou, E., Allum, J., & Rowe, M. (2024). Microcredentials and the master's degree: Understanding the national landscape to support learners and the workforce. Council of Graduate Schools.
- Garcia, A. L., & Zhou, E. (2022). Academic professional development for PhD students in selected science fields: Who is participating? Council of Graduate Schools.

About the Data Source

The CGS Master's Exit Survey Project was a coalition of 12 master's-granting institutions working to unravel patterns in STEM and career pathways for graduating master's students. Over the course of the project, institutions collected data from graduating master's students using web-based surveys developed by CGS in consultation with university leaders, funding agencies, researchers, and the CGS Research Committee. The resulting data offered a first look at the career choices and aspirations at the program level and may help faculty and university leaders strengthen career services, professional development opportunities, and mentoring. The CGS Master's Exit Survey was distributed between 2022-2023 to graduating master's students at participating institutions. This brief is based upon the aggregated data set, which includes more than 10,000 respondents.

Resources

CGS Microcredentials Project: With support from ETS, CGS led a project exploring the relationship between microcredentials and the master's degree. The project report and resources for graduate schools are <u>available on the CGS website</u>.

Non-degree Credentials Research Network (NCRN): The NCRN is a project funded through a grant from Lumina Foundation and managed by researchers at the George Washington Institute of Public Policy (GWIPP) and the Rutgers University Education and Employment Research Center (EERC). The NCRN is a multi-disciplinary community of scholars, practitioners and policymakers that focuses on the little-understood role of certificates, certifications and other non-degree credentials in the labor market. Project resources are <u>available on the NCRN website</u>.

Credential Engine: Credential Engine provides a suite of web-based services including a centralized Credential Registry to house up-to-date information about all credentials, the Credential Transparency Description Language (CTDL) - a common language to enable credential comparability, and a platform to support customized applications to search and retrieve information about credentials. Resources are <u>available on the Credential Engine website.</u>

This brief is based on work supported by the National Science Foundation (grant numbers 2100343). Any opinions, findings, and conclusions or recommendations expressed in this brief do not necessarily reflect the views of the funders.

