

Summary of Research on Accelerated Master's Programs (AMPs)

METHODS

The research team used Google to search initially for accelerated master's programs (AMPs) in computer science to get a sense of which institutions offer such programs. We learned that these types of programs are quite prevalent. To narrow our scope, we researched AMPs at a diverse set of 33 colleges and universities (See Appendix). We classified identified AMPs in DS/AI-relevant disciplines using the following IPEDS CIP codes:

- Computer and Information Sciences (CIP Code 11)
- Engineering (CIP Code 14)
- Mathematics and Statistics (CIP Code 27)
- Data Science (CIP Code 30 – new code in 2020)
- Various
 - Biological and Biomedical Sciences (CIP Code 26)
 - Physical Sciences (CIP Code 40)
 - Social Sciences (CIP Code 45)
 - Health Professions and Related Clinical Sciences (CIP Code 51)

Note that determining the most appropriate CIP code for some degrees can be ambiguous.

INSIGHTS

1) Many institutions offer some sort of AMP.

The institutions we targeted for further research offer at least one AMP in a DS/AI-relevant degree and more than 70% offer at least one AMP in each of two or more DS/AI-relevant disciplines. Online accelerated master's programs were not included in this research.

2) While AMPs are common, their nomenclature is inconsistent.

Accelerated master's programs have different names at different institutions, complicating our efforts to identify offerings. For example, Stanford is the only institution we researched that refers to their program as a "Coterminal Master's." The most common names for AMPs were "Accelerated Master's" and "4+1 Program."

The full list of the unique program names identified, in order of popularity, is:

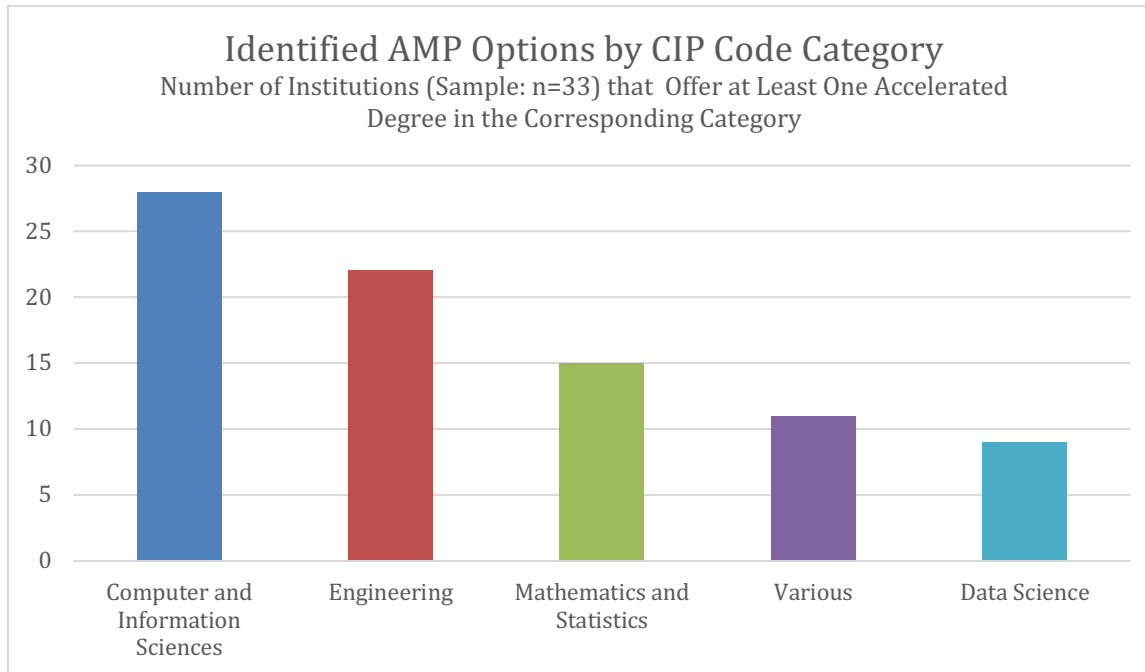
- Accelerated Master's
- 4+1 Program
- Combined BS/MS Program
- Fifth Year Master's
- Early Admission
- Integrated BS/MS Program
- Coterminal Master's
- Concurrent Master's
- Fast Track
- Accelerated Status Program
- Contiguous BS/MS Pathways
- Blended Program
- PlusOne Program

3) Computer science is the most common AMP degree option.

We took note of all the DS/AI-relevant fields in which we identified an accelerated Master's, categorized by IPEDS CIP code categories (Fig. 1). Accelerated degrees in Computer and Information Sciences are the most common, with 27 out of 33 institutions offering a program in this discipline. Among these institutions, all but one offers an AMP in Computer Science, making CS the most common AMP degree option identified.

In 2020, IPEDS added a new CIP code for Data Science. We identified an accelerated master's in Data Science at nine (9) institutions in our sample. Among AMPs categorized in Various CIP code categories, the most common degree option is Bioinformatics, identified at five (5) institutions.

Figure 1. DS/AI-relevant accelerated master's degree programs.



4) Information about AMPs is not always easy to find.

Several institutions have a centralized webpage with clear overviews of the programs and degree options. For many others, the AMP information was found deep within departmental websites, in academic catalogs, or in links to AMP application portals. Improved access to information about these AMP programs could raise the awareness with prospective students.

5) AMPs vary in applicant eligibility requirements, and some are quite restrictive.

For many programs, only students from within the home institution or department can apply. Some programs provide more flexibility but still place limits on the undergraduate majors that may pursue an accelerated master's degree. A few universities offer programs that are open exclusively to students from partner institutions.

APPENDIX

List of Included Institutions

Arizona State University	Princeton University
Barnard College	Smith College x (Amherst, Hampshire, or Mount Holyoke)
Boston University	Stanford University
Bryn Mawr College	UC Berkeley
California Polytechnic State University	UC Irvine
Clark Atlanta University	UC Santa Cruz
Colorado State University	UMBC
Cornell University	UNC Charlotte
Emory University	University of Illinois Urbana-Champaign
Georgia Tech	University of Pennsylvania x (Bryn Mawr, Haverford, or LaSalle U)
Harvard University	University of Virginia
Harvey Mudd College x Claremont Graduate University	University of Washington
Indiana University	UT Austin
Michigan Technological University	UT El Paso
North Dakota State University	UT San Antonio
Northeastern University	Vanderbilt University
Oregon State University	