



Council of Graduate Schools

*Advocacy, Research, and Innovation*

# Completion and Attrition: Program Baseline Data

Debra W. Stewart

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# The Ph.D. Completion Project — Description\*

## ■ Project Goals:

- To study doctoral student completion and attrition patterns at a specifically selected set of Research and Project Partners.
- To give deans context to lead conversations about what attrition and completion patterns actually are at their universities, and what practices could be implemented to improve these patterns.
- To empower graduate deans to develop interventions that are tailored to disciplines, departments, and programs at their universities.

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# Phase I Research and Project Partners

- Arizona State University\*
- University of California—Berkeley
- University of California—Los Angeles\*
- University of Cincinnati\*
- University of Colorado—Boulder
- Cornell University\*
- Duke University\*
- University of Florida\*
- Florida State University\*
- Fordham University\*
- George Washington University
- University of Georgia\*
- Howard University\*
- University of Iowa\*
- University of Illinois—Urbana Champaign\*
- Jackson State University
- University of Kansas
- Louisiana State University
- University of Louisville\*
- Marquette University\*
- University of Maryland—Baltimore County\*
- McGill University
- University of Melbourne (Australia)
- University of Michigan\*
- Michigan State University
- University of Minnesota
- University of Missouri—Columbia\*
- Université de Montréal\*
- New Mexico State University
- New York University\*
- University of North Carolina—Chapel Hill\*
- North Carolina State University\*
- North Dakota State University
- University of Notre Dame\*
- Pennsylvania State University\*
- Princeton University\*
- University of Puerto Rico
- Purdue University\*
- University of Rhode Island
- Rutgers-State University of New Jersey\*
- University of Southern California
- Southern Illinois University—Carbondale\*
- Syracuse University
- Washington University—St. Louis\*
- Western Michigan University\*
- Yale University\*

\* Submitted Data



# Phase II Research and Project Partners

- Arizona State University
- University of Arkansas
- Brown University
- University of California—Berkeley
- University of California—Los Angeles
- University of California—San Diego
- University of Cincinnati
- Colorado State University
- Cornell University
- Duke University
- University of Florida
- Florida State University
- University of Georgia
- Howard University
- University of Illinois—Urbana Champaign
- University of Kansas
- University of Louisville
- Loyola University Chicago
- Marquette University
- University of Maryland—Baltimore County
- McMaster University
- University of Michigan
- Michigan State University
- University of Missouri—Columbia
- University of North Carolina—Chapel Hill
- North Carolina State University
- Northwestern University
- Ohio State University
- Pennsylvania State University
- Princeton University
- Purdue University
- University of Rhode Island
- Rutgers, the State University of New Jersey
- University of Southern California
- Syracuse University
- Washington University in St. Louis
- Yale University

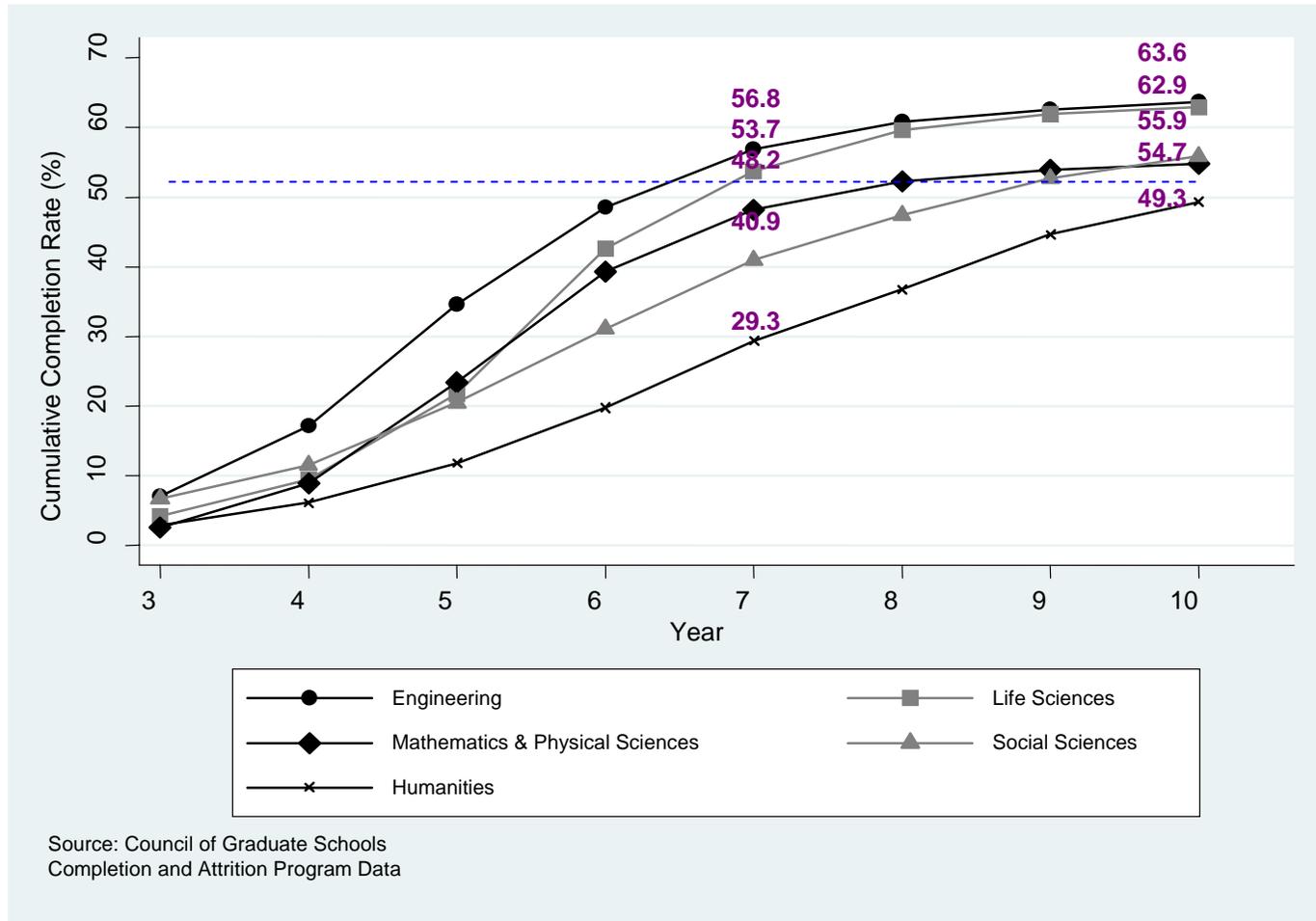


# Current Total Number of Students by Broad Field & Number of Programs (all cohorts)

	<u># of Programs</u>	<u># of Entering Students</u>
Engineering	54	9,496
Life Sciences	66	6,925
Math & Physical Sciences	78	15,262
Social Sciences	65	9,671
Humanities	67	7,759
<i>All Fields Total</i>	<b>330</b>	<b>49,113</b>



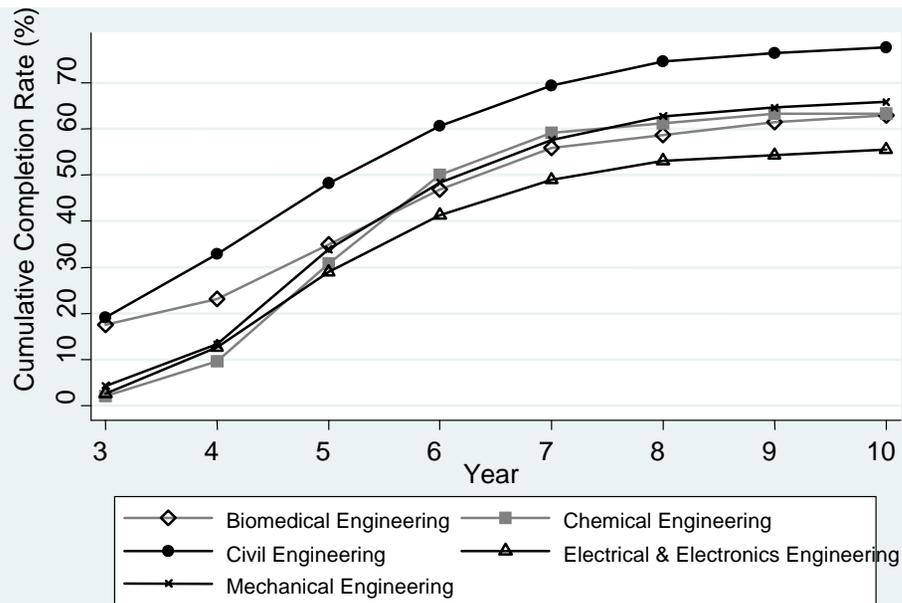
# Average Cumulative Ten-Year Completion Rates for Cohorts Entering Doctoral Study from 1992-93 through 1994-95, by Broad Field and Year



# There Is Substantial Variation Within Broad Fields

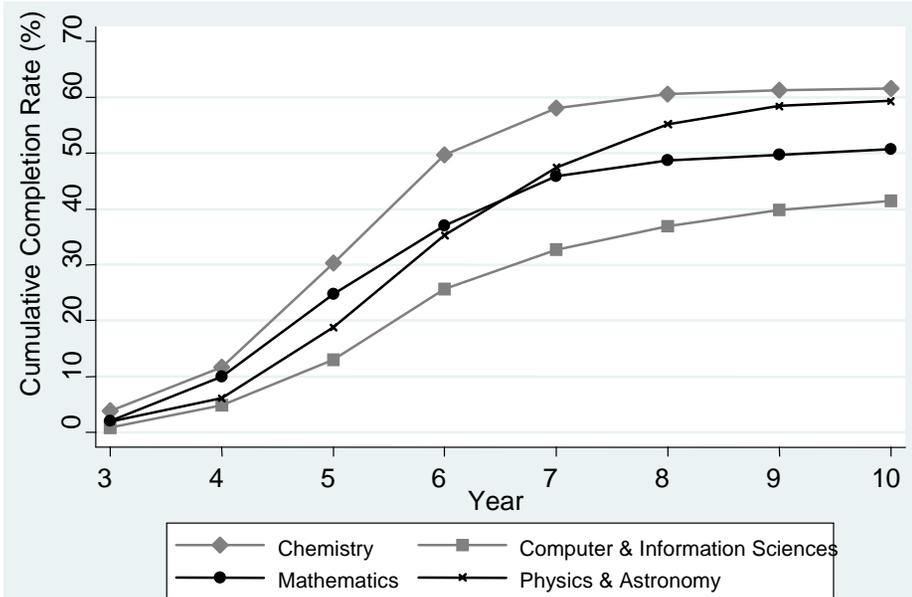
Average Ten-Year Cumulative Completion Rates from 1992-93 through 1994-95, by Year

## Engineering



Source: Council of Graduate Schools  
Completion and Attrition Program Data

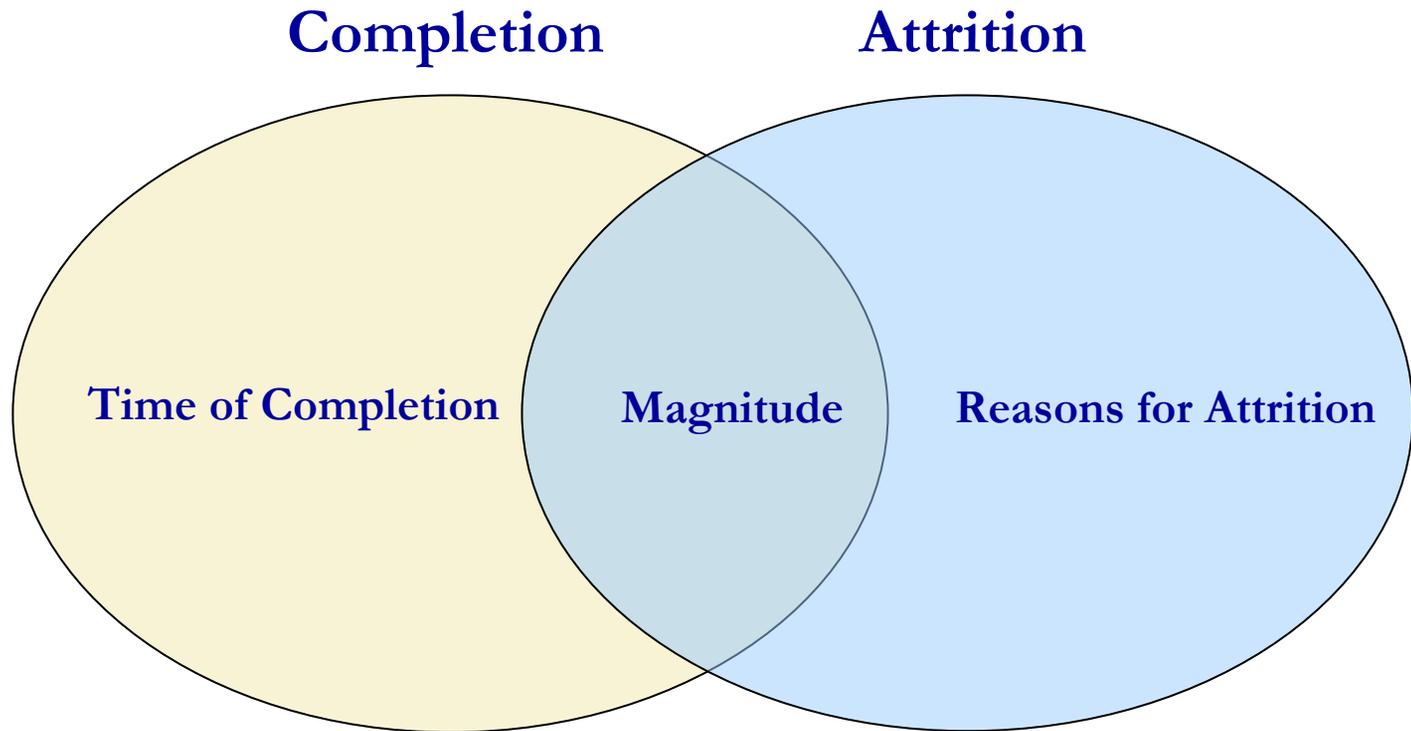
## Mathematics & Physical Sciences



Source: Council of Graduate Schools  
Completion and Attrition Program Data



# Completion and Attrition Tell Us Different Things about Doctoral Programs



# What is Attrition?

- Attrition: Leaving a program in one of four states:
  - Without a master's
  - With master's, without candidacy
  - With master's, with candidacy
  - Transferral

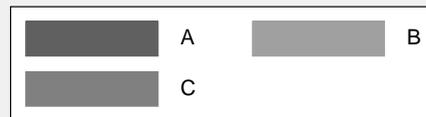
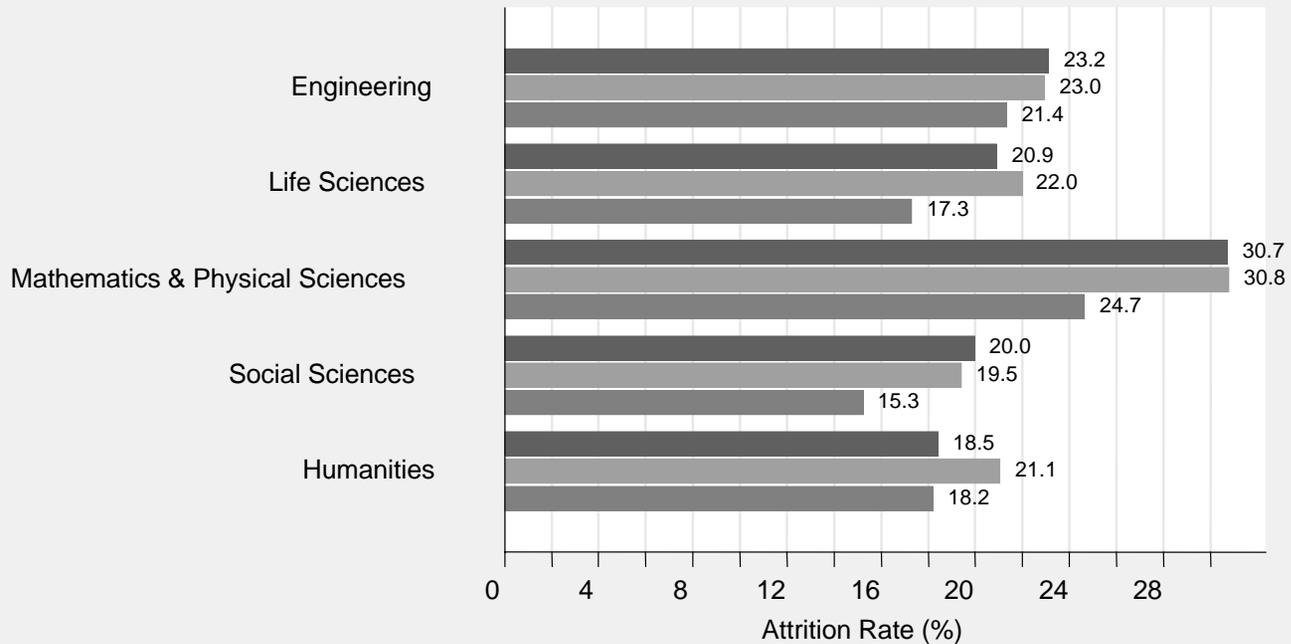


# What Do We Know About Attrition?

- Attrition rates of SEM fields higher than SSH fields for all 10 years after entry
- In SEM fields, cumulative attrition rates increase quickly in first four years, then decline
- Significant variation within SEM fields
- Small portion of attrition due to transfer
- About half of early attriters leave with master's degree



# Early Attrition Rates Improving Over Time



NOTE: A-cohorts include all students entering 1992-93 through 1994-95  
B-cohorts include all students entering 1995-96 through 1997-98  
C-cohorts include all cohorts entering 1998-99 through 2000-01

Source: Council of Graduate Schools  
Completion and Attrition Program Data



# Strategies for Increasing Completion, Reducing Attrition

- Selection/Matching
- Mentoring and Advising
- Financial Support and Structure
- Program Environments
- Research Experiences
- Curricular and Administrative Processes and Procedures



# Coming Attractions in the Ph.D. Completion Project

- How do completion patterns vary by ethnicity, gender and citizenship?
- Why do students say they complete (or not)? What are the perceptions about graduate school of completers and non-completers?
- What is the impact of the six categories of interventions? How does efficacy vary across broad field and for which populations?
- How does master's degree completion interact with completion/attrition across program and broad field?
- Can we project ultimate completion and time to degree from our completion and attrition data?

