

**Council of Graduate Schools  
Completion and Attrition in STEM Master's Programs**

**Instructions and Format for the Student-Level Data Template**

**Background**

As a condition of participating in the Council of Graduate Schools' (CGS) project on *Completion and Attrition in STEM Master's Programs*, partnering institutions agreed to provide data on all students enrolled in eligible master's programs between 2003/04 and 2010/11. The following instructions describe the process by which other institutions can use this template to collect student-level data.

The data are to be entered into an Excel spreadsheet, with one record (row) for each enrolled student. Each student record will contain the following variables:

- Enrollment information (program, type of degree, date started in program)
- Prior educational attainment (undergraduate GPA, year of degree, previous graduate degree or number of graduate hours)
- Degree status information as of a date specified by the institution (status [graduated, voluntary or involuntary attrition, in progress], date of graduation). We recommend specifying a particular date (e.g., June 30, 2011).
- Demographic information (gender, race/ethnicity, citizenship, year of birth)

Definitions for each variable in the student-level template are provided below. **We ask institutions to use these definitions in providing the data to ensure that the data across all institutions are consistent.**

**Questions?** Contact Jeff Allum at 202-461-3878 or [jallum@cgs.nche.edu](mailto:jallum@cgs.nche.edu).

**VARIABLE DEFINITIONS:**

**Enrollment Data**

- **Scrambled ID number:** This is a scrambled ID number assigned by the institution. The ID number will be used only for data cleaning purposes (e.g., to reference records where there are discrepancies in the data).
- **Program name:** The full name (no abbreviations) of the eligible master's program in which each student was/is enrolled (example: Biological Sciences).
- **Type of degree:** The type of degree (example: "M.A." for Master of Arts, "M.S." for Master of Science, "M.B.A." for Master of Business Administration, etc.) for each eligible master's program.
- **Month student started in program (MM):** Using MM format, indicate the month in which the student started the program (example: 08 for August).
- **Year student started in program (YYYY):** Using YYYY format, indicate the year in which the student started the program (example: 2003).

**Previous Graduate Degree**

- **Type of previous graduate degree or certificate:** Indicate the type of degree for each student who had a graduate degree before enrolling in each eligible master's program

(example: "M.S." for Master of Science, "M.Agr." for Master of Agriculture, etc.). If the student did not have a previous graduate degree, leave blank.

- **Field of previous graduate degree:** Use the taxonomy appended to these instructions to indicate the field of study in which the student earned previous graduate degree (example: enter "101" for students who earned a graduate degree in the field of agriculture, natural resources, and conservation). If the student did not have a previous graduate degree, leave blank.
- **Number of graduate hours transferred to program at enrollment, if any:** For each student who had earned graduate credit hours prior to enrolling in each eligible master's program, indicate the number of credit hours transferred (example: "3" if 3 graduate credit hours were transferred). If no graduate hours were transferred to the program at enrollment, enter "0."

### **Student Demographic Characteristics**

- **Year of birth:** Using YYYY format, enter the year of birth for each student enrolled in each eligible master's program.
- **Gender:** Use:
  - "M" for Male
  - "F" for Female
- **Citizenship:** Use:
  - "C" for U.S. citizen or permanent resident
  - "I" for international student (i.e., non-U.S. citizens on temporary visa)
- **Race/ethnicity of domestic students:** *For domestic students only*, use:
  - "H" for Hispanic/Latino
  - "N" for American Indian/Alaska Native
  - "A" for Asian/Other Pacific Islander (including Native Hawaiian)
  - "B" for Black/African American
  - "W" for White
  - "M" for two or more races (i.e., non-Hispanic/Latino)
  - "U" for race/ethnicity unknown

*For international students (i.e., non-U.S. citizens on temporary visa), leave blank.*

### **Undergraduate Data for Most Recent Degree**

- **Year undergraduate degree awarded (YYYY):** Using YYYY format, indicate the year in which each student from each eligible master's program earned their most recent undergraduate degree.
- **Undergraduate GPA:** Indicate the student's cumulative GPA earned from their last undergraduate degree awarded (example: 3.22)
- **Scale for undergraduate GPA (if other than 4.0):** If the undergraduate GPA was calculated according to any scale other than a 4.0 scale, please indicate (example: 5.0, Pass/Fail). If the GPA is calculated according to a 4.0 scale, leave blank.

### **Status of Master's Student**

- **If the student has graduated ...**
  - **Month of Graduation (MM):** Using MM format, indicate the month of graduation for each master's student enrolled in an eligible master's program (example: 05 for May).
  - **Year of Graduation (YYYY):** Using YYYY format, indicate the year of graduation for each master's student enrolled in an eligible master's program (example: 2004).
- **If the student left the program without earning a master's degree ...**
  - **Month of attrition (MM):** Using MM format, indicate the month of attrition for each master's student enrolled in an eligible master's program (example: 11 for November).
  - **Year of attrition (YYYY):** Using YYYY format, indicate the year of attrition for each master's student enrolled in an eligible master's program (example: 2009).
  - **Voluntary or involuntary attrition:** Use:
    - "V" for voluntary attrition if the student left of their own volition
    - "I" if the student was involuntarily asked to leave the program for any reason (academic or any other)
- **Status as of [date specified by institution]:** Use:
  - "G" for students who have graduated
  - "L" for students who left the program without completing
  - "C" for students who are actively enrolled in the program or on leave of absence and are eligible to continue in the program without reapplying
  - "U" for students whose status is unknown

**Completion and Attrition in STEM Master's Programs**  
**Taxonomy of Fields of Study**

**Biological and Agricultural Sciences**

- 101 Agriculture, Natural Resources, and Conservation
- 102 Biological and Biomedical Sciences

**Physical and Earth Sciences**

- 103 Chemistry
- 104 Earth, Atmospheric, and Marine Sciences
- 105 Physics and Astronomy
- 106 Physical Sciences, Other

**Mathematics and Computer Sciences**

- 107 Computer and Information Sciences
- 108 Mathematical Sciences

**Engineering**

- 109 Chemical Engineering
- 110 Civil Engineering
- 111 Computer, Electrical, and Electronics Engineering
- 112 Industrial Engineering
- 113 Materials Engineering
- 114 Mechanical Engineering
- 115 Engineering, Other

**Social and Behavioral Sciences**

- 116 Anthropology and Archaeology
- 117 Economics
- 118 Political Science
- 119 Psychology
- 120 Sociology
- 121 Social Sciences, Other

**Health and Medical Sciences**

- 122 Health and Medical Sciences

**Arts and Humanities**

- 123 Arts – History, Theory, and Criticism
- 124 Arts – Performance and Studio
- 125 English Language and Literature
- 126 Foreign Languages and Literatures
- 127 History
- 128 Philosophy
- 129 Arts and Humanities, Other

**Education**

- 130 Education Administration
- 131 Curriculum and Instruction
- 132 Early Childhood Education
- 133 Elementary Education

- 134 Educational Assessment, Evaluation, Research
- 135 Higher Education
- 136 Secondary Education
- 137 Special Education
- 138 Student Counseling and Personnel Services
- 139 Education, Other

**Business**

- 140 Accounting
- 141 Banking and Finance
- 142 Business Administration and Management
- 143 Business, Other

**Public Administration and Services**

- 144 Public Administration
- 145 Social Work

**Other Fields**

- 146 Architecture and Environmental Design
- 147 Communication and Journalism
- 148 Family and Consumer Sciences
- 149 Library and Archival Sciences
- 150 Religion and Theology
- 151 Other Fields