

# ACS Committee on Professional Training Graduate Education Survey

Thank you for taking the time to complete this questionnaire. The time needed to complete this form varies according to individual circumstances, but the average time is estimated to be 45 minutes. If you need to stop and return to the form at a later time, all of the responses are saved as you answer each question.

All information you provide will be treated as CONFIDENTIAL and be available only to members of the ACS Committee on Professional Training and staff in the ACS Office of Professional Training for the purposes of preparing a report on the characteristics of graduate education at colleges and universities in the United States. The published report will include data only in compiled format and will not be associated with any individual institution.

If you have any questions about the survey items or the use of this information, please contact Marta at [m\\_gmurczyk@acs.org](mailto:m_gmurczyk@acs.org) or at (202) 872-4599.

To access the survey, please enter the survey code found at the end of the cover letter.

## Graduate Student Statistics and Requirements

1. How many graduate students do you have in the Ph.D. program?

1a. How many of the Ph.D. students are international students?

1b. For the Ph.D. students who are U.S. citizens/permanent residents, please list the number who are:

African American

Hispanic

Native American

Women

2. Among your incoming graduate students who received their undergraduate degree from a U.S. college, approximately what percentage graduated from a chemistry program approved by the American Chemical Society. (For the list of the ACS- approved programs see

[http://acswebapplications.acs.org/applications/cpt/asl/app\\_list\\_results.cfm](http://acswebapplications.acs.org/applications/cpt/asl/app_list_results.cfm))

3. Are entering graduate students required to take placement exams to determine their preparation for graduate study?

Yes  No

3a. (Only if question 3 is answered yes) Do you have any programs in place to correct deficiencies (beyond taking undergraduate courses) in preparation for graduate study?

Yes  No

4. Are students required to take formal graduate courses in addition to graduate research and seminars?

Yes  No

4a. (Only if question 4 is answered yes) What is the minimum number of credits of formal graduate courses required, not including research and seminars?

4b. (Only if question 4 is answered yes) Approximately how many of the required credits are within the student's own field of chemistry (e.g., organic chemistry)?

4c. (Only if question 4 is answered yes) Are these courses taught on the semester or quarter system?

- Semester
- Quarter
- Other

5. Approximately, how many seminars or other presentations (exclusive of the dissertation defense) is a Ph.D. student required to give to audiences other than the student's own research group?

6. Do you require graduate students to create and defend original research proposal(s) in addition to their dissertation proposal?

- Yes
- No

6a. (Only if question 6 is answered yes) Can these required research proposal(s) be related to a student's own research?

- Yes
- No

6b. (Only if question 6 is answered yes) Is more than one proposal required?

- Yes
- No

7. Do your requirements for the Ph.D. include any of the following:

- |                            |                           |                          |
|----------------------------|---------------------------|--------------------------|
| Cumulative examinations    | <input type="radio"/> Yes | <input type="radio"/> No |
| Oral Preliminary exam      | <input type="radio"/> Yes | <input type="radio"/> No |
| Comprehensive written exam | <input type="radio"/> Yes | <input type="radio"/> No |
| Comprehensive oral exam    | <input type="radio"/> Yes | <input type="radio"/> No |
| Dissertation defense       | <input type="radio"/> Yes | <input type="radio"/> No |
| Other                      | <input type="radio"/> Yes | <input type="radio"/> No |

If other, please describe:

8. Do you have a foreign language requirement for the Ph.D.?

- Yes
- No

8a. If yes, which language(s) meet this requirement?

9. Does each graduate student give a public oral presentation of his/her dissertation?

- Yes
- No

## Graduate Student Progression

1. Approximately, what percentage of all graduate students is supported through teaching assistantships (TA)?

1a. What is the TA stipend range?

Stipend Range:      low \$\$\$      |      high \$\$\$      |

     |     

2. Approximately, what percentage of all graduate students is supported through research assistantships from faculty-generated research funds?

3. Are the base stipends for teaching assistants (TAs) and research assistants (RAs) the same?

- Yes
- No

4. Approximately, what percentage of the total graduate student support is through:

- University or department fellowships
- Government fellowships
- Training grants, interdisciplinary
- Training grants, chemistry
- Industry
- Other

If other, please list:

5. What percentage of graduate students receives some formal preparation for a faculty position?

5a. Do laboratory section TAs receive formal instructions before they start as TAs?

Yes

No

5b. What percentage of TAs teaches discussion sections sometime during their graduate career?

5c. Do discussion section TAs receive formal instruction in teaching before they start as TAs?

Yes

No

6. What percentage of graduate students completes an internship in industry or government laboratories during their graduate school years?

7. What percentage of graduate students receives training outside of formal course work in areas such as:

- Ethics/Scientific integrity
- Intellectual property/patents
- Communication skills
- Business/economics
- Mentoring
- Grant writing
- Other

8. What percentage of graduate students:

8a. Participates in interdisciplinary projects involving other departments?

8b. Has more than one advisor?

8c. If more than one advisor, are they all from the:

Same department

Different departments

9. Upon entering the graduate program, what percentage of students selects a research advisor within the first:

- 2 months
- 6 months
- 1 year
- later

10. In the process of selecting a research advisor, faculty members speak about their research to the entering students:

- As a group
- Individually
- Both

11. Do you require or permit laboratory rotations before a final advisor is chosen?

- Require
- Permit
- Neither

12. Is there a limit to the number of graduate students an advisor may accept into his/her research group?

- Yes
- No

13. Is there an upper limit on the amount of time allowed for achieving a Ph.D.?

- Yes
- No

13a. If yes, how many years?

14. Is there an upper limit on years of support (of any kind)?

- Yes
- No

14a. If yes, how many years?

15. What is the average number of years for completion of a Ph.D. degree?

16. Does your department have a Director of Graduate Studies?

- Yes
- No

16a. (Only if question 16 is answered yes) Is the Director of Graduate Studies:

- A tenured/tenure-track faculty member
- A nontenure-track faculty member
- Not a faculty member

17. Does each graduate student have an advisory committee that follows his/her progress through graduate study?

- Yes
- No

17a. (Only if question 17 is answered yes) Do all advisory committee members serve on the final Ph.D. committee?

- Yes
- No

17b. (Only if question 17 is answered yes) Is the research advisor a member of the student's advisory committee?

- Yes
- No

18. Are mechanisms in place to ensure that the graduate student is aware of and understands the requirements for Ph.D.?

- Yes
- No

18a. If yes, please describe:

19. Is there a graduate student handbook prepared by the department?

- Yes
- No

20. Are mechanisms in place for the students to evaluate their progress throughout the Ph.D. experience?

- Yes
- No

20a. If yes, briefly explain:

## Faculty and Departmental Structure

1. What is the TOTAL number of tenure-track and tenured faculty in your department?

	Tenured		Not tenured but tenure-track	
Total Number	<input style="width: 80%; height: 20px;" type="text"/>		<input style="width: 80%; height: 20px;" type="text"/>	

1a. What is the number of tenure-track and tenured faculty in your department in the following categories:

	Tenured		Not tenured but tenure-track	
African American	<input style="width: 80%; height: 20px;" type="text"/>		<input style="width: 80%; height: 20px;" type="text"/>	
Hispanic	<input style="width: 80%; height: 20px;" type="text"/>		<input style="width: 80%; height: 20px;" type="text"/>	
Native American	<input style="width: 80%; height: 20px;" type="text"/>		<input style="width: 80%; height: 20px;" type="text"/>	
Women	<input style="width: 80%; height: 20px;" type="text"/>		<input style="width: 80%; height: 20px;" type="text"/>	

1b. How many of your tenured and tenure-track faculty received at least one of their post-secondary degrees outside of the U.S.?

2. Do you have regular colloquia, either department wide or divisional?

- Yes                       No

2a. (Only if question 2 is answered yes) What percentage of the colloquia speakers comes from industry? (Estimate to the nearest 10%.)

2b. (Only if question 2 is answered yes) What percentage of the colloquia speakers comes from government? (Estimate to the nearest 10%.)

3. Is there a formal graduate student organization (or graduate affairs committee)? (Check all that apply.)

- In the department  
 At the institution (campuswide)  
 No formal graduate student organization

4. Are mechanisms in place for the graduate student organization or individual graduate students to participate in the policies of the department, such as:

4a. Responsibility for the seminar program (selecting and hosting the speakers)?

- Yes                       No

4b. Representation on faculty committees such as: (Check all that apply.)

- Department seminar committees  
 Faculty search committees  
 Graduate program committee (Ph.D. requirements, graduate courses)  
 Graduate admissions committee  
 Graduate advisory and appeals committee  
 Instrumentation committee  
 Other

If other, please explain:

4c. Is there a meeting place or commons specifically for graduate students?

- Yes                       No

5. Where do the students obtain information on careers and/or skills needed to obtain jobs or postdoctoral positions? (Check all that apply.)

- Departmental events
- Research advisor
- University Placement/Career Center
- Departmental Bulletin Boards
- Departmental Websites
- American Chemical Society
- Other

If other, please list:

5a. Does the department have a system of tracking the employment of its doctoral students after they graduate (e.g., an alumni data base)?

- Yes                       No

6. How many postdoctoral fellows are currently in the department?

6a. What percentage of these postdoctoral fellows is international?

7. For new assistant professors hired in the past three years:

7a. What is the average starting salary (9-10 month basis)?

7b. What is the average dollar value of start-up packages?

8. Please list the approximate percentage (to the nearest 10%) of your department's research funding for the current year that comes from:

- NIH
- NSF
- Department of Energy
- Department of Defense
- Department of Homeland Security
- ACS-PRF
- Private Foundation
- Industry
- Other

If other, please list:

9. Is your department organized divisionally (organic, physical, etc.)?

- Yes                       No

9a. Is a biochemistry (or chemical biology, or similar) division part of your department?

- Yes                       No

10. Does your institution/department have any procedures in place to provide family services for the faculty?

- Yes                       No

10a. (Only if question 10 is answered yes) Which family services does the institution provide? (Check all that apply.)

- Child care
- Extended tenure decision
- Parental/family leave
- Other

If other, please describe:

10b. (Only if question 10 is answered yes) Are postdoctoral associates able to use any of these services?

- Yes  No

10c. (Only if question 10 is answered yes) Are graduate students able to use any of these services?

- Yes  No

11. Has the department made any significant changes in the doctoral program in the last five years?

- Yes  No

11a. If yes, please briefly describe them:

12. How frequently is the department's graduate program reviewed (please check)?

	Annually	Biennially	Five-Year Intervals	No set schedule
Self Evaluation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
External Review	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. Please add any additional comments that you wish to, concerning the Ph.D. program in your department.

14. Your institution is:

- Public University  
 Private University

## Master's Program Survey

1. Which master's degree(s) does your department offer? (Please check all that apply)

- Master of Science
- Master of Arts
- Master of Materials Science
- Master of Arts in Teaching
- Professional Master's
- Other

If other, please list:

1a. Do you have an interdepartmental program for a master's that is not granted by your department?

- Yes  No

2. On average how many master's degrees do you award annually as a final degree?

3. What percentage of students who enter your Ph.D. program terminates their graduate studies with a master's degree?

4. What is the number of years required to earn a master's degree?

Minimum

Typical

5. How many credits of formal graduate courses, excluding research, are required for a master's degree?

5a. Are these taught on the semester or quarter system?

- Semester  
 Quarter  
 Other

6. Is a research thesis required for the master's degree?

- Yes  No

6a. (Only if question 6 is answered no) Can a master's degree be earned by: (Check all that apply)

- Taking coursework only  
 Taking coursework and doing research without a required thesis  
 Taking courses and writing a library thesis

7. Are there specific qualifying and/or comprehensive exams required for master's degree students?

- Yes  No

7a. (Only if question 7 is answered yes) Do qualifying and/or comprehensive exams required for masters degree students differ from those taken by Ph.D. degree candidates?

- Yes  No

Does your department regularly admit students whose stated objective is obtaining a master's degree, not a PhD degree?

- Yes  No

The following questions relate to students admitted specifically to your master's program (only if previous question is answered yes).

8. How many students are admitted annually for study in the master's program?

9. Among students admitted into your master's program, what percentage received their bachelor's degree in the U.S. and what percentage received this degree outside of the U.S.?

Domestic

Foreign

10. Which of the following describes the goals of your master's program(s)?

10a. Preparation for working in industry:

- Yes  No

If yes, is it: (Please check all that apply):

- A partnership with a specific employer  
 Focused on a particular sector (e.g., polymers)  
 Other

If other, please list:



**10b. Teacher training**

Yes  No

If yes, is it: (Please check all that apply):

- For in-service teachers
- For pre-service teachers
- Other

If other, please describe:

**10c. Preparation for more advanced study**

Yes  No

**10d. Combined BS/MS program**

Yes  No

**11. Is your master's degree program specifically designed to prepare students for employment with the master's as the highest earned degree?**

Yes  No

11a. If yes, please explain:

**12. Do you provide support for your master's students in the form of:**

- Teaching assistantships
- Research assistantships
- Other

If other, please explain:

**13. Did the Chair receive this survey and approve the responses?**

Yes  No