

November 20, 2019

**ALEXANDER AUE, DEPARTMENT AND PROGRAM CHAIR**  
Statistics Graduate Program

**RE: Statistics Degree Requirements**

Enclosed is a copy of the Statistics degree requirements as approved by Graduate Council on November 15, 2019. These degree requirements are now the official requirements for the Statistics Graduate Program and will be posted on the Office of Graduate Studies program webpage:

<https://grad.ucdavis.edu/programs/gsta>

Thank you for your efforts on behalf of graduate education.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Arnett". The signature is fluid and cursive, with a large initial "C" and a stylized "A".

Carlee Arnett, Chair  
Graduate Council

CC: Jasmine Durias, Project/Policy Analyst, Graduate Studies  
Sarah Driver, Graduate Program Coordinator  
Jillian Hancock, Graduate Program Coordinator

# STATISTICS M.S. AND Ph.D. DEGREE REQUIREMENTS

Revised: July 8, 2019

Graduate Council Approval: November 15, 2019

## Master's Degree Requirements

### 1) Admissions requirements:

An undergraduate major in mathematics or statistics is typical for statistics graduate students, but is not required. However, because of the mathematical nature of some of the graduate coursework, students should be able to demonstrate good mathematical ability. The applicant must complete the Office of Graduate Studies online application, with fee, by the stated deadline and include: one official transcript for each school attended, three letters of recommendation, and GRE scores taken within the last 5 years. A score on the internet-based TOEFL (or IELTS) at or above the university minimum of 80 (7 for IELTS) is required if the applicant does not have an undergraduate degree, or prior graduate degree, from an approved English-medium institution. The program does not accept part-time students.

- a. **Prerequisites:** The prerequisites for entrance into the master's program are as follows: a bachelor's degree with 3.0 overall grade-point average; one year of calculus; a course in linear algebra; facility with a programming language; and upper-division work in mathematics and/or statistics.
- b. **Deficiencies:** Students admitted with deficiencies in upper-division work must make up the coursework within the first academic year, and must achieve a grade of at least a B in each course. Deficiencies are determined by the Graduate Advising Committee.

### 2) M.S., Plan, II

The program of study will be developed and approved for each student by one of the Graduate Advisors in consultation with the student. This is a M.S. Plan II program (no thesis). A minimum of 44 units is required for the standard track (48 for the Data Science track), of which at least 18 must be at the graduate level (according to university regulations). A comprehensive final examination in the major subject is required of each candidate. No thesis is required. The comprehensive final examination fulfills the capstone requirement.

**Standard Track:** Students must complete at least 44 units, of which at least 18 must be graduate level (according to university regulations).

**Emphasis in Data Science Track:** The Graduate Program in Statistics offers the subspecialty track: Emphasis in Data Science. This track will provide opportunities for students in the Statistics Master's program to acquire knowledge that provides them with the tools to address the increasingly important challenge of analyzing increasingly large and complex datasets. Students that choose to do this track must complete 48 units, of which at least 18 must be graduate level (according to university regulations).

This program requires more units than the UC Davis minimum, which are: 36 units of graduate and upper division courses, of which at least 18 units must be graduate courses in the major field. Not more than 9 units of research (299 or equivalent) may be used to satisfy the 18-unit requirement.

### 3) Course Requirements

#### a) Standard Track (total 44 units)

##### Core Courses (total 32 units)

STA 200A	Introduction to Probability Theory	4 units
STA 200B, C	Introduction to Mathematical Statistics	4 units each
STA 135	Multivariate Data Analysis	4 units
STA 206, 207	Statistical Methods for Research	4 units each
STA 208	Statistical Methods in Machine Learning	4 units
One of the following 2 courses:		
STA 242	Introduction to Statistical Programming	4 units
STA 243	Computational Statistics	4 units

The following courses can be used as substitutes:

- For students who entered the Statistics program as Ph.D. students, successful completion of STA 232A, B, C substitutes for STA 206, 207, 208 as a requirement for the M.S. degree.

Links to course descriptions:

Undergraduate: <https://statistics.ucdavis.edu/courses/descriptions-undergrad>

Graduate: <https://statistics.ucdavis.edu/courses/descriptions-grad>

##### Elective Courses (total 12 units)

At least three courses, with at least one course at graduate level, selected from this list:

STA 137	Applied Time Series Analysis	4 units
STA 138	Analysis of Categorical Data	4 units
STA 141B	Data & Web Technologies for Data Analysis	4 units
STA 141C	Big Data & High Performance Statistical Computing	4 units
STA 142	Reliability	4 units
STA 144	Sampling Theory of Surveys	4 units
STA 145	Bayesian Statistical Inference	4 units

STA 260	Statistical Practice and Data Analysis	3 units
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or any four-unit letter-grade graduate level course in Statistics.

The following courses can be used as substitutes:

- With the permission of one of the Graduate Advisers, an internship coupled with STA 299 can substitute for an elective course.

## **b) Emphasis in Data Science Track (total 48 units)**

### **Core Courses (total 36 units)**

STA 135	Multivariate Data Analysis	4 units
STA 141A	Fundamentals of Statistical Data Science	4 units
STA 200A	Introduction to Probability Theory	4 units
STA 200B	Introduction to Mathematical Statistics	4 units
STA 206, 207	Statistical Methods for Research	4 units each
STA 208	Statistical Methods in Machine Learning	4 units
STA 209	Optimization for Big Data Analytics	4 units

One of the following 2 courses:

STA 242	Introduction to Statistical Programming	4 units
STA 243	Computational Statistics	4 units

### **Elective Courses (total 12 units)**

At least one course selected from the following:

STA 137	Applied Time Series Analysis	4 units
STA 138	Analysis of Categorical Data	4 units
STA 141B	Data & Web Technologies for Data Analysis	4 units
STA 141C	Big Data & High Performance Statistical Computing	4 units
STA 144	Sampling Theory of Surveys	4 units
STA 145	Bayesian Statistical Inference	4 units
	Or any graduate level statistics course	4 units

At least one course selected from the following:

ECS 122A, B	Algorithm Design and Analysis	4 units each
ECS 165A, B	Database Systems	4 units each
ECS 170	Artificial Intelligence	4 units
ECS 171	Machine Learning	4 units

A third elective course taken from Mathematics, Statistics, Computer Science, or related disciplines (with approval of the Graduate Advisor).

**c) English Language Requirement**

Students who have not obtained a previous degree at an approved English-medium institution or demonstrated English-language proficiency through an appropriate exam (e.g. TOEFL) are required to complete appropriate English-language courses, as described in the policy *Graduate Student Course Requirements – English as Second Language* ([GC2018-02](#)). Courses taken in satisfaction of this requirement do not count towards the units required for graduation.

**d) Summary:**

Full-time students must enroll for 12 units per quarter including research, academic and seminar units. Courses that fulfill any of the program course requirements may not be taken S/U unless the course is normally graded S/U. Once course requirements are completed, students can take additional classes as needed, although the 12 units per quarter are generally fulfilled with a research class (299) and perhaps seminars, or additional electives, approved by one of the Graduate Advisors. Per UC regulations students should not ordinarily enroll in more than 12 units of graduate level courses (200) or more than 16 units of combined undergraduate and graduate level (100, 200, 300) courses per quarter.

**Standard Track:** 32 units of core coursework and 12 units of electives are required for a total of 44 units.

**Emphasis in Data Science Track:** 36 units of core coursework and 12 units of electives are required for a total of 48 units.

**4) Special requirements:**

Students who have not obtained an undergraduate or graduate degree at an approved English-medium institution, or who have not demonstrated strong English language proficiency through the TOEFL or IELTS exam are required to take appropriate English language courses, as described in *Graduate Student Course Requirements – English as Second Language* (GC2018-02). Courses taken in satisfaction of this requirement do not count towards the units required for graduation.

**5) Committees:**

- a. **Admissions Committee:** once applications and relevant materials are submitted to the program, they are reviewed by the admissions committee, which usually consists of four or five faculty members. Once a decision has been made to admit or deny an applicant, the admissions committee chair forwards the committee's recommendation to the Dean of Graduate Studies for approval.
- b. **Graduate Advising Committee:** there are five faculty members of the advising committee for the Master's program, chaired by the Master Graduate Advisor (see

Section 6 below for information on how a study plan is developed).

- c. **Program Executive Committee:** there are 3 elected members of the executive committee, in addition to the program chair who serves as the chair of this committee.
- d. **Comprehensive Examination Committee:** the Chair of the Graduate Program in Statistics (GPS) will appoint an examination committee that will be responsible for preparing, administering and grading the examination. The same exam will be given to the students simultaneously. This committee will also make the final decision on each student. If the committee does not reach a decision on a student, the Executive Committee will be responsible for making the pass-no pass decision.

**6) Advising Structure and Mentoring:**

The Graduate Advising Committee is selected by the Chair of the program from among the Graduate Advisors appointed by the Dean of Graduate Studies and assists the M.S. students in developing a study plan based on each student's level of preparation. By virtue of Graduate Studies approval, the Graduate Advisors have signatory authority for the Master's program.

**7) Advancement to Candidacy:**

M.S. students must file an Advancement to Candidacy form (<https://grad.ucdavis.edu/current-students/forms-information>) after completing one-half of their course requirements for their degree requirements and at least one quarter before completing all their degree requirements.

**8) Comprehensive Examination:**

Every M.S. student needs to pass a comprehensive exam, to continue in the program. The M.S. Comprehensive Examination is a written examination. The examination may include the use of statistical software and may be offered in a computer lab. The examination is taken at the end of the Winter quarter (during Spring Break) upon completion of STA 206 and STA 207. If a student does not attempt the examination upon completion of those courses, and does not receive prior approval from the exam committee, it will be counted as not passing the comprehensive exam.

Should a student not pass the comprehensive exam at this time, the student will be offered a second examination during the Spring quarter following the first exam. If a student does not attempt the second exam, it will be counted as a failure. Failure to pass the exam at the second attempt will be counted as a failure of the comprehensive exam.

Failure to pass the comprehensive exam will result in a recommendation to the Dean of Graduate Studies for disqualification of the student from the graduate program.

Students who entered the graduate program as Ph.D. students and subsequently change their degree objective to the M.S. program are considered to have passed the comprehensive examination for the Master's if they passed the STA 232AB part of the

program's pre-qualifying Ph.D. written exam.

**9) Normative Time to Degree:**

The Normative Time to Degree for the Statistics M.S. program is four to five quarters. A well-prepared student typically completes the program in four quarters.

**10) Typical Time Line and Sequence of Events:**

Course requirements are typically completed in four to five quarters. Graduate Students must be enrolled in a minimum of 12 units every quarter. These 12 units can be made up of both required courses and 299 variable unit courses. For a well-prepared student it is possible to complete the core course requirements by the end of the first year. Students may take longer if they take required electives in the fourth or fifth quarter. The following would be a typical program.

<b>Year One</b>	<b>Fall</b>	<b>Winter</b> (advancement to MS candidacy) (Preliminary/Comprehensive Exam completed)	<b>Spring</b>
	STA200A (4) STA206 (4) Elective (4)	STA200B (4) STA135 (4) STA207 (4)	STA200C (4) STA208 (4) STA242 or 243 (4)
<b>Year Two</b>	<b>Fall</b>		
	Elective (4) Elective (4) Elective or 299 units (4)		

The following would be a typical program for a student requiring two full years.

<b>Year One</b>	<b>Fall</b>	<b>Winter</b>	<b>Spring</b>
	STA106 (4) STA200A (4) STA141A (4)	STA108 (4) STA200B (4) STA135 (4)	STA200C (4) Elective (4) Elective (4)
<b>Year Two</b>	<b>Fall</b>	<b>Winter</b> (advancement to MS candidacy) (Preliminary/Comprehensive Exam completed)	<b>Spring</b>

	STA206 (4) Elective (4) Elective (4)	STA207 (4) Elective (4) Elective or 299 units (4)	STA208 (4) STA242 or 243 (4) Elective (4)

**11) Sources of funding.**

Students may be supported by TA-ships, internships or GSR-ships. However, there is no promise for any support.

**12) PELP, In Absentia and Filing Fee status.**

Information about PELP (Planned Educational Leave), In Absentia (reduced fees when researching out of state), and Filing Fee status can be found in the Graduate Student Guide: <http://www.gradstudies.ucdavis.edu/forms/>

## **Ph.D. Degree Requirements**

### **1) Admission Requirements**

An undergraduate major in mathematics or statistics is typical for statistics graduate students, but is not required. However, because of the mathematical nature of some of the graduate coursework, students should be able to demonstrate good mathematical ability. The minimal background for entrance into the Ph.D. program is: a bachelor's degree with 3.0 overall grade- point average; facility with a programming language; and upper division work in mathematics and/or statistics. The applicant must complete the Office of Graduate Studies online application, with fee, by the stated deadline and include: one official transcript for each school attended, three letters of recommendation, and GRE scores taken within the last 5 years. A score on the internet-based TOEFL (or IELTS) at or above the university minimum of 80 (7 for IELTS) is required if the applicant does not have an undergraduate degree, or prior graduate degree, from an approved English-medium institution. **The program does not accept part-time students.**

- a. **Prerequisites:** The prerequisites for entrance into the Ph.D. program are as follows: at least one semester or two quarters of advanced calculus at a level equivalent to **MAT 25 and MAT 125A**; and a quarter of linear algebra at a level equivalent to **MAT 67**.
- b. **Deficiencies:** Students admitted with deficiencies must make up the coursework within the first academic year, and must achieve a grade of at least a B in each course.

### **2) Dissertation Plan: Plan A**

This degree is offered under Plan A which specifies a five member (minimum) dissertation/final examination committee and a final oral examination (defense of the dissertation); no exit seminar is required.

### **3) Course Requirements – Core and Electives (54-55 total units)**

A Ph.D. student will select an area of specialization and will choose a major dissertation advisor **from among the Graduate Program in Statistics (GPS) faculty working** in that area, usually in the second or third year of study. The student's program of study will be developed by the student jointly with the major dissertation advisor, with the assistance from any of the program's Graduate Advisors as necessary. The options for area of specialization are: Statistics; Biostatistics.

#### **a) Core courses:**

##### **Statistics Track (36 units total)**

**STA 231 A, B, C (4 units each) STA 260 (3 units)**

**STA 232 A, B, C (4 units each) STA 290 for three quarters (1 unit each)**

**STA 242 or 243 (4 units) STA 390 (2 units)**

**Biostatistics Track (48 units total)**

Students enrolled in the biostatistics track must complete the above core courses, and the following additional courses:

STA 222 (4 units)

STA 223 (4 units)

STA 224 (4 units)

**b) Elective courses:****Statistics Track (18 units total)**

Students must choose five elective graduate courses (at least 18 units total), out of which at least four must be in Statistics. The following is a list of potential elective courses:

STA 222, Survival Analysis (4 units)

STA 223, Generalized Linear Models (4 units)

STA 224, Analysis of Longitudinal Data (4 units)

STA 225, Clinical Trials (4 units)

STA 226, Statistical Methods for Bioinformatics (4 units)

STA 235A-235B-235C, Probability Theory (4 units each)

STA 237A-237B, Time Series Analysis (4 units each)

STA 250, Topics in Applied and Computational Statistics (4 units)

STA 251, Topics in Statistical Methods and Models (4 units)

STA 252, Advanced Topics in Biostatistics (4 units)

**Biostatistics Track (7 units total)**

Students must take one life sciences (non-quantitative biology) course at the upper division or graduate level (4 units) and one elective graduate course from Statistics or Biostatistics (at least 3 units). All coursework (a total of at least 55 units) and the program of study must be approved by the Graduate Advisor.

**c) English Language Requirement**

Students who have not obtained a previous degree at an approved English-medium institution or demonstrated English-language proficiency through an appropriate exam (e.g. TOEFL) are required to complete appropriate English-language courses, as described in the policy *Graduate Student Course Requirements – English as Second Language* ([GC2018-02](#)). Courses taken in satisfaction of this requirement do not count towards the units required for graduation.

**d) Summary:**

For the Statistics track, there is a total of 54 units (36 core and 18 elective). For the Biostatistics track, there is a total of 55 units (48 core and 7 elective). All coursework and the program of study must be approved by the Graduate Advisor.

#### 4) Special Requirements

Students who have not obtained an undergraduate or graduate degree at an approved English-medium institution, or who have not demonstrated strong English language proficiency through the TOEFL or IELTS exam are required to take appropriate English language courses as described in Graduate Student Course Requirements – English as Second Language (GC2018-02). Courses taken in satisfaction of this requirement do not count towards the 52 units required for graduation.

#### 5) Committees

- a. **Admissions Committee:** once applications and relevant materials are submitted to the program they are reviewed by the admissions committee, which consists of four to five faculty members. Once a decision has been made to admit or deny an applicant, the admissions committee chair forwards the committee's recommendation to the Dean of Graduate Studies for approval. The application and fellowships deadline for entry in Fall of the next academic year can be found on our website: <https://statistics.ucdavis.edu/grad/admissions>.
- b. **Advising Committee:** there are four faculty members of the advising committee, chaired by the Master Graduate Advisor. The Master Graduate Advisor is selected by the Chair of the program from the list of Graduate Advisors who have been appointed by the Dean of Graduate Studies. The person assists graduate students in developing a study plan. Graduate Advisors have signatory authority for the Master's and Ph.D. programs.
- c. **Pre-qualifying Written Examination Committee:** the Chair of the Graduate Program in Statistics (GPS) will appoint an examination committee of four members from among the members of the program. This committee will be responsible for preparing, administering and grading the examination. This committee will forward its recommendation to the GPS faculty members, who will make the final decision on each student by vote.
- d. **Qualifying Examination Committee:** the examining committee will be appointed in accordance with the policies of the Graduate Council and Office of Graduate Studies at the recommendation of the Graduate Advisor who consults with the student prior to making the recommendation. The major professor is not eligible to serve as chair of the examining committee (see Section 8 below for more information regarding the examination requirements).
- e. **Dissertation Committee:** the student, in consultation with their major professor, nominates five qualified faculty members to serve on the Dissertation Committee. These nominations are submitted to the Office of Graduate Studies for formal appointment in accordance with the Graduate Council Policy on Service on Advanced Degree Committees (GS1998-01). The major professor serves as Chair of the committee.

## 6) Advising Structure and Mentoring

The major professor is the faculty member who supervises the research and dissertation; this person serves as the Chair of the Dissertation Committee. The Master Graduate Advisor is identified by the chair of the program from among the appointed Graduate Advisors, assists graduate students in developing a study plan, and has signatory authority for the Master's and Ph.D. programs. A copy of the Statistics Mentoring Guidelines can be found at <http://anson.ucdavis.edu/mentor.pdf>.

## 7) Advancement to Candidacy

The student is eligible for advancement to Candidacy for the Ph.D. degree upon completion of all course requirements, having maintained a GPA of, at least, 3.0 in all coursework (except those graded S/U), and after passing the Ph.D. Qualifying Examination; this is typically in the fifth quarter (or earlier).

## 8) Examination and Dissertation Requirements

### a) Ph.D. Pre-qualifying Written Examination

The Ph.D. Pre-qualifying Written Examination will be given at the beginning of each Spring Quarter and also at the beginning of each Fall Quarter. Students in the Ph.D. program must attempt the exam in the Spring Quarter immediately after they complete both the STA 231AB and STA 232AB core course series. If a student does not attempt the examination at this time, it will be recorded as a 'no pass'. Every Ph.D. student needs to pass the examination in a maximum of two attempts. In case of not pass at the first attempt, the second attempt must take place at the next time the examination is offered, typically six months later, and if a student does not attempt the exam at that time, it will be counted as a failure. Two 'not passes' of the examination will result in a recommendation to the Dean of Graduate Studies for discontinuation of the student in the Ph.D. program.

The Ph.D. Pre-qualifying Written Examination is a written exam with two separate parts: a theoretical part and an applied part. The duration of each part is about 3-4 hours. The applied part may be offered in a computer lab and may include the use of statistical software. If at the first attempt one part is passed but the other is not, only the part which was not passed must be repeated at the next attempt.

### b) Ph.D. Qualifying Examination

The Ph.D. Qualifying Examination (QE) is an oral exam whose purpose is to determine if the student is capable of independent research. The QE will be composed of a forty-five minute presentation given by the student and is followed by a question period which covers a special research topic as well as coursework in general. A student who passes the QE is eligible for advancement to candidacy for the Ph.D. degree. The QE is expected to be attempted within one year from the quarter in which the student passes the Ph.D. Pre-qualifying Written Examination, but no later than the end of the student's third year of the Ph.D. program. In consultation with the Dissertation Advisor, the student will submit to the Graduate Advising Committee (GAC) a date for the exam and a dissertation proposal.

1. The dissertation proposal should be between three and five pages in length and should contain an outline of the general context of the thesis research, a description of the special problem(s) to be addressed, and an indication of the methods and techniques to be used.
2. A draft version of the proposal must be submitted to the GAC for the purpose of determination of the composition of the QE committee at least 6 weeks before the proposed date of the exam. The student must submit a final version of the proposal to the QE committee a week before the exam date.
3. Based on the proposal, the GAC will recommend the appointment of a committee of four examiners to Graduate Studies (in consultation with the student and the student's Dissertation Advisor). Unless an exception is granted by the GAC, the exam committee includes three members from the Graduate Program in Statistics. Per Graduate Council guidelines, at least one member must be external to the Graduate Program in Statistics. The **student's intended** Dissertation Advisor (and/or co-advisor) is not eligible to serve on the Qualifying Examination committee.
4. Outcome of the Exam – The committee will reach a decision on the student's performance immediately after the exam. The committee, having reached a unanimous decision, shall inform the student of its decision to:
  - “Pass” (no conditions may be appended to this decision)
  - “Not Pass” (the Chair's report should specify whether the student is required to retake all or part of the examination, list any additional requirements, and state the exact timeline for completion of requirements to achieve a “Pass”)
  - “Fail”

If a unanimous decision takes the form of “Not Pass” or “Fail”, the Chair of the QE committee must include in its report a specific statement, agreed to by all members of the committee, explaining its decision and must inform the student of its decision. Having received a “Not Pass” the student may attempt the QE one additional time; the QE report must list the specific conditions and timing for the second exam. After a second examination, a vote of “Not Pass” is unacceptable; only “Pass” or “Fail” is recognized. Only one retake of the qualifying examination is allowed. Should the student receive a “Fail” on the first or second attempt at the exam, the student will be recommended for disqualification from the program to the Dean of Graduate Studies.

A student who passes the Ph.D. Qualifying Examination is eligible for Advancement to Candidacy for the Ph.D. degree. The student must file the appropriate paperwork with the Office of Graduate Studies and pay the candidacy fee to be promoted to Candidacy for the Ph.D. degree.

**c) Final Examination**

Defense of the dissertation before the dissertation committee will constitute the final examination for the Ph.D. degree. **The final examination must be passed within four years after promotion to Candidacy, excluding time on PELP, unless a special exception is granted by the Master Graduate Advisor.** Pass or no pass is determined by a vote of the dissertation committee. Title and abstract of the Ph.D. Defense presentation will be distributed to all faculty and students of the Graduate Program in Statistics, who are invited to attend the presentation portion of the examination. **The subsequent question period is a closed session between the student and the committee.**

**d) Dissertation**

The doctoral dissertation is **an essential** part of the Ph.D. program. A topic will be selected by the student, under the advice and guidance of a major professor (thesis advisor) and the dissertation committee chaired by the major professor. Students are encouraged to begin some research activity as early as possible during the second year of their graduate studies. The dissertation must contain an original contribution of publishable quality to the knowledge of statistics that may expand the theory or methodology of statistics, or expand or modify statistical methods to solve a critical problem in applied disciplines. Acceptance of the dissertation by three designated members of the dissertation committee follows Graduate Studies guidelines (Plan A with defense). The dissertation must be completed and **submitted to the dissertation committee** prior to taking the final examination. The dissertation must be submitted to each member of the dissertation committee at least one month before the student expects to make requested revisions; committee members are expected to respond within 4 weeks, not including summer months for nine-month faculty. Students should be guided on matters of style by the chair and members of the thesis/dissertation committee. Graduate Studies is not concerned with the form of the bibliography, appendix, footnotes, etc. as long as they are done in some acceptable, consistent and recognized manner approved by your committee (see <https://grad.ucdavis.edu/current-students/academic-services-information/filing-thesis-or-dissertation>).

**9) Normative Time to Degree**

The normative time to degree is five years.

**10) Typical Time Line and Sequence of Events**

Every full-time student at UC Davis is required to take 12 units of coursework per quarter. In addition to the coursework outlined below, students will take Statistics 290 and generally will take additional electives later on, in consultation with their major professor.

**The following track will be a typical program for a well-prepared student seeking a Ph.D. degree.**

Year One	Fall	Winter	Spring (Preliminary Exam completed)
	STA 231A (4 units)	STA 231B (4 units)	STA 231C (4 units)
	STA 232A (4 units)	STA 232B (4 units)	STA 232C (4 units)
	STA 390 (2 units)	STA 141A (4 units)	STA 260 (3 units)
	STA 290 (2 units)		STA 290 (1 unit)
			<i>Ph.D. Pre-qualifying Written Exam</i>
Year Two	Fall	Winter (advancement to Ph.D. candidacy)	Spring
	Statistics Elective (4 units)	STA 242 (4 units)	Dissertation Research (12 units)
	Statistics Elective (4 units)	Statistics Elective (4 units)	
	Statistics Elective (4 units)	Statistics Elective (4 units)	
		<i>Ph.D. Qualifying Exam</i>	
Years Three-Four	Complete requirements for the Ph.D. degree, including Dissertation and Defense		

### 11) Sources of Funding

Funding for each student is specified when students are offered admission to the program, and the funding itself can vary from student to student. A funding offer letter sent to the student will spell out the details of that individual's funding. Typically such funding consists of a combination of stipends and TA-ships. After students have gained more experience, they typically receive funding through a Graduate Student Researcher (GSR) position.

### 12) PELP, In Absentia, and Filing Fee Status

Information about PELP, In Absentia, and Filing Fee status can be found on the Graduate Studies website: <http://www.gradstudies.ucdavis.edu/forms/>

### 13) Leaving the Program Prior to Completion of the PhD Requirements

Should a student leave the program prior to completing the requirements for the Ph.D., they may still be eligible to receive the masters if they have fulfilled all the requirements for that degree (see Master's Degree Requirements). Students may use the Change of Degree Objective form available from the Registrar's Office:  
[http://registrar.ucdavis.edu/local\\_resources/forms/D065-graduate-major-degree-change.pdf](http://registrar.ucdavis.edu/local_resources/forms/D065-graduate-major-degree-change.pdf).