OUTLINE

- Academic Advising @ UC Davis
- Major Programs & Tracks
- Pass 2 Registration Reminders
- Scheduling and Sample Plans
- Non-Major Requirements
- Getting Involved & Final Reminders
UC Davis has a decentralized advising structure. You have different advisors for different things (e.g. Financial Aid Office, Internship and Career Center, etc.). In terms of academic advising, you also have two different types of advisors.

**COLLEGE OF LETTERS AND SCIENCE**
Statistics is a major within the College of Letters and Science. Your advisors in the College of Letters and Science Office of the Dean can provide advice on your non-major requirements, academic difficulty, and more. They do not provide advice related to your major.

**DEPARTMENT OF STATISTICS**
Advisors in the Department of Statistics can provide information specific to your major. They can help with academic planning, understanding policies and requirements, getting involved in department programs, etc.

If you don't know where to go, that is okay! Your advisors will refer you to the appropriate office/resource. We are all here to help you make the most of your time at UC Davis and share important resources, organizations, opportunities, etc.
ASSISTS students with general academic planning, clarifying department requirements and policies, approving forms and petitions, and providing referrals to campus resources.

KIM MCMULLEN

Offers advice on the major program, course selection, post-graduation opportunities and research/independent study. They also approve electives and major modifications, and evaluate transfer course articulations.

ANCHAL, JACOB, AND VANESSA

Meet with any of your advisors by making an appointment or attending their drop-in hours. Details can be found at statistics.ucdavis.edu/undergrad/advising.
MAJORS

GENERAL OVERVIEW

The Statistics major has both a Bachelor of Science (BS) and a Bachelor of Arts (AB). The BS has five different tracks.

In addition to the undergraduate program, the Department of Statistics offers MS and PhD programs in Statistics and houses a Graduate Group in Biostatistics.

LEARNING OUTCOMES

- statistical reasoning and inferential methods
- statistical modeling and its limitations
- interpreting and communicating the results of a statistical analysis
- data analysis using statistical computing tools and software
- probability and the mathematical foundations of statistics
## MAJOR TRACKS

### APPLIED
Emphasizes statistical applications. AB or BS options.

**FEATURES**
- core statistics courses
- statistics electives
- electives in area of emphasis

**UNITS**
- AB: 65-71
- BS: 75-83

### GENERAL
Emphasizes statistical theory.

**FEATURES**
- core statistics courses
- advanced math courses
- statistics electives

**UNITS**
- 82-84

### STATISTICAL DATA SCIENCE
Emphasizes data handling skills.

**FEATURES**
- core courses
- specialized data science courses
- electives in Stats, Math, and Computer Science

**UNITS**
- 79

### COMPUTATIONAL
Emphasizes computing.

**FEATURES**
- core statistics and computer science courses
- electives in Stats, Math, and Computer Science

**UNITS**
- 79-80

### MACHINE LEARNING
Emphasizes statistical learning methods.

**FEATURES**
- core courses
- specialized machine learning courses
- electives in Stats, Math, and ECS

**UNITS**
- 79

Additional details can be found on the Statistics Website and Undergraduate Manual.
REGISTRATION & PASS 2

- **Pass One Registration**
  - Consists of a four hour appointment window followed by open periods.
  - Your first opportunity to register and waitlist!
  - Allows you to register or waitlist for up to 17 units.
  - Registration in some courses is restricted to certain populations/majors during Pass One.

- **Pass Two Registration**
  - Consists of a four hour appointment window followed by open periods.
  - Another opportunity to register.
  - Allows you to register or waitlist for up to 19 units.
  - First opportunity to register or waitlist for courses with Pass One Registration Restrictions.

- **Note:** There are additional opportunities to register beyond Pass 1 and Pass 2! Students can register during Open Registration registration periods and Schedule Adjustment.
  - Learn more at the [Registration Calendar](#).
    - During Schedule Adjustment students can register for up to 28.5 units (but please don't do that to yourself!).
REMINDERS & PREPARING FOR PASS 2

• Continue to use the First Quarter Recommendation Worksheets as a guide.
  ○ Statistics A.B.
  ○ Statistics B.S.
• We recommend 3-4 courses (12-16 units) in your first quarter. (12 units = full time status)
• No more than two major courses!
• No Upper Division Courses (courses number 100-199).
• Check the First Year Seminars and First Year Aggie Connections websites for new courses/connections.

TYPICAL SCHEDULE

1. MAT COURSE
2. ELWR OR COMPOSITION COURSE
3. GE COURSE OR ECS 32A/36A
4. GE COURSE/SEMINAR
TOTAL UNITS: 12-16

ONLINE RESOURCE LINKS

• Schedule Builder  
  ○ sisweb.ucdavis.edu
• First Year Seminars  
  ○ fys.ucdavis.edu
• First Year Aggie Connections  
  ○ aggieconnect.ucdavis.edu
RECOMMENDATIONS
- All Statistics students should take a MAT course in their first quarter (algebra, pre-calculus, or calculus).
- There are three calculus series offered at UC Davis (MAT 21, MAT 17, MAT 16).
- **All Statistics students are encouraged to take the MAT 21 series regardless of track.**
- Please consult with your advisor if you have questions about which MAT course to enroll in based off of your placement exam score and AP credit.

MATH PLACEMENT EXAM
Required for ALL students who will take Pre-Calculus and/or the first quarter of Calculus at UC Davis:

- MAT 12, 16A, 17A, 21A, 21M

### AP CREDIT

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<th>Mathematics-Calculus BC</th>
<th>Score 5</th>
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<table>
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### SCHEDULING MATHEMATICS

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<tr>
<th>COURSE</th>
<th>TOTAL SCORE</th>
<th>WITH</th>
<th>TRIG SUB-SCORE</th>
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<tbody>
<tr>
<td>MAT 12</td>
<td>25 or more</td>
<td></td>
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</tr>
<tr>
<td>MAT 16A</td>
<td>30 or more</td>
<td>with</td>
<td>2 or more</td>
</tr>
<tr>
<td>MAT 17A</td>
<td>30 or more</td>
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<td>2 or more</td>
</tr>
<tr>
<td>MAT 21A</td>
<td>35 or more</td>
<td>with</td>
<td>3 or more</td>
</tr>
<tr>
<td>MAT 21M*</td>
<td>40 or more</td>
<td>with</td>
<td>3 or more</td>
</tr>
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</table>
Calculus Help

Math Tutoring

- Calculus Room
  - https://www.math.ucdavis.edu/resources/calc_room/
  - Drop-in tutoring services. This is a gathering place for students in Math 16, 17 and 21 series to study in groups or individually with Teaching Assistants available to answer questions.

- Tutoring at the Academic Assistance and Tutoring Center (AATC)
  - https://tutoring.ucdavis.edu/math
  - Drop-in tutoring services. You can form study groups, work on assignments, and get assistance from peer-tutors.
  - In addition to drop-in tutoring, the AATC has math specialists you can consult with and online resources and tutorials.
INTRODUCTORY STATISTICS COURSES

STA 13 Elementary Statistics
Designed for students who do not have a background in calculus and who will not be taking any further advanced statistics coursework.

Prerequisites: high school algebra

STA 32 Gateway to Statistical Data Science
Designed for students who have a background in calculus and who plan to take higher level statistics coursework. In addition to covering the fundamentals of statistics, this course also has a programming component. Most higher level STA courses require the statistical programming techniques emphasized in this course.

Prerequisites: MAT 16B or 17B or 21B

STA 100 Applied Statistics for Biological Sciences
Designed for students in the biological sciences. This is an alternative option for statistics majors with an interest in the biological sciences.

Prerequisites: MAT 16B or 17B or 21B

RECOMMENDATIONS

- You should not take an introductory statistics course in your first quarter!
- STA 32 is strongly recommended for Statistics majors
- Even if you have AP credit for STA 13, you are still recommended to take STA 32.
RECOMMENDATIONS

- Most Statistics students do not take a computer science course in their first quarter.
- All Statistics major options require at least one introductory computer science course. More courses may be required and/or recommended depending on the major track you choose.

ECS 32A vs. ECS 36A

**ECS 32A Introduction to Programming**
Recommended! Designed for non-computer science majors. Covers the fundamentals of programming and problem solving in Python.

**ECS 36A Programming and Problem Solving**
Designed for computer science majors and for students with some background in programming. Requires a placement exam. Non-computer science majors cannot enroll until Pass 2 registration.
In addition to your major requirements, you have university, general education, and college requirements. You learned more about these and other scholarship and residency requirements in Aggie 101, but below is a brief outline.

- **University Requirements**
  - 180 Unit Requirement
  - American History and Institutions Requirement
    - may have already been satisfied by previous high school or college coursework.
  - Entry Level Writing Requirement

- **General Education Requirements**
  - Courses in Topical Breadth (52 units) and Core Literacies (35 units)
  - Find out more at ge.ucdavis.edu/requirements.

- **College Requirements (for students in the College of Letters and Science Only)**
  - 64 Upper Division Unit Requirement
  - College English Composition Requirement (Lower Division & Upper Division)
  - Foreign Language Requirement-AB Degrees ONLY
  - Natural Science and Math Requirement-BS Degrees ONLY
RECOMMENDATIONS

- The sections Science and Engineering (SE), Quantitative Literacy (QL), and Scientific Literacy (SL) will be satisfied by your major requirements.
- Focus on Arts and Humanities (AH), Social Sciences (SS), Literacy with Words and Images (WE, OL, VL), and Civic and Cultural Literacy (ACGH, DD, WC).

REMEMBER!

Anything you take in your first quarter will count for something!

Focus on having a BALANCED schedule with diverse classes that genuinely interest you.
01. Take a MAT course.

02. Do not take a STA course.

03. Take at least 12 units.

Typical Schedule:

1. MAT COURSE
2. ELWR OR COMPOSITION COURSE
3. GE COURSE OR ECS 32A/36A
4. GE COURSE/SEMINAR

Total Units: 12-16
GETTING INVOLVED

CLUBS TO JOIN

- Data Science Club
- Women in Data
- Moneyball Club
- & 800+ More!

RESEARCH

- Statistics students work with Statistics faculty as well as with faculty all over campus. Students working with Statistics faculty can get academic credit (STA 199) for their research to replace a major requirement.

STAYING INFORMED

- Read the Statistics Newsletter!
  - You will be automatically enrolled in the Statistics Newsletter. Get updates on department events, internships, and other important announcements.
QUESTIONS?
CAREER OPPORTUNITIES

FUTURE CAREERS

Statistics students work in diverse roles in academics, government, and industry.

Sample Employers
- Facebook
- Nielsen
- Public Policy Institute of California
- Blizzard Entertainment
- Google
- Kaiser Permanente
- Survey Monkey
- Wells Fargo

Career Possibilities
- Statistician/Biostatistician in government and industry
- Data Scientist
- Researcher
- Business Analyst
- Actuarial Analyst
- Statistical Consultant for business and industries
- College/University Faculty
Statistics students attend a wide variety of degree programs after graduation. It is important to research the various degree programs that interest you as they may require additional prerequisites beyond your major requirements.

- **Examples:**
  - Statistics
  - Biostatistics
  - Data Science
  - Machine Learning
  - Quantitative Finance
  - Business Analytics
  - Epidemiology and Public Health Sciences
  - Economics

- **Graduate School Resources**
  - **Pre-Grad Advising Office:** Offers workshops, advising, information sessions and more!
  - **Statistics Faculty Advisor:** If you are interested in a graduate program related to Statistics, you can meet with our faculty advisor to discuss your plans, get course recommendations, etc.