

University of California, Santa Barbara Program Learning Outcomes

B.A. in Statistical Science

Students graduating with a B.A. in Statistical Science should be able to:

- 1. Demonstrate a working knowledge of the core concepts in probability and statistics. In particular,
 - i. Use basic mathematical skills needed for probability and statistics.
 - ii. Employ the basic computer skills used in statistics.
 - iii. Explain the fundamentals of probability theory and its role in the construction of modern statistical theory.
 - iv. Draw on a strong foundation in statistical reasoning and inferential methods.
 - v. Describe, interpret and conduct an exploratory analysis of data by graphical and other means.
 - vi. Use some statistical programming packages.
- 2. Communicate statistical results effectively. Students will understand that statistical concepts are applied to many fields.
- 3. Use statistical reasoning and inferential methods.
- 4. Combine statistical modeling concepts with computational skills to analyze data.