**APPLIED STATISTICS MINOR**

**Minor in Applied Statistics**

**Information**  
Bori Mazzag, Ph.D., Chair  
Department of Mathematics  
707-826-3143

**The Program**  
It is increasingly necessary for practitioners in any quantitative discipline to have a substantial background in statistics. Whereas statistics has traditionally played a central role in the biological and natural sciences, it is now equally important in business, economics, and the social sciences.

The applied statistics minor is designed to provide the broad statistical knowledge and practical skills needed for application of statistical techniques to research and management problems in a wide variety of disciplines. The introductory, intermediate, and topics courses include computer laboratory sessions, in which students learn to use statistical software. The minor culminates with an upper division applications course.

Different choices for the introductory, intermediate, and applications courses make the applied statistics minor an attractive complement to bachelor’s degree programs in business, economics, psychology, and the biological and natural resources sciences.

**REQUIREMENTS FOR THE MINOR**

- **MATH 102** (4) Algebra & Elementary Functions, or equivalent
- **One of the following calculus courses:**  
  - MATH 105 (3) Calculus for the Biological Sciences & Natural Resources  
  - MATH 109 (4) Calculus I
- **One of the following introductory courses:**  
  - PSYC 241 (4) Introduction to Psychological Statistics  
  - STAT 108 (3) Elementary Statistics  
  - STAT 108i (3) Elementary Statistics with Integrated Support  
    [Coreq: STAT 8]  
  - STAT 109 (4) Introductory Biostatistics
- **One of the following intermediate courses:**  
  - BA 332 (4) Intermediate Business Statistics  
  - PSYC 478 (4) Analysis of Variance  
  - STAT 333 (4) Linear Regression Models/ANOVA

- **Two topics courses from the following list:**  
  - STAT 323 (4) Probability & Statistics  
  - STAT 404 (4) Multivariate Statistics  
  - STAT 406 (4) Sampling Design & Analysis  
  - STAT 410 (4) Modern Statistical Modeling  
  - STAT 480 (1-3) Special Topics in Statistics

- **One advanced applications course from the following list:**  
  - BA 446 (4) Marketing Research  
  - FISH 458 (4) Fish Population Dynamics  
  - FOR 311 (4) Forest Mensuration & Growth  
  - PSYC 488 (4) Regression/Multivariate Topics  
  - WLDF 311 (4) Wildlife Techniques  
  - WLDF 478 (3) Animal Energetics  
  - or other applications course with substantial statistics content, as approved by the Applied Statistics coordinator.

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**APPROPRIATE TECHNOLOGY MINOR**

**Minor in Appropriate Technology**

**Advisors**  
Arne Jacobson, Ph.D.  
Department of Environmental Resources Engineering  
Harry Griffith Hall 116B  
707-826-3184

- John Meyer, Ph.D.  
  Department of Politics  
  Founders Hall 138  
  707-826-4497

**The Program**  
The term “appropriate technology” challenges the presumed inevitability or naturalness of technological development. At the same time, the question of which technologies are “appropriate” resists easy or predetermined answers. An HSU minor in appropriate technology allows students to familiarize themselves with promising technologies, while also developing their understanding of the political, social, and economic processes by which choices about technologies are — and might be — made.

Courses enable students to combine theory and practice, often through hands-on projects at the Campus Center for Appropriate Technology (CCAT). CCAT is a student-run, living laboratory and demonstration home on the HSU campus. It models effective energy use, a photovoltaic electrical system, solar hot water heating, graywater recycling, a composting privy, organic gardening, low-impact building materials, and many other technologies, in a residential setting.

The minor can be of particular value to students wishing to pursue careers in science, public policymaking, or community development. It can also be useful for students wishing to volunteer for the Peace Corps or other overseas development work. For those wishing to design and develop technological systems professionally, the minor is not an adequate substitute for a major in Environmental Resources Engineering or a related field.

**REQUIREMENTS FOR THE MINOR**

- **ENST 123** (2) CCAT Practicum (1 unit course taken twice, each with a different topic, for a total of 2 units)
- **ENGR 305** (3) Appropriate Technology
- **ENGR 306** (3) Technology and the Environment
- **PSCI 364** (4) Technology & Development
- **PSCI 373** (4) Politics of Sustainability
- **SOC 320** (4) Environmental Sociology