The University of Arizona Graduate Interdisciplinary Program (GIDP) in Statistics

An Introduction
The University of Arizona has a long and successful tradition in Graduate Interdisciplinary Research & Training:

→ 15 current GIDPs, facilitating cutting-edge research at the interface of traditional disciplines.

→ GIDPs produced over 10% of all Ph.D. degrees at UA in 2008.

→ Programs span a broad range, from American Indian Studies, to Genetics, to Remote Sensing & Spatial Analysis.
Our GIDP involves **Interdisciplinary Statistics**

→ The program was chartered by the Arizona Board of Regents in Spring 2006.

→ Important support comes from UA’s BIO5 Institute.

→ Statistics is a growing field: Statistician was rated as the 3rd “best job in the U.S.” in a *Wall Street Journal* report

(http://online.wsj.com/article/SB123119236117055127.html)
• The Statistics GIDP has over 40 faculty members with wide interests in quantitative, interdisciplinary research.

• Core program faculty are housed in the Department of Mathematics and in the Division of Epidemiology & Biostatistics.

• Other contributing depts. include Computer Science, Ecology & Evolutionary Biology, Economics, Educational Psychology, Geography, Natural Resources, and many others.
The GIDP currently offers interdisciplinary curricula leading towards:

a. The Ph.D. in Statistics.
   → A Ph.D. minor is available for doctoral students in other disciplines.

b. The M.S. in Statistics.

c. A 12-unit Graduate Certificate in Statistics.
Ph.D. Curriculum

The Ph.D. in Statistics requires 71-72 units past the Baccalaureate degree.

→ Core courses (32 units) involve basic material in the Theory and Methods of Statistics, and include the core 15 units from the M.S. degree (next slide).

→ 9 units (minimum) are required for an external minor, used to build a foundation for transdisciplinary research in each individual student’s plan of study.

→ 12 units of topical statistics electives are used to extend the minor into an individualized, interdisciplinary curriculum.

→ 18 units comprise the Ph.D. dissertation, whose focus is taken from the 21 minor/elective units.
The M.S. in Statistics requires 30 units past the Baccalaureate degree.


→ 12 units of topical statistics electives are used to build an interdisciplinary focus in each individual student’s curriculum.

→ 3 units are devoted to the M.S. thesis (a non-thesis option is available).
The Graduate Certificate in Statistics requires 12 units past the Baccalaureate degree.

- 3 required units in the (post-calculus) Theory of Statistics.

- 9 additional units of topical statistics electives are used to build an interdisciplinary focus in each individual student’s curriculum.
Analyzing genetic microarray data

Environmental build-up of CO₂

Geographic hazard analysis

Measuring luminosity of stars

Chromosome haplotype analysis


