MS IN BIOSTATISTICS AND DATA SCIENCE

The MS in Biostatistics and Data Science degree program is a minimum 36 semester credit hours, and provides training in research design, basic statistical theory, data analysis, computer applications, and statistical consultation. Graduates of the program are prepared to assume statistical posts in government, private health agencies, or in health research programs. The program emphasizes fundamental statistical theory and methods and provides the basis for doctoral level biostatistical studies.

Special Entrance Requirements

Applicants to the MS program should hold an undergraduate degree that emphasizes the development of strong quantitative skills through multivariate calculus and at least one semester of linear algebra. Examples are degree programs in mathematical, physical, biological, or social sciences. Advanced mathematical training and knowledge of computer programming are highly desirable. For more information, see the Admissions (https://catalog.uth.edu/public-health/admissions/) section.

Course of Study

The following courses are required for the MS in Biostatistics and Data Science:

coursework in biostatistics (1600-1999; not already on the degree planner). Students should consult with their advisor when selecting elective courses. Students may also elect to complete a minor outside of their department. Students who opt to complete a minor should consult with their advisor and the minor's department for requirements.

For a sample course of study, see the MS in Biostatistics and Data Science degree planner (https://web.sph.uth.edu/student-forms/Academic_Requirements/Degree%20Programs%20&%20Planners/Planner.MS.BIOS.2024-2025.docx).

Code	Title	Hours
Required for all School of Public Health Students		
PH101	Foundations in Public Health [1]	0
Leveling and Other Required Courses [2]		**0**
PHM 1690L	Introduction to Biostatistics in Public Health	
PH 1630L	Introduction to R Programming for Biostatistics and Data Science	
PH 1631L	Introduction to Python Programming for Biostatistics and Data Science	
Major Courses		
PH 1700L	Intermediate Biostatistics	3
PH 1820L	Applied Linear Regression	3
PH 1821L	Applied Multivariate Analysis for Biostatistics	3
PH 1830L	Categorical Data Analysis	3
PH 1910L	Probability and Distribution Theory	3
PH 1911L	Statistical Inference	3
PH 1975L	Introduction to Data Science	3
PH 1976L	Fundamentals of Data Analytics and Predictions	3
Electives		
Select 9 credits [3]		9
Thesis		
PHM 9998	Integrative Learning Experience/Thesis Research	3
Total Hours		**36**

[1] Online, not-for-credit course

[2] Leveling courses do not count toward the total number of credits for the degree program.

[3] Students must complete a 3 credit hour epidemiology course of their choice (2500-2999). Students are encouraged to complete elective