Director:

Dr. Amy Wagler
Associate Professor of Mathematical Sciences
Department of Mathematical Sciences
The University of Texas at El Paso
El Paso, TX 79968
Phone: (915) 747-6847
Email: awagler2@utep.edu

Program Description:

This certificate program will provide students a foundation in big data analytics with a focus on the requisite theory and practice with current applications. In the program, students will gain exposure to concepts of big data analytics, beginning with the basis in mathematics and statistics and moving onto applications of data mining, programming and data visualization. This program is appropriate for those with backgrounds in almost any field, but does require completion of calculus I and an applied statistics course prior to admission. Students who graduate from this program will have the skills appropriate to work as applied data scientists in government, industry or education. We have applied for financial aid to the US Department of Education in order to support students enrolled in this certificate program.

Admittance Criteria:

Admission to the program requires admission to the graduate school and a minimum of a 3.00 GPA. Prerequisites to admission include STAT 2480 or equivalent with a minimum grade of "B" and MATH 1411 or MATH 2301 or equivalent with a minimum grade of "B".

Courses:

Students are required to take STAT 5474, STAT 5428 and STAT 5195 and choose two courses from the Prescribed Elective Courses. For many of these graduate level statistics courses, there are existing prerequisites. The required course (STAT 5474) has STAT 5428 with a B or better as a prerequisite. For most elective courses, STAT 3330 and STAT 4380 are prerequisites, either directly or indirectly (via a prerequisite that requires these courses). One course (STAT 5494) requires STAT 5380.

Prefix and Number	Required Courses	SCH
STAT 5474	Introduction to Data Mining	4
STAT 5428	Introduction to Statistical Analysis	4

STAT 5195	Graduate Seminar	1

Prefix and Number	Prescribed Elective Courses	SCH
STAT 5329	Statistical Programming	3
STAT 5385	Statistics in Research	3
STAT 5388	Multivariate Data Analysis	3
STAT 5354	Post-Genomics Analysis	3
STAT 5494	Statistical Data Mining	4
MATH 5329	Numerical Analysis	3
CS 5354	Topics in Intelligent Computing: Data Mining	3

UTEP Graduate College: TBD