

HEALTH INFORMATICS AND DATA ANALYTICS GRADUATE CERTIFICATE

Banner Code: HH-CERG-HIDA

Academic Advising

Website: chhs.gmu.edu/hap/health-informatics/certificate-health-informatics-and-data-analytics.cfm

This certificate prepares clinicians, health care managers, statisticians, epidemiologists, computer programmers, data analysts, and other professionals in analysis of complex health care data, including data extracted from electronic health records, claims data, and consumer generated data. Since electronic health records and related data repositories are becoming increasingly massive, the certificate emphasizes topics related to big data analysis. Data mining, propensity scoring, and other advanced analytic techniques covered in the certificate, can handle complex problems typically found in observational data: large, multidimensional and multi-type data sets, with many confounding issues and noise. These techniques can be computationally efficient on large scale analysis and intelligent in predicting an outcome.

This graduate certificate may be pursued on a full- or part-time basis.

HAP 700	Introduction to Health Informatics
HAP 709	Health Care Databases
HAP 719	Advanced Statistics in Health Services Research I
HAP 720	Health Data Integration
HAP 777	Health Data Visualization
HAP 780	Data Mining in Health Care
HAP 823	Comparative Effectiveness Analysis using Observational Data
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Total Credits	18

Admissions & Policies

Admissions

Applicants must hold a bachelor's degree from a regionally-accredited institution and must have a minimum of a 3.0 GPA to be considered. Applicants must meet the admission standards and application requirements specified in Graduate Admissions and must apply using the online Application for Graduate Admission (<https://www2.gmu.edu/admissions-aid>). The application process is competitive, and applications are considered for the fall and spring semesters. For application deadlines and detailed application requirements, refer to the CHHS Admissions website (<http://chhs.gmu.edu/admissions/graduate/deadlines.cfm>).

Policies

For policies governing all graduate certificates, see AP.6.8 Requirements for Graduate Certificates.

Requirements

Certificate Requirements

Total credits: 18

Students must complete all courses with a grade of B or better. The course content and syllabi are also available at the program website (<http://chhs.gmu.edu/hap/health-informatics/certificate-health-informatics-and-data-analytics.cfm>) and by contacting hap@gmu.edu.

Required Courses

Students must complete six of the following: 18

HAP 725	Statistical Process Control in Healthcare
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