HEALTH INFORMATICS AND DATA ANALYTICS GRADUATE CERTIFICATE

Banner Code: HH-CERG-HIDA

Academic Advising
Website: https://hap.gmu.edu/program/view/19933

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 increasing more 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.

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 (https://chhs.gmu.edu/admissions/graduate-admissions/standards-requirements-and-deadlines).

Policies
For policies governing all graduate certificates, see AP6.8 Requirements for Graduate Certificates.

Requirements

Certificate Requirements
Total credits: 18

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

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

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HAP 700</td>
<td>Introduction to Health Informatics</td>
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<tr>
<td>HAP 709</td>
<td>Health Care Databases</td>
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<td>HAP 719</td>
<td>Advanced Statistics in Health Services</td>
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<td>Research I</td>
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<td>HAP 720</td>
<td>Health Data Integration</td>
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<td>HAP 777</td>
<td>Health Data Visualization</td>
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<td>HAP 780</td>
<td>Data Mining in Health Care</td>
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<td>HAP 823</td>
<td>Comparative Effectiveness Analysis</td>
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<td></td>
<td>using Observational Data</td>
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Total Credits 18