# Graduate Certificate in Clinical Health Informatics (updated 8.5.16)

<table>
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<tr>
<th>Course Name</th>
<th>Brief Course Description and contents</th>
<th>Course Credit Hrs.</th>
<th>Prerequisite(s)</th>
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<td>Introduction to Clinical Healthcare Informatics</td>
<td>Through class discussion, visits from practitioners, and faculty lectures, students are introduced to the present and projected roles of health informaticians.</td>
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<td>Concepts in Healthcare Informatics</td>
<td>This course will cover the history of Informatics from a medical, nursing and healthcare perspective. It will incorporate inter-professional collaboration, ethics, HIT drivers and legislation. It will cover concepts such as ROI/RFP/RFQ and Due Diligence, as well as vendor selection and assessment strategies.</td>
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| Introduction to Healthcare Project Management     | This course will cover the basic Project Management concepts, providing students with an understanding of the Project Management Life Cycle, System Development Life Cycle, Change management and control, and knowledge of the Project Management Professional (PMP) certification requirements and information. | 3                  | • Introduction to Clinical Healthcare Informatics  
• Concepts in Healthcare Informatics |
| Healthcare Data Analytics                         | This course will provide a basic understanding of database structure, including relational databases and database types, data management, including querying, reporting and data correction, and data analysis, including dash boarding and predictive analytics. It will cover data security and encryption, as well as privacy and confidentiality. | 3                  |                                                    |
| Quality Improvement and Safety in Healthcare Environments | This course will provide an understanding of quality and process improvement strategies, including six sigma/lean, as well as strategies for process improvement. It will also cover past/current/future regulations and requirements (MU/HIPAA/HITECH) regulating quality improvement functionality in HIT. Patient Safety and Heuristic evaluation principles in system and software design will also be covered. | 3                  | • Introduction to Clinical Healthcare Informatics  
• Concepts in Healthcare Informatics |
| Residency and Capstone Project                    | This course will provide hands-on, real-life experience in Health IT. Students can tailor the residency experience to meet certification requirements. Different certifications require different numbers of residency experience hours. Students can choose between 150-300 hours (3-6 credit hours) depending on the certification they desire to achieve. 50 hours of residency per credit hour. A final, residency-based project presentation, incorporating concepts learned during the program, will be required (capstone). | 3-6                | • Intro to Clinical Healthcare Informatics  
• Concepts in Healthcare Informatics  
• Intro to Healthcare Project Management  
• Quality Improvement and Safety in Healthcare Environments |
| Healthcare Information Technology                 | This course will cover IT hardware, software, networking, as well as full HIT and HIM systems. It will cover concepts for hardware and software assessments, gap analyses, workflow analyses, and ergonomic assessments. It will cover network structure and functions. | 2                  | • Healthcare Data Analytics                      |

7 courses total: 18-21 graduate credit hours
Georgia State University
Lewis School of Nursing and Health Professions
Graduate Certificate in Clinical Health Informatics
Program Progression Plan

**Semester 1 (7 credit hours)**
- Introduction to Clinical Healthcare Informatics (SNHP 2000 can substitute for this course)
- Concepts in Healthcare Informatics
- Healthcare Data Analytics

**Semester 2 (6 credit hours)**
- Introduction to Healthcare Project Management
- Quality Improvement and Safety in Healthcare Environments

**Semester 3 (5-8 credit hours)**
- Healthcare Information Technology
- Residency and Capstone Project (credit hours depend on student’s choice of certification exam)