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| REQUIREMENTS | CONT’D REQ/COURSE AVAILABILITY |
| **Admission Requirements**  In addition to the requirements listed in the Graduate Admission section, candidates must satisfy all of the following:  1. **Grade point average of 3.0** (B) from all undergraduate coursework or a satisfactory score on the GRE or GMAT test.  2. **Resume** detailing work experiences and accomplishments.  3. **Personal statement** of career goals and background experiences, including an explanation of how this program will help achieve educational and professional objectives.  4. **Recommendations:** Two professional or academic recommendations received online, addressing the candidate’s potential for graduate study completion. You will provide the emails of two references, and they will be sent a link to fill out their online recommendation.  5. Candidates must possess knowledge of a **programming** language equivalent to 2 or 3 undergraduate courses.  6. Candidates must possess a knowledge of **applied statistics**.  **Degree Requirements**  All candidates must complete 36 credits with a cumulative GPA of 3.0.  **Core Requirements (12 credits)**   * CIS 661 Introduction to Health and Bioinformatics * CMB 610 Foundations of Biotechnology * PSM 650 Ethics and Professionalism in Applied Science   Select One Stats Course:   * STA 610 Applied Statistics for Health Professions   **OR**   * STA 622 Statistical Methods for Biologists   **Seminar Requirement (2 credits)**   * PSM 662 Seminar in Professional Science Practice   **Directed Requirements (15 credits)**   * CIS 635 Knowledge Discovery and Data Mining * CIS 660 Data Engineering * CIS 671 Information Visualization   *\*Directed requirements continue in the next column with a chosen concentration.*    **Internship Requirement (4 credits)**   * PSM 691 Internship   **Capstone Requirement (3 credits)**   * CIS 691 Medical and Bioinformatics Capstone | **Degree Requirements, Concentrations**  Students choose between two concentrations to focus their degree.  Select either Bioinformatics Concentration:  CIS 677 High-Performance Computing **AND**  CIS 678 Machine Learning  Or Health Informatics Concentration:  CIS 665 Clinical Information Systems **AND**  PNH 630 Health Administration and Service **OR**  PNH 635 Hospital Organization and Management  **Course Availability**  **Fall or Winter Classes**  CIS 635 Knowledge Discovery and Data Mining  CIS 660 Data Engineering  CIS 661 Introduction to Health & Bioinformatics  CIS 665 Clinical Information Systems  CIS 671 Information Visualization  CIS 677 High-Performance Computing  CIS 678 Machine Learning  PNH 630 Health Administration and Service  PSM 650 Ethics and Professionalism in Applied Science  PSM 662 Seminar in Professional Science Practice  STA 610 Applied Statistics for Health Professions  **Fall-Only Classes** STA 622 Statistical Methods for Biologists PNH 635 Hospital Organization and Management  **Winter-Only Classes**  CMB 610 Foundations of Biotechnology  CIS 691 Medical and Bioinformatics Capstone |