About This Major . . .
The Professional Certificate in Health Information Technology Systems prepares health care professionals to support the collection, management, retrieval, exchange, and/or analysis of information in electronic form, in health care and public health organizations. This role functions at an operational level to provide comprehensive management of health care information and its secure exchange between healthcare consumers and providers. These specialists participate in processing, managing and transforming data from information to knowledge. This specialist works within the health care environment interacting with both health care professionals and IT specialists. The informatics specialty maintains the big picture of health care informatics while providing an in-depth perspective of nursing informatics. The ANA Scope and Standards of Nursing Informatics as well as other frameworks such as American Medical Informatics Association’s definition of biomedical informatics and their current work in the development of biomedical informatics competencies and the International Medical Informatics Association’s work on informatics competencies. The following areas of knowledge will be taught in the certificate program: Foundations/Introduction to Healthcare Informatics; Database Management Systems; Information Systems Security and Privacy; Information Systems Life Cycle; Semantic Representation.

All CMU professional certificate recipients are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to the campus-wide student learning outcomes, recipients will be able to:

1. Explores the use of information systems in health care and nursing practice.
2. Reviews the development of an overall framework for analyzing the use of information by organizations along with examples of different types of information systems.
3. Explore selected health informatics projects in clinical settings
4. Evaluate outcomes-based quality assessment and improvement methods in health care
5. Process techniques and tools of project management in the health care setting.
6. Explore the principles of evidence-based medicine in bringing informatics to the bedside.

Advising Process and DegreeWorks
This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a certificate. Some courses are critical to complete in specific semesters while others may be moved around. Meeting with an academic advisor is essential in planning courses and discussing the suggested course sequencing. It is ultimately the student’s responsibility to understand and fulfill the requirements for her/his intended certificate.

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar’s Office to evaluate progress towards a certificate and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar’s Office.

Graduation Process
Students must complete the following in the first two months of the semester prior to completing their certificate requirements (for one semester certificates complete in the first week of class):

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the “Intent to Graduate” form to the Registrar’s Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at [http://www.coloradomesa.edu/registrar/graduation.html](http://www.coloradomesa.edu/registrar/graduation.html).

If your petition for graduation is denied, it will be your responsibility to apply for graduation in a subsequent semester. Your “Intent to Graduate” does not automatically move to a later graduation date.

INSTITUTIONAL CERTIFICATE REQUIREMENTS

The following institutional requirements apply to all CMU professional certificates. Specific programs may have different requirements that must be met in addition to institutional requirements.

- Consists of 5-59 semester hours.
- Primarily 300-400 level courses.
- At least fifty percent of the credit hours must be taken at CMU.
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Certificate Requirements.
- The Catalog Year determines which program sheet and certificate requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See “Requirements for Undergraduate Degrees and Certificates” in the catalog for a complete list of graduation requirements.

PROGRAM-SPECIFIC CERTIFICATE REQUIREMENTS

- 16 semester hours for the Professional Certificate in Health Information Technology Systems.

PROFESSIONAL CERTIFICATE: HEALTH INFORMATION TECHNOLOGY SYSTEMS REQUIREMENTS (16 semester hours)

- CISB 410 - Project Management (3)
- CISB 470 - Management of Information Systems (3)
- HSCI 401 - Health Informatics I: Data Analysis (2)
- HSCI 406 - Health Informatics II: Project Design & Implementation (2)
- NURS 408 - Health Information Systems (3)
- NURS 409 - Quality Assessment & Improvement in Health Care Settings (3)

SUGGESTED COURSE SEQUENCING

First Year, Summer Semester: 2 credits

- HSCI 401 - Health Informatics I: Data Analysis (2)

First Year, Fall Semester: 6 credits

- NURS 408 - Health Information Systems (3)
- CISB 410 - Project Management (3)

First Year, J-Term and Spring Semester: 8 credits

- CISB 470 - Management of Information Systems (3)
- HSCI 406 - Health Informatics II: Project Design & Implementation (2)
- NURS 409 - Quality Assessment & Improvement in Health Care Settings (3)