

Healthcare Analytics Certificate Program

The Healthcare Analytics Certificate Program consists of three non-credit courses, which will develop the knowledge and skills for an individual to be able to participate in, and lead, data analysis and improvement efforts. Healthcare organizations generate large amounts of data about patients, costs, supplies, staffing, and procedures. A key challenge is to understand and develop insights from data to improve patient care and services in order to answer the questions that invariably arise. This program will teach you how to identify a problem, analyze and interpret data, evaluate and ultimately share your findings.

- Flexible online format
- Accelerated pace
- Real-world applications vs theory memorization
- Meaningful assignments geared to healthcare

The Healthcare Analytics Certificate Program:

- Three, non-credit, online courses
- Each course is 6 weeks in length
- Successful completion of all three courses will earn the student a certificate in healthcare analytics.
- Students will gain experience in:
 - o Statistical measurement and analysis within the context of healthcare.
 - o Question development based on common workplace problems.
 - o Operational procedures in a healthcare system, including workplace efficiency and productivity.
 - o Question development, data collection, analysis and dissemination to solve healthcare related events.
 - o Evaluation of effectiveness.

Potential Audience:

- Managers, analysts, nurses, and staff who want to learn effective data analysis techniques they can apply on the job
- Full-time professionals who want flexible, online course schedules
- Any medical professional who wants a better understanding of data analysis, systems improvement, and data mining.

Pre-Requisites:

- There are no specific pre-requisites for this course. However, students should have basic skills in the following:
 - o The ability to prepare a document in MS-Word
 - o Working knowledge of MS-Excel and MS-PowerPoint
 - o The ability to navigate the Internet
 - o The ability to explore mathematical issues
 - o The ability to evaluate information presented on a website

Course Descriptions

Course 1: Fundamentals of Statistics and Measurement (6 weeks)

This course provides an introduction to statistics and measurement in the context of the healthcare setting. Descriptive and inferential statistics will be discussed along with an overview of the concepts of reliability and validity and their application to common workplace problems. At the conclusion of this course, students will be able to identify and implement the appropriate statistical test to answer common research questions. Additionally, students will be informed consumers of statistical research and be able to comprehend and synthesize statistical analysis.

Course 2: Systems Engineering (6 weeks)

The purpose of this course is to provide students with a solid grounding on the operational procedures of the health care system. Lectures will discuss theories for increasing work place efficiency and productivity, methods for their implementation in a health care setting, and the application of these theories with common healthcare tasks such as scheduling and decreasing wait time. Additionally, lectures will discuss procedures for evaluating the effectiveness of a workplace system.

Course 3: Advanced Statistics for Healthcare (6 weeks)

This course explores statistical and research issues that are specific to epidemiology. Students will be introduced to practical methodological issues such as obtaining data for analysis and measuring the progress of completing a research project. Advanced statistical methods that are particularly relevant to the health care setting will be introduced. These topics include longitudinal data analysis, relative risk, and survival analysis.

Course Schedule

Spring 2018

Course 1	Course 2	Course 3
Feb 7 - Mar 20	Mar 28 - May 8	May 16 – Jul 3

Fall 2018

Course 1	Course 2	Course 3
July 11 - Aug 21	Sept 5 - Oct 16	Oct 24 - Dec 11

Please note: Students transition from course 1-3 with their cohort. Registration for the certificate includes registration for all three courses.

Tuition & Fees

The certificate cost is \$1,000. No textbook is required for the course at this time.

Refund/Cancellation Policy

No refunds will be issued once students have been given access to the course. Should a student choose to drop prior to being given access, a request must be submitted in writing. Students will be refunded

70% of the full tuition amount. Non-participation does not relieve the student from obligation to pay for the course. No refund will be issued to those who do not successfully complete the requirements or do not attempt to complete the requirements.

Should a student not progress, there is no refund.

Should a student require a break for personal or medical reasons, a written request must be submitted and approved before the student may transfer to a new cohort.

Students have one calendar year to complete the certificate, unless previous permission has been granted by NMC staff.

FAQ's

Course Format

Online courses using several methods of information sharing: Powerpoints, Videos, Recorded Lecture, Discussion Boards and Virtual Office Hours with Instructors. Students will be expected to participate by the required due date, but do not have specific times/dates they will need to be in the online course.

Time Commitment

Each course will require at least six - eight hours of time per week. You will need to budget time to: complete the required reading, watch a narrated presentation, review any supplemental reading and/or websites, participate in the discussion board, and complete a homework assignment. Your exact time commitment will be dependent upon your previous experience and your ability to comprehend the course materials.

Technical Requirements

Students in the certificate program will need regular access to the Internet, as well as access to Microsoft Office (MS-Word, MS- Excel, and MS-PowerPoint) software.

Admission

There is no application. Students will [register directly through the website](#) and pay online. Payment for the entire certificate is due 10 days prior to the program's start date. Questions regarding payment plans can be directed to Abby Bynum.

Registration for the certificate includes all three courses. Students must complete all three courses. The certificate is cohort-based. Students will take each course progressively based on the schedule for their cohort.

Contact Person

Abby Bynum

If you have non-technical questions or issues, you should contact abigail.bynum@methodistcollege.edu.