

Online Certificate in Precision Medicine Analytics

15 Credit Hours

Admission Requirements:

- Application and processing fee
- Transcripts from accredited undergraduate degree
- GPA 3.0, probationary status may be granted
- Resume or CV
- Purpose statement addressing career goals

No GRE or GMAT required

Cost:

- Per Credit: \$650
- Resource Fee: \$200 per course
- Total Tuition Per Course: \$2,150
- Estimated Total Tuition: \$10,750



Graduation Requirements:

Students must earn a 3.0 GPA or higher to meet graduation requirements and successfully complete all required courses.

Job Outlook in Texas:



24,045 Jobs
Open in 2022*



27,759
Unique Postings (9/16-12/21)



\$57,400 per year
Median Earnings

*Filtered by the proportion of the national workforce in these occupations with a Bachelor's degree.
Source Emsi Analyst 2022.

Acquired Skills:

Top Hard Skills

- Biology
- Chemistry
- Medical Laboratory
- Laboratory Equipment

Top Common Skills

- Communications
- Research
- Quality Control
- Operations

Curriculum:

PCM 601 - Histopathology and Molecular Biology of Cancer

This course introduces fundamental cancer theory and image analysis techniques in cancer histopathology. Students will explore topics in slide preparation and changes in tumor cell morphology as it relates to image interpretation. An introduction to the application of digital image processing techniques for feature extraction and disease classification is provided.

PCM 605 - Molecular Targets in Precision Medicine

The identification of drug targets for disease is central to pharmaceutical research. This course provides students a historical understanding of key targets of drug development by reviewing one of the most important aspects of drug discovery – the identification of drug targets for precision medicine.

PCM 641 - Introduction to Machine Learning and Artificial Intelligence

This course provides an introductory explanation of data analysis techniques including machine learning, data mining, and statistical analysis used to generate clinically useful molecular information for clinicians to make diagnostic, prognostic and/or therapeutic decisions.

PCM 644 - Clinical Research Designs / Statistics / Data Analytics

This course examines key research design principles pertinent to health care, clinical laboratory operations and drug development. Students will learn classical and adaptive clinical trial study designs, common statistical methods and quality assurance techniques used to interpret clinical data and platforms used to analyze online clinical data sets.

HCAD 656 - Healthcare Informatics

An introduction to the field of healthcare analytics with emphasis on the application of statistical concepts, procedures, and tools to add value to healthcare leaders in making clinical and management decisions.