



School of American Education (SAE)

### Certificate in Biomedical Informatics and Data Science

Innovators, this is your moment! Unite your enthusiasm for information technology and healthcare to make a real difference in the dynamic world of health and medicine.

The Certificate in Biomedical Informatics and Data Science at the School of American Education (SAE), Institute of Health & Management (IHM), is a 6-month online program designed to provide a foundational understanding of biomedical informatics and data science, with a focus on healthcare applications. This 4 Unit (12 credit hours) program offers students the opportunity to explore the intersection of healthcare, computer science, and data analysis, aiming to develop professionals capable of using biomedical data, information, and knowledge to improve human health.

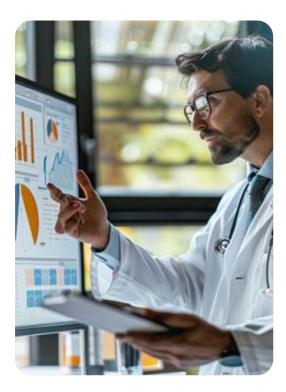
Upon successful completion of the certificate at IHM, students can also choose to continue their education by transitioning to the Master of Science (MS) in Biomedical Informatics and Data Science at Arizona State University (ASU). This pathway allows you to complete an additional 18 credit hours at ASU, earning the full MS degree. The combined program gives you a strong foundation and advanced skills for addressing modern challenges in healthcare, bioinformatics, and data science.

## Why Biomedical Informatics?

Biomedical informatics plays a crucial role in the healthcare system by enabling more effective and efficient patient care.

The field is vital for:

- Early Disease Detection:
  Using data to detect diseases at an early stage.
- Improved Patient
  Experience: Enhancing the patient experience in hospital settings.
- Precision Diagnosis: Making diagnoses more precise through data-driven insights.
- Better Healthcare Quality: Improving healthcare quality and reducing costs through informatics.
- Reducing Hospital Visits: Minimizing the need for frequent hospital visits by leveraging advanced technologies.



#### Why Study at Arizona State University<sup>®</sup> (ASU)?



Arizona State University (ASU) is a globally recognized institution renowned for its innovative approach to education, consistently ranked #1 in innovation by U.S. News & World Report. Offering over 800 programs across various disciplines, ASU provides students with access to cuttingedge research opportunities, state-of-the-art facilities, and expert faculty. With a diverse student body representing over 135 countries, ASU fosters a multicultural environment that prepares students for a globalized world. Many of its programs are STEM-designated, enabling international students on F-1 visas to benefit from Optional Practical Training (OPT) extensions of up to 36 months.

Committed to sustainability, innovation, and entrepreneurship, ASU empowers students to tackle global challenges and create meaningful change. Additionally, the university also provides comprehensive career services, generous scholarships, and strategic partnerships to make quality education accessible and affordable for students from around the world.



U.S News and World Report #1 in Most Innovative School 2024

Times Higher Education, University Impact Rankings for 2024 <u>https://www.timeshighereducation.com/impactrankings</u>

Arizona State University | Institutions | STARS Reports

K https://reports.aashe.org/institutions/arizona-state-university-az/report/



#### **STEM-OPT for International Students on F-1 Visas**

After successfully completing this pathway master's degree, students on an F-1 visa may be eligible for an Optional Practical Training (OPT) extension of up to 36 months. This extension provides an opportunity for international students to gain valuable skills and work experience in the United States. Please note that the OPT extension applies only to students on an F-1 visa and does not apply to those completing the degree through ASU Online.

#### **Entry Requirements**

- □ A bachelor's or master's degree in biology, computer science, engineering, nursing, or statistics from a recognised university.
- □ Basic competencies in general biology, statistics, and computer programming.
- Competitive applicants typically have a "B" (3.00 on a 4.00 scale) grade point average in the last 60 semester hours or 90 quarter hours of undergraduate coursework. If you do not meet the minimum GPA requirements, your application may still be considered by the department.
- English proficiency requirements (TOEFL, IELTS, or equivalent)
  - □ TOEFL: Minimum score of 80 on the TOEFL iBT® (testing center only; no home editions accepted).
  - $\hfill\square$  IELTS: Minimum overall band score of 6.5 (Academic).
  - $\Box$  PTE: Minimum score of 60.
  - □ Duolingo: Minimum score of 105.

#### Units

- BMI 515: Applied Biostatistics in Medicine and Bioinformatics
- BMI 601: Fundamentals of Health Informatics
- D BMI 604: Health Information Communication
- BMI 613: Workflow Analysis and Redesign in Health Systems Engineering

(IHM Credits: 4 units (12 credits hours))

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#### Pathway to Master of Science (MS) in Biomedical Informatics and Data Science at ASU

The Certificate in Biomedical Informatics and Data Science at IHM serves as a direct pathway to the MS in Biomedical Informatics and Data Science at Arizona State University (ASU). Upon completion of the IHM Certificate, students can transfer directly to ASU to complete the remaining 20 credit hours needed for the MS degree at Arizona State University.





#### Career Opportunities

Graduates of this program will be equipped with the skills needed to pursue roles in various healthcare settings, including:

- Health Informatics
  Specialist
- □ Clinical Data Analyst
- □ Bioinformatics Researcher
- Healthcare Technology Consultant

# Study Mode and Duration

- Online (6 months at Institute of Health & Management, Australia)
- On-campus (12 months at Arizona State University)





March, May, July, September, November, January

Disclaimer: This is a non-AQF course and does not result in a qualification recognized under the Australian Qualifications Framework (AQF). Completion of this program makes students eligible to enroll in postgraduate programs at Arizona State University, subject to meeting their specific entry requirements.

Program/Course Manager:

#### Dr. Balasankar Ganesan

BOT, MSc. OT (HKPU), MPH (UOW, Australia), Ph.D. (HKPU), Ph.D. (UTS Sydney), FRSPH (UK)

Head, School of American Education IHM Australia

Certificate in Biomedical Informatics and Data Science

USD 8,000

Master of Science in Biomedical Informatics and Data Science (ASU)

#### USD 40,640

ASU fees vary by program and other factors. For the latest information on tuition, scholarships, and financial requirements, please visit the ASU website or contact our SAE or ASU admissions office.



#### Institute of Health & Management Pty Ltd.

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