Annexe 2: Minor in Biomedical Informatics

The Minor in Biomedical Informatics, required of all medical students, combines healthcare, data science, artificial intelligence and information technology to provide students with the necessary knowledge and skills to excel in the evolving field of healthcare informatics.

The Minor consists of five courses, two of which — *Digital Literacy in Healthcare* and *Data Literacy in Healthcare* — are embedded within the NUS Common Curriculum for Healthcare Professional Education.

1. **Digital Literacy in Healthcare (fulfilled as part of the NUS Common Curriculum for Healthcare Professional Education)**
   Students will acquire skills such as computational thinking, data science, artificial intelligence and machine learning in the healthcare context, and more.

2. **Data Literacy in Healthcare (fulfilled as part of the NUS Common Curriculum for Healthcare Professional Education)**
   This course features components of evidence-based practice, and covers the principles of data analysis, and decision-making under uncertainty, relevant to clinical practice.

3. **Value-based Healthcare**
   This course highlights the framework for improving patient outcomes, safety, and satisfaction, with the strong support of structural data management and analytics.

4. **Clinical Data System Design Testing and Governance**
   This course highlights effective use of data derived from medical records systems, devices and its impact on healthcare.

5. **Introduction to Medical Data and Data Processing**
   This course highlights how data standards, sources (traditional and contemporary), and applications in healthcare allow interoperability and information flows across different IT systems.

The comprehensive curriculum ensures that students gain proficiency in using data effectively, enhancing patient outcomes through data management and analytics while fostering seamless information flow across healthcare IT systems. By empowering medical students with these essential skills, the Minor in Biomedical Informatics positions them to lead the way in shaping the future of healthcare delivery.