

HKU Med LKS Faculty of Medicine School of Biomedical Sciences 香港大學生物醫學學院

> Job placement assurance after graduation \*

Articulation to HKU MBBS and other local or overseas degree programmes \*



# World-class<br/>Biomedical<br/>Data Science<br/>Education@HKUMed

**BSc(Bioinformatics)** 

Guaranteed paid summer internships

Research or exchange opportunities at top overseas universities



\*Subject to approval and/or conditions set by School of Biomedical Sciences (SBMS)

# **Admission Requirement**

# **For JUPAS**

**Consideration of Other Factors:** 

In addition to satisfying the University entrance requirements, candidates for admission shall satisfy all of the following requirements in HKDSE:

Achieve the level of performance in the four core subjects as below:

| SUBJECT   | MIN. GRADE   |  |  |  |
|---|--------------|--|--|--|
| English   | 4            |  |  |  |
| Chinese   | 3            |  |  |  |
| Mathematics   | 4            |  |  |  |
| Liberal Studies / Citizenship<br>and Social Development | 2 / Attained |  |  |  |

Attain a minimum of level 3 in two electives<sup>#</sup>, with at least one elective subject in Biology or Chemistry or Combined Science with Biology component or Combined Science with Chemistry component.

The best 6 subjects of HKDSE will be taken into consideration for admission.

#Mathematics Extended Part (Module 1 (M1) / Module 2 (M2)) will be recognised as equivalent to a full elective subject.



In addition to satisfying the University Entrance Requirements including academic, English language and second language requirement, candidates for admission shall satisfy the following subject requirements:

• High School Level Chemistry or Biology (e.g. GCE/IAL Chemistry or Biology, or IB Higher Level Chemistry or Biology)

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- High School Level Mathematics (e.g. GCE/IAL Mathematics, or IB Higher Level/Standard Level "Mathematics: Analysis and Approaches" / "Mathematics: Applications and Interpretation")
- Preference for First Choice Applicants

Competitive Score for IB Diploma and GCE/International A-level^

- IB: 37
- GCE/IAL: 2A\*1A (excluding Chinese and English language subjects)

^Competitive Score refers to the score which most successful candidates achieved over the past few years. However, achieving the Competitive Score does not guarantee admission to the programme as admission decisions are based on a number of factors.



For Non JUPAS

# **Curriculum Structure**

|        | Sep  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау   | Jun | Jul | Aug |
|--------|--|-----|-----|-----|-----|-----|-----|-----|---|-----|-----|-----|
| Year 1 | Bioinformatics Core courses (24 credits)<br>Common Core courses (24 credits)<br>Language Enhancement courses (12 credits)  |     |     |     |     |     |     |     | Summer Internship<br>( HK / Overseas / Industrial ) |     |     |     |
| Year 2 | Bioinformatics Core courses + Electives (36 - 42 credits)<br>Common Core courses (12 credits)<br>Language Enhancement courses (6 credits)<br>Research Immersion for selected students (6 credits)  |     |     |     |     |     |     |     | Summer Internship<br>( HK / Overseas / Industrial ) |     |     |     |
| Year 3 | Bioinformatics Core courses + Electives (60 credits)<br>OR Overseas Exchange<br>OR Articulation to HKU MBBS or other local / overseas degree programmes *<br>Bioinformatics Core courses + Electives (48 credits)<br>Capstone project (12 credits) |     |     |     |     |     |     | s * | Summer Internship<br>( HK / Overseas / Industrial ) |     |     |     |
| Year 4 |  |     |     |     |     |     |     |     |   |     |     |     |



Minor Options and Electives



Strong Academic and Research Support



Professional Recognition and Career Prospects

With a variety of choices for elective subjects, students may opt to take one or more minor(s) offered across the whole university, including these two minors offered within the Bioinformatics curriculum:

## **Minor in Digital Health**

Example courses:

- Artificial Intelligence in Medicine
- Digital Health
- Biomedical Signal Processing and Modelling in Biomedical Applications

## Minor in Biomedical Data Science

Example courses:

- Sequence Bioinformatics
- Global Health Informatics
- Statistical Machine Learning

- Scholarship available to students: Genomic Science Prize for Bioinformatics students.
- Early exposure to research-based project with 1 on 1 supervision.
- Subsidized research and industrial internship starting from Year 1.
- Credit-bearing research experience for selected students from Year 2.
- Articulation to HKU MBBS and other overseas degree programmes.\*
- Intercalation to HKU Master of Public Health Programme.\*

Graduates will be equipped with practical and transferable skills that are in high demand in research, hospitals and the healthcare industry, both locally and internationally.

Here are some examples of tasks that our graduates can manage:

- Interpreting genetic testing results from patients and reporting findings to help clinicians to make treatment decisions.
- Identifying patterns in epidemic outbreak-based electronic records of passengers on public transport in order to guide pandemic prevention strategies.
- Predicting how novel compounds interact with proteins to help identify new targeted therapies for diseases.