# **BSc Biomedical Informatics**

BSc Biomedical Informatics is an undergraduate degree programme, taught in English, delivered by academics from Zhejiang University and the University of Edinburgh at the new Zhejiang International Campus in Haining. Successful students will have the opportunity to graduate with a dual degree from Zhejiang University and the University of Edinburgh.

## **Undergraduate Opportunities 2025**

http://zje.zju.edu.cn



#### **Programme overview**

# **Year 1** - Key concepts in the Biological and Biomedical Informatics

#### Integrative Biomedical Sciences 1

This course will develop a foundational core biological knowledge and understanding that emphasises the importance of biology in the context of a biomedical informatics background. Teaching will be delivered through lectures/seminars and supported by extensive small group sessions including facilitated discussions and tutorials led by academic staff.

#### Introduction to Cellular and Molecular Biology 1

This course will develop foundational cellular and molecular knowledge, investigating what is known about cellular structure, function and behaviour and how cells form the basis of life.

#### Introduction to Biomedical Informatics 1

This course aims to provide students with an overview of the fundamental technological concepts of Biomedical Informatics using realworld applications as examples. The course will lay a strong technical and computational foundation in the areas of operating systems version control, and programming. Those skills will be taught with a view towards biomedical applications and examples, wherever possible, drawn from the biomedical field.

#### Year 2 - Foundational understanding of Biomedical Informatics and its importance in the wider biomedical field

In year 2 the focus is on building foundational knowledge in Biomedical Informatics and data science, and linking through to physiology, genetics, genomics and proteomics:

- Databases and Software Technology
- Genomics and Proteomics
- Applied Data Sciences 2
- Integrative Functions of Body Systems 2
- Biomedical Genetics 2

#### Year 3 - Developing knowledge through experiment

In year 3, the curriculum includes three compulsory courses:

- Integrative Biomedical Sciences 3
- Computational and Systems Biology
- Biomedical Informatics 3

Students will also study two year 3 IBMS/BMI elective options (20 credits each Semester 1

Year 3 aims to be an exciting exploration of the application of biomedical informatics to biomedical sciences, facilitating student development by learning from experiment in key areas for application.

#### Year 4 - Research in practice

In the final year of the programme students focus on key compulsory courses and optional electives in Biomedical Informatics including a project where Biomedical Informatics approaches are applied to a research question.

The final year of the programme aims to develop application of practical biomedical informatics research skills to address key research questions in biomedical science.

Examples of these courses are:

- Biomedical Informatics 4
- Practical Bioinformatics in Biomedical/ Medical/Clinical Research
- Biomedical Informatics Elective
- Biomedical Informatics Project Preview Dissertation
- Biomedical Informatics Project
- Biomedical Informatics Portfolio

We cannot guarantee that all courses will run each year, and will notify applicants of any changes to the programme structure and courses as soon as possible.





# **WORLD-CLASS PARTNERSHIP**

### **Zhejiang University - University of Edinburgh**

Translating innovative research into disease diagnosis, treatment and prevention. Learn more: http://zje.zju.edu.cn

The Zhejiang University - University of Edinburgh (ZJE) Institute provides innovative teaching and state of the art research in Biomedical Informatics in brand new facilities at the Zhejiang University International Campus in Haining, situated between Shanghai and Hangzhou.

What do I need to get in?

You will find our most up to date entry requirements at: https://zje.zju.edu.cn/zje/EntryRequirements/list.htm

Financial requirements

Find information on fees at:

https://zje.zju.edu.cn/zje/FeesandScholarships/list.htm

Scholarships are available

Find information on scholarships at:

https://zje.zju.edu.cn/zje/FeesandScholarships/list.htm

How do I apply?

Find information on applying to the programme at:

https://zje.zju.edu.cn/zje/Howtoapply/list.htm

#### **Contact us**

If you would like further information about our BSc Biomedical Informatics at the Zhejiang University - University of Edinburgh Institute, please contact us at:

#### Email: xiaohanhuang@intl.zju.edu.cn Address:

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Instagram: https://www.instagram.com/zje\_institute

ZHEJIANG UNIVERSITY WAS FOUNDED AS THE QUISHI ACADEMY IN

ASSOCIATED TEACHING HOSPITALS

7 AFFILIATED HOSPITALS

ONE OF THE
TOP3
UNIVERSITIES
IN CHINA

THE UNIVERSITY OF EDINBURGH WAS FOUNDED IN

1503 RANKED 27TH IN THE WORLD

IN THE QS WORLD UNIVERSITY RANKINGS 2025

