
JOINT DEGREE PROGRAMME (JDP) NUS BACHELOR OF SCIENCE (HONOURS) IN LIFE SCIENCES WITH UNIVERSITY OF DUNDEE

1. Overview of Programme

This Joint Degree Programme (JDP) National University of Singapore (NUS) Bachelor of Science (Honours) in Life Sciences [BSc (Hons)] with University of Dundee (UoD) is designed to be completed in four years, and to be taught in NUS and UoD. The Programme combines the strengths of both universities' undergraduate curricula, integrates overseas experience into the undergraduate studies, and awards a jointly validated BSc (Hons) degree qualification.

NUS students in this JDP will complete the degree requirements as per that of NUS BSc (Hons) degree in Life Sciences. Participants will spend the first two-and-a-half years in NUS before moving to and staying at UoD for three regular semesters (i.e. the 6th to 8th semesters inclusive of their course of undergraduate study). This study abroad segment thus includes the Honours year.

2. A Programme in Drug Discovery and Design for the Biopharmaceutical Industry

Singapore has ventured into the biopharmaceutical manufacturing for over a decade, and in recent years substantially moving into the field of drug discovery. To enhance the biopharmaceutical manufacturing and to complement the development of clinical trial, trained professionals with the repertoire of relevant skill sets are crucial. This JDP enables NUS students to experience and be trained in research projects of industry standard and scale in drug optimization and design.

Life Sciences at the UoD is the highest-rated for Biological Sciences in the UK. The Drug Discovery Unit (DDU) of the UoD School of Life Sciences is actively developing drugs for the treatment of neglected tropical diseases including malaria, leishmaniasis, Chaga's disease, African sleeping sickness and tuberculosis and translating innovative drug targets in oncology, eczema, type-2 diabetes, anti-bacterials and anti-virals.

[University of Dundee](#) | [School of Life Sciences](#) | [Drug Discovery Unit](#)

Participants in this JDP are set to conduct their Honours year research project in UoD focusing on drug discovery and development, jointly supervised and assessed by the faculty members of both universities.

3. JDP Requirements

NUS participants in this JDP would complete in NUS – 52MC (Modular Credits) of Major requirements, 8MC of Faculty requirements, 20MC of General Education, and 20MC of Unrestricted Elective Modules. In UoD, NUS students would read 35MC towards the Major requirements and 25MC towards the Unrestricted Elective Modules.

Please refer to the following summary of programme requirements and the recommended study plan for this JDP on Page 3.

Graduation Requirements	NUS BSc (Hons) in Life Sciences	
	Single Degree	Joint Degree
Major	84 MCs	87 MCs
Faculty Requirements	8 MCs	8 MCs
General Education	20 MCs	20 MCs
Unrestricted Free Electives	48 MCs	45 MCs
Total	160 MCs	160 MCs

4. Admissions

Open to Year 1 Life Sciences Major in NUS Faculty of Science.

Students in NUS Faculty of Science with primary major in Life Sciences may apply to enter this programme in the first year. Life Sciences Major students in the senior years may apply but the study plan may deviate as scheduled. All applicants will undergo a selection process and an interview to assess their academic competencies, aptitude and suitability for the programme, as well as other relevant criteria.

5. Continuation and Exiting the Programme

NUS students in this JDP must maintain a CAP of 3.50 or above (out of 5.00) for the BSc (Hons) degree. A student whose CAP falls below 3.50 for any semester will be required to leave the programme, resulting in a termination to the JDP candidature. The student may then resume and complete the default BSc or BSc (Hons) degree in NUS, the latter if the student meets the Honours requirements and wishes to pursue the Honours class.

NUS students in this programme can also choose to withdraw and continue with the default BSc or BSc (Hons) degree study, the latter if the student meets the Honours requirements and wishes to pursue Honours.

6. Application to AY2018/2019 Intake

The next application and intake window is in August 2018, for the freshman cohort. Applicants should have a good background in biology and shortlisted applicants will be required to attend an interview. An interim intake will be scheduled this Semester 2 AY2017/2018 for current Life Sciences Majors in the Year 2, with a CAP of at least 3.50.

7. Enquiry

Please contact Life Sciences Enquiry.

Tel: 6516 2698

Email: dbsbox2@nus.edu.sg

Schedule for Completion of BSc (Hons) in Life Sciences Matriculation Cohort AY2017/2018

JDP Study Plan for BSc (Hons) in Life Sciences with the University of Dundee.

Numbers in [] indicates Modular Credits (MC).

	Semester	At NUS	At UoD
YEAR 1	1 st Semester (Sem 1) & 2 nd Semester (Sem 2)	LSM1102 Molecular Genetics [4] LSM1105 Evolutionary Biology [4] LSM1106 Molecular Cell Biology [4] CM1121 Organic Chemistry 1 [4] ST1232 Statistics for Life Sciences [4] <u>Faculty Requirements:</u> Either CS1010 (or variant) OR COS2000 for Computational Thinking [4] SP1541 Exploring Science Communication through Popular Science [4] General Education Modules [5X4=20]	
	3 rd Semester (Sem 1) & 4 th Semester (Sem 2)	LSM2191 Laboratory Techniques in Life Sciences [4] LSM2234 Physical Concepts in Biology [4] LSM2241 Introductory Bioinformatics [4] Either LSM2232 Genes, Genomes and Biomedical Implications OR LSM2233 Cell Biology [4] Unrestricted Elective Modules [20] - Including CM2121 Organic Chemistry 2	
YEAR 3	5 th Semester (Sem 1)	LSM3211 Fundamental Pharmacology [4] LSM3225 Molecular Microbiology in Human Diseases [4] LSM3231 Protein Structures and Functions [4] LSM3243 Molecular Biophysics [4]	
	6 th Semester (Sem 2)		<u>UoD Modules (in UoD credits)</u> {Grade-and-Credit-Transfer; equivalent to 20MC} BS32007 Organic Synthesis (15 credits) BS32003 Drug Discovery and Development (15 credits) BS32012 Project B/Lab Mini-project (15 credits) BS32010 Applied Bioinformatics (15 credits)
YEAR 4	7 th Semester (Sem 1) & 8 th Semester (Sem 2)		<u>UoD Modules (in UoD credits)</u> {Grade-and-Credit-Transfer; equivalent to 40MC} BS41004 Research Project: Biological Sciences (40 credits) BS41005 Research Skills in Biological Sciences (20 credits) BS31004 Biochemistry and Cell Biology (15 credits) BS42004 Advanced Modern Drug Discovery (15 credits) BS42011 Advanced Organic Chemistry (15 credits) One BS4xxxx course (15 credits)

Note:

To complete in NUS – 52MC of Major requirements, 8MC of Faculty requirements, 20MC of General Education, and 20MC of Unrestricted Elective Modules. In UoD, NUS students would read 35MC towards the Major requirements and 25MC towards the Unrestricted Elective Modules.