## Bachelor of Science (Pharmaceutical Science) For Cohort AY2021/22 onwards

University and College Requirements		Major Requirements	Unrestricted Electives
Common Curriculum comprising of 13 courses:  Asian Studies  Artificial Intelligence  Communities and Engagement  Digital Literacy  Design Thinking  Humanities  Data Literacy  Scientific Inquiry I  Social Sciences  Writing  Two Interdisciplinary Courses of Choice	(Major 4 Units)	PHS1101 The Billion-Dollar Pill – Bench to Bedside Drug Development	Unrestricted Elective (UEs) e.g.
	Level 2000 (Major 24 Units)	<ul> <li>Essential Courses</li> <li>PHS2101 Physiology for Pharmaceutical Science</li> <li>PHS2102 Physicochemical and Biochemical Principles of Drug Action</li> <li>PHS2103 Essentials of Pharmaceutical and Synthetic Chemistry</li> <li>PHS2104 Macromolecules in Pharmaceutical Science</li> <li>PHS2105 Principles of Pharmaceutical Formulations I</li> <li>PHS2191 Laboratory Techniques in Pharmaceutical Science I</li> </ul>	For students interested in research:  PHS3288 Undergraduate Research Opportunities Programme in Science (UROPS) in Pharmaceutical Science I  PHS3289 UROPS in Pharmaceutical Science II (https://www.science.nus.edu.sg/undergraduates/undergraduate-research/urops/)
	Level 3000 (Major 16 Units)	PHS3101 Principles of Pharmaceutical Formulations II     PHS3102 Principles of Drug Design and Development     PHS3191 Laboratory Techniques in Pharmaceutical Science II     LSM3211 Fundamental Pharmacology	For students interested in internship Undergraduate Professional Internship Programme (UPIP) (https://www.science.nus.edu.sg/undergraduates/internships/upip/):
	Level 4000 (Major 16 Units)	<ul> <li>Essential Courses</li> <li>PHS4101 Pharmacokinetics and Biopharmaceutics</li> <li>PHS4121 Regulation of Healthcare Products</li> <li>Elective Courses (Pass any 8 Units from the following)</li> <li>PHS4201 Microbiology for Pharmaceutical Science</li> <li>PR4204 Special Drug Delivery</li> <li>PR4205 Bioorganic Principles of Medicinal Chemistry *</li> <li>PR4207 Applied Pharmacokinetics and Toxicokinetics</li> <li>PHS4288 Research Project in Pharmaceutical Science (8 Units) *</li> <li>PHS4991 Exchange Enrichment Level 4000</li> </ul>	<ul> <li>PHS2310 FOS UPIP 1ST</li> <li>PHS2312 FOS UPIP 2S1 (12 Units)</li> <li>PHS2313 FOS UPIP 2S2 (12 Units)</li> <li>PHS3310 FOS UPIP 2ST</li> <li>PHS3312 FOS UPIP 3S1 (12 Units)</li> <li>PHS3313 FOS UPIP 3S2 (12 Units)</li> <li>PHS4310 FOS UPIP 3ST</li> <li>PHS4312 FOS UPIP 4S1 (12 Units)</li> <li>PHS4313 FOS UPIP 4S2 (12 Units)</li> </ul>
52 Units +		60 Units +	48 Units +

To graduate with a Major in Pharmaceutical Science, student must have read and passed at least one of the following:

- (1) PHS3288/PHS3288R or
- (2) PHS4288\* or
- (3) Any UPIP Course\*\*
- (4) Any NOC Internship Course
- \* PHS4288 can be double-counted towards major requirements.

<sup>\*\*</sup> Students who have passed a FASSIP course before switching to a primary major in Pharmaceutical Science would be deemed to have fulfilled this requirement.

<sup>#</sup>To be confirmed.