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

<table>
<tr><th>University and College Requirements</th><th colspan="2">Major Requirements</th><th>Unrestricted Electives</th></tr>
<tr><td rowspan="4">Common Curriculum comprising of 13 modules:
• Asian Studies
• Artificial Intelligence
• Communities and Engagement
• Digital Literacy
• Design Thinking
• Humanities
• Data Literacy
• Scientific Inquiry I
• Scientific Inquiry II
• Social Sciences
• Writing
• Two Interdisciplinary Modules of Choice</td><td>Level 1000

(Major 4 MCs)</td><td>Essential Module
• PHS1101 The Billion-Dollar Pill – Bench to Bedside Drug Development</td><td rowspan="4">Unrestricted Elective Modules (UEMs)

e.g.

For students interested in research:
• PHS3288 Undergraduate Research Opportunities Programme in Science (UROPS) in Pharmaceutical Science I
• PHS3289 UROPS in Pharmaceutical Science II

For students interested in internship -- Undergraduate Professional Internship Programme (UPIP) (https://www.science.nus.edu.sg/undergraduates/internships/upip/):
• PHS2310 FOS UPIP 1ST
• PHS2312 FOS UPIP 2S1 (12 MCs)
• PHS2313 FOS UPIP 2S2 (12 MCs)
• PHS3310 FOS UPIP 2ST
• PHS3312 FOS UPIP 3S1 (12 MCs)
• PHS3313 FOS UPIP 3S2 (12 MCs)
• PHS4310 FOS UPIP 3ST
• PHS4312 FOS UPIP 4S1 (12 MCs)
• PHS4313 FOS UPIP 4S2 (12 MCs)</td></tr>
<tr><td>Level 2000

(Major 24 MCs)</td><td>Essential Modules
• PHS2101 Physiology for Pharmaceutical Science
• PHS2102 Physicochemical and Biochemical Principles of Drug Action
• PHS2103 Essentials of Pharmaceutical and Synthetic Chemistry
• PHS2104 Macromolecules in Pharmaceutical Science
• PHS2105 Principles of Pharmaceutical Formulations I
• PHS2191 Laboratory Techniques in Pharmaceutical Science I</td></tr>
<tr><td>Level 3000

(Major 16 MCs)</td><td>Essential Modules
• PHS3101 Principles of Pharmaceutical Formulations II
• PHS3102 Principles of Drug Design and Development
• PHS3191 Laboratory Techniques in Pharmaceutical Science II
• LSM3211 Fundamental Pharmacology</td></tr>
<tr><td>Level 4000

(Major 16 MCs)</td><td>Essential Modules
• PHS4101 Pharmacokinetics and Biopharmaceutics
• PHS4121 Regulation of Healthcare Products
Elective Modules (Pass any 8 MCs from the following)
• PHS4201 Microbiology for Pharmaceutical Science
• PR4204 Special Drug Delivery
• PR4207 Applied Pharmacokinetics and Toxicokinetics
• PHS4288 Research Project in Pharmaceutical Science (8 MCs) *
• PHS4991 Exchange Enrichment Level 4000</td></tr>
<tr><td>52 MCs +</td><td colspan="2">60 MCs +</td><td>48 MCs +</td></tr>
<tr><td colspan="4">Minimum required for graduation = 160 MCs</td></tr>
</table>

To graduate with a Major in Pharmaceutical Science, student must have read and passed at least one of the following:
(1) PHS3288 or
(2) PHS4288* or
(3) Any UPIP/FASSIP module
**PHS4288 can be double-counted towards major requirements.*

(Updated: 11 Feb 2022)