

Annex 2

NEW NUS ENGINEERING+ CURRICULUM Media Factsheet

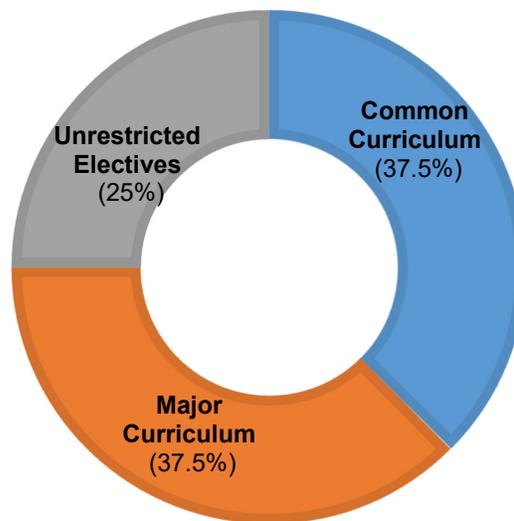
Inaugural Student Cohort: Academic Year 2021/2022

Inaugural Intake: Over 1,500 undergraduate students

Degree Programmes:

- 4-year Direct Honours Degree awarded in accordance with the students' major
- 10 engineering major degree programmes

Overall Curriculum of Engineering Degree:



The Engineering Major requirements will comprise the equivalent of 15 modules, or 37.5% of the degree requirements.

Two Key Features:

(1) New Common Curriculum:

The new Common Curriculum comprises the equivalent of 15 modules, or 37.5% of the degree requirements. It incorporates the six NUS General Education pillars and is designed to impart essential 21st century skills and competencies to all of our students. The pillars are as follows:

6 General Education Pillars

- Singapore Studies
- Cultures and Connections
- Critique and Expression
- Communities and Engagement
- Digital Literacy
- Data Literacy

7 Common Pillars

- Design Thinking
- Maker Space
- Systems Thinking
- Artificial Intelligence
- Creating Narratives
- Project Management
- Sustainable Futures

1 Integrated Project

- Equivalent to two modules

(2) New Flexible Structure:

- The remaining 25% of the overall curriculum will be in the form of Unrestricted Electives, whereby students can choose what they take.
- Students taking any engineering major will be free to pursue a second major or minor across NUS. They will also be free to choose any specialisation accessible from their major.
- Students can take a second major or up to two minors or specialisations within the curriculum space, without the need to increase their workload or extend their candidature.
- Examples of exciting educational pathways:

Major in Mechanical Engineering, Minor in Economics and Minor in Management	This combination can lead Mechanical Engineering students to management consultant positions.
Major in Electrical Engineering and Second Major in Statistics	This combination opens doors to students who are interested to be an artificial intelligence engineer.
Major in Biomedical Engineering and Second Major in Innovation and Design	This combination is recommended for students who are keen to become a med-tech entrepreneur.
Major in Civil Engineering, Minor in Project Management and Minor in Architectural Studies	This combination paves the way for students to become a well-rounded project manager with complementary skillsets.

Before and After: Summary of Key Changes

AY 2020/2021 and before	AY2021/2022 and after
General Education requirements comprise 12.5% of the overall curriculum	New Common Curriculum requirements will comprise 37.5% of the overall curriculum, incorporating newly revamped General Education offerings.

<p>Programme requirements usually comprise 67.5% or more of the overall curriculum</p>	<p>Major curriculum requirements will form 37.5% of the overall curriculum. Part of the previous programme requirements (comprising modules common across engineering majors) has been moved into the new common curriculum space.</p>
<p>Curriculum structure does not readily allow second majors, or minor/specialisation combinations</p>	<p>Curriculum structure comfortably accommodates a wide range of second majors, minors and specialisations.</p> <p>The added flexibility also creates space for students to undertake a variety of enhancement programmes.</p>

Note: Current students from cohorts AY2020/2021 and before will not be impacted by the new curriculum structure. They will continue to fulfil the curriculum and graduation requirements in place at the point of their admission.

Approach to Learning: NUS Engineering is enhancing our teaching and learning by introducing blended learning techniques across a number of our core modules. Throughout the Common Curriculum, our students will be given practical, hands-on experiences and will be exposed to real-world problems.

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