Name: _____          Student ID: _____

Contact Number: _____

**AFG Checklist for CEG Students of AY2020 intake**
**(Direct intake to CEG1 in AY2020 and Common Engrg streamed to CEG2 in AY2021):**

| | Have I fulfilled the following requirements? | MCs | Tick if fulfilled |
|---|---|---|---|
| 1. | **University Level Requirements (ULR):** | **20** | |
| | **General Education Module (GEM)**<br>Students are required to read 20 MCs, consisting of one GEM from each of the five pillars<br>　▪ Human Cultures GEH1xxx<br>　▪ Asking Questions GEQ1000<br>　▪ Quantitative Reasoning GER1000<br>　▪ Singapore Studies GES1xxx<br>　▪ Thinking and Expression GET1xxx<br>　Notes:<br>　a) RVRC residents are allowed to read GEQ1917 Understanding and Critiquing Sustainability (or equivalent) to fulfill the AQ pillar.<br>　b) Students in USP or UTCP are required to read GER1000% from the Quantitative Reasoning pillar in partial fulfilment of the ULR. They are not required to read GE modules from the other four pillars, as they will fulfil their ULR via USP/UTCP. | | |
| 2. | **Unrestricted Elective Module (UEM):** | **32** | |
| | which may be acquired through:<br><br>- ES1103 English for Academic Purposes (compulsory, if not exempted)<br><br>- Additional CEG Technical Electives<br><br>- Innovation and Design Programme (iDP) and/or NUS Overseas Colleges (NOC)<br><br>- Enhancement programmes e.g. UROP via FoE or SoC<br><br>- Minor programmes<br><br>- Double/Second Major<br><br>- University Scholars Programme (USP)<br><br>[Almost all/any modules offered within NUS, can count as/be used to fulfil UEM] | | |
| 3. | **Programme Requirements:** | **108** | |
| | **CEG Core Modules** | | |
| | CG1111 Engineering Principles and Practice I (6 MCs) | | |
| | CG1112 Engineering Principles and Practice II (6 MCs) | | |
| | CS1010 Programming Methodology (4 MCs) | | |
| | CS1231 Discrete Structures (4 MCs) | | |
| | MA1511 Engineering Calculus (2 MCs) | | |
| | MA1512 Differential Equations for Engineering (2 MCs) | | |
| | MA1508E Linear Algebra for Engineering (4 MCs) | | |
| | CG2023 Signals & Systems (4 MCs) | | |
| | CG2027 Transistor-level Digital Circuits (2 MCs) | | |
| | CG2028 Computer Organization (2 MCs) | | |
| | CG2271 Real-Time Operating Systems (4 MCs) | | |
| | CS2040C Data Structures and Algorithms (4 MCs) | | |
| | CS2101 Effective Communication for Computing Professionals (4 MCs) | | |
| | CS2113/T Software Engineering & Object-Oriented Programming (4 MCs) | | |
| | EE2026 Digital Design (4 MCs) | | |

| | | | |
|---|---|---|---|
| | EG2401A Engineering Professionalism (2 MCs) | | |
| | ST2334 Probability & Statistics (4 MCs) | | |
| | CG3207 Computer Architecture (4 MCs) <br> OR <br> CS3230 Design and Analysis of Algorithms (4 MCs) | | |
| | CP3880 Advanced Technology Attachment Programme (12 MCs) OR EG3611A Industrial Attachment (10 MCs) | | |
| | CG4002 Computer Engineering Capstone Project (8 MCs) | | |
| | EE4204 Computer Networks (4 MCs) | | |
| | **CEG Technical Electives** (18 - 20 MCs) <br> - At least 12 MCs Depth modules <br> - CG4001 (12 MCs) can map to [8 MCs TE Depth and 4 MCs UEM] <br> - CP4106/EE4002R can map to 8 MCs TE Depth <br> - All technical electives must add up to (at least) 18 MCs (if took 12 MCs ATAP) or 20 MCs (if took 10 MCs IA) | | |
| | **Have I fulfilled all requirements to graduate?** | **160 (min)** | |

**Other information:**

1.  **Limit on Level 1000 modules:** Students should not read more than 60 MCs of level 1000 modules towards their degree requirements (minimum of 160 MCs for graduation).

2.  **Satisfactory / Unsatisfactory (S/U) option (AY2020 intake):** Refer to S/U homepage within student portal for more information.

3.  **Three pathways for AY2020 intake:** Refer to separate document.