| Name: | Student ID: |
|-----------------|-------------|
| Contact Number: | |

AFG Checklist for CEG Students of AY2020 intake (Poly intake to CEG2 in AY2020):

| | Have I fulfilled the following requirements? | MCs | Tick if fulfilled |
|----|--|-----|-------------------|
| 1. | University Level Requirements (ULR): | 20 | |
| | General Education Module (GEM) | | |
| | Students are required to read 20 MCs, consisting of one GEM from each of the five | | |
| | pillars | | |
| | Human Cultures GEH1xxx Adving Overtions GEO1000 | | |
| | Asking Questions GEQ1000 Overtitative Researing GER1000 | | |
| | Quantitative Reasoning GER1000 Singapore Studies CES1000 | | |
| | Singapore Studies GES1xxxThinking and Expression GET1xxx | | |
| | Notes: | - | |
| | a) RVRC residents are allowed to read GEQ1917 Understanding and Critiquing Sustainability (or equivalent) to fulfill the AQ pillar. 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): exempted 20 MCs | 32 | |
| | which may be acquired through: | | |
| | - <u>ES1103 English for Academic Purposes</u> (compulsory, if not exempted) | | |
| | - Additional <u>CEG Technical Electives</u> | | |
| | - <u>Innovation and Design Programme</u> (iDP) and/or <u>NUS Overseas Colleges</u> (NOC) | | |
| | - Enhancement programmes e.g. UROP via <u>FoE</u> or <u>SoC</u> | | |
| | - <u>Minor programmes</u> | | |
| | - <u>Double/Second Major</u> | | |
| | - <u>University Scholars Programme</u> (USP) | | |
| | [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) | | |
| | CS2112/T Software Engineering & Object Oriented Programming (4 MCs) | - | |
| | | 1 | 1 |
| | CS2113/T Software Engineering & Object-Oriented Programming (4 MCs) EE2026 Digital Design (4 MCs) | | |

| - All technical electives must add up to (at least) 20 MCs Have I fulfilled all requirements to gradu | 160 (min) | |
|---|-----------|--|
| - CG4001 (12 MCs) can map to [8 MCs TE Depth and 4 MCs UEM] - CP4106/EE4002R can map to 8 MCs TE Depth | | |
| - At least 12 MCs Depth modules | | |
| CEG Technical Electives (20 MCs) | | |
| CG4002 Computer Engineering Capstone Project (8 MCs) EE4204 Computer Networks (4 MCs) | | |
| - 3-months internship (CP3200 SIP/EG3612 VIP) | | |
| - CEG technical elective | | |
| - MA1301 Introductory Mathematics (4 MCs) | | |
| - PC1222 Fundamentals of Physics II (4 MCs) | | |
| following, totaling (at least) 10 MCs: | | |
| CS3230 Design and Analysis of Algorithms (4 MCs) In lieu of industrial attachment (10 MCs), students may read a combination of the | | |
| OR CS2220 Design and Analysis of Algorithms (4 MCs) | | |
| CG3207 Computer Architecture (4 MCs) | | |
| ST2334 Probability & Statistics (4 MCs) | | |

Other information:

1. Poly graduates admitted to CEG in AY2020/21:

1.1 *Poly students with the relevant Diploma Plus certificate in Mathematics (i.e. exempted from MA1301) will need to read an additional Technical Elective/internship (in lieu of MA1301).

1.2 Poly students, admitted to CEG in AY20/21, will follow CEG AY20/21 curriculum and may be eligible for the following exemptions (24 - 34 MCs), depending on his/her diploma from the polytechnic.

| Unrestricted Elective Module (UEM) x 5 | 20 MCs (up to) 14 MCs | |
|--|--------------------------|--|
| Programme Requirements | | |
| CS2101 Effective Communication for Computing Professionals | 4 MCs | |
| CG1111 Engineering Principles and Practice I | 6 MCs | |
| CS1010 Programming Methodology | 4 MCs | |

- 2. **Limit on Level 1000 modules:** Students should <u>not read more than 60 MCs of level 1000 modules</u> towards their degree requirements (minimum of 160 MCs for graduation).
- 3. **Satisfactory / Unsatisfactory (S/U) option (AY2020 intake):** Refer to <u>S/U homepage within student portal</u> for more information.
- 4. Three pathways for AY2020 intake: Refer to separate document.