Gan Eng Seng School

Secondary 2
Meet-Parent-Session
Express Course

12 April 2024, Friday

Outline of Presentation

- Holistic Development of Gessians
- Post-Secondary Options
- Sec 3 2025 Subject Combinations
- Streaming Process and Considerations
- Q & A

Life of a Gessian…

Leadership Development

CCAs

ICT-Based Lessons/ Activities

Our Belief In Holistic Education

Academic programmes

Character & Citizenship Education

Physical & Mental Wellness Activities

Not just about academic excellence!

begin WITH THE *end* IN mind

Post 'O'-Level Education Pathways

What's Next after GCE 'O'-levels?
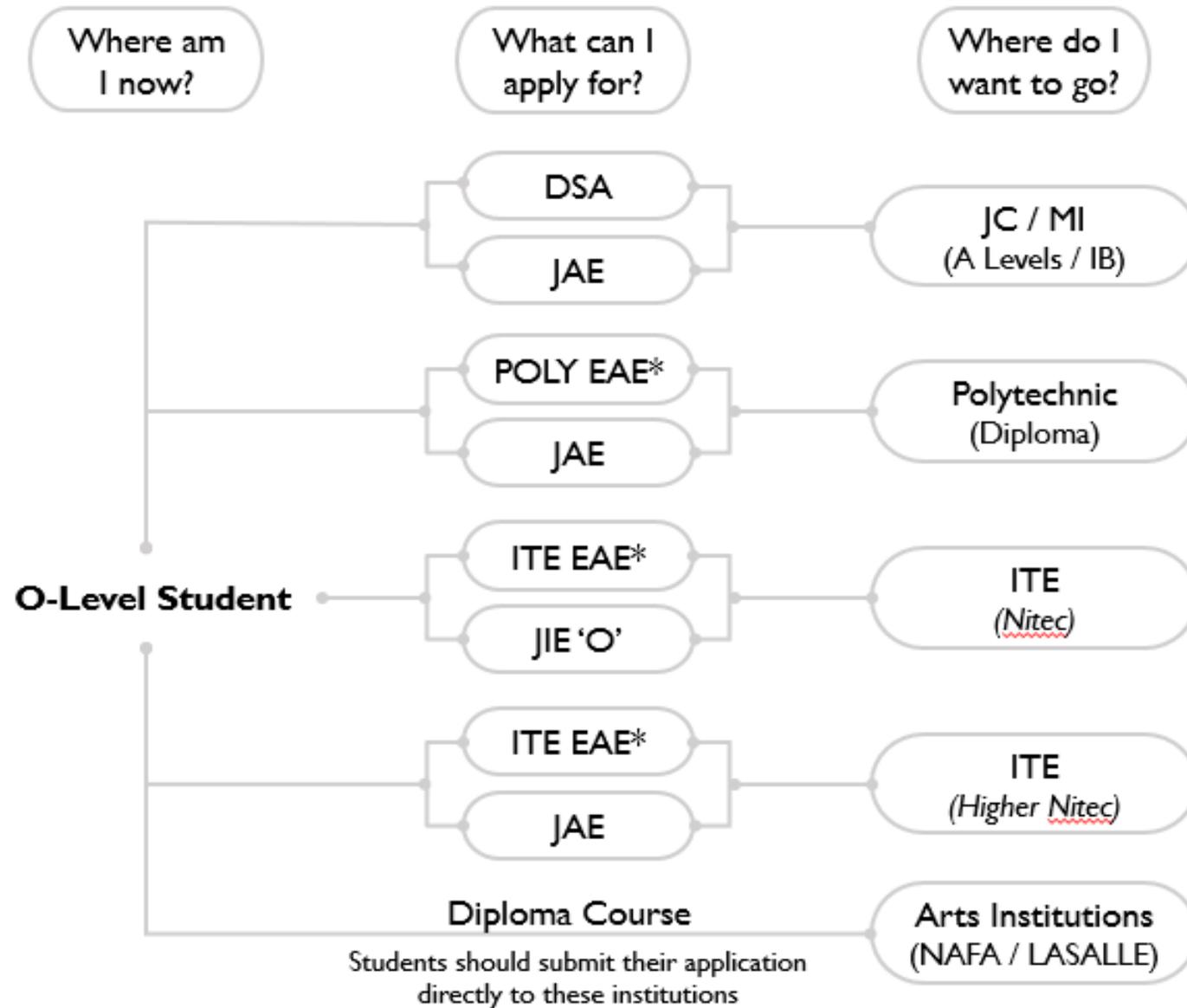
The Pre-Universities Landscape

Why choose a JC/MI?

- You prefer an in-depth study of a specific content area in academic studies.

- You prefer learning that is more conceptual and theoretical.

- You prefer a structured timetable with allocated lectures and tutorials.

- You prefer the routine of a school setting.

JC / MI (A Levels):
Merit-based Admission (JAE)
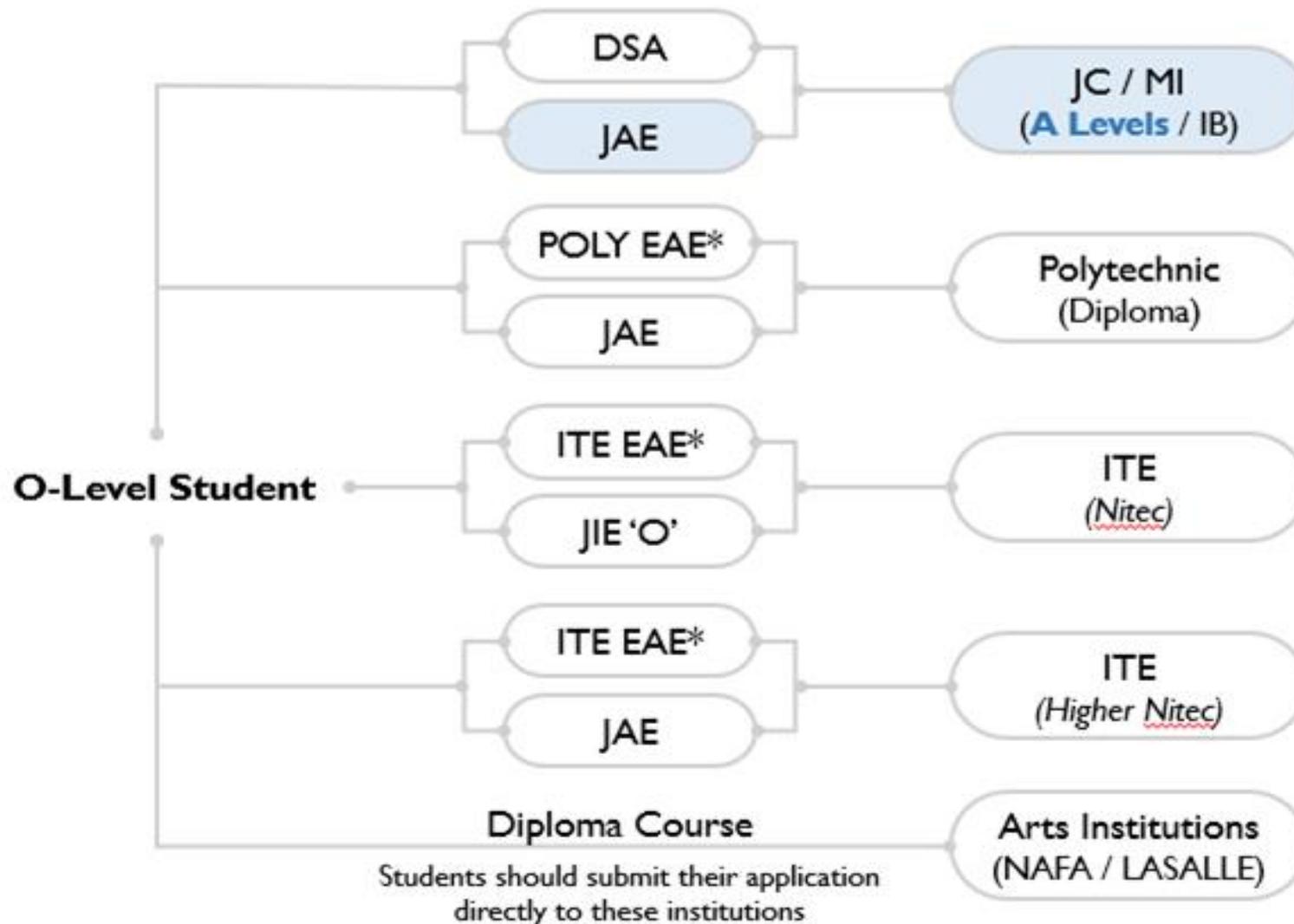
GCE A-Level Programme
Junior Colleges / Millennia Institute

LANGUAGES

Mother Tongue Languages
3rd Languages

KNOWLEDGE
SKILLS

GP

LIFE
SKILLS
CCA, CCE,
VIA, PE

PW

HUMANITIES
& THE ARTS

E.g. Art,
Economics,
Literature in
English,
Geography,
History, Music,
Theatre Studies
& Drama

MATHEMATICS
& SCIENCES

E.g. Biology,
Chemistry,
Physics,
Mathematics,
Computing

KI
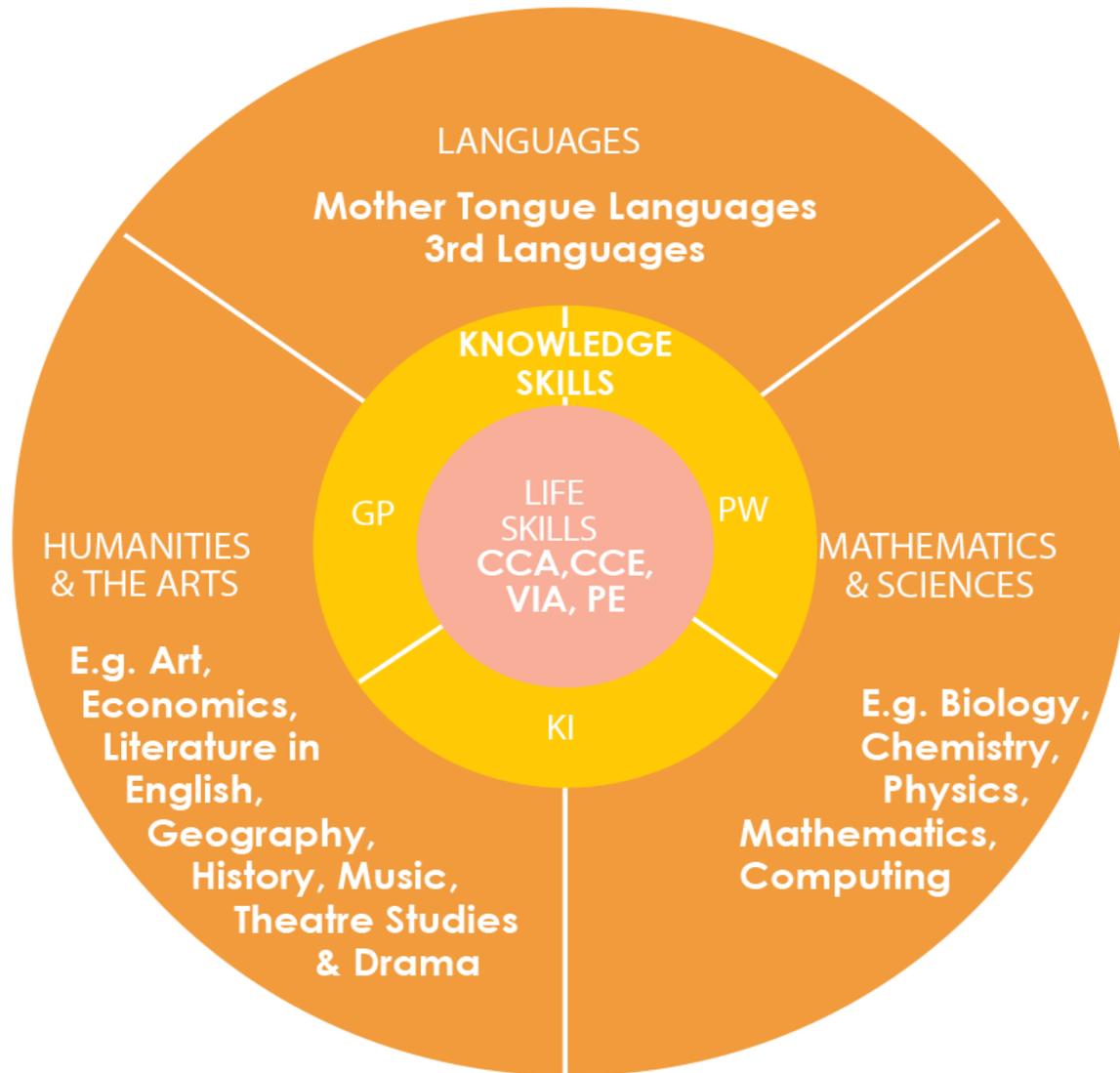
Legend	
CCA	Co-Curricular Activities
CCE	Character & Citizenship Education
PE	Physical Education
GP	General Paper
PW	Project Work
KI	Knowledge & Inquiry
VIA	Values in Action

JC and MI: A-Level Curriculum

H1	H2	H3
Half of H2 subjects in terms of curriculum time or content.	Equivalent to 'A' level subjects prior to 2006.	Subjects with diverse learning opportunities for in-depth study (e.g. advanced content, research, university-level module). You must offer the corresponding subject at H2 level. Replaced the 'S' papers after 2006.

JC and MI: Admission Criteria

L1R5 : For Junior College Course		
L1	First Language	- English/Higher Mother Tongue
R5	Relevant Subject 1	- Humanities/Higher Art/Higher Music/Malay (Special Programme)/ Chinese (Special Programme)/Bahasa Indonesia
	Relevant Subject 2	- Mathematics/Science
	Relevant Subject 3	- Humanities/Higher Art/Higher Music/Mathematics/ Science/ Malay (Special Programme)/Chinese (Special Programme)/ Bahasa Indonesia
	Relevant Subject 4	- Any GCE 'O' Level subjects (except Religious Knowledge)
	Relevant Subject 5	- Any GCE 'O' Level subjects (except Religious Knowledge)

Gross
L1R5 ≤ 20
(before computation of bonus points)

L1R4 : For Millennia Institute Course		
L1	First Language	- English/Higher Mother Tongue
R4	Relevant Subject 1	- Humanities/Higher Art/Higher Music/Mathematics/ Science/ Malay (Special Programme)/Chinese (Special Programme)/ Bahasa Indonesia
	Relevant Subject 2	- Humanities/Higher Art/Higher Music/Mathematics/ Science/ Malay (Special Programme)/Chinese (Special Programme)/ Bahasa Indonesia
	Relevant Subject 3	- Any GCE 'O' Level subjects (except Religious Knowledge)
	Relevant Subject 4	- Any GCE 'O' Level subjects (except Religious Knowledge)

Gross
L1R4 ≤ 20
(before computation of bonus points)

JC and MI: Subject Requirements

Subject Requirements

Subject	Requirement
English Language	A1 to C6
Mother Tongue Language * :	
Chinese Language, Malay Language, Tamil Language	A1 to D7
OR Higher Chinese Language, Higher Malay Language, Higher Tamil Language	A1 to E8
OR Chinese Language 'B' Syllabus, Malay Language 'B' Syllabus, Tamil Language 'B' Syllabus	Merit or Pass
Mathematics:	
Mathematics	A1 to D7
OR Additional Mathematics	A1 to D7

How to calculate bonus points?

Table 1
Computation of Bonus Points

S/No	Type of Bonus Points	No. of Bonus Points	Maximum Bonus Points Allowable	
1	For students seeking admission to JC/MI/Polytechnic/ITE and with the following co-curricular attainments/grades: a. Excellent, A1 – A2 b. Good, B3 – C6	2 points 1 point	Limited to a maximum of **4 Bonus Points** for these 4 types.	Limited to a maximum of **6 Bonus Points**.
2	For students seeking admission to JC/MI courses and with grades of A1 to C6 in both their first languages (i.e. English and a Higher Mother Tongue).	2 points		
3	For students seeking admission to JC/MI courses and with grades of A1 to C6 in Malay/Chinese (Special Programme) (MSP/CSP) or Bahasa Indonesia (BI) as their third language.	2 points		
4	For students from feeder schools if they choose their affiliated Junior College course(s) as their: a. 1st choice, _or_ b. 1st and 2nd choices.	2 points		
5	For students who have applied for the CLEP, MLEP or TLEP and have been selected for the programme.	2 points		

JC and MI: 2023 Net L1R5 Aggregate

Junior College (JC) Courses
(2-Year Duration)

JC Name	A-Level				International Baccalaureate	
	Arts		Science			
	Course Code	Net L1R5 Range for Previous (2023) JAE	Course Code	Net L1R5 Range for Previous (2023) JAE	Course Code	Net L1R5 Range for Previous (2023) JAE
Anderson Serangoon Junior College	39A	6 to 11	39S	4 to 10	-	-
Anglo-Chinese Junior College	22A	4 to 9	22S	2 to 8	-	-
Anglo-Chinese School (Independent)	-	-	-	-	51I	2 to 5
Catholic Junior College	23A	4 to 14	23S	3 to 13	-	-
Dunman High School	44A	4 to 9	44S	2 to 8	-	-
Eunoia Junior College	38A	2 to 8	38S	2 to 6	-	-
Hwa Chong Institution	24A	2 to 5	24S	2 to 4	-	-
Jurong Pioneer Junior College	40A	5 to 17	40S	5 to 14	-	-
Nanyang Junior College	26A	4 to 6	26S	2 to 5	-	-
National Junior College	27A	5 to 8	27S	2 to 7	-	-
Raffles Institution	28A	2 to 5	28S	2 to 4	-	-
River Valley High School	45A	6 to 9	45S	4 to 8	-	-
St. Andrew's Junior College	30A	3 to 10	30S	3 to 9	-	-
St. Joseph's Institution	-	-	-	-	52I	2 to 7
Tampines Meridian Junior College	41A	6 to 13	41S	4 to 13	-	-
Temasek Junior College	32A	7 to 9	32S	3 to 8	-	-
Victoria Junior College	33A	2 to 8	33S	2 to 7	-	-
Yishun Innova Junior College	42A	11 to 19	42S	6 to 20	-	-

Millennia Institute (MI) Courses
(3-Year Duration)

| School Name	A-Level					
	Arts		Commerce		Science	
	Course Code	Net L1R4 Range for Previous (2023) JAE	Course Code	Net L1R4 Range for Previous (2023) JAE	Course Code	Net L1R4 Range for Previous (2023) JAE
Millennia Institute	43A	10 to 20	43C	9 to 19	43S	3 to 17

Source: Courses Offered in 2024 JAE, pg.1

The Polytechnic Landscape

Why Choose Polytechnic Education?

- The classes are more spread-out over the day.

- There are more group projects.

- There is a need for consistency and discipline to maintain grades, as the results are calculated **cumulatively** over the three years.

- There is strong emphasis on practice-based learning.

- There is a larger emphasis on soft skills such as communication, presentation, problem-solving, creative thinking skills.

- The Diploma prepares you for the world of work

Polytechnic:
Merit-based Admission (JAE)
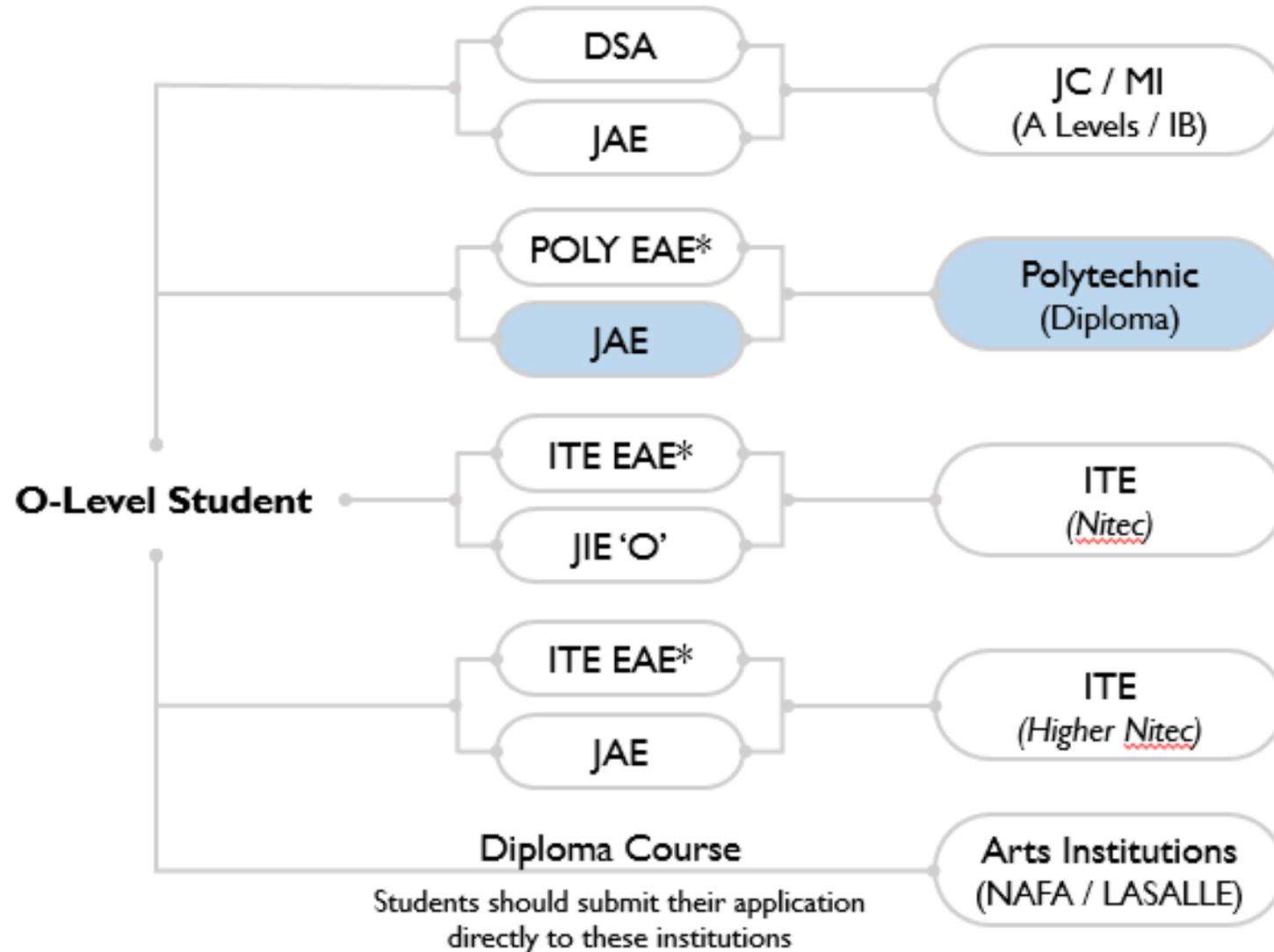
Singapore Polytechnic

Ngee Ann Polytechnic

Temasek Polytechnic

Nanyang Polytechnic

Republic Polytechnic

Poly courses focus on the **development of industry-relevant competencies**

Curriculum is **practice-oriented** and allows the **building of a strong theoretical foundation** and enables **direct application of knowledge and skills to real work**

Students **graduate with a Diploma**

Course Clusters in Polytechnics
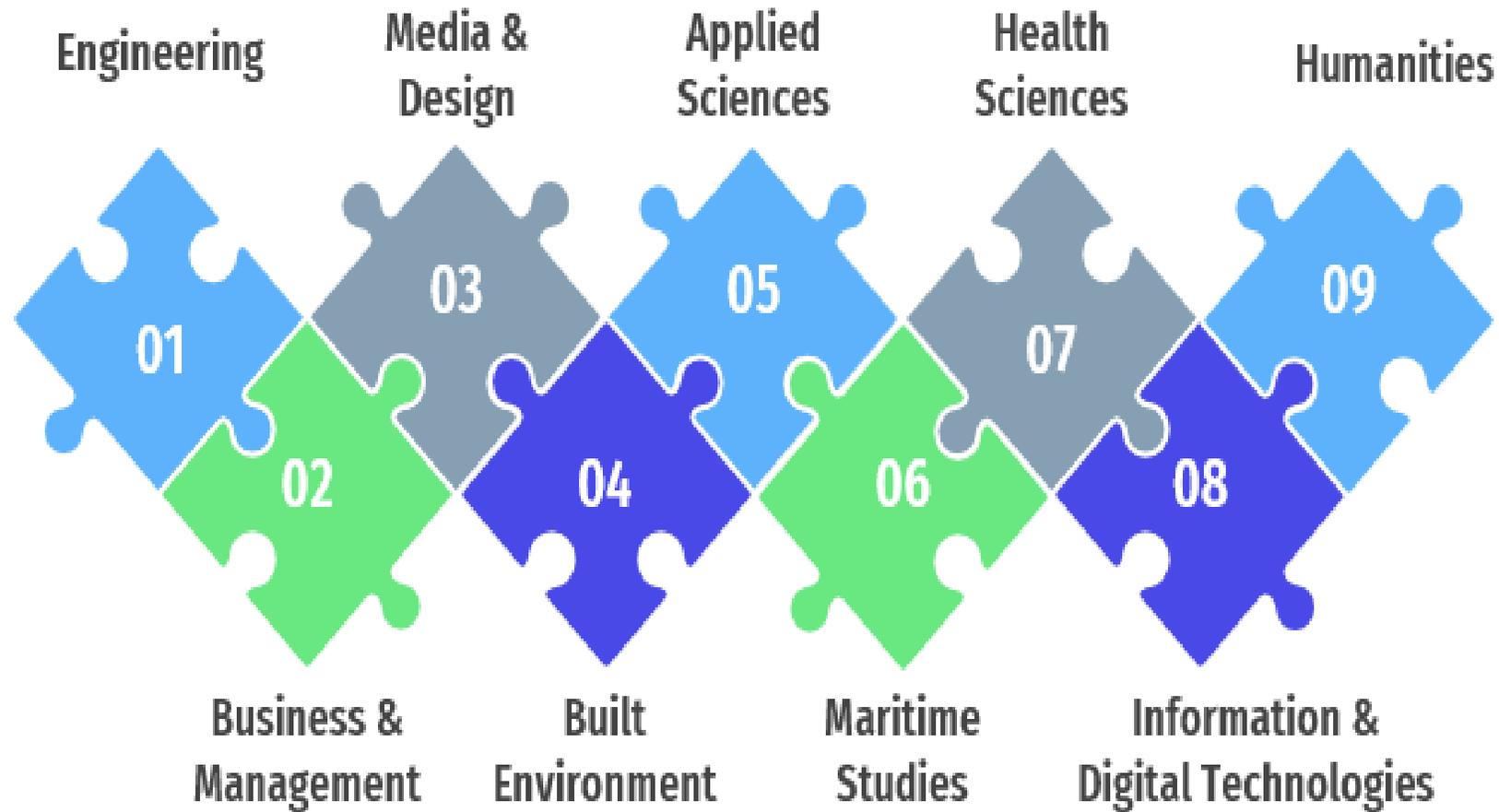
Entry Requirements to the Polytechnics

Net ELR2B2 ≤ 26 and fulfil Minimum Entry Requirements

A
- **Humanities**
- **Media & Design**

B
- **Business & Management**

C
- **Applied Sciences**
- **Engineering**
- **Health Sciences**
- **Information & Digital Technologies**
- **Built Environment**

D
- **Built Environment**
- **Media & Design**

Polytechnics:
Minimum Entry Requirements

Subjects	English Language	Math	Net ELR2B2
Grades	A1 to C6/D7*	A1 to C6/D7*	≤ 26

- ***Minimum Entry Requirement (MER) VARIES across courses.**
- **Relevant Subjects (R2) vary from course to course.**

Selected Cut-Off Points from JAE 2023

Polytechnic	Name of Course	Cut-Off for 2023 JAE
Ngee Ann	Biomedical Science	7
	Pharmaceutical Science	9
	Accountancy	12
	Banking & Finance	10
	Business Studies	8
	Common Business	12
	Aerospace Engineering	18
	Cybersecurity & Digital Forensics	10
	Data Science	10
	Mass Communication	8

Selected Cut-Off Points from JAE 2023

Polytechnic	Name of Course	Cut-Off for 2023 JAE
Singapore	Biomedical Science	7
	Perfumery and Cosmetic Science	11
	Architecture	16
	Accountancy	12
	Banking & Finance	11
	Business Administration	12
	Engineering with Business	11
	Applied AI and Analytics	10
	Cybersecurity & Digital Forensics	12

What's right for your child?

GAN ENG SENG SCHOOL 2025 SEC 3 EXPRESS SUBJECT COMBINATIONS

Why Subject Combination?

Sec 3 subject combination aims to give every Gessian the most appropriate subject combination so that he/she can develop to the best of his/her ability, interests and potential.

Centre-Based Programme for O-Level Computing: Briefing for Sec Two Students

Student Engagement Deck

March 2024

A PRESENTATION BY
MINISTRY OF EDUCATION, SINGAPORE

Hello World!

Want to learn coding
and programming?

Interested in AI
and Emerging Tech?

Passion for creating
digital solutions?

Centre-Based Programme for O-Level Computing

WHAT

Students interested to offer O-Level Computing as a subject in their upper secondary years can now apply to take the subject at designated centres.

HOW

Students may travel to the centres to attend lessons after classes end in their own school. Some lessons may also be held virtually.

WHO SHOULD APPLY

Students with the passion, interest in computing and a good foundation in mathematics are welcomed to apply.

WHAT YOU WILL LEARN: Subject Information

You will learn about Computing Fundamentals, Algorithms and Programming, Spreadsheets, Networking and the Impact of Computing.

At the end of the course, you will take the O-Level Computing Examination, will which consist of 2 papers, a 2 hr written theory paper and a 2 hr 30 min lab-based paper on spreadsheets and programming.
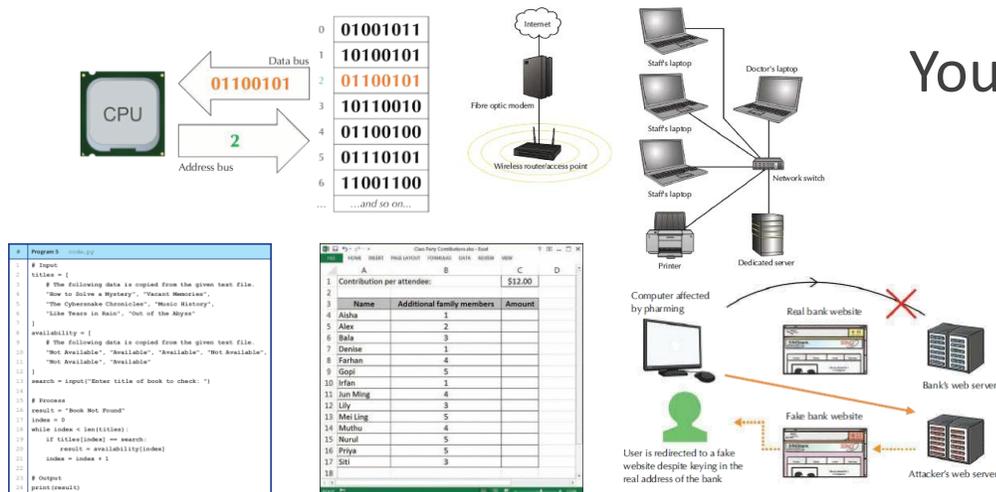
You can find out more from SEAB's website at https://www.seab.gov.sg/home/examinations/gce-o-level/o-level-syllabuses-examined-for-school-candidates-2025 under the subject Computing (7155).

Venue and Schedule

The centre serving Gan Eng Seng School is <u>Clementi Town Secondary School.</u>

Students whose applications are successful will be assigned to a centre based on the zone their schools are in:

The tentative lesson day and timing for the four centres are as follows:

No	Centre	Day and Time (Tentative)
1	Admiralty Secondary School	Tuesday or Thursday, 3 to 3.30 pm onwards
2	Ngee Ann Secondary School	Thursday, 3 to 3.30 pm onwards
3	Clementi Town Secondary School	Tuesday and/or Thursday, 3 to 3.30 pm onwards
4	Zhonghua Secondary School	Tuesday, 3.30 pm onwards

Lessons will be 3 hours per week over 1-2 afternoons, for 2 years, and may take a blended format.

Before Applying

There are many questions one can ask to decide whether to apply to offer the subject. Ask yourself the following questions:

- Do you know what you are going for?

- Will the subject be suitable for you at this juncture?

- Do you have the discipline, time and energy to take up the commitment of offering an external subject over 2 years?

- Have you spoken to your teachers and parents for advice?

- What are your future aspirations?

Eligibility Criteria

All Secondary 2 students can apply. You do not need prior knowledge of coding and programme. To be eligible to offer O-level Computing from Secondary 3, you will need to:

1. Demonstrate consistent good performance in G3/Express Mathematics, as it provides the foundation to learn O-level Computing.
   - You should attain an overall score of at least 60% in Secondary 1 G3/Express Mathematics and an overall pass in G3/Express Mathematics at the end of Secondary 2.

   - If you do not attain an overall pass in G3/Express Mathematics at the end of Secondary 2, the offer may be rescinded.

2. Be recommended by your school to have the commitment, and ability to cope with the overall Secondary 3 academic load, including the demands of taking up an external subject.

3. Provide a personal statement of not more than 200 words to share about your interest to offer O-level Computing.

Important Application Information

Online application at https://for.edu.sg/o-level-comp-centre-based

Read the information sheet for applicants provided to you by your school.

Application opens on 1 Apr 2024.

The **deadline** to apply, with the necessary documentation: **20 May 2024**

Should there be more eligible candidates than available vacancies, computerised balloting will be conducted by MOE to select the successful applicants.

Which Subject Combination?

In selecting the subject combination for your
child/ward, the following should be taken into consideration:

- Understanding future post-secondary options
- Realistic expectations of your child's/ward's ability to cope with the demands of the course
- The academic rigour of the chosen subjects
- Consider child's/ward's needs, interest, preferences and well-being

O Level Samples – Pure Science

B7 **The history of chemical formulae**

The idea that chemical compounds could be represented by formulae was developed in the first part of the nineteenth century.

A French chemist called Joseph Proust developed the Law of Constant Composition in the early 1800s. He noticed that if different masses of metals were heated in air to constant mass, the increase in the mass was proportional to the mass of each metal used. His law states that,

'All samples of a particular chemical compound have the same elemental composition by mass.'

Proust collected data about the change in mass when the metals iron, lead and mercury were heated in air to constant mass.

He used the data to calculate the percentage composition by mass of the metal oxides.

Table 1 shows some data from an experiment to find the increase in mass when iron, lead and mercury are heated.

Table 1

metal	mass of metal before heating/g	mass after heating to constant mass/g
iron	20.0	28.6
	30.0	42.7
lead	25.0	26.9
	30.0	32.3
mercury	25.0	27.0
	40.0	41.6

The Law of Constant Composition does not work for all metals because different oxides may be formed under different conditions.

John Dalton was a British chemist who worked a few years later than Proust. He realised that the Law of Constant Composition could be explained if all compounds contained small particles of each element. This was the beginning of atomic theory. Dalton developed symbols and used them to represent elements and compounds.

oxygen   hydrogen   nitrogen   carbon   sodium

water   hydrochloric acid   nitrogen monoxide
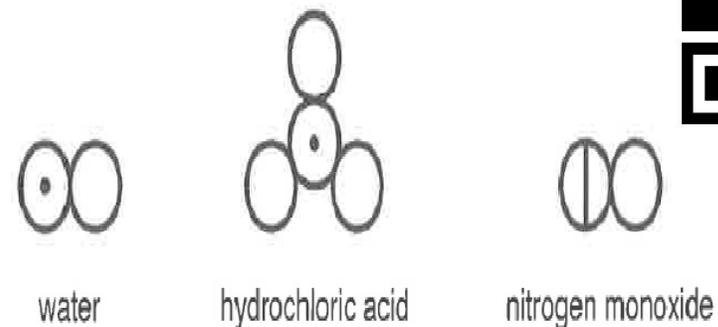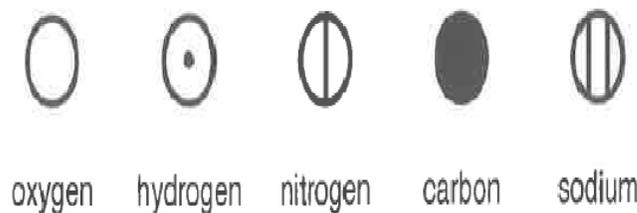
Some of our modern formulae for compounds show that Dalton's formulae were not always correct.

O Level Samples – Pure Geog

(b) Study Fig. 4, which shows the pattern of food consumption in a developed country (DC) and a less developed country (LDC).

Pattern of food consumption in a DC and a LDC
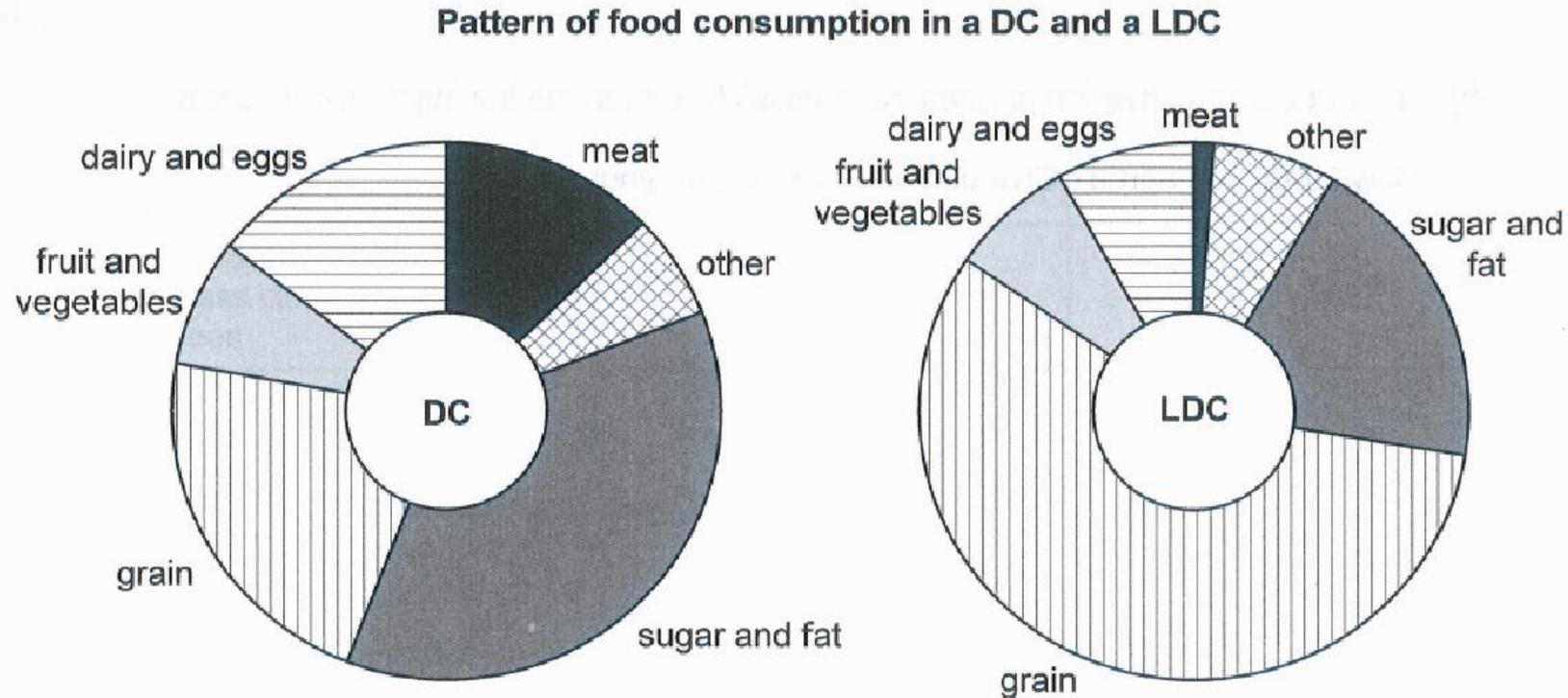
Fig. 4

(i) Using Fig. 4, compare the pattern of food consumption in a DC and a LDC. [5]

(ii) Use the information from Fig. 4 to explain the differences in the pattern of food consumption between a DC and a LDC. [5]

Common Misconceptions About Sec 3 Subject Combinations

- Taking 8 subjects is more "prestigious" than taking 7 subjects
- It's better to take an 8th subject as an "insurance policy"
- Academically stronger students all take 8 subjects
- If my child/ward is strong in math, he/she will also be strong in science
- My child/ward needs to take Biology if he/she wants to be a doctor

Basis Of Sec 3 Subject Allocation Exercise

Subject allocation is based on:

■ **Merit** (student's overall performance for S2 2024)

WA1+WA2+WA3+EYE

Term 1 WA 1 (10%)	Term 2 WA 2 (10%)	Term 3 WA 3 (10%)	Term 4 EYE (70%)

■ MOE mandated examinable subjects – EL, MTL (unless exempted), MA, Sci, Geo, His, Lit, D&T, Art, FCE

■ Student's options and number of students opting for the subject

■ Resource and Staffing

GAN ENG SENG SCHOOL 2025 SEC 3 EXPRESS SUBJECT COMBINATIONS

	Category A 6 / 7 Subjects	Category B 7 Subjects	Category C 8 Subjects	Category D 8 Subjects
Sub 1	English Language			
Sub 2	Mother Tongue (unless exempted)			
Sub 3	Mathematics			
Sub 4	Humanities: Social Studies + Geography Elective OR Social Studies + History Elective **(Students offering Pure Geography must offer History Elective)**			Humanities: Social Studies + Geography Elective
Sub 5	Additional Mathematics **(Student must pass S2 Mathematics overall to be able to offer AM. Student not eligible for AM will be streamed to Category A.)**			
Sub 6	Science (Physics & Chemistry)	Pure Chemistry **(Student must pass S2 Science overall to be eligible to offer Pure Science.)**		
Sub 7	Art **(Max 20 students)** Pure Geography Design and Technology **(Max 20 students)** (Choose 1) **(not all subjects may eventually be offered after the subject option exercise is concluded)** OR Computing **(Selection by MOE)**	Pure Physics or Pure Biology (Choose 1)	Pure Physics or Pure Biology (Choose 1)	Pure Physics
Sub 8			Art **(Max 20 students)** Pure Geography Design and Technology **(Max 20 students)** (Choose 1) **(not all subjects may eventually be offered after the subject option exercise is concluded)** OR Computing **(Selection by MOE)**	Pure Biology

Timeline for Sec 3 (2025) Subject Allocation

12 April	Meet-the-Parent Session Objective: Communicate to students and their parents on subject combinations for 2025.
24 October	Release of report book after End-of-Year Exam and online Option Exercise form (ALL EARS Form Builder) Objective: Allow students to select their desired course based on their overall academic performance and school's available resources
By 27 October	Deadline for Subject Allocation Exercise – submission of choices (5 pm)
05 November	Release of results for Sec 3 (2025) Subject Allocation Exercise
By 08 November	Submission of and Processing Appeal Forms (5 pm)
15 November	Release of Sec 3 (2025) subject allocation appeal via email

How Do I Help My Child Academically?

- Insist on proper English at all times (will help for all subjects)
  - There is a difference between the following text messages:
    - "today we are gg 2 watch movie. I oreadi bought tics and oso ordered popcorn. Pls come on time. Im sure we will have alot of fun."
    - "Today we are going to watch a movie. I have already bought tickets and also ordered popcorn. Please come on time. I'm sure we will have a lot of fun."

How Do I Help My Child Academically?

- Get your child to explain graphs and diagrams from the newspapers to you. As they are explaining, nudge your child to <u>draw conclusions</u> from the data that they are seeing (will help for the sciences and humanities):
  - Go from: the number of people has increased by 90% in the last 5 years.
  - To: the number of people has increased by 90% in the last 5 years, <u>and this means that</u> it has put a greater strain on the country's resources as food production rates have stayed the same.

How Do I Help My Child Academically?

- Every subject is important, <u>including Mother Tongue</u>. If a student is not coping well, measures taken at home can also help.
  - Students will feel this effect particularly in Sec 4 (2nd half), where those who have performed well no longer have to study for Mother Tongue and can focus on their other subjects.
  - Psychological effect of having a good grade in the L1R5 computation.
  - Enforced Mother Tongue days at home.
  - Reading in Mother Tongue – underlining words that they don't know and using the dictionary to find out their meaning in English.

In Summary

1. Know your child's strengths and potentials
2. Continue to emphasise the need to perform well holistically
3. Complement school's efforts in establishing good study habits.
4. Every subject is a good subject.
5. There will be success when the choice is right for your child.

Parents' Resources

- MOE has launched a website that provides tips and guidance on supporting your child/ward in their schooling years.
  https://www.moe.gov.sg/parentkit

Thank You

ONWARD!