



Sec 2

Subject Combination Webinar



Teacher Glendon
Ex-MOE tutor of 10 years

Teacher Clarence
Expert Upper Sec Math tutor

Overmugged

- We work with thousands of students every year, teaching and providing them educational resources to reach their academic goals
- We help Lower Secondary students transition towards Upper Secondary and conquer their National Exams
- **Our Upper Secondary Group Tuition Classes cover:**
 - English
 - Pure Chemistry, Physics, Biology
 - Combined Chem/Phys, Chem/Bio
 - A-Math, E-Math
 - Principles of Accounts



Our Overmugged Team



Upper Sec Tutor Team (Sciences)



Teacher Jason Phang
Biology



Teacher Glendon
Biology



Teacher Shafiq
Chemistry
Combi Sci (Chem/Phys)



Teacher Jarryl
Chemistry
Physics



Teacher AJ
Chemistry



Teacher Stefanie
Chemistry



Teacher Darrell
Chemistry
Physics



Teacher Ashley
Chemistry
Combi Sci (Chem/Phys)



Teacher Abigail
Chemistry



Teacher Pamela
Physics



Teacher Claire
Chemistry
Combi Sci (Chem/Phys)



Teacher Zhi Hao
Chemistry



Upper Sec Tutor Team (Math)



Teacher Jason Yek

Subjects:
E-Math
A-Math



Teacher Clarence

Subjects:
E-Math
A-Math



Teacher Qian Wei

Subjects:
E-Math
A-Math



Teacher Hao Wei

Subjects:
E-Math
A-Math

Upper Sec Tutor Team (English)



Teacher Amira

Subject:
Lower Sec English
Upper Sec English
JC H1 General Paper



Teacher Olivia

Subject:
Lower Sec English
Upper Sec English

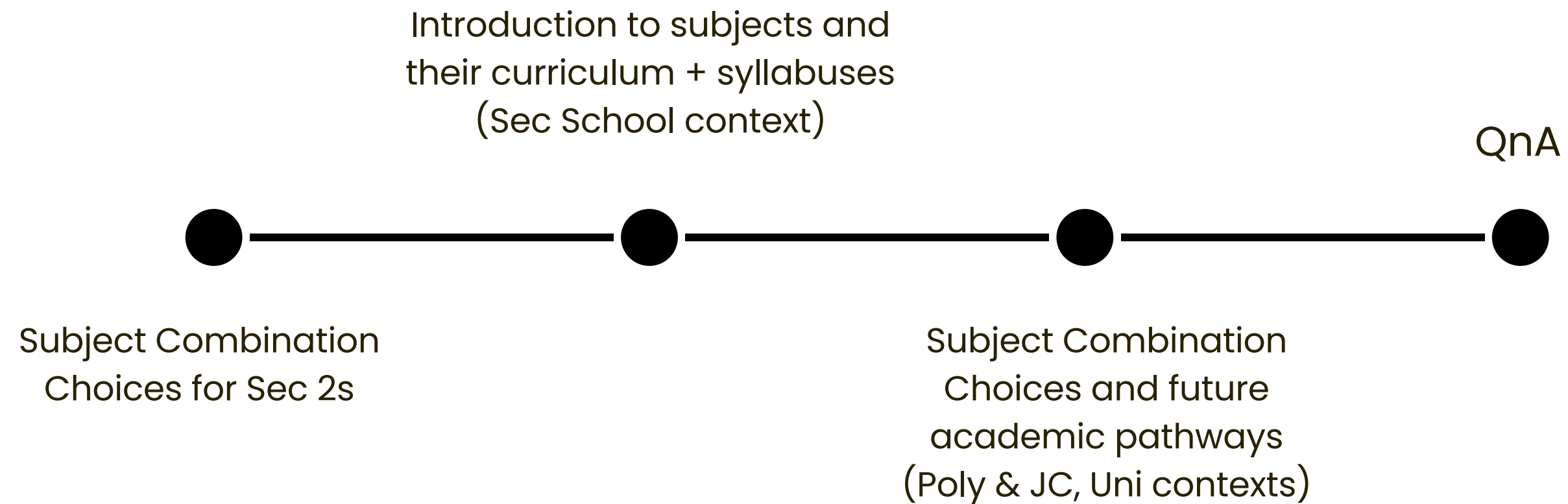


Teacher Zhi Hui

Subject:
Upper Sec English
JC H1 General Paper



Today's Topics



Today's Speakers



Teacher Glendon Ex-MOE Teacher Educator of 10 years

Education Awards and Accolades:
Outstanding Contribution Award from 2017–2021 for his valuable contributions to the school's educational programs.

About Glendon:

Glendon is a former MOE Biology Educator with 6 years of experience. **Well-versed in the local education system, he effectively guides students in choosing subject combinations that align with their academic strengths and future goals.**

At the Secondary IP level, his classes consistently achieved near 100% value-add, with up to 80% scoring A or A* in final exams — reflecting his strong track record in driving academic excellence.



Teacher Clarence

Expert Upper Sec A-Math and E-Math Tutor of 5 years

About Clarence:

Clarence is **passionate about helping students discover their strengths and make informed decisions about their academic pathways.** He believes that with the right support, every student can thrive—not just in mathematics, but in their overall learning journey.

With over 5 years of experience, Teacher Clarence's methods have delivered strong results: over 90% of his students improved by at least 3 grades with two cohorts achieving 80% distinctions in national exams.

01

Subject
Combination
Choices for Sec 2s



Subject Combination configuration

Students taking “O” Levels typical take a minimum of 6 subjects to a maximum of 9 (subject to school’s policies and case by case situations evaluated by the school)

Commonly, students take 7 subjects consisting of:

1. English

2. Mother Tongue Language

3. E-Math

4. Chemistry / Combined Science (C+P / C+B / P+B)

5. Social studies + History/ Geography / Literature

6 + 7. A-Math / Principles of Accounts / D&T / Art / Nutrition and Food Science / Physics / Biology / Pure Humanities / Computing

Qualification criteria for subjects

Schools will have varying criteria for students qualifying for certain subjects.

For Pure Sciences:

Above a percentage in Lower Sec Science
(eg. 65–75% for double science and >75% for triple science)

For A-Math:

Above a percentage in Lower Sec Math (eg. 55–65%)

For Pure Humanities:

Above a percentage in Lower Sec Humanities

Computing (if offered):

Aptitude test + Score in Math



There are avenues for appeal and schools will handle these on a case-by-case basis.

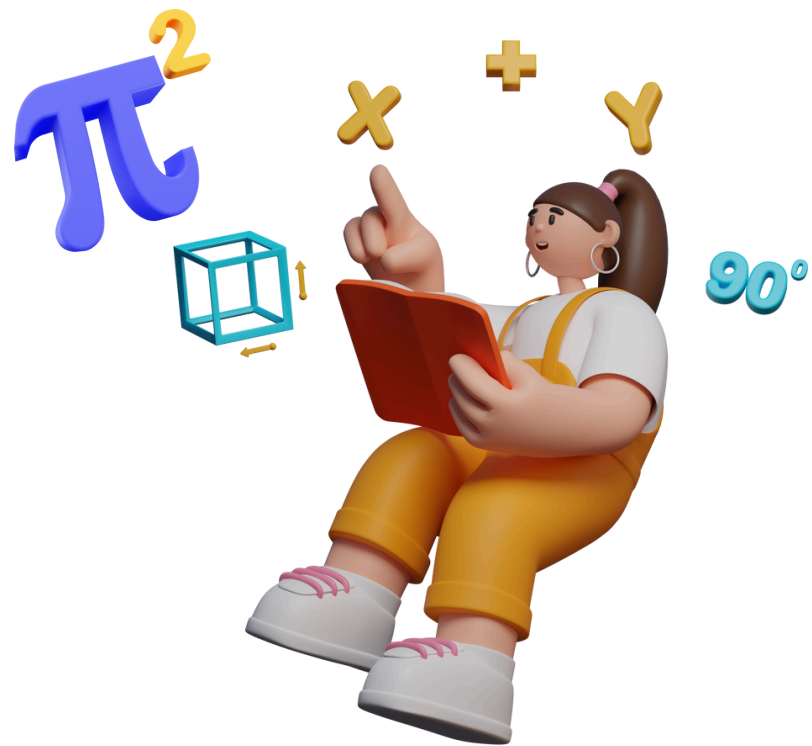
Considerations from the school:

Teachers to teach the subject, timetabling, minimum students to form a class, FSBB etc.

02

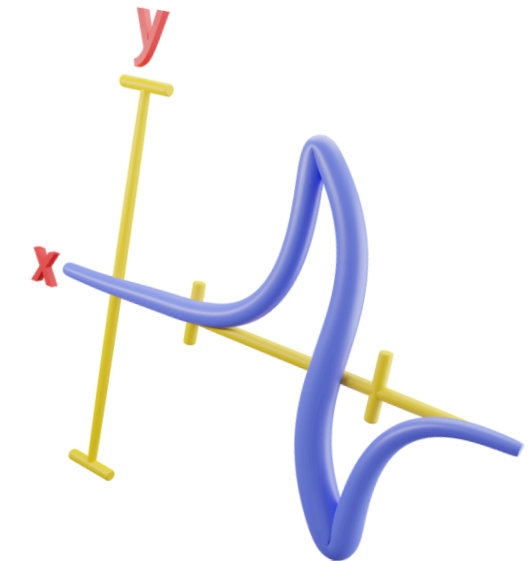
Subject Combination
Choices and what they
entail (Sec School context)





Brief overview of subjects

For full details of syllabus, explore search on Google "<Subject> Syllabus 2025" for the official breakdown from SEAB



A-Math vs E-Math

Range of topics are very different with some overlap.

E-Math is compulsory. A-Math can be described as more "theoretical" with more abstract concepts which have applications in advanced science and engineering but not directly immediately.

Assessment:

2x 2H15M Papers (Paper 1 and Paper 2)



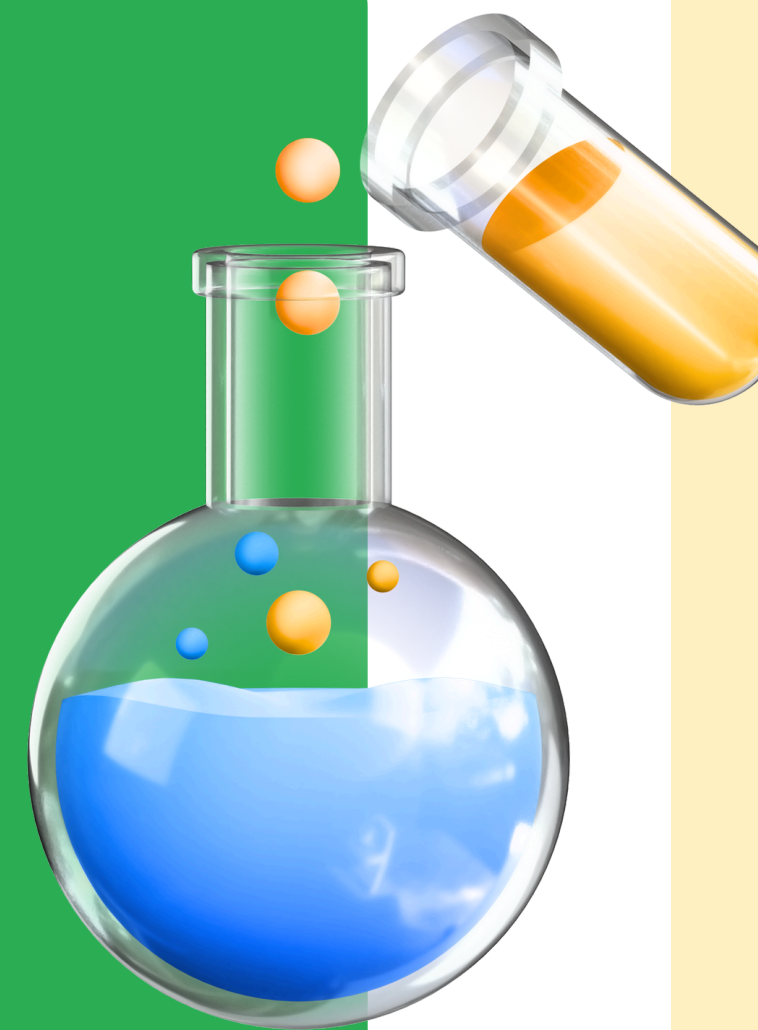
Pure vs Combined Science

Topics covered in combined science are also covered in Pure Science. Pure science will have more topics. Combined Science covers around 65–70% of the pure science syllabus.

Demands of the questions are also different for both sciences – eg. Pure science questions might be significantly longer with questions relating to real world contexts.

Assessment:

MCQ + Open-ended + Practical



***Precaution: Combined Science literally combines
2 science subjects into 1 subject**

**= you know lesser about each Pure Science
= if you want to take H2 Sciences in JC, you'll struggle alot**



Pure vs Combined Humanities

Elective humanities (with social studies) covers about 70% of the pure humanities in terms of topics.

Assessment: 2 Papers for Pure vs 1 Paper for Combined.

***Precaution:**
For those who want to take a
H2 Arts Stream Subject in Junior College
(eg Literature, History, Geography)

= you'll probably want to take it as a
Pure Humanities Subject for the O-Levels



So... how to choose?

1

**Students are advised to
select based on their interest.**



For example, if a student is interested in humanities rather than science, a selection of combined science with pure humanities might be more suitable (if the school offers such a combination)

If you find triple sciences to be difficult, then don't force yourself to take it! You'll end up dreading it and not doing well.

So... how to choose?

2

Next, consider your further education pathways.



For example, in JC, to take H2 math, students are typically expected to have knowledge of the topics covered in A-math. Hence, if the student does not like math but wants to keep options open, taking A-math should be considered.

Also, look into the course requirements in University and Polytechnic as well if there are particular courses you're interested in/ aiming for.

So... how to choose?

3

Make informed decisions by looking through subject specific resources / asking your seniors and teachers.



There are many resources, textbooks and guidebooks available in schools! ECG counsellors, Form teachers and subject teachers would be great people to ask/ simply have conversations with.

Final Conclusion:



Did you know?

To enter a medicine course, you DO NOT need to take H2 Bio at JC. Bridging courses might be needed.

If you are SURE of your interests, go with it!

Develop that interest and be curious, after all learning should stem from the desire to explore and discover.

If you are UNSURE of your interest, take the subject options that opens the most education pathways.

Eg. Double Pure Science (Chem/Phy) + A-Math
or Combined Science (Chem/Phy) + A-Math.

There is no harm in deciding later, you are still able to “catch up” in JC for humanities subjects where there are no strict pre-requisites.

03

Subject Combination Choices
and their implications
(Poly, JC, Uni context)



Criteria at A-Levels

3 core and 1 contrasting subject

Breakdown (70 rank points):

3 x H2 subjects (20 points each)

1 x H1 subject (Only included if it raises your score - 10 points)

H1 General paper (10 points)
H1 Project work (Pass/fail)

A-Level Subjects vs their O-Level prerequisites

Subject	Subject Categorisation	O-Level prerequisite
H2 Mathematics	Mathematics & Science	A Math
H2 Chemistry		Pure Chemistry or Good grade in Combined science (Chemistry)
H2 Physics		Pure Physics or Good grade in Combined science (Physics)
H2 Biology		Pure Biology or Good grade in Combined science (Biology)
Economics (Econs)	Humanities & the Arts	-
Geography (Geo)		Pure/elective geography
H2 History		Pure/elective history
H2 Literature		Pure/elective literature

A-Level Science Stream

Possible Subject combinations



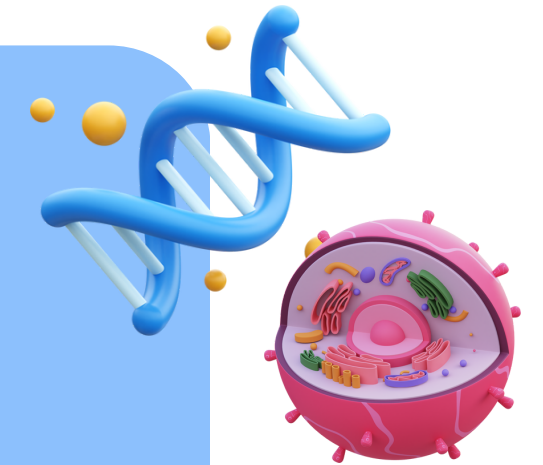
PCME (70 rank points):

H2 Physics (20 points)
H2 Chemistry (20 points)
H2 Math (20 points)
H1 *(whichever you choose)
H1 General paper (10 points)
H1 Project work (pass/fail))

Comments:

Most common subject combination.
Good timetable.

Allows you to enter 99% of courses
in Singapore Universities, even
medicine and dentistry.



BCME (70 rank points):

H2 Biology (20 points)
H2 Chemistry (20 points)
H2 Math (20 points)
H1 *(whichever you choose)
H1 General paper (10 points)
H1 Project work (pass/fail))

Comments:

Second most common subject
combination. Good timetable.

Allows you to majority courses in Singapore
Universities, except for some courses like
Computer Engineering in NUS.

A-Level Arts Stream

Possible Subject combinations



GELM (70 rank points):

Breakdown (70 rank points):

- **H2 Geography** (20 points)
- **H2 Economics** (20 points)
- **H2 Literature** (20 points)
- **H1/ H2 Math ***
- **H1 General paper** (10 points)
- **H1 Project work** (pass/fail)

Comments:

Common combination for Arts students.

Able to enter 99% humanities courses in Singapore Universities (eg Law Communications, History)

Unable to enter most Science, Engineering and Medicine courses



HELM (70 rank points):

Breakdown (70 rank points):

- **H2 History** (20 points)
- **H2 Economics** (20 points)
- **H2 Literature** (20 points)
- **H1/ H2 Math ***
- **H1 General paper** (10 points)
- **H1 Project work** (pass/fail)

Comments:

Able to enter 99% humanities courses in Singapore Universities (eg Law Communications, History)

Unable to enter most Science, Engineering and Medicine courses

Criteria for Polytechnics

“Minimum Entry Requirements (MER)”

For polytechnics, search for MER, which will show which subjects are needed at the O-Levels in order to be eligible for the course.

ENTRY REQUIREMENTS OF COURSES TO REPUBLIC POLYTECHNIC



To be eligible for admission to the various courses in Republic Polytechnic, applicants must obtain **26 points or better for aggregate score** (i.e. English Language, 2 relevant subjects and best 2 other subjects, including CCA credit) and meet the minimum entry requirements as shown in the table of courses in this section.

The **net ELR2B2 aggregate of the highest to** for Previous (2023) JAE" in the table below shows the **net ELR2B2 aggregate of the highest to** who were admitted to these courses in the 2023 Joint Admissions Exercise (JAE). These are meant as a reference for applicants applying to these courses, and **do not** constitute the admission requirements for subsequent admission exercises. The net ELR2B2 aggregate scores for the courses are not pre-determined by the polytechnics before posting. The eventual course aggregate scores for the 2024 JAE may vary from previous years, based on students' GCE O-Level examination results and their course choices during the JAE.

For more information about each course at www.moe.gov.sg/coursefinder.

Courses	Course Code	Aggregate Type	Net ELR2B2 Range for Previous (2023) JAE	Minimum Entry Requirements																								
SCIENCE																												
Chemistry ①	R17	ELR2B2-C	12 to 18	<table border="1"><thead><tr><th>Subject</th><th>Grade</th></tr></thead><tbody><tr><td>a) English Language</td><td>1-7</td></tr><tr><td>b) Mathematics (Elementary/Additional)</td><td>1-6</td></tr><tr><td>c) Any one of the following subjects:</td><td>1-6</td></tr><tr><td>• Biology</td><td></td></tr><tr><td>• Biotechnology</td><td></td></tr><tr><td>• Chemistry</td><td></td></tr><tr><td>• Food & Nutrition / Nutrition & Food Science</td><td></td></tr><tr><td>• Physics</td><td></td></tr><tr><td>• Science (Chemistry, Biology)</td><td></td></tr><tr><td>• Science (Physics, Biology)</td><td></td></tr><tr><td>• Science (Physics, Chemistry)</td><td></td></tr></tbody></table>	Subject	Grade	a) English Language	1-7	b) Mathematics (Elementary/Additional)	1-6	c) Any one of the following subjects:	1-6	• Biology		• Biotechnology		• Chemistry		• Food & Nutrition / Nutrition & Food Science		• Physics		• Science (Chemistry, Biology)		• Science (Physics, Biology)		• Science (Physics, Chemistry)	
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Joint Admissions Exercise (JAE)

Apply for your dream course in NP via the JAE, conducted annually for Singapore-Cambridge GCE 'O' Level holders. Admissions is based on academic merit and subjected to available vacancies of the diploma courses.

1. Can I apply for JAE?

- You must be a Singapore Citizen; or Singapore Permanent Resident with valid GCE O-Level results from any year; or International student studying in a Government, Government-Aided, or an Independent School with valid 2023 GCE O-Level results.
- Entry to polytechnic is based on your net ELR2B2* aggregate (minus CCA bonus points). *ELR2B2 = English Language (EL) + 2 Relevant Subjects (R2) + 2 Other Best Subjects (B2)

Our courses are categorized into 4 aggregate types:

ELR2B2-A: Aggregate score for Humanities & Media related courses

ELR2B2-B: Aggregate score for Business related courses

ELR2B2-C: Aggregate score for Science & Technology related courses

ELR2B2-D: Aggregate score for Design related courses

[Please [click here](#) for more information on relevant subjects.]

For Polytechnic, students and parents are advised to head to the individual Polytechnic Websites to check what are



Engineering

Engineers are professionals who invent, design, analyze, build and test machines, complex systems, structures, gadgets and materials to fulfill functional objectives and requirements while considering the limitations imposed by practicality, regulation, safety and cost.

**Ideal combination to enter engineering:
PCM (H2 Physics, H2 Chemistry, H2 Math)**

Students who take BCM can also enter, but with a Physics base, it's easier to adjust to the course.



School of Chemistry, Chemical Engineering and Biotechnology

Bioengineering | Chemical and Biomolecular Engineering

The School of Chemistry, Chemical Engineering and Biotechnology hosts world-class education and research to nurture future-ready chemistry, chemical engineering, and biotechnology graduates for exciting careers in growth industries, including chemistry, healthcare, energy and sustainability, food and agriculture, and data analytics.



School of Civil and Environmental Engineering

Civil Engineering | Environmental Engineering | Maritime Studies

The School of Civil and Environmental Engineering is a leading School in Sustainability and Built Environment, offering undergraduate education in three disciplines: Civil Engineering (on built environment), Environment Engineering (on environmental sustainability) and Maritime Studies (on shipping management).



School of Electrical and Electronic Engineering

Electrical and Electronic Engineering | Information Engineering and Media

The School of Electrical and Electronic Engineering is a leading school for technology and innovation in engineering. Ranked 4th in the world, the School's curriculum focuses on cutting-edge trends like Machine Learning, Clean Energy and the Internet of Things.



School of Materials Science and Engineering

Materials Engineering

NTU's Materials Science Subject consistently ranks in the top of QS World University Rankings and US News Global Universities Rankings. A degree in Materials Engineering will provide relevant knowledge, technical and soft skills to prepare graduates for diverse roles in various industry sectors.



School of Mechanical and Aerospace Engineering

Aerospace Engineering | Mechanical Engineering

The School of Mechanical and Aerospace Engineering aims to fuel students' aspirations to lead the future, tackle global challenges, champion innovation and translate ideas into action through hands-on experience.



SINGAPORE-CAMBRIDGE GCE 'A' LEVEL CERTIFICATE

A good H2 pass in Chemistry and H2 pass in either Biology or Physics.
Of the best six subjects (i.e. 4 content-based subjects, H1 GP and H1 PW), used in the computation of the University Admission Score, at least one content subject to be from a contrasting discipline.

The 4 content-based subjects can be of the following combinations:

- 4 H2 content-based subjects OR
- 3 H2 and 1 H1 content-based subjects

Medicine



Ideal combination:
BCM (H2 Biology, H2 Chemistry, H2 Math)

Students who take PCM can also enter local medical school, but with a Biology base, it's easier to adjust to the course. For overseas medical school, H2 Biology is a prerequisite.

Need to get nearly all As + an excellent CCA record + internships which showcase a very strong interest in the medical field. **Applicants need to pass an interview**



Law



**Ideal combination:
any subject combination is fine**

Even though having more humanities subject will help you develop the ability to make good arguments.

Scoring A for General Paper will be a huge advantage



Lee Kong Chian
School of
Business



Nanyang Business School



NUS
BUSINESS
SCHOOL

Business School



**Ideal combination:
Most subject combinations are fine**

Choose what you like though some university offer double degrees/ major which pair business with economics

*Biz courses ranked in order of recent popularity
Business Courses are really competitive and stressful



Public Sector



**Ideal combination:
Most subject combinations are fine**

But it is important to note that the public service is very diverse in terms of jobs available.

If you have aspirations to climb the ladder in the public service, then your A level grade really defines your pathway.

General Advice!

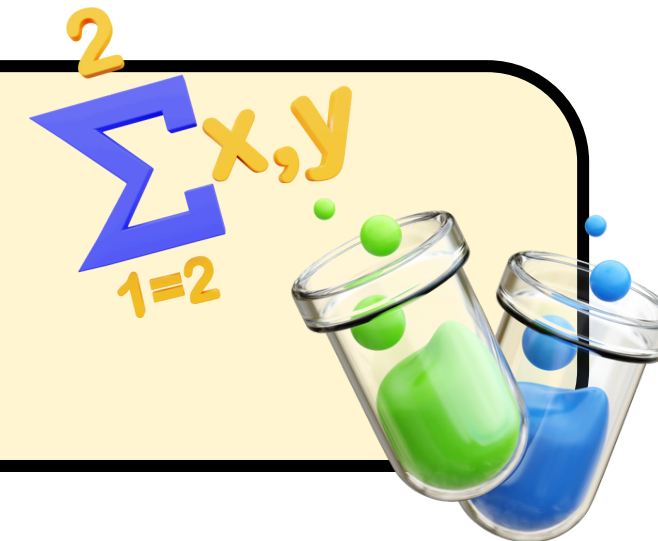


Education and the subjects you take are meant to give you more opportunities for your future.

=

**CHOOSE SUBJECTS THAT HELP TO
KEEP THE MOST DOORS OPEN**

**[PERSONAL ADVICE]
Choose H2 Math and H2 Chem**



Our AY2026 Sec 3 Classes

Sec 3 Sciences

AY26 Classes	Location	Day	Start Time	End Time	Tutor
S3 Pure Chemistry	Bishan	Mon	5:00 PM	7:00 PM	Zhi Hao
S3 Pure Chemistry	Bukit Timah	Mon	7:30 PM	9:30 PM	Stefanie
S3 Pure Chemistry	Bukit Timah	Sat	3:00 PM	5:00 PM	Zhi Hao
S3 Pure Chemistry	Jurong East	Tue	5:00 PM	7:00 PM	Zhi Hao
S3 Pure Chemistry	Kovan	Thu	4:30 PM	6:30 PM	Abigail
S3 Pure Chemistry	Kovan	Fri	5:00 PM	7:00 PM	AJ
S3 Pure Chemistry	Kovan	Sat	12:00 PM	2:00 PM	Jarryl
S3 Pure Chemistry	Marine Parade	Mon	4:30 PM	6:30 PM	Abigail
S3 Pure Chemistry	Novena	Tue	5:00 PM	7:00 PM	Jarryl
S3 Pure Chemistry	Tampines	Fri	7:30 PM	9:30 PM	Shafiq
S3 Pure Chemistry	Tampines	Sat	11:30 AM	1:30 PM	Abigail
S3 Pure Physics	Bishan	Sun	2:00 PM	4:00 PM	Zoey
S3 Pure Physics	Bukit Timah	Sat	5:00 PM	7:00 PM	Claire
S3 Pure Physics	Jurong East	Mon	5:00 PM	7:00 PM	Claire
S3 Pure Physics	Kovan	Mon	5:00 PM	7:00 PM	Jarryl
S3 Pure Physics	Novena	Wed	5:00 PM	7:00 PM	Jarryl
S3 Pure Physics	Tampines	Tue	4:30 PM	6:30 PM	Pamela
S3 Pure Biology	Kovan	Thu	6:30 PM	8:30 PM	Jason Phang
S3 Pure Biology	Tampines	Tue	6:30 PM	8:30 PM	Jason Phang
S3 Combined Science Chemistry & Physics	Kovan	Tue	5:00 PM	7:00 PM	Claire
S3 Combined Science Chemistry & Physics	Tampines	Mon	7:30 PM	9:30 PM	Chun Guan
S3 Combined Science Chemistry & Biology	Kovan	Wed	4:30 PM	6:30 PM	Jason Phang
S3 Combined Science Chemistry & Biology	Tampines	Mon	6:30 PM	8:30 PM	Jason Phang

Our AY2026 Sec 3 Classes

Sec 3 Math

AY26 Classes	Location	Day	Start Time	End Time	Tutor
S3 A-Math	Bukit Timah	Tue	5:00 PM	7:00 PM	Desvin
S3 A-Math	Jurong East	Sat	12:00 PM	2:00 PM	Desvin
S3 A-Math	Kovan	Thu	4:30 PM	6:30 PM	Clarence Lee
S3 A-Math	Kovan	Sat	10:00 AM	12:00 PM	Clarence Lee
S3 A-Math	Kovan	Sat	4:00 PM	6:00 PM	Hao Wei
S3 A-Math	Novena	Sat	4:00 PM	6:00 PM	Mabel
S3 A-Math	Tampines	Mon	5:00 PM	7:00 PM	Qian Wei

AY26 Classes	Location	Day	Start Time	End Time	Tutor
S3 E-Math	Bukit Timah	Tue	7:30 PM	9:30 PM	Desvin
S3 E-Math	Kovan	Tue	7:30 PM	9:30 PM	Clarence Lee
S3 E-Math	Kovan	Sat	2:00 PM	4:00 PM	Hao Wei
S3 E-Math	Novena	Sat	2:00 PM	4:00 PM	Mabel
S3 E-Math	Tampines	Tue	6:30 PM	8:30 PM	Qian Wei

Our AY2026 Sec 3 Classes

Sec 3 English

AY26 Classes	Location	Day	Start Time	End Time	Tutor
Upper Sec English	Bishan	Sat	11:00 AM	1:00 PM	Zhi Hui
Upper Sec English	Bukit Timah	Thu	5:00 PM	7:00 PM	Zhi Hui
Upper Sec English	Bukit Timah	Sun	9:00 AM	11:00 AM	Zhi Hui
Upper Sec English	Kovan	Mon	5:00 PM	7:00 PM	Zhi Hui
Upper Sec English	Kovan	Thu	5:00 PM	7:00 PM	Amira
Upper Sec English	Kovan	Sun	12:00 PM	2:00 PM	Amira
Upper Sec English	Kovan	Sun	3:00 PM	5:00 PM	Amira
Upper Sec English	Marine Parade	Tue	5:00 PM	7:00 PM	Olivia
Upper Sec English	Novena	Wed	5:00 PM	7:00 PM	Olivia
Upper Sec English	Tampines	Tue	7:30 PM	9:30 PM	Amira
Upper Sec English	Tampines	Wed	5:00 PM	7:00 PM	Amira

**To download our slides,
head over to our website**



**Our AY2026 Earlybird Enrollment
is open! Scan here to check out
our AY2026 classes:**



**Enrol by 31st Oct 2025 to
unlock these Early Bird Perks:**

 Up to \$600 e-cashback
 \$150 worth of curated notes
 \$80 registration fee waived

**OR Whatsapp us here
+65 87702540**



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leave us a google review!



SCAN HERE!

04 QnA