PROSPECTUS

2023

OUR MISSION

Making Lives and Waking Hearts to serve the coming days
Family-Society-Eternity

OUR VISION

Home of Servant Leaders who bring life to the Nations

COLLEGE VALUES

Saints are principled servant-leaders, upholding the WISE and TRUE values that define who we are and how we act when we stand together as a village.

Wonder A Saint is curious about the world. He wants to learn. A Saint asks questions. **Integrity** A Saint does right wherever he is, whomever he is with and whatever he is doing. He does right when no one is watching. **Self-discipline** A Saint wants to be known for his self-control. He perseveres because he wants to finish well. **Excellence** A Saint relentlessly strives to exceed personal best, celebrating high endeavour as its own reward.	**Thanksgiving** A Saint is not a self-made man. He acknowledges that others constantly give effort and time for his benefit. He uses words and deeds to express gratitude. **Resilience** A Saint does not give up even when life is tough. A Saint does not quit. A Saint overcomes evil with good. **Unity** A Saint respects others especially those whom God has made differently from him. A Saint is humble. **Empathy** A Saint puts himself in the other person's shoes. A Saint speaks up and acts for those who are down.

QUALITIES OF A SAINT

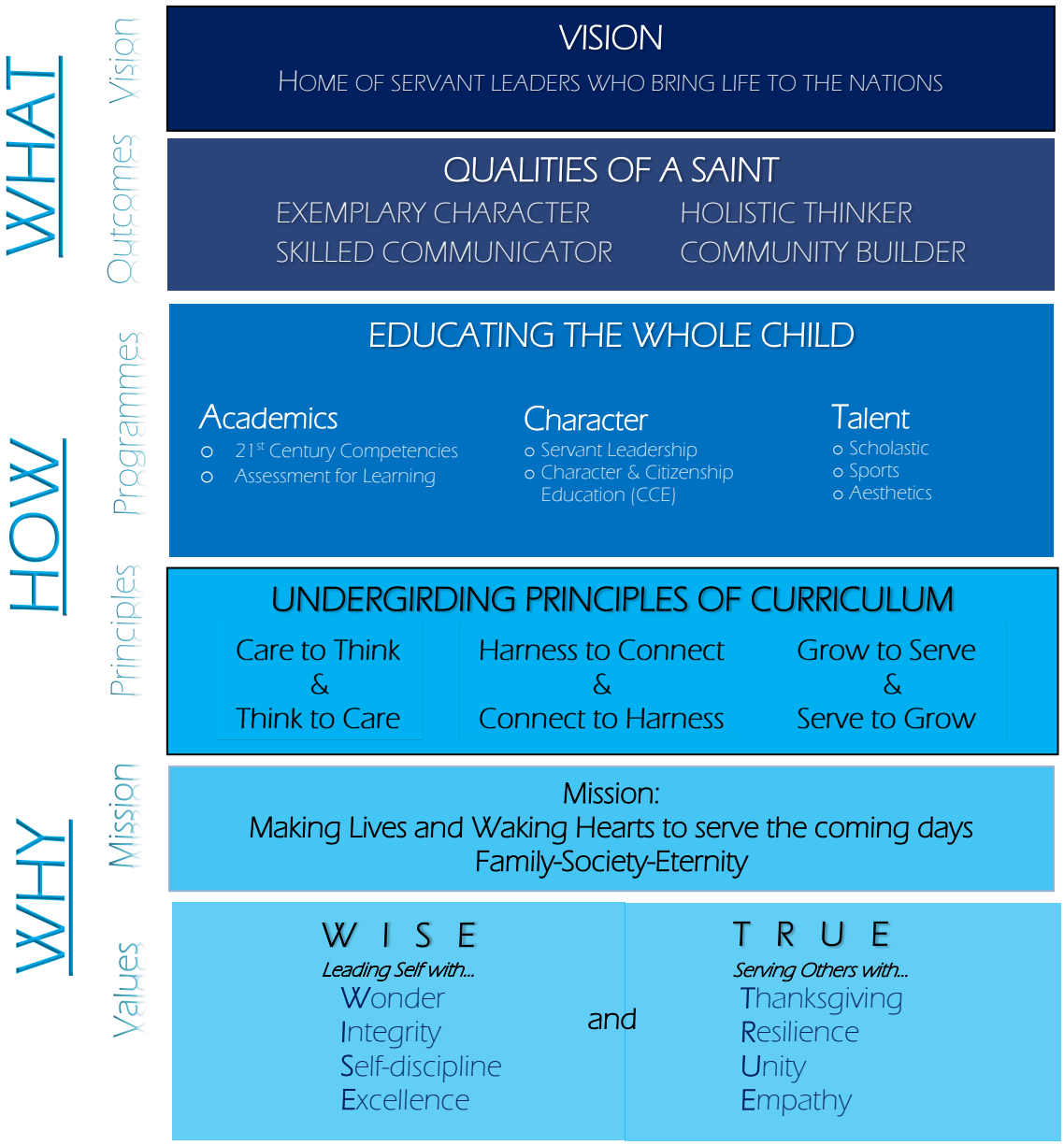
EXEMPLARY CHARACTER
HOLISTIC THINKER
SKILLED COMMUNICATOR
COMMUNITY BUILDER

MOTTO

UP AND ON

Contents

St Andrew's Junior College
Educational Framework



In St Andrew's Junior College (SAJC), we believe in providing a holistic education that aims to nurture exemplary character and the talents of Saints so that they can contribute to nation-building and become powerful agents in creating a better future for all.

The SAJC Educational Framework is designed with key processes and institutional programmes aimed at the development of the whole child into the 21st century servant leaders who bring life to the nations. It takes cognizance of research into 21st century skills, the Ministry of Education's 2015 Competencies as well as the characteristics of servant leadership necessary for developing Saints who will be a blessing to their community.

The essence of the SAJC Educational Framework is distilled with three stem questions:
Why do we drive our Teaching and Learning?
How do we drive our Teaching and Learning?
What are the outcomes of our Teaching and Learning?

WHY do we drive our Teaching and Learning?

At the heart of the SAJC Educational Framework are the St Andrew's Village (SAV) values that serve as the raison d'être of our teaching and learning. Summed up by the acronyms WISE and TRUE, these deep-seated values propel Saints to lead self and to serve others. In turn, these values support our mission of *"Making Lives and Waking Hearts to serve the coming days -- Family-Society-Eternity"* where Saints are to leave their indelible mark of contributions to their families, society and the world.

HOW do we drive our Teaching and Learning?

Three undergirding principles serve as the bedrock of our curriculum design:
Care to Think & Think to Care – where students unite their hearts and minds to develop their full potential;
Harness to Connect & Connect to Harness – where students make connections with ideas and concepts and forge meaningful relationships with people around them;
Grow to Serve & Serve to Grow – where students become self-directed learners so that they can use their talents equipped with skills to serve others.

Together, these three principles guide the design of our curriculum where the whole child is educated. Each Saint's full potential is holistically developed with the pursuit of the ***A****cademics*, the nurturing of their ***C****haracter* and the growth of their unique ***T****alents*.

WHAT are the outcomes of our Teaching and Learning?

Throughout their learning journey in SAJC, be it in their curriculum or co-curriculum activities, Saints will be nurtured to demonstrate the four Qualities of Saints (QoS): *Exemplary Character*, *Holistic Thinker*, *Skilled Communicator* and *Community Builder* as they immerse themselves experientially in our holistic curriculum.

As they graduate and leave the gates of SAJC, Saints will continue to embody these four qualities that will make them Saints for life where they will be servant leaders wherever they go, ready to serve the community, the nation and the world – realising our college's vision to be the Home of Servant Leaders who bring life to the Nations.

The Qualities of a Saint

• *Exemplary Character*

Servant Leadership differs from most other leadership models by virtue of the fact that it focuses on serving others before all else. Character development is the bedrock upon which all the other qualities are built upon.

In SAJC, character education comprises Social Emotional Learning (self-awareness, self-management, social awareness, relationship management and responsible decision making) and the internalisation of the College values, TRUE (Thanksgiving, Resilience, Unity and Empathy) and WISE (Wonder, Integrity, Self-Discipline and Excellence) in the lives of the Saints. These values are inculcated through SLEAD lessons, Scripture Readings, Chapel, and Co-curricular Activities and Programmes.

However, the most powerful mode of learning for being an exemplary character is through role-modelling and seizing teachable moments in our daily interactions.

• *Holistic Thinker*

"The aim of education should be to teach us rather how to think, than what to think -- rather to improve our minds, so as to enable us to think for ourselves, than to load the memory with the thoughts of other men." *- John Dewey*

It is widely agreed by educators and philosophers that the paramount purpose of education is to develop thinking individuals with a heart who can make good decisions in their lives and work.

The "Holistic Thinker" is defined as one who makes good judgements by considering the big picture, innovates and provides practical solutions, envisions the future and is prepared flexibly for it. The 4 dimensions in Holistic Thinking advocated in SAJC are: Critical Thinking, Creative Thinking, Caring Thinking and Forward Thinking

All lessons and activities in SAJC have clear objectives which include the thinking skills to be taught or reinforced.

- ***Skilled Communicator***

"A word fitly spoken is like apples of gold in pictures of silver." *- Proverbs 25:11*

Effective and skilful communication is widely regarded as being one of the most important leadership skills and a core ingredient for personal and work success. Knowing the right thing to say and how to say it determines our leadership potential and ability to achieve positive outcomes.

To communicate effectively, we have to learn how to deploy our words, tone of voice, emotions and body language to connect with others. It is also the glue that holds our relationships together. Effective communication includes speaking, writing and listening with genuineness, respect and clarity. It involves the use of different modes of communication such as drama and art, as well as information technology to enhance the quality of communication.

In SAJC, we strongly believe in honing the communication skills of our staff and students in the instructional and co-curricular programmes. More than polishing the communication techniques through speech training and practice, we are mindful that the way we communicate reveals who we are as Saints. We aspire that every member of the St Andrew's community be gracious in speech and seeks to edify one another in the challenges we face and new heights we scale together.

- ***Community Builder***

"Education is a social process. Education is growth. Education is, not a preparation for life; education is life itself." *-John Dewey*

Community building is defined as an ongoing process where members of a community share skills, talents, knowledge and experiences that strengthen or develop themselves and the community they belong to. A community builder actively takes actions aimed at problem solving and enriching lives and strengthening relationships in their community.

Nurturing Saints to be community builders empowers them to become responsible adults who will continue to contribute to their communities, workplaces and the nation in the future. They will become Saints who embrace a life-long passion for serving others. As future leaders of the country, Saints must be energised to desire to make effective changes for the better and contribute to the society.

To be an effective community builder, every Saint needs to have a genuine interest and sincere concern for people and acquire a deep understanding of cultural and global literacies in order to reach out and engage both local and international friends.

In SAJC, we believe that 'No one is here by chance'. Everyone therefore has a unique role to play in the College and in touching one another's lives. To create a positive culture and a conducive environment for learning and relationship building, every member of the SAJC community is responsible for creating a caring and nurturing environment for learning and working. Everyone is expected to participate in service learning and community involvement programmes locally and/or overseas. In addition, international exchange programmes are also organised for Saints to develop cultural literacy and for enrichment.

Academics

• *Curriculum*

Besides developing the essential knowledge, skills and behaviours required for our Saints to continue to post-JC studies, the College's formal and informal curriculum aims to develop the Saints in 4 identified Qualities: ***Exemplary Character, Holistic Thinker, Skilled Communicator and Community Builder***. The following key teaching and learning domains own and drive programmes to develop these 4 Qualities in the Saints:

Qualities of the Saints	**Teaching and Learning Domains**	
Exemplary Character	• SLEAD Programmes • Citizenship Education Programmes • Chapel & Scripture Reading	• Co-curricular Activities and Programmes • Student Leadership • Student Well-being • Discipline
Holistic Thinker	• Co-curricular Activities and Programmes • Humanities • English Language • Information Technology • Mathematics • Mother Tongue Languages	• SLEAD Education Programmes • National Education Programmes • Project Work • Sciences • Student Leadership
Skilled Communicator	• Art • Co-curricular Activities and Programmes • Values-in-Action Programmes • English Language	• Humanities • Mother Tongue Languages • Information Technology • Project Work • Sciences • Service Learning • Student Leadership
Community Builder	• Physical Education • Co-curricular Activities and Programmes • Values-in-Action Programmes • SLEAD Programmes	• Citizenship Education Programmes • Project Work • Service Learning • Student Leadership

- *Pedagogy*

5 'I's Framework

The action plans of all departments are designed using the 5'I's framework. The framework emphasises the **Importance** of academic excellence, identifies **Issues** involved and strategies to be used, leverages on significant others, peers and tutors to **Influence** students, uses different forms of motivation, reward and recognition to **Ignite** students' passion to learn and identifies **Indicators** of success.

Research-informed Classroom practices

The College is a Professional Learning Community, with all teachers in at least one Professional Learning Team involved in exploring the effectiveness of new pedagogies. Lesson observations by department leaders provide useful feedback to subject tutors on their teaching and learning processes. Analysis of feedback from students through subject-based surveys and student Focus Group Discussions are used to review the teaching and learning processes, and to ensure that 'what's taught' is learnt well.

Teachers keep abreast of current effective practices and share their knowledge with one another during professional development time and professional sharing days and retreats. Beyond the College, the professional sharing and learning continues between the JCs and in conferences.

Differentiated learning

The College caters to the different abilities of pupils via differentiated learning programmes. Departments innovate and employ various methods to deliver their Instructional Programmes. Learning opportunities beyond the classrooms, such as end-of-year work attachment and learning journeys are also provided for students. Outstanding students are selected for special educational experiences offered in Talent Development Programmes (TDP).

Blended Learning

In line with MOE's introduction of Blended Learning (BL) as a key part of the schooling experience for our Secondary School and JC/MI students to nurture self-directed and independent learners as well as to develop passionate and intrinsically motivated learners, SAJC implements BL for both JC1 and JC2 Saints through Online lectures and Home-Based Learning days.

1. Online lectures

Online lectures provide students the autonomy to learn at their own time and at their own pace as well as to monitor and regulate their own learning. Saints have to view weekly online lectures on weekday afternoons and are encouraged to follow the College's online lecture schedule to pace their learning.

2. Home-Based Learning (HBL) Days

The key feature of HBL day in SAJC is the conscious dedication of time and space i.e., 2 hr for a meaningful Learning Experience (LE). This dedicated time also allows Saints to meaningfully engage in a learning experience that evoke their wonder, interest, and passion in the subject area.

Furthermore, Student-Initiated Learning (SIL) is time set aside for Saints to explore their personal interests which also provides Saints with the opportunity to develop themselves as independent, passionate, lifelong learners.

Saints can learn to benefit from their BL experiences in SAJC through abiding by the three norms as shown below.

(1) Plan Ahead: Growing into a self-directed learner involves learning how to manage your own time and thus plan to get the most out of your time.

(2) Take Ownership: BL provides you with the opportunity to learn independently. As a life-long skill, start building these habits now. Reflect on how well you're managing yourself on HBL days.

(3) Build Trust: BL has been designed to empower you as learners. We believe that you will respect your commitments and deadlines for all HBL activities. In doing so, you honour the trust placed in you by teachers and show them that you can handle greater autonomy.

The schedule for HBL and online lectures would be provided for every student.

- ***Assessment***

Assessment for Learning (AfL)

The College uses formative assessment such as written assignments, class tests, practical tests, oral examinations and presentations, and timed trials to monitor students' performance. Teachers use the information and results gleaned from these assessments to review and design appropriate learning strategies to improve student learning.

To assess the effectiveness of student learning on a termly basis, the College uses summative assessments such as the Common Test, Block Test, Final Examination and Preliminary Examination. These assessment modes not only enable teachers to assess the learning of the students at key junctures in the academic calendar, but also provide information for decision-making regarding assignment to special programmes and eligibility for promotion or higher education.

With all the distractions that students face during their difficult teenage years, home support is crucial in determining students' success. Parents are therefore advised on their child's academic progress and other aspects of their child's development. This partnership with parents is key in enabling the students to perform at their peak in the GCE A-Level Examination.

Talent Development Programme

The Talent Development Programme (TDP) serves to stretch our Saints by honing their competencies in information and communication skills, critical and inventive thinking, civic literacy, global awareness, and cross-cultural skills. This is done through the provision of opportunities to develop and grow them in the domains of Scholastic Development, Servant Leadership Development and Expanding Perspectives.

Under Scholastic Development, Saints in the TDP can expect to learn knowledge and skills beyond the GCE A-level curriculum. To deepen and broaden the content taught in classrooms, TDP students in the Arts and Science stream have the opportunity to gain experiences offered in the Humanities Scholars Programme and Science Scholars Programme respectively.

Examples of opportunities offered	
Humanities Scholars Programme	Science Scholars Programme
• Humanities Seminar Series • EU @ Your School • Academic Mentoring	• External science research programmes (e.g., Nanyang Research Programme, Science Research Programme, SUTD Research Mentorship Programme) • MOE Scientist in School Programme • Learning journey to research institutes

Saints in the TDP are also equipped with skills and experiences to take on challenges confidently, as they mature to be Servant Leaders with the ability to leverage multiple perspectives. With the TDP experience, our Saints are better poised to strive for prestigious scholarships in both the public and private sectors.

Come and join in the exciting learning adventures in St Andrew's Junior College!

COURSE INFORMATION

1. The GCE A-Level requires students to take General Paper (**GP**), Project Work (**PW**) and Mother Tongue Language (**MTL**) at H1 level. Students are also required to offer 3H2 and 1H1 content-based subjects, at least one of which is a subject from a contrasting discipline.

2. Alternatively, students who have met SAJC's requirements can also choose to study 4 H2 subjects, of which at least 1 must be from a contrasting discipline.

3. In order to be exempted from MTL, students are required to obtain **at least a D7** for Higher Mother Tongue subject at GCE O-Level Examination. Students who offer Mother Tongue B Syllabus (MTB) at GCE O-Level Examination will continue with MTB at GCE A-Level.

4. The following tables show the **3H2 and 1H1 Subject Combinations** offered in SAJC for 2023. These combinations will only be offered if there is sufficient demand.

3H2 Subject Combinations

- **Arts Course**

Subject Codes	H2	H2	H2	H1
3A1	Economics	Geography	History	A subject from Math or the Sciences: **Math, Biology, Chemistry, Physics**
3A2	Economics	Geography	Literature	
3A3	Economics	History	Literature	
2A1	Economics	Geography	Math	A different subject from the Humanities: **Art, Geography, History, Literature** OR A subject from the Sciences: **Biology, Chemistry, Physics**
2A2	Economics	History	Math	
2A3	Economics	Literature	Math	
2A4	Geography	Literature	Math	
2A5	History	Literature	Math	

Note:
At most ONE of the following subjects may be used to replace one H2 subject in the above combinations provided students fulfil the contrasting subject requirement:

- H2 Art
- H2 Chinese Language & Literature *(with the exception of **3A2** and **3A3**)*
- H2 Malay Language & Literature *(with the exception of **3A2** and **3A3**)*
- H2 Tamil Language & Literature *(with the exception of **3A2** and **3A3**)*

- **Science Course**

<table>
<tr><th>Subject Codes</th><th>H2</th><th>H2</th><th>H2</th><th>H1</th></tr>
<tr><td>3S1</td><td>Biology</td><td>Chemistry</td><td>Math</td><td rowspan="2">A subject from the Humanities:

Art, Economics, Geography, History, Literature</td></tr>
<tr><td>3S2</td><td>Chemistry</td><td>Physics</td><td>Math</td></tr>
<tr><td>2S1</td><td>Biology</td><td>Economics</td><td>Math</td><td rowspan="8">A different subject from the Humanities:

Art, Economics, Geography, History, Literature

OR

A different subject from Math or the Sciences:

Math, Biology, Chemistry, Physics</td></tr>
<tr><td>2S2</td><td>Chemistry</td><td>Economics</td><td>Math</td></tr>
<tr><td>2S3</td><td>Physics</td><td>Economics</td><td>Math</td></tr>
<tr><td>2S4</td><td>Biology</td><td>Geography</td><td>Math</td></tr>
<tr><td>2S5</td><td>Chemistry</td><td>Geography</td><td>Math</td></tr>
<tr><td>2S6</td><td>Physics</td><td>Geography</td><td>Math</td></tr>
<tr><td>2S7</td><td>Biology</td><td>Economics</td><td>Chemistry</td></tr>
<tr><td>2S8</td><td>Physics</td><td>Economics</td><td>Chemistry</td></tr>
</table>

Note:

1) At most ONE of the following subjects may be used to replace one H2 subject in the above combinations provided students fulfil the contrasting subject requirement:
   - H2 Art
   - H2 Chinese Language & Literature
   - H2 Malay Language & Literature
   - H2 Tamil Language & Literature

2) H1 Math is recommended for 2S7 and 2S8

5. For subject combinations with low demand, the College reserves the right to decide whether such subject combinations would be offered.

6. In choosing your subject combination, it is critical that you consider the course you would like to pursue in university.

4 H2 Subject Combinations

1. Students may offer 4 H2 subjects if they have attained a L1R5 (without bonus points) of 9 or lower.

2. The following tables show the **4 H2 subject combinations** offered in SAJC for 2023. These combinations will only be offered if there is sufficient demand.

Arts Course

Subject Codes	H2	H2	H2	H2
4A1	Economics	Geography	Literature	Math
4A2	Economics	History	Literature	Math

Science Course

Subject Codes	H2	H2	H2	H2
4S1	Biology	Chemistry	Math	Economics
4S2	Physics	Chemistry	Math	Economics

3. As 4H2 Subject Combination is a more demanding combination, students would be engaged at College milestone assessment check points to determine whether they are coping well.

H3 Subjects

H3 subjects have syllabi that are of much higher level of difficulty. Students offering H3 subjects must have the time and ability to manage a workload beyond their subject combination. A H3 subject must be offered together with the corresponding subject at the H2 level.

H3 subjects may be offered to students to take in JC2 if they have scored distinctions ***for all H2 subjects*** in the **JC1 Promotional Examination**.

Students can apply for H3 subjects offered by one of the following MOE partners involving tertiary institutions such as SMU, NUS or NTU.

Alternatively, H3 subjects offered in SAJC include H3 Chemistry, H3 Mathematics, H3 Physics, H3 Literature, H3 Geography and H3 History.

2022 Indicative Grade Profiles

Based on the number of places that were available for the various subject combinations offered in 2022, the following were the Indicative Grade Profiles of the corresponding subjects at O-Level:

Subject offered at A-Level	**Corresponding Subject at O-Level**	**5th Percentile***
H2 Mathematics	Additional Mathematics	B3
H2 Biology	Pure Biology	B3
	Combined Science (with Biology)	A2
H2 Chemistry	Pure Chemistry	B3
	Combined Science (with Chemistry)	A2
H2 Physics	Pure Physics	B3
	Combined Science (with Physics)	A2

* 5th percentile refers to the bottom 5% of the 2022 Cohort who attained
B3 or below for Additional Mathematics and Pure Sciences
A2 or below for Combined Sciences with the corresponding Science subject

Note:

To do a H2 Science at A-Level, a minimum of a Combined Science with the corresponding Science subject at O-Level is required.

ADMISSION REQUIREMENTS INTO LOCAL UNIVERSITIES

NTU, NUS, **SMU, SUTD, SUSS and SIT** will select applicants based on their grades in:

- **3 H2** *and* **1 H1** content-based subjects (at least one of which must be a contrasting subject)
- General Paper (**GP**)
- Project Work (**PW**)

Other acceptable subject combinations include: four H2 content-based subjects, Project Work and GP

Applicants should also meet the Mother Tongue Language (**MTL**) requirement for admission by having one of the following:

- a minimum of D7 for the higher MTL paper taken at the GCE O-Level examination.
- a minimum of 'S' grade for the H1 MTL paper or General Studies in Chinese.
- a minimum of 'S' grade for the H2 MTL paper taken at the GCE A-Level Examination.
- a pass in the MT 'B' Syllabus paper at the GCE A-Level Examination.

If a candidate is exempted from MTL, as approved by MOE, the MOE-approved subject-in-lieu will be considered as the MTL subject.

Candidates who are unable to fulfil the MTL requirement for admission but satisfy all other admission requirements will be admitted on a provisional basis. During their course, they will be required to attend the MTL course conducted by the University or attain the minimum requirement as listed above by retaking the MTL paper at the GCE A-Level Examination before they are allowed to graduate.

Besides their examination results, the universities may also consider students' achievement in other areas, such as Co-Curricular Activities (**CCA**) and Values-in-Action (**VIA**) Programme, as reflected in their School Graduation Certificate (**SGC**).

For more information on the admission requirements please refer to the universities websites.

INDICATIVE GRADE PROFILES FOR NUS/NTU/SMU FOR AY2021/2022 ADMISSIONS EXERCISE

The Indicative Grade Profile assumes C grades for General Paper (GP) and Project Work (PW). The Grade Profiles below indicate that of the 10th percentile of the cohort. Please note that certain programmes may require grades higher than C for GP.

Please refer to the universities websites for the most up-to-date Indicative Grade Profiles.

University	Course	10th percentile
NTU	Renaissance Engineering*	AAA/A
NTU	Data Science & Artificial Intelligence	AAA/A
NUS	Law*	AAA/A
NUS	Medicine*	AAA/A
NUS	Dentistry*	AAA/A
NUS	Business Analytics	AAA/A
NUS	Computer Science	AAA/A
NUS	Information Security	AAA/A
NUS	Food Science and Technology	AAA/A
NUS	Pharmaceutical Science	AAA/A
NUS	Pharmacy	AAA/A
NUS	Philosophy, Politics, and Economics*	AAA/A
NTU	Medicine*	AAA/A
SMU	Bachelor of Laws	AAA/B
NTU	Computer Science	AAA/B
NTU	Environmental Earth Systems Science*	AAA/B
NTU	SSS Double Major Programmes	AAA/B
NUS	Information Systems	AAA/B
NUS	Data Science and Economics	AAA/B
NTU	Double Major Programmes*(College of Science)	AAA/C
NUS	Computing Engineering	AAA/C
NTU	Economics and Data Science	AAA/C
SMU	Bachelor of Science (Computer Science)	AAB/B
NTU	Biological Sciences*	AAB/B
NTU	SOH Double Major Programmes*	AAB/B
NTU	Communication Studies*	AAB/B
NUS	Environmental Studies	AAB/B
NTU	Public Policy & Global Affairs	AAB/C
NTU	Psychology	AAC/B
NTU	Science (Education)*	AAC/B
NTU	Economics	AAC/C
SMU	Bachelor of Science (Computing & Law)	ABB/A
NUS	Humanities and Sciences	ABB/B
NUS	Business Administration (Accountancy)	ABB/B
NUS	Business Administration	ABB/C
NTU	Chemistry & Biological Chemistry	ABC/B
NTU	Bioengineering	ABC/C
NTU	Chemical & Biomolecular Engineering	ABC/C
NTU	Computer Engineering	ABC/C
SMU	Bachelor of Business Management	BBB/B
SMU	Bachelor of Social Science	BBB/B
SMU	Bachelor of Science (Information Systems)	BBB/C
NTU	Business	BBC/B
NTU	Arts (Education)*	BBC/B

NUS	Chemical Engineering	BBC/B
SMU	Bachelor of Accountancy	BBC/C
SMU	Bachelor of Science (Economics)	BBC/C
NTU	Information Engineering & Media	BBC/C
NTU	Mathematical Sciences	BBC/C
NTU	Accountancy	BBC/C
NUS	Biomedical Engineering	BBC/C
NUS	Mechanical Engineering (Include Aeronautical Engineering Specialisation)	BBC/C
NTU	Art, Design & Media*^	BCC/B
NTU	Chinese	BCC/B
NTU	English*	BCC/B
NTU	Linguistics & Multilingual Studies*	BCC/B
NUS	Industrial Design*	BCC/B
NUS	Landscape Architecture*	BCC/B
NUS	Real Estate	BCC/B
NUS	Electrical Engineering	BCC/B
NUS	Engineering Science	BCC/B
NUS	Industrial and Systems Engineering	BCC/B
NTU	Materials Engineering	BCC/C
NTU	Philosophy*	BCC/C
NUS	Environmental Engineering	BCC/C
NUS	Materials Science and Engineering	BCC/C
NTU	Environment Engineering	BCC/D
NTU	Maritime Studies	BCC/D
NTU	History*	BCC/D
NTU	Sports Science & Management	BCC/D
NUS	Project & Facilities Management	CCC/B
NTU	Mechanical Engineering	CCC/C
NUS	Nursing*	CCC/C
NUS	Architecture*	CCC/C
NUS	Civil Engineering	CCC/C
NTU	Electrical & Electronic Engineering	CCC/D
NTU	Engineering	CCD/C
NTU	Physics/Applied Physics	CCD/C
NTU	Civil Engineering	CCD/D

^ Admission to Art, Design & Media programme is based on Composite Score which comprises Entrance Requirement Score and University Admission Score.
* Courses that require interview &/or test. The programmes marked with asterisk (*) are those where additional assessments such as interviews, selection tests, and/or portfolios are required.

Please note:
1. With effect from AY 2020/2021, the grade profiles also take into account offers that were made under Aptitude Based Admissions (ABA).
2. Meeting the previous year's grade profiles of a programme does not guarantee admission into that programme for the current year.
3. NUS Double degree programmes are excluded from the table.

Sources:
https://www.nus.edu.sg/oam/undergraduate-programmes/indicative-grade-profile-(igp)
https://www.ntu.edu.sg/admissions/undergraduate/indicative-grade-profile
https://admissions.smu.edu.sg/admissions-requirements/indicative-grade-profile

INDICATIVE GRADE PROFILES FOR SUTD

As a guide, the University has provided the following reference data to help prospective applicants make an informed choice in applying to the university:

Of the A Level students who were offered in the university admission exercise in 2022:
• Nearly all had taken Mathematics at H2 level, and 8 in 10 scored at least a B • Nearly all had taken either Physics or Chemistry (or both) at H2 Level, and nearly 7 in 10 of those who took H2 Physics and/or H2 Chemistry scored at least a B for either or both subjects.

For more information please click the link below:

Singapore University of Technology and Design | Apply Now (sutd.edu.sg)

INDICATIVE GRADE PROFILES FOR SUSS

The SUSS holistic admission comprises both the applicant's performance for the following assessment components (i.e. 4-stage assessment), AND the applicant's grades scored for Singapore-Cambridge A-level in three H2, one H1 subjects, General Paper and Project Work (computed as University Admission Score [UAS]):

- Essay writing – responses to an essay in relation to the research topic and video(s) [which applicant would have to prepare in advance prior to interview day];
- Cognitive exercise – analytical and logical thinking test;
- Group discussion – verbal discussion on the research topic and video(s) which revolve around societal issues in Singapore and/or the region; and
- An individual or cluster interview – interview by faculty member(s) to understand the applicant's intent to read the programme, his/her passion for the discipline, as well as to assess whether applicant's disposition and personal attributes would fit the programme.

  Applicants are encouraged to share their portfolio, co-curricular activities, community service, volunteering work, leadership qualities, entrepreneurship skills, internship stints, work experience, and other personal non-academic achievements, etc. with the faculty member(s).

Reference Information for AY2022 applicants applying to the SUSS Full-time Undergraduate programme may refer to the below indicative grade profile (IGP) and number of programme places in the following link:

https://www.suss.edu.sg/full-time undergraduate/admissions/indicative-grade-profile-igp

Please note the information is to be used as a reference only**.**

INDICATIVE GRADE PROFILES FOR SIT

SIT's broad-based admissions framework considers applicants holistically based on both academic merit and non-academic merit, to ensure that the right students are admitted. If shortlisted, candidates will be called in for an interview.

For more information on SIT's Indicative Grade Profile please refer to the link below:
https://www.singaporetech.edu.sg/sites/default/files/2021-01/SIT_Indicative_Grade_Profile_0.pdf

Source:
https://www.singaporetech.edu.sg/admissions/undergraduate

VARIOUS COURSE REQUIREMENTS IN THE LOCAL UNIVERSITIES

In addition to fulfilling the admission requirements, you also need to ensure you fulfil the course prerequisites of the degree programmes that you wish to apply to in the future. Please refer to the soft copy of the prospectus on the school website to access the hyperlinks.

Please refer to the universities website for the most up-to-date information.

REQUIREMENTS FOR COURSES IN NTU

Programme	Minimum Subject Requirements	Selection Test/ Interview
NANYANG BUSINESS SCHOOL		
Accountancy Accountancy with a Second Major in Entrepreneurship Bachelor of Accountancy with Minor in Digitalisation and Data Analytics (DDA) Bachelor of Accountancy with a Minor in Strategic Communications Bachelor of Accountancy with Minor in International Trading	H1 Level pass in Mathematics **or** 'O' Level/equivalent pass in Additional Mathematics	On selective basis
Business Business with a Second Major in Entrepreneurship Business with a Minor in International Trading Business with a Minor in Strategic Communications	H1 Level pass in Mathematics, **or** 'O' Level/equivalent pass in Additional Mathematics	On selective basis

Programme	Minimum Subject Requirements	Selection Test/ Interview
Double Degree in Accountancy and Business Double Degree in Accountancy and Business (with a Second Major in Entrepreneurship) Double Degree in Accountancy & Business with Minor in International Trading	H1 Level pass in Mathematics, **or** 'O' Level/equivalent pass in Additional Mathematics	On a selective basis
Double Degree in Accountancy & Data Science and Artificial Intelligence	H2 Level pass in Mathematics, **and** H2 Level pass in Physics/Chemistry/Biology/Computing	On a selective basis
Double Degree in Business (with specialisation in Business Analytics) and Computer Engineering (BCE)	H2 level pass in Mathematics **and** H2 level pass in Physics/Chemistry/Biology/Computing **and** H1 level/'O' level pass in Physics/equivalent* *Applicable to applicants who have not read Physics at H2 level	On a selective basis
Double Degree in Business (with specialisation in Business Analytics) and Computer Science. (BCS)	H2 level pass in Mathematics **and** H2 level pass in Physics/Chemistry/Biology/Computing	On a selective basis
COLLEGE OF HUMANITIES, ARTS, & SOCIAL SCIENCES		
School of Art, Design and Media		
Bachelor of Fine Arts in Design Art Bachelor of Fine Arts in Media Art	The Bachelor of Fine Arts in Design Art combines three pathways in Interaction Design, Product Design and Visual Communication into an integrated programme in Design. The Bachelor of Fine Arts in Media Art combines four pathways in Animation, Filmmaking, Game and Photography into an integrated programme in Media. In addition to satisfying the general entry requirements of NTU, candidates are required to produce and submit the following materials for admission assessment. • A portfolio • Personal statement and writing samples • A creative project • An Observational Drawing	

Programme	Minimum Subject Requirements	Selection Test/ Interview
	For specific submission instructions and details, please refer to School of Art, Design and Media's Admissions Requirements. Those wishing to go beyond their core subject can also choose to have a Second Major, such as Art History which is unique to NTU, or from 20 Minors offered across the College, including Creative Writing, Film Studies and Urban & Environmental Studies.	
School of Humanities		
Single Degree		
Bachelor of Arts (Hons) in Chinese	Pass in H2 Level Chinese subjects **or** good pass in H1 Level Chinese subjects **or** good pass in 'O' Level Higher Chinese **or** good pass in 'O' Level Chinese	On a selective basis
Bachelor of Arts (Hons) in English	A good grade in General Paper/Knowledge & Inquiry/H1 or H2 Level Humanities Subject	
Bachelor of Arts (Hons) in History	A good grade in General Paper/Knowledge & Inquiry/H1 or H2 Level Humanities Subject	
Bachelor of Arts (Hons) Linguistics and Multilingual Studies	A good grade in General Paper/Knowledge & Inquiry/H1 or H2 Level Humanities Subject	
Bachelor of Arts (Hons) in Philosophy	A good grade in General Paper/Knowledge & Inquiry/H1 or H2 Level Humanities Subject	
Double Major Programmes *The Double Major degree programme is a **single degree programme** offering students the opportunity to specialise in any two major academic disciplines. Each major carries equal weight in the degree*		
Chinese and English (Double Major) Chinese and Linguistics & Multilingual Studies (Double Major)	A good grade in General Paper/Knowledge & Inquiry/H1 or H2 Level Humanities subject; **and** Pass in H2 Level Chinese subjects, **or** Good pass in H1 Level Chinese subjects, **or** Good pass in 'O' Level Higher Chinese, or Good pass in 'O' Level Chinese	Yes
English Literature and Art History (Double Major) English and History (Double Major) English and Philosophy (Double Major)	A good grade in General Paper/Knowledge & Inquiry/H1 **or** H2 Level Humanities Subject	Yes
History and Chinese (Double Major)	A good grade in General Paper/Knowledge & Inquiry/H1 or H2 Level Humanities subject; **and** Pass in H2 Level Chinese subjects, **or** Good pass in H1 Level Chinese subjects, **or** Good pass in 'O' Level Higher Chinese, **or** Good pass in 'O' Level Chinese	Yes

Programme	Minimum Subject Requirements	Selection Test/ Interview
History and Linguistics & Multilingual Studies (Double Major)	A good grade in General Paper/Knowledge & Inquiry/H1 **or** H2 Level Humanities subject	Yes
Linguistics and Multilingual Studies and English (Double Major) Linguistics and Multilingual Studies and Philosophy (Double Major)	A good grade in General Paper/Knowledge & Inquiry/H1 **or** H2 Level Humanities subject	Yes
Philosophy and Chinese (Double Major)	A good grade in General Paper/Knowledge & Inquiry/H1 **or** H2 Level Humanities subject; **and** Pass in H2 Level Chinese subjects, **or** Good pass in H1 Level Chinese subjects, **or** Good pass in 'O' Level Higher Chinese, **or** Good pass in 'O' Level Chinese	Yes
Philosophy and History (Double Major)	A good grade in General Paper/Knowledge & Inquiry/H1 **or** H2 Level Humanities subject	Yes
Psychology and Linguistics and Multilingual Studies (Double Major)	A good grade in H1 level Mathematics **and** a good grade GP/ Knowledge and Inquiry/ H2 Level Humanities Subject	On a selective basis
School of Social Sciences		
Single Degree		
Bachelor of Social Sciences in Economics	A good grade in H1 Level Mathematics **and** A good grade GP/ Knowledge and Inquiry	On a selective basis
Bachelor of Social Sciences in Psychology	A good grade in H1 Level Mathematics **and** A good grade GP/ Knowledge & Inquiry	
Bachelor of Social Sciences in Public Policy and Global Affairs	A good grade in General Paper/Knowledge & Inquiry **and** H1 Level History/English Literature/Geography	
Bachelor of Social Sciences in Sociology	A good grade in General Paper/Knowledge and Inquiry	
Bachelor of Science (Hons) in Economics and Data Science	H2 Level pass in Mathematics, **and** H2 Level pass in Physics/Chemistry/Biology/Computing	
Second Major		
Economics with a second Major in Business	A good grade in H1 Level Mathematics **and** A good grade GP/ Knowledge and Inquiry	On a selective basis
Psychology with a Second Major in Biological Sciences	A good grade in H1 Level Mathematics **and** A good grade GP/ Knowledge and Inquiry **and** H1 level pass in Physics/Chemistry/Biology	

Programme	Minimum Subject Requirements	Selection Test/ Interview
Double Major Programmes		
Economics and Media Analytics (Double Major)	A good grade in H2 Level Mathematics **and** at least a B grade GP/ Knowledge & Inquiry	On a selective basis
Economics and Psychology (Double Major)	A good grade in H2 Level Mathematics **and** A good grade GP/ Knowledge & Inquiry	
Economics and Public Policy and Global Affairs (Double Major)	A good grade in H2 Level Mathematics **and** A good grade GP/ Knowledge & Inquiry/ H1 Level History /English Literature /Geography	
Psychology and Media Analytics (Double Major)	A good grade in H1 Level Mathematics **and** at least a B grade in GP/ Knowledge and Inquiry	
Wee Kim Wee School of Communication and Information		
Bachelor of Communication Studies Bachelor of Communication Studies with a Second Major in Business Bachelor of Communication Studies with Second Major in Governance and International Relations	H1 Level pass in Mathematics **or** ' O' Level/equivalent pass in Additional Mathematics **and** At least a B grade in General Paper/Knowledge and Inquiry	Yes
COLLEGE OF ENGINEERING		
Renaissance Engineering Programme	H2 Level pass in Mathematics **and** H2 Level pass Physics /Chemistry /Biology/Computing **and** H1 level / 'O' Level pass in Physics/equivalent *Pass in H1 Level / 'O' Level Physics is only applicable to applicants who have not read H2 Level Physics.*	Yes
Bachelor of Engineering Programmes		
Aerospace Engineering	H2 Level pass in Mathematics **and** H2 Level pass Physics /Chemistry /Biology/Computing **and** H1 level / 'O' Level pass in Physics/equivalent *Pass in H1 Level / 'O' Level Physics is only applicable to applicants who have not read H2 Level Physics.*	
Civil Engineering		
Computer Engineering		
Electrical and Electronic Engineering		

Programme	Minimum Subject Requirements	Selection Test/ Interview
Environmental Engineering		
Engineering[@](Common Engineering)		
Information Engineering and Media		
Mechanical Engineering		
Bioengineering	Pass in H2 Level Mathematics, and Pass in H2 Level Biology/ Chemistry/Computing/Physics	
Chemical and Biomolecular Engineering		
Computer Science		
Materials Engineering		
Engineering with a Minor in Business (Offered jointly with the Nanyang Business School. Applicable to all Engineering majors above.)	Please refer to the requirements for the respective Engineering major above	
Engineering with a Minor in International Trading (Offered jointly with the Nanyang Business School. Applicable to all Engineering majors above.)	Please refer to the requirements for the respective Engineering major above	
Bachelor of Science Programmes		
Data Science and Artificial Intelligence (Offered jointly with the School of Physical and Mathematical Sciences)	Pass in H2 Level Mathematics, **and** Pass in H2 Level Biology/ Chemistry/ Computing/ Physics	On a selective basis
Economics and Data Science (Offered jointly with the School of Social Sciences)	Pass in H2 Level Mathematics, a**nd** Pass in H2 Level Biology/ Chemistry/ Computing/ Physic	
Maritime Studies	Pass in H1 Level Mathematics/'O' level Additional Mathematics or equivalent, **and** Pass in H1 Level/'O' level Science subject	
Double Degrees		
Accountancy & Data Science and Artificial Intelligence	Please refer to the requirements for the respective Engineering/ Science major above.	On a selective basis

Programme	Minimum Subject Requirements	Selection Test/ Interview
(Offered jointly with the Nanyang Business School)		
Business and Computing Engineering *(Offered jointly with the Nanyang Business School)*	Please refer to the requirements for the respective Engineering/ Science major above.	
Business and Computing *(Offered jointly with the Nanyang Business School)*	Please refer to the requirements for the respective Engineering/ Science major above.	
Business and Computer Engineering	Please refer to the requirements for the respective Engineering/ Science major above [+]	
Engineering and Economics (Offered jointly with the School of Social Sciences. Applicable to all single Engineering degree programmes listed above)	Please refer to the requirements for the respective Engineering/ Science major above	
Double Majors		
Bachelor of Science (B.Sc) in Mathematical and Computer Sciences (Offered jointly with the School of Physical and Mathematical Sciences)	Pass in H2 Level Mathematics, **and** Pass in H2 Level Biology/ Chemistry/ Computing/ Physics	
Second Majors		
Bachelor of Engineering in your chosen major with a Second Major in Business (Offered jointly with the Nanyang Business School. Applicable to all Engineering majors above.)	Please refer to the requirements for the respective Engineering major above.	
Bachelor of Engineering in your chosen Major with a Second Major in Data Analytics. (Offered jointly with the School of Physical and Mathematical Sciences. Available to all Engineering majors above.)	Please refer to the requirements for the respective Engineering major above	

Programme	Minimum Subject Requirements	Selection Test/ Interview
Bachelor of Engineering in your chosen major with a Second Major in Entrepreneurship (Offered jointly with the Nanyang Technopreneurship Centre. Applicable to all Engineering majors above.)	Please refer to the requirements for the respective Engineering major above	
Bachelor of Engineering in Bioengineering / Chemical and Biomolecular Engineering with a Second Major in Food Science and Technology	H2 Level pass in Mathematics, **and** H2 Level pass in Physics/Chemistry/Biology/Computing, **and** H1 Level/'O' Level pass in Physics/equivalent *Pass in H1 Level / 'O' Level Physics is only applicable to applicants who have not read H2 Level Physics.*	
Bachelor of Engineering in Materials Engineering with a Second Major in Medical Biology (Offered jointly with the School of Biological Sciences)	H2 Level pass in Mathematics, **and** H2 Level pass in Physics/Chemistry/Biology/Computing, **and** H1 Level/'O' Level pass in Physics/equivalent *Pass in H1 Level / 'O' Level Physics is only applicable to applicants who have not read H2 Level Physics.*	
Bachelor of Engineering in Materials Engineering with a Second Major in Pharmaceutical Engineering	H2 Level pass in Mathematics, **and** H2 Level pass in Physics/Chemistry/Biology/Computing, **and** H1 Level/'O' Level pass in Physics/equivalent *Pass in H1 Level / 'O' Level Physics is only applicable to applicants who have not read H2 Level Physics.*	
Bachelor of Engineering in Bioengineering with a Second Major in Pharmaceutical Engineering	H2 Level pass in Mathematics **and** H2 Level pass Physics/Chemistry /Biology/Computing **and** H1 level / 'O' Level pass in Physics/equivalent *Pass in H1 Level / 'O' Level Physics is only applicable to applicants who have not read H2 Level Physics.*	
Bachelor of Engineering in Civil Engineering / Electrical and Electronic Engineering / Environmental Engineering / Mechanical Engineering with a Second Major in Society and Urban Systems (Offered jointly with the School of Social Sciences)	Please refer to the requirements for the respective Engineering major above.	

Programme	Minimum Subject Requirements	Selection Test/ Interview
Bachelor of Science in Maritime Studies with a Second Major in Data Analytics (Offered jointly with the School of Physical and Mathematical Sciences)	Pass in H2 Level Mathematics, **and** Pass in H1 Level/'O' level Science subject	
College of Science		
Asian School of Environment		
Environmental Earth Systems Science	H1 Level pass in Mathematics and H2 Level pass in either Physics, Chemistry, Biology, Economics or Computing	On a selective basis
Double Major in Environmental Earth Systems Science and Public Policy and Global Affairs	H1 Level pass in Mathematics **and** H2 level pass in Physics/Chemistry/Biology/Computing or Economics **and** a good grade in General Paper/Knowledge and Inquiry/H1 Level History/English Literature/Geography	On a selective basis
School of Biological Science		
Biological Sciences	At least H1 or equivalent pass in Mathematics and a good pass in H2 Physics, Chemistry or Biology	On a selective basis
Biological Sciences with a Second Major in Food Science and Technology	At least H2 pass in Mathematics **and** a H2 Level pass in Physics, Chemistry or Biology **OR** At least H1 equivalent pass in Mathematics **and** two H2 Level pass in Physics, Chemistry or Biology	On a selective basis
Double Major in Biological Sciences and Psychology	Good H1 or equivalent pass in Mathematics **and** good H2 pass in Physics, Chemistry or Biology, **and** a good grade in General Paper or Knowledge & Inquiry	On a selective basis
Biomedical Sciences and Chinese Medicine	At least H1 or equivalent pass in Mathematics and a good H2 pass in Physics, Chemistry or Biology **and** at least an O Level or equivalent pass in Chinese Language	Yes
Double Major in Biological Sciences and Psychology	Good H1 or equivalent pass in Mathematics, good H2 Level pass in Physics, Chemistry or Biology, and a good grade in General Paper or Knowledge & Inquiry	On a selective basis
School of Physical and Mathematical Science		
Chemistry and Biological Chemistry	Good H2 pass in Chemistry **and** H2 level pass in Mathematics or Physics	

Programme	Minimum Subject Requirements	Selection Test/ Interview
Chemistry and Biological Chemistry with Second Major in Business (International Trading)		
Chemistry and Biological Chemistry with Second Major in Food Science and Technology		
Chemistry and Biological Chemistry with Second Major in Environmental Science		
Data Science and Artificial Intelligence	Good H2 pass in Mathematics **and** H2 pass in either Physics, Chemistry, Biology or Computing	
Mathematical Sciences	Good H2 pass in Mathematics	
Mathematical Sciences with Minor in Finance		
Double Major in Mathematical Sciences and Economics	Good H2 pass in Mathematics and good grade in General Paper or Knowledge & Inquiry	On a selective basis
Double Major in Mathematical and Computer Sciences	Good H2 pass in Mathematics **and** H2 pass in either Physics, Chemistry, Biology or Computing	
Physics Applied Physics Applied Physics with Second Major in Microelectronics Engineering Double Major in Physics and Mathematical Sciences	Good H2 pass in Physics **and** Mathematics	
LEE KONG CHIAN SCHOOL OF MEDICINE		
Medicine	Pass in H2 Level Chemistry **and** Pass in either H2 Level Biology or Physics In addition, candidates are required to submit the following materials for admission assessment: • Academic results • Personal statement • Two online referee reports • BioMedical Admissions Test (BMAT)	Yes

Programme	Minimum Subject Requirements	Selection Test/ Interview
	Applicants are also recommended to provide details of exceptional talents and/or outstanding achievements beyond school co-curricular activities for admissions assessments. Applicants will have to register for the Biomedical Admissions Test (BMAT) and take the BMAT as part of the criteria for entry to the Lee Kong Chian School of Medicine (LKCMedicine) programme. Applicants take the BMAT around October/ November each year, prior to their application to the LKCMedicine. Only results of the BMAT taken in the 12-month period prior to admission to LKCMedicine will be considered in the selection process. For more details on the BMAT, please refer to www.bmat.org.uk. For further details, please visit https://www.ntu.edu.sg/education/undergraduate-programme/bachelor-of-medicine-and-bachelor-of-surgery-(mbbs)	
NATIONAL INSTITUTE OF EDUCATION		
Arts (Education) Science (Education)	GCE A level *These degree programmes offer many courses which may require further subject prerequisites. Please refer to the National Institute of Education (NIE) website for details.*	Yes
Bachelor of Science in Sport Science & Management	H1 Level pass in Mathematics **or** O level/equivalent pass in Additional Mathematics	On a selective basis

Footnote to minimum Subject Requirements
@Students who are undecided on their Engineering major may opt for Engineering (i.e. Common Engineering) at the point of application. All Common Engineering students will read a semester of engineering studies after which they will be streamed into either Civil Engineering, Electrical and Electronic Engineering, Environmental Engineering, Materials engineering or Mechanical Engineering at the end of Year 1, Semester 1. In all cases, admissions and streaming into an engineering major are merit-based.

More details can be found at the following website:-
https://www.ntu.edu.sg/admissions/undergraduate

https://www.ntu.edu.sg/admissions/undergraduate/admission-guide/singapore-cambridge-gce-a-level

REQUIREMENTS FOR COURSES IN NUS

Programme	Minimum Subject Requirements	Selection Interview
College of Humanities and Science:		
Bachelor of Arts		
Chinese Language/Chinese Studies	At least B4 for Higher Chinese at GCE 'O' Level, Chinese Language at 'AO' level OR A pass for Chinese at GCE 'A' Level, Higher Chinese at GCE 'A' Level OR At least C grade for Chinese (H1CL) at GCE 'A' Level OR A pass for Chinese Language and Literature (H2CLL) at GCE 'A' Level, Chinese Language and Literature (H3CLL) at GCE 'A' Level	
English Language/English Literature/Theatre Studies	Be exempted from the NUS Qualifying English Test, or have passed the NUS Qualifying English Test, or be exempted from further CELC remedial English modules	
Malay Studies	A pass in Higher Malay Language at GCE 'O' Level OR A H1 pass in Malay Language OR A H2/H3 in Malay Language and Literature OR A pass in LAM1201 Malay 1 (offered by Centre for Language Studies at FASS) for students without prior knowledge in Malay	
Global Studies History Japanese Studies Philosophy South Asian Studies Southeast Asian Studies	Nil. Open to all registered students of the College.	
Philosophy, Politics, and Economics Cross-Disciplinary Programme (PPE-XDP)	Requires a separate application. Please click PPE-XDP or scan the QR code below for details on the application procedure.	
Bachelor of Social Science		
Anthropology Communication and New Media Economics Geography Political Science Psychology	Nil. Open to all registered students of the College	

Programme	Minimum Subject Requirements	Selection Interview
Social Work Sociology		
Bachelor of Science		
• Chemistry • Chemistry Specialisation in Chemical Research	Good H2 pass (or equivalent) in Chemistry Students without these prerequisites are required to read the bridging module in Chemistry (CM1417 or CM1417X)	

• Data Science and Analytics
 	
• Data Science and Analytics
  • Specialisation in Operations Research
  • Specialisation in Statistical Methodology
	Very good H2 pass (or equivalent) in Mathematics/Further Mathematics
	
	Students without these prerequisites are required to read the bridging module in Mathematics (MA1301 or MA1301X)	

• Food Science and Technology* • Specialisation in Food Science and Technology Research and Innovation	Any two H2 passes (or equivalent) in Chemistry or Biology or Physics or Computing or Mathematics/Further Mathematics Students without these prerequisites are required to read the bridging modules in Chemistry and/or Biology (CM1417/CM1417X and/or LSM1301)	

• Life Sciences
 	
• Life Sciences
  • Specialisation in Biomedical Science
  • Specialisation in Ecology, Evolution and Biodiversity
  • Specialisation in Molecular and Cell Biology
	Good H2 passes (or equivalent) in Biology and Chemistry
	
	Students without these prerequisites are required to read the bridging modules in Biology/Chemistry.	

• Mathematics • Mathematics • Specialisation in Data Modelling and Analytics	Good H2 pass (or equivalent) in Mathematics/Further Mathematics Students without these prerequisites are required to read the bridging module in Mathematics (MA1301 or MA1301X)	

Programme	Minimum Subject Requirements	Selection Interview
• Specialisation in Operations Research and Analytics • Specialisation in Pure Mathematics		
Pharmaceutical Science*	Very good H2 pass (or equivalent) in Chemistry and a very good H2 pass (or equivalent) in Biology or Physics or Mathematics/Further Mathematics *Students are required to apply and subject to approval*	
• Physics • Physics • Specialisation in Astrophysics • Specialisation in Nanophysics • Specialisation in Quantum Technologies	Good H2 pass (or equivalent) in Mathematics/Further Mathematics Students without these prerequisites are required to read the bridging module in Mathematics (MA1301 or MA1301X)	
Quantitative Finance	Good H2 pass (or equivalent) in Mathematics/Further Mathematics Students without these prerequisites are required to read the bridging module in Mathematics (MA1301 or MA1301X)	
• Statistics • Statistics • Specialisation in Data Science • Specialisation in Finance and Business Statistics	Good H2 pass (or equivalent) in Mathematics/Further Mathematics *Students without these prerequisites are required to read the bridging module in Mathematics*	
Second Major (Optional)		
Chemistry	Good H2 pass (or equivalent) in Chemistry	
Data Analytics	Very good H2 pass (or equivalent) in Mathematics/Further Mathematics	
Food Science* *Applicable to Chemistry Majors only*	Any two H2 passes (or equivalent) in Chemistry or Biology or Physics or Computing or Mathematics/Further Mathematics Good pass in gateway module FST1101B Science and Technology of Foods ** Students are required to apply and subject to approval.*	

Programme	Minimum Subject Requirements	Selection Interview
Life Sciences	Good H2 passes (or equivalent) in Biology and Chemistry	
Mathematics	Good H2 pass (or equivalent) in Mathematics/Further Mathematics	
Nutrition (wef Academic Year 2022/2023)* *Applicable to CHS students only*	Any two H2 passes (or equivalent) in Chemistry or Biology or Physics or Computing or Mathematics/Further Mathematics	
Pharmaceutical Science*	A very good pass in H2 Chemistry A very good pass in gateway module PHS1101 The Billion-Dollar Pill - Bench to Bedside Drug Development A very good Cumulative Average Point (CAP) standing **Students are required to apply and subject to approval*	
Physics	Good H2 pass (or equivalent) in Mathematics/Further Mathematics	
Quantitative Finance	Good H2 pass (or equivalent) in Mathematics/Further Mathematics	
Statistics	Good H2 pass (or equivalent) in Mathematics/Further Mathematics	
Minors (Optional)		
Analytical Chemistry	Good H2 pass (or equivalent) in Chemistry	
Astronomy	H2 Mathematics/Further Mathematics (or equivalent)	
Biophysics	Good H2 passes (or equivalent) in Physics, Chemistry and/or Biology	
Bioinformatics	Open to students from all disciplines	
Chemistry	Good H2 pass (or equivalent) in Chemistry	
Data Analytics	Good H1 pass (or equivalent) in Mathematics	
Forensic Science	Good pass in gateway module in FSC2101 Forensic Science *Students are required to apply and subject to approval*	
Life Sciences	Good H2 pass (or equivalent) in Biology	
Mathematics	Good H2 pass (or equivalent) in Mathematics/Further Mathematics	
Medical Physics	Good H2 passes (or equivalent) in Physics and Biology *Students are required to apply and subject to approval.*	Yes
Meteorology and Climate Science	H2 Mathematics/Further Mathematics (or equivalent) *Students are required to apply and subject to approval*	Yes

Programme	Minimum Subject Requirements	Selection Interview
Nanoscience	Good H2 pass (or equivalent) in Chemistry or Physics	
Nutrition Applicable to CHS students only.	Any two H2 passes (or equivalent) in Chemistry or Biology or Physics or Computing or Mathematics/Further Mathematics *Students are required to apply and subject to approval*	
Pharmaceutical Science	Very good pass in H2 Chemistry (or equivalent) and a very good pass in the gateway module PHS1101 *Students are required to apply and subject to approval*	
Physics	Good H2 pass (or equivalent) in Mathematics/Further Mathematics	
Physics in Technology	H2 Mathematics/Further Mathematics (or equivalent)	
Quantitative Finance	Good H2 pass (or equivalent) in Mathematics/Further Mathematics	
Statistics	Good H2 pass (or equivalent) in Mathematics/Further Mathematics	
Joint Minors (Optional)		
Aquatic Ecology	Open to students from all disciplines, except those who are reading the Environmental Studies programme from Academic Year 2016/2017 and onwards	
Engineering Materials	Good H2 pass (or equivalent) in Chemistry or Physics	
Geosciences	Nil	

Double Major Programmes
Students who are interested in Second Major or Minor programmes offered by other Faculties/Schools in NUS can consider applying for Double Major Programmes (DMPs) and Major with Minor Programmes (MMPs) upfront at the point of admission. The full list and their subject Prerequisites are available on the NUS Office of Admission (OAM) website here.

Primary Major (Faculty of Science)	Major (From Other Faculties / Schools)	Admission Requirements
Life Sciences	Management (BIZ)	Good H2 passes (or equivalent) in Biology and Chemistry
Mathematics	Business Analytics (SoC)	Good H2 pass (or equivalent) in Mathematics or Further Mathematics
Mathematics	Computer Science (SoC)	Good H2 pass (or equivalent) in Mathematics or Further Mathematics
Mathematics	Information Security (SoC)	Good H2 pass (or equivalent) in Mathematics or Further Mathematics
Mathematics	Management (BIZ)	Good H2 pass (or equivalent) in Mathematics or Further Mathematics
Statistics	Business Analytics (SoC)	Good H2 pass (or equivalent) in Mathematics or Further Mathematics

Programme		Minimum Subject Requirements	Selection Interview
Statistics	Computer Science (SoC)	Good H2 pass (or equivalent) in Mathematics or Further Mathematics	
Statistics	Information Security (SoC)	Good H2 pass (or equivalent) in Mathematics or Further Mathematics	
Statistics	Management (BIZ)	Good H2 pass (or equivalent) in Mathematics or Further Mathematics	
Primary Major *(Faculty of Science)*	*Minor* *(From Other Faculties / Schools)*	*Admission Requirements*	
Data Science and Analytics	Entrepreneurship (BIZ)	Very good H2 pass (or equivalent) in Mathematics/Further Mathematics	
Food Science and Technology	Entrepreneurship (BIZ)	Any two H2 passes (or equivalent) in Chemistry or Biology or Physics or Computing or Mathematics/Further Mathematics	
Life Sciences	Entrepreneurship (BIZ)	Good H2 passes (or equivalent) in Biology and Chemistry	
Life Sciences	Public Health (SSHSPH)	Good H2 passes (or equivalent) in Biology and Chemistry	
Mathematics	Entrepreneurship (BIZ)	Good H2 pass (or equivalent) in Mathematics/Further Mathematics	
Quantitative Finance	Information Security (SoC)	Good H2 pass (or equivalent) in Mathematics/Further Mathematics	
Statistics	Entrepreneurship (BIZ)	Good H2 pass (or equivalent) in Mathematics/Further Mathematics	
Statistics	Information Security (SoC)	Good H2 pass (or equivalent) in Mathematics/Further Mathematics	

BIZ = NUS Business School
SSHSPH = Saw Swee Hock School of Public Health
SoC = NUS School of Computing

Source: https://chs.nus.edu.sg/prospective-students/#subject-prerequisites

NUS Business School		
Accountancy (BBA ACC)	H1 pass in Mathematics **or** O" Level Additional Mathematics	No
Business Administration (BBA)	H1 pass in Mathematics **or**"O" Level Additional Mathematics	No
Real Estate	H1 Pass in Chemistry **or** Mathematics **or** Physics	No

For more information on:

The list of second majors and minors available to students in BBA and BBA (ACC) programmes please refer to Majors/Minors for BIZ students

Double Major Programmes available to BBA only please refer to Double Major Programme

Minor Programmes available to BBA only please refer to Minor Programmes

Programme	Minimum Subject Requirements	Selection Interview
Double Degrees Programme please refer to Double Degree Programmes		
School of Computing		
Computer Science	H2 pass in Computing or Mathematics or Further Mathematics or Physics; OR a good pass in H1 Mathematics	On a selective basis
Information Security	H2 pass in Computing or Mathematics or Further Mathematics or Physics; OR a good pass in H1 Mathematics	On a selective basis
Computer Engineering	H2 pass in Mathematics or Further Mathematics and either Physics, Computing or Chemistry. Students without H1 or H2 Physics need to have an O level pass in Physics or its equivalent and would be required to take physics bridging module.	On a selective basis
Information Systems	H2 pass in Computing; OR a good pass in H1 Mathematics.	On a selective basis
Business Analytics	H2 pass in Mathematics or Further Mathematics.	On a selective basis
Double Majors *The School of Computing offers direct admissions for its undergraduates to pursue a double major with another faculty/within the school. For more details on these double major programmes please refer to* https://www.comp.nus.edu.sg/programmes/ug/dmajoro/ *The School also offers a wide array of minors and special programmes to full-time undergraduate students to provide more breadth and depth in their studies. Please click link for more information:* *https://www.comp.nus.edu.sg/programmes/ug/minorc/*		
College of Design and Engineering		
Architecture	H1 pass in Chemistry or Mathematics or Physics; OR pass in 'O' level Additional Mathematics.	Yes
Biomedical Engineering Two specialisations available: • Robotics • Medical Engineering	H2 Mathematics, H2 Physics* and H2 Chemistry** *Applicants without H1 or H2 Physics need to have an 'O'-Level pass in Physics or its equivalent and will be required to take Physics bridging modules. **Applicants without H2 Chemistry will have to take a Chemistry bridging module.	
Chemical Engineering	H2 pass in Mathematics or Further Mathematics* ** Students with insufficient Physics background may need to read Physics bridging modules after enrolling in NUS*	
Civil Engineering	H2 pass in Mathematics or Further Mathematics	
Electrical Engineering	H2 pass in Mathematics or Further Mathematics	
Engineering Science	H2 pass in Mathematics or Further Mathematics	

Programme	Minimum Subject Requirements	Selection Interview
Environmental Engineering	H2 pass in Mathematics or Further Mathematics *Students with insufficient Physics background will need to read Physics bridging modules after enrolling in NUS*	
Industrial Design	H1 pass in Mathematics, Physics, Economics or Art; OR Pass in 'O' Level Additional Mathematics	Yes
Industrial Systems Engineering	H2 pass in Mathematics or Further Mathematics Applicants without H1 or H2 Physics need to have an 'O'-Level pass in Physics or its equivalent and will be required to take Physics bridging modules.	
Infrastructure and Project Management	Pass in H2 Physics and H2 Mathematics or Further Mathematics. Students without H2 Physics can still apply but will have to take the Physics Bridging Module	
Landscape Architecture	H1 pass in Chemistry or Mathematics or Physics; OR pass in 'O' level Additional Mathematics.	Yes
Materials Science & Engineering	H2 pass in Mathematics or Further Mathematics *Students without H2 Physics may be required to take Physics bridging modules.*	
Mechanical Engineering	H2 pass in Mathematics or Further Mathematics	
Faculty of Dentistry		
Dentistry	Good H2 pass in Chemistry and a good H2 pass in either Biology or Physics. *Please note to be considered for Dentistry or Medicine, you must rank these courses as first or second choice. If Dentistry or Medicine is ranked as second choice, first choice needs to be an interview course.*	Yes
Yong Loo Lin School of Medicine		
Medicine	H2 pass in Chemistry and either Biology or Physics. *Students applying for Medicine need to submit a portfolio to NUS Medicine Admissions Portal after completing their undergraduate admissions application* *Please note to be considered for Dentistry or Medicine, you must rank these courses as first or second choice. If Dentistry or Medicine is ranked as second choice, first choice needs to be an interview course.*	Yes
Nursing	H2 pass in any two of the following: Biology, Chemistry, Computing, Physics and Mathematics	Yes
Faulty of Law		
Law	Good overall A Level results, including • At least a B grade in H1 General Paper (GP) *To be considered for Law, you must rank this course as first, second or third choice. If Law is ranked as second choice or third choice, the course choice(s) ranked above need to be an interview course.*	Yes

Programme	Minimum Subject Requirements	Selection Interview
Department of Pharmacy (Faculty of Science)		
Pharmacy	Very good pass in H2 Chemistry and very good pass in H2 Biology, Physics, Mathematics or Further Mathematics Students applying to Pharmacy should refer to https://pharmacy.nus.edu.sg/study/undergraduate/bachelor-of-pharmacy for important information on the 'Fitness to Practice'	No

Programme	***Subject Prerequisites***	***Selection Test/ Interview***
Double / Concurrent Degree Programmes / Specialisations / Double Major Programmes / Minor Programmes		
Concurrent Degree		
Business Administration (Accountancy) & Master in Public Policy	H1 pass in Mathematics or pass in O Level Additional Mathematics.	Yes
Business Administration & Master of Science (Management)	H1 pass in Mathematics or pass in O Level Additional Mathematics.	Yes
Business Administration (Accountancy) & Master in Public Policy	H1 pass in Mathematics or pass in O Level Additional Mathematics.	Yes
Business Administration (Accountancy) & Master of Science (Management)	H1 pass in Mathematics or pass in O Level Additional Mathematics.	Yes
Information Systems and Master of Science (Management) (NUS)	H2 pass in Computing; OR a good pass in H1 Mathematics	Yes
Law & Master in Public Policy	Good overall A level results, including at least a B grade in H1 General Paper (GP); or a good pass in H2 Knowledge & Inquiry (KI); or a minimum SAT Critical Reading / Evidence-based Reading & Writing score of 700 accompanied by a minimum E grade for GP/KI.	Yes
Double Degrees		
Arts & Social Sciences (NUS) and Arts (Sciences Po)	Please refer to www.usp.nus.edu.sg/nus-sciencespo for details.	Yes

Programme	***Subject Prerequisites***	***Selection Test/ Interview***
Business Administration & Communications and New Media	Minimum prevailing admission criteria of both courses.	No
Business Administration & Computer Science courses	H2 pass in Computing or Mathematics or Further Mathematics or Physics; OR a good pass in H1 Mathematics.	No
Business Administration & Information Systems	H2 pass in Computing; OR a good pass in H1 Mathematics.	No
Business Administration & Law	H1 pass in Mathematics **OR** pass in O Level Additional Mathematics **AND** good overall A level results, including at least a B grade in H1 General Paper (GP); or a good pass in H2 Knowledge & Inquiry (KI); **OR** a minimum SAT Critical Reading / Evidence-based Reading & Writing score of 700 accompanied by a minimum E grade for GP/KI.	Yes
Business Administration and Business Analytics	H2 pass in Mathematics **or** Further Mathematics.	No
Business Analytics and Economics	H2 pass in Mathematics **or** Further Mathematics.	No
Computer Engineering and Business Administration	H2 pass in Mathematics **or** Further Mathematics **and** either Physics, Computing **or** Chemistry	No
Computer Engineering and Economics	H2 pass in Mathematics **or** Further Mathematics **and** either Physics, Computing **or** Chemistry	No
Economics and Business Administration	Minimum prevailing admission criteria of both courses.	No
Economics & Law	H2 pass in Mathematics **AND** good overall A level results, including at least a B grade in H1 General Paper (GP); or a good pass in H2 Knowledge & Inquiry (KI); or a minimum SAT Critical Reading / Evidence-based Reading & Writing score of 700 accompanied by a minimum E grade for GP/KI.	Yes
Engineering & Business Administration	H2 pass in Mathematics or Further Mathematics	No
Engineering & Economics	H2 pass in Mathematics or Further Mathematics	No

Programme	*Subject Prerequisites*	*Selection Test/ Interview*
Information Systems and Economics	H2 pass in Computing; OR a good pass in H1 Mathematics.	No
Mathematics & Computer Science	An A grade in H2 Mathematics or Further Mathematics AND a good grade in H2 Computing or Physics or Chemistry or Biology	No
Specialisation		
Biomedical Engineering (Robotics Specialisation)	H2 pass in Mathematics or Further Mathematics	No
Civil Engineering (Digitalization in Urban Infrastructure Specialisation)	H2 pass in Mathematics or Further Mathematics	No
Computer Engineering (Robotics Specialisation)	H2 pass in Mathematics or Further Mathematics and either Physics, Computing or Chemistry Students without H1 or H2 Physics need to have an 'O' Level pass in Physics or its equivalent and would be required to take Physics bridging modules	No
Electrical Engineering (Internet of Things Specialisation)	H2 pass in Mathematics or Further Mathematics and either Physics, Computing or Chemistry Students without H1 or H2 Physics need to have an 'O' Level pass in Physics or its equivalent and would be required to take Physics bridging modules	No
Electrical Engineering (Robotics Specialisation)	H2 pass in Mathematics or Further Mathematics	No
Environmental Engineering (Digitalization in Urban Infrastructure Specialisation)	H2 pass in Mathematics or Further Mathematics	No
Mechanical Engineering (Aeronautical Engineering Specialisation)	H2 pass in Mathematics or Further Mathematics	No
Mechanical Engineering (Robotics Specialisation)	H2 pass in Mathematics or Further Mathematics	No

Programme	*Subject Prerequisites*
Double Major Programmes	
Business Schools	

Business Administration with Business Analytics	H2 pass in Mathematics or Further Mathematics
Business Administration with Communications & New Media	H1 pass in Mathematics or pass in 'O' Level Additional Mathematics
Business Administration with Economics	H1 pass in Mathematics or pass in 'O' Level Additional Mathematics
Business Administration with Psychology	H1 pass in Mathematics or pass in 'O' Level Additional Mathematics
Business Administration with Real Estate Finance	H1 pass in Chemistry or Mathematics or Physics
College of Humanities and Sciences	
Faculty of Arts and Social Sciences	
Communications & New Media with Management	H1 pass or equivalent in Mathematics
Economics with Business Analytics	H2 pass in Mathematics or Further Mathematics
Economics with Management	H1 pass or equivalent in Mathematics
Psychology with Management	H1 pass or equivalent in Mathematics
Faculty of Science	
Life Sciences with Management	Good H2 passes in Biology and Chemistry
Mathematics with Business Analytics	Good H2 pass or equivalent in Mathematics or Further Mathematics.
Mathematics with Computer Science Courses	Good H2 pass or equivalent in Mathematics or Further Mathematics.
Mathematics with Information Security	Good H2 pass or equivalent in Mathematics or Further Mathematics.
Mathematics with Management	Good H2 pass or equivalent in Mathematics or Further Mathematics.
Statistics with Business Analytics	Good H2 pass or equivalent in Mathematics or Further Mathematics.
Statistics with Computer Science Courses	Good H2 pass or equivalent in Mathematics or Further Mathematics.
Statistics with Information Security	Good H2 pass or equivalent in Mathematics or Further Mathematics
Statistics with Management	Good H2 pass or equivalent in Mathematics or Further Mathematics
College of Design and Engineering	
Computer Engineering with Innovation & Design (Double Major)	H2 pass in Mathematics or Further Mathematics and either Physics, Computing or Chemistry
Computer Engineering with Management (Double Major)	H2 pass in Mathematics or Further Mathematics and either Physics, Computing or Chemistry
Computer Engineering with Systems Engineering (Double Major)	H2 pass in Mathematics or Further Mathematics and either Physics, Computing or Chemistry

Engineering with Innovation & Design (Double Major)	H2 pass in Mathematics or Further Mathematics
Engineering with Management (Double Major)	H2 pass in Mathematics or Further Mathematics
Engineering with Systems Engineering (Double Major)	H2 pass in Mathematics or Further Mathematics
Mechanical Engineering (Aeronautical Engineering Specialisation) with Innovation & Design (Double Major)	H2 pass in Mathematics or Further Mathematics
Mechanical Engineering (Aeronautical Engineering Specialisation) with Management (Double Major)	H2 pass in Mathematics or Further Mathematics
Mechanical Engineering (Aeronautical Engineering Specialisation) with Systems Engineering (Double Major)	H2 pass in Mathematics or Further Mathematics
School of Computing	
Business Analytics with Economics	Good H2 pass in Mathematics or Further Mathematics
Business Analytics with Mathematics	Good H2 pass or equivalent in Mathematics or Further Mathematics.
Business Analytics with Statistics	Good H2 pass or equivalent in Mathematics or Further Mathematics.
Computer Science Courses with Mathematics	Good H2 pass or equivalent in Mathematics or Further Mathematics.
Computer Science Courses with Statistics	Good H2 pass or equivalent in Mathematics or Further Mathematics.
Information Security with Mathematics	Good H2 pass or equivalent in Mathematics or Further Mathematics.
Information Security with Statistics	Good H2 pass or equivalent in Mathematics or Further Mathematics.
Information Systems with Economics	Good H2 pass in Mathematics or Further Mathematics

Programme	***Subject Prerequisites***	***Selection Test/ Interview***
Special Programmes:		
Engineering & Medicine (Duke-NUS)	Will be considered for the Programme if admitted to an Engineering course.[4]	Yes
Engineering Scholars Programme	Will be considered for the Programme if admitted to an Engineering course.[4]	Yes

Programme	***Subject Prerequisites***

Minor Programmes	
Business Schools	
Business Administration (Accountancy) with a Minor in Quantitative Finance	Good H2 pass or equivalent in Mathematics or Further Mathematics
Business Administration (Accountancy) with a Minor in Statistics	Good H2 pass or equivalent in Mathematics or Further Mathematics
Business Administration with a Minor in Communications & New Media	Minor subject requirements will be the same as the Major subject requirements
Business Administration with a Minor in Public Health	Minor subject requirements will be the same as the Major subject requirements
Business Administration with a Minor in Psychology	Minor subject requirements will be the same as the Major subject requirements
Business Administration with a Minor in Quantitative Finance	Good H2 pass in Mathematics or Further Mathematics
Business Administration with a Minor in Real Estate	Minor subject requirements will be the same as the Major subject requirements
Business Administration with a Minor Statistics	Good H2 pass or equivalent in Mathematics or Further Mathematics
Real Estate with a Minor in Business Analytics	H2 pass in Mathematics or Further Mathematics
Real Estate with a Minor in Infrastructure Management and Finance	Minor subject requirements will be the same as the Major subject requirements
Real Estate with a Minor in Management	Minor subject requirements will be the same as the Major subject requirements
College of Humanities and Sciences	
Communications & New Media with a Minor in Management	H1 pass or equivalent in Mathematics
Economics with a Minor in Business Analytics	H2 pass or equivalent in Mathematics or Further Mathematics
Economics with a Minor in Information Systems	H2 pass or equivalent in Mathematics or Further Mathematics
Psychology with a Minor in Management	H1 pass or equivalent in Mathematics
Data Science and Analytics with a Minor in Entrepreneurship	Very good H2 pass in Mathematics/Further Mathematics
Food Science and Technology with a Minor in Entrepreneurship	Good H2 pass or equivalent in Chemistry and a good H2 pass or equivalent in Biology or Mathematics / Further Mathematics or Physics or Computing
Life Sciences with a Minor in Entrepreneurship	Good H2 passes in Biology and Chemistry
Life Sciences with a Minor in Public Health	Good H2 passes in Biology and Chemistry
Mathematics with a Minor in Entrepreneurship	Good H2 pass or equivalent in Mathematics or Further Mathematics.

Quantitative Finance with a Minor in Information Security	Good H2 pass or equivalent in Mathematics or Further Mathematics.
Statistics with a Minor in Entrepreneurship	Good H2 pass or equivalent in Mathematics or Further Mathematics.
Statistics with a Minor in Information Security	Good H2 pass or equivalent in Mathematics or Further Mathematics.
College of Design and Engineering	
Biomedical Engineering with a Minor in Business	H2 pass in Mathematics or Further Mathematics
Biomedical Engineering with a Minor in Information Security	H2 pass or equivalent in Mathematics or Further Mathematics
Civil Engineering with a Minor in Infrastructure Management and Finance	H2 pass or equivalent in Mathematics or Further Mathematics
Computer Engineering with a Minor in Data Engineering	H2 pass in Mathematics or Further Mathematics and either Physics, Computing or Chemistry
Computer Engineering with a Minor in Management	H2 pass in Mathematics or Further Mathematics and either Physics, Computing or Chemistry
Electrical Engineering with a Minor in Business Analytics	H2 pass in Mathematics or Further Mathematics
Electrical Engineering with a Minor in Information Security	H2 pass in Mathematics or Further Mathematics
Engineering with a Minor in Data Engineering	H2 pass in Mathematics or Further Mathematics
Engineering with a Minor in Management	H2 pass in Mathematics or Further Mathematics
Industrial & Systems Engineering with a Minor in Business Analytics	H2 pass in Mathematics or Further Mathematics
Industrial & Systems Engineering with a Minor in Information Security	H2 pass in Mathematics or Further Mathematics
Infrastructure & Project Management with a Minor in Infrastructure Management and Finance	H2 pass in Mathematics or Further Mathematics
Statistics with a Minor in Information Security	H2 pass in Mathematics or Further Mathematics
Materials Science & Engineering with a Minor in Information Security	H2 pass in Mathematics or Further Mathematics
Mechanical Engineering (Aeronautical Engineering Specialisation) with a Minor in Management	H2 pass in Mathematics or Further Mathematics
Mechanical Engineering with a Minor in Business Analytics	H2 pass in Mathematics or Further Mathematics
Mechanical Engineering with a Minor in Information Security	H2 pass in Mathematics or Further Mathematics
School of Computing	
Business of Analytics with a Minor in Economics	Good H2 pass in Mathematics or Further Mathematics

Business of Analytics with a Minor in Entrepreneurship	H2 pass or equivalent in Mathematics or Further Mathematics
Business of Analytics with a Minor in Information Security	Good H2 pass in Mathematics or Further Mathematics
Business of Analytics with a Minor Quantitative Finance	H2 pass or equivalent in Mathematics or Further Mathematics
Business of Analytics with a Minor in Real Estate	Good H2 pass in Mathematics or Further Mathematics
Business of Analytics with a Minor in Statistics	H2 pass or equivalent in Mathematics or Further Mathematics
Computer Sciences Courses with a Minor in Entrepreneurship	H2 pass in Computing, Mathematics or Further Mathematics or Physics
Computer Sciences Courses with a Minor in Interactive Media	H2 pass in Computing, Mathematics or Further Mathematics or Physics
Computer Sciences Courses with a Minor in Management	H2 pass in Computing, Mathematics or Further Mathematics or Physics
Computer Sciences Courses with a Minor in Statistics	Good H2 pass or equivalent in Mathematics or Further Mathematics
Information Security with a Minor in Entrepreneurship	H2 pass in Computing, Mathematics or Further Mathematics or Physics
Information Security with a Minor in Management	H2 pass in Computing, Mathematics or Further Mathematics or Physics
Information Security with a Minor in Mathematics	Good H2 pass or equivalent in Mathematics or Further Mathematics
Information Security with a Minor Quantitative Finance	Good H2 pass or equivalent in Mathematics or Further Mathematics
Information Security with a Minor in Statistics	Good H2 pass or equivalent in Mathematics or Further Mathematics
Information Systems with a Minor in Economics	Good H2 pass in Mathematics or Further Mathematics
Information Systems with a Minor in Entrepreneurship	H2 pass in Computing or Mathematics or Further Mathematics
Information Systems with a Minor in Interactive Media	H2 pass in Computing or Mathematics or Further Mathematics
Information Systems with a Minor in Management	H2 pass in Computing or Mathematics or Further Mathematics

More details can be found at the following websites:-
https://www.nus.edu.sg/oam/apply-to-nus/singapore-cambridge-gce-a-level/subject-pre-requisites

REQUIREMENTS FOR COURSES IN SMU

SMU comprises of six schools, each offering undergraduates programmes:

- School of Accountancy,
- Lee Kong Chian School of Business,
- School of Computing and Information Systems,
- School of Economics,
- School of Social Sciences,
- Yong Pung How School of Law,
- College of Integrative Studies and
- SMU-Duke-NUS MD Programme.

The programmes the six schools offer include:

- Bachelor of Integrative Studies
- Bachelor of Accountancy
- Bachelor of Business Management
- Bachelor of Laws
- Bachelor of Science (Computer Science)
- Bachelor of Science (Computing & Law)
- Bachelor of Science (Economics)
- Bachelor of Science (Information Systems)
- Bachelor of Science (Software Engineering) WSDeg
- Bachelor of Social Science
- SMU-Duke-NUS Medicine Pathway

SMU offers more than 300 double major combinations and over 20 double degree programmes. To find out more about a major you are interested in click here.

For more information on the programmes offered in SMU, please click here and here.

Programmes	**Minimum Subject Requirements**
All Courses	• Passes in at least 3 H2 content-based subjects, 1 H1 content-based subject, Project Work (PW) and General Paper (GP)/Knowledge & Inquiry (KI). • Other acceptable subject combinations include: 4 H2 content-based subjects, PW and GP; or 3 H2 content-based subjects, PW and KI. For the H2 and H1 content-based subjects, at least one content-based subject must be from a contrasting discipline. • Interview for shortlisted applicants. Shortlisted Law/Computing & Law applicants must also take a writing test Unless exempted from Mother Tongue Language (MTL) requirement, you must meet one of the following MTL requirements: • 'S' grade or better in MTL or General Studies in Chinese at H1 Level or Mother Tongue Language and Literature at H2 Level • D7 grade or better in Higher MTL at O-Level • Pass in MTL Syllabus B at A-Level

	Successful applicants who have not met the MTL requirement will be offered Conditional Admission and are required to satisfy this requirement before graduating from SMU.
Law/Computing & Law	Law/Computing & Law applicants must meet at least one of the following requirements: • GP / KI grade of A or B (H1 / H2 level syllabus) • GP of B3 or better (A / AO syllabus) Applicants who fall short of the above minimum requirements may be considered on a case-by-case basis. To be considered, applicants must indicate Law as their first choice in their application for admission to SMU. Shortlisted Law applicants must also take a writing test
Economics	A good pass in H2 Math or H2 Further Math or Additional Maths at GCE O-Level. Applicants who do not have this requirement can still apply for consideration if they have alternative Mathematics content background. The School of Economics makes the final decision on admission.
Computer Science	A good pass in H2 Math or H2 Further Math or H2 Physics or H1 Math. Applicants who do not have this requirement can still apply for consideration if they have alternative Mathematics content background. The School of Information Systems makes the final decision on admission.
SMU-Duke-NUS Medicine Pathway	• Must be Singapore Citizens or Singapore Permanent Residents • Have outstanding academic results in either Singapore-Cambridge GCE A-Levels, local Polytechnic Diploma, IB Diploma or NUS High School Diploma • Have good records of leadership experience and community service • Demonstrate strong communication skills • Have a strong interest to pursue postgraduate studies in medicine Applications for SMU undergraduate programme and Duke-NUS MD conditional pathway programme will be separately considered by SMU and Duke-NUS respectively. Duke-NUS will conduct interviews to evaluate the applicant's suitability. For more information, please click here.

More details can be found at the following websites:-

https://admissions.smu.edu.sg/programmes

https://admissions.smu.edu.sg/admissions/singapore-cambridge-gce-a-level

REQUIREMENTS FOR COURSES IN SUTD

SUTD currently offers five undergraduate programmes. Their undergraduate programmes are developed to offer a modern engineering and architectural education that crosses traditional disciplines. They prepare students for roles that involve design, technical leadership and creative thinking:

Architecture and Sustainable Design (ASD)
Bachelor of Science (Architecture and Sustainable Design)
ASD prepares students for the future needs of architecture in a digital era – ecological urban architecture, leveraging on big data to design smart cities, advanced design computation, digital fabrication and more.

Computer Science and Design (CSD)
Bachelor of Engineering (Computer Science and Design
CSD prepares students for the design of software as well as integrated software/hardware systems that interact with human and machines

Design and Artificial Intelligence (DAI)
Bachelor of Science (Design and Artificial Intelligence)
DAI prepares students for an artificial intelligence-driven economy, where they can boost productivity and create economic value through sustainable applications.

Engineering Product Development (EPD)
Bachelor of Engineering (Engineering Product Development)
EPD prepares students for leadership in the conception, design, implementation and operation of innovative technology-intensive products.

Engineering Systems and Design (ESD)
Bachelor of Engineering (Engineering Systems and Design)
ESD prepares students for the design, analysis, optimisation and management of large-scale complex systems

For more information on Minors and Specialisation offered under each programme, please click here.

Programmes	Minimum Subject Requirements
All Courses	• The University accepts applications from both Science and Arts stream students. • You should possess good passes in at least three H2 content-based subjects, one H1 content-based subject, Project Work and attempted General Paper (GP) or Knowledge & Inquiry (KI). Other acceptable subject combinations include: four H2 content-based subjects, Project Work and GP; or three H2 content-based subjects, Project Work and KI. • While it is recommended that you have taken Mathematics and a Science subject, i.e. Physics or Chemistry, at H2, the university considers your results in Mathematics and the Science subjects taken at H1, O-level or equivalent as well. You may also be encouraged to take bridging modules before start of term. All Singapore Citizens and Permanent Residents are required to fulfil the MTL requirement for admission into full-time publicly-funded undergraduate programmes in the universities. The MTL requirement may be fulfilled through the following: 1. a D7 grade for Higher MTL at Singapore-Cambridge GCE O-Level (the iGCSE MTL First Language examination does not fulfil the requirement); or 2. a pass in MTL 'B' or a S grade for H1 MTL/ MTL-in-lieu or H2 MTL Language and Literature or H1 General Studies in Chinese at Singapore-Cambridge GCE A-Level; or 3. a pass in MTL A: Literature, or MTL A: Language and Literature, or Language B MTL at Standard or Higher Level at International Baccalaureate Diploma Programme (the IB Standard Level Language ab initio does not fulfil the requirement). Those who have not fulfilled the MTL requirement may still apply for admission with no prejudice to their application. However, if accepted, they will be required to fulfil the MTL requirement during their course of study. Applicants who have been away from Singapore's school system for some years and have not kept up with the study of their MTL or a language that can be offered as MTL-in-lieu may apply for MTL exemption. The MTL exemption application will be facilitated by the universities as part of the university application, and the results made known to applicants who receive admission offers from the university. Please note that MOE does not accept direct applications for MTL exemption. The application for MTL exemption will also not prejudice the evaluation of the application for a place in the university. Shortlisted candidates will be notify to attend a an in-person or online interview

Notes on SAT	• SAT, SAT Subject Tests and AP scores are optional. Do visit the US College Board website for details and registration.

More details can be found at the following websites:-
Singapore University of Technology and Design | Apply Now (sutd.edu.sg)

Note that:

With SUTD's unique cohort-based and active learning approach, they look for students who work well in teams, who are not afraid to question the norm and be different, who are intellectually curious, who persevere in the face of difficulties, and who are comfortable being hands-on.

Through candidate's participation in co-curricular activities, accomplishments and portfolios, teacher's recommendations, and responses to SUTD's personal insight questions, the university hopes to gain a better understanding of you as an individual, and if you have the attributes to flourish in SUTD.

The interview (for shortlisted candidates) with the senior faculty/staff will also provide the University with additional information to assess if you are a good fit.

As admission to the University is competitive, do note that satisfying the minimum requirements is often not enough to be competitive for selection. The selection will be based on merit and a comprehensive review as outlined above.

REQUIREMENTS FOR COURSES IN SUSS

Singapore University of Social Services (SUSS) is university with a rich heritage in inspiring lifelong education, and transforming society through applied social sciences. The university offers more than 80 undergraduate programmes offered through its five schools:

School of Humanities and Behavioural Sciences
School of Business
SR Nathan School of Human Development
School of Law, and
School of Science and Technology

The full time undergraduate programmes offered include:

Bachelor of Accountancy
Bachelor of Early Childhood Education with Minor
Bachelor of Human Resource Management with Minor
Bachelor of Public Safety and Security with Minor
Bachelor of Science in Business Analytics with Minor
Bachelor of Science in Finance with Minor
Bachelor of Science in Information and Communication Technology with Minor
Bachelor of Science in Marketing with Minor
Bachelor of Science in Supply Chain Management with Minor
Bachelor of Social Work with Minor
Bachelor of Laws

Programmes	**Minimum Subject Requirements**
Full Time Undergraduate Programme	• Passes in at least 2 H2 content-based subjects and General Paper (GP) in the same sitting, a pass in Project Work (PW), and a pass in an H1 contrasting subject. • Shortlisted applicants may be required to undergo one or more interviews and/or take written admission or other evaluation/selection tests as may be prescribed by SUSS from time to time. • All applications are considered individually on merit, and the offer of admission is dependent on the number of places available in individual programme. • If you do not have a Grade C6 in GCE 'O' level English Language (or equivalent), you may be required to take additional test(s) and/or English Language proficiency course(s). Singapore Citizens and Permanent Residents with GCE A Level need to meet one of the following MTL requirements if you have the following education background: - Minimum of D7 for the higher MTL paper taken at the GCE 'O' Level examination or minimum of 'S' grade for the H1 MTL paper or General Studies in Chinese or minimum of 'S' grade for the H2 paper

	taken at the GCE 'A' Level examination or a Pass in the MTL 'B' Syllabus paper at the GCE 'A' Level examination.
Law Programme	The Law programme is open to Singaporeans and Permanent Residents only. • Applicants to the LLB programme must have at least the GCE 'A' level with three H2 passes. • Demonstrate aptitude to practice law through taking the UK Law National Aptitude Test1 Additionally, applicants must also meet the English Language proficiency requirement and the following mother tongue (MTL) requirement: - A good command of English provides a strong platform for a learner to successfully complete a degree programme. All Bachelor of Laws students who do not meet the essay passing grade during the admission interview will be required to complete SDE103 and SDE104 courses (fees are waived). - Minimum of D7 for the higher MTL paper taken at the 'O' Level examination or minimum of 'S' grade for the H1 MTL paper or General Studies in Chinese or minimum of 'S' grade for the H2 MTLL paper taken at the 'A' Level examination or pass in the MTL 'B' Syllabus paper at the 'A' Level examination Additionally, applicants must also meet the English Language proficiency requirement and the following Applicants who have not satisfied the MTL requirement above may be admitted on a provisional basis and will be required to attain the MTL within the period of their university study before being permitted to graduate from SUSS. • All eligible students will be assessed through admission interviews, a review of their personal statements on aspirations and motivations and any supporting evidence of their commitment to the practice of criminal and family law. For more information, please refer to: https://www.suss.edu.sg/law-programmes/admissions/eligibility

For information about SUSS please refer to the following link: https://www.suss.edu.sg/

REQUIREMENTS FOR COURSES IN SINGAPORE INSTITUTE OF TECHNOLOGY

Applicants presenting A Level qualifications may consider the undergraduate degree programmes offered by the following providers:

DigiPen Institute of Technology Singapore
Singapore Institute of Technology
Singapore Institute of Technology and DigiPen Institute of Technology Singapore
Singapore Institute of Technology and University of Glasgow
Singapore Institute of Technology and Massey University
Singapore Institute of Technology and Newcastle University
Singapore Institute of Technology and Technical University of Munich
The Culinary Institute of America

Please click on the programmes below to find out more.

- Aerospace and Aviation
- Allied Health
- Building and Infrastructure Engineering
- Business and Management
- Chemical Engineering
- Design and Media
- Electrical and Electronics Engineering
- Food Technology
- Information and Digital Technology
- Mechanical Engineering
- Nursing
- Pharmaceutical Engineering
- Systems Engineering
- Transport Engineering

To explore the wide range of undergraduate programmes, please click here.

Programmes	Minimum Subject Requirements
All Courses	Applicants submitting the Singapore-Cambridge GCE A Levels must have obtained passes in at least two subjects at A/H2 Level and offered either General Paper (GP) or Knowledge and Inquiry (KI) in the same sitting. In addition, applicants must meet one of the following Mother Tongue Language (MTL) requirements: • A minimum 'S' grade for the H1 or H2 MTL paper or General Studies in Chinese taken at the GCE A Level examination • Pass in the MTL 'B' Syllabus paper at the A Level examination • A minimum D7 for the higher MTL paper taken at the O Level examination For those who are exempted from MTL, the MOE-approved subject-in-lieu will be considered as their MTL subject. Those who have not fulfilled the MTL requirement may still apply for admission. Their application will be reviewed without prejudice. However, if accepted, they will be required to (i) attain any of

	the minimum requirements as a private candidate, or (ii) attend equivalent courses conducted by pre-approved language schools before being allowed to graduate. **Some programmes have programme-specific requirements for application.** Find out about the additional requirements: https://www.singaporetech.edu.sg/admissions/undergraduate/admissions-requirements/programme-specific-requirements

For more information on SIT please refer to https://www.singaporetech.edu.sg/

H1 General Paper
Subject Code: 8881

Course Objectives

1 To understand better the world and themselves by fostering a critical awareness of continuity and change in the human experience;
2 To broaden their global outlook and deepen their understanding of local issues as well as how issues of regional and global importance relate to Singapore;
3 To appreciate the interrelationship of ideas across time, space and disciplines;
4 To develop critical and inventive thinking skills;
5 To develop critical reading skills and engage in independent research; and
6 To develop the skills of communicating clearly, accurately and effectively using the English language.

Course Content

Paper 1 (Essay)

The suggested topic areas are:

- Historical, social, cultural, economic, political and philosophical topics
- Science including its history, philosophy, general principles, current developments and applications
- Mathematical and geographical topics
- Literature and language
- Arts and crafts
- Topics of local interest and global concern.

Candidates will be tested on the maturity of thought appropriate to Pre-University students which would include an understanding of general principles and applications.

Paper 2 (Comprehension)

The course aims to develop the following abilities in students:

1 To better comprehend English prose passages as a whole and in detail
2 To infer relevant information
3 To summarise information
4 To evaluate information
5 To make observations of patterns and relationships
6 To apply understanding and interpretation in a task derived from the text(s)
7 To re-express material supplied in texts in continuous form
8 To gain knowledge and understanding of common English usage

Scheme of Assessment

Paper	Description	Duration	Marks	Weighting
1	Essay	1 hr 30 min	50	50%
2	Comprehension	1 hr 30 min	50	50%

*For a more detailed description of the syllabi, please refer to SEAB website at www.seab.gov.sg

H1 Project Work
Subject Code: 8808

Course Objectives

Project Work (PW) is a learning experience which aims to provide students with the opportunity to synthesise knowledge from various areas of learning, and critically and creatively apply it to real life situations. This process which enhances students' knowledge and enables them to acquire skills like collaboration, communication and independent learning prepares them for lifelong learning and the challenges ahead.

Learning Outcomes of Project Work

The learning outcomes identify the key areas of learning of the subject. Four learning outcomes are separately articulated: knowledge application, communication, collaboration and independent learning. While students learn to work in groups, they will also learn independently through self-reflection and evaluation of their own work processes. These learning outcomes exist in dynamic interplay rather than as compartmentalized and distinct categories. The following are the learning outcomes of PW:

- ***Knowledge Application***
  Students will acquire the ability to make links across different areas of knowledge and to generate, develop and evaluate ideas and information so as to apply these skills to the project task.

- ***Communication***
  Students will acquire the skills to communicate effectively and to present ideas clearly and coherently to a specific audience in both the written and oral forms.

- ***Collaboration***
  Students will acquire collaborative skills through working in a team to achieve common goals.

- ***Independent Learning***
  Students will be able to learn on their own, reflect on their learning and take appropriate action to improve it.

Objectives of Assessment

The assessment in PW aims to measure the extent to which the students have achieved the expected learning outcomes. During the course, the students have to demonstrate their ability, individually and as a group, by applying the knowledge learned to develop a project task.

Students will be assessed in the following areas:

- ***Knowledge Application***
  Candidates are expected to demonstrate the ability to generate, develop and evaluate ideas and information so as to apply these skills as they carry out a project task.

- ***Communication***
  Candidates are expected to demonstrate the ability to present ideas clearly and coherently to a specific audience in both the written and oral forms.

NOTE: *Collaboration and Independent Learning are not assessed.*

Scheme of Assessment
Candidates are required to complete the following 2 compulsory papers:

Paper 1a: Written Report
- Produce a **Written Report** of 2500 to 3000 words on the project.

Paper 1b: Insights & Reflections
- Submit an individual **Insights & Reflections** of 500 words based on the project.

Paper 2: Oral Presentation
- Give an **Oral Presentation** on the project and answer a question posed by the assessors.

H1 Mathematics
Subject Code: 8865

H1 Mathematics provides students with a foundation in mathematics and statistics that will support their business or social sciences studies at the university. It is particularly appropriate for students without Additional Mathematics background because it offers an opportunity for them to learn important mathematical concepts and skills in algebra and calculus that were taught in Additional Mathematics. Students will also learn basic statistical methods that are necessary for studies in business and social sciences.

Course objectives

To enable students to:

1. acquire mathematical concepts and skills to support their tertiary studies in business and the social sciences;
2. develop thinking, reasoning, communication and modelling skills through a mathematical approach to problem solving;
3. connect ideas within mathematics and apply mathematics in the context of business and social sciences; and
4. experience and appreciate the value of mathematics in life and other disciplines.

Use of Graphic Calculators (GC)

The use of GC will be expected. The examination papers will be set with the assumption that candidates will have access to a GC.

Course Requirements

Knowledge of the content of O-Level Mathematics is assumed.

Syllabus Outline

S/N	Topics	Sub-topics
1	**Functions and Graphs**	• Exponential & Logarithm Functions & Graphing Techniques • Equations & Inequalities
2	**Calculus**	• Differentiation • Integration
3	**Probability & Statistics**	• Probability • Binomial Distribution • Normal Distribution • Sampling • Hypothesis Testing • Correlation coefficient & Linear regression

Assessment Objectives (AO)
There are three levels of assessment objectives for the examination.
The assessment will test candidates' abilities to:

AO1 understand and apply mathematical concepts and skills in a variety of problems, including those that may be set in unfamiliar contexts, or require integration of concepts and skills from more than one topic;

AO2 formulate real-world problems mathematically, solve the mathematical problems, interpret and evaluate the mathematical solutions in the context of the problems; and

AO3 reason and communicate mathematically through making deductions and writing mathematical explanations and arguments.

Scheme of Assessment
There will be one 3-hour paper marked out of 100 as follows:

Section A (Pure Mathematics – 40 marks) will consist of about 5 questions of different lengths and marks based on the Pure Mathematics section of the syllabus.

Section B (Probability & Statistics – 60 marks) will consist of about 6 – 8 questions of different lengths and marks based on the Probability & Statistics section of the syllabus.

There will be at least two questions, with at least one in each section, on application of Mathematics in real-world contexts, including those from business and the social sciences. Each question will carry at least 12 marks and may require concepts and skills from more than one topic.

Candidates will be expected to answer ***ALL*** questions.

H2 Mathematics
Subject Code: 9758

H2 Mathematics is designed to prepare students for a range of university courses, including mathematics, sciences, engineering and related courses, where a good foundation in mathematics is required. It develops mathematical thinking and reasoning skills that are essential for further learning of mathematics. Through applications of mathematics, students also develop an appreciation of mathematics and its connections to other disciplines and to the real world.

Course Objectives

To enable students to:

1. acquire mathematical concepts and skills to prepare for their tertiary studies in mathematics, sciences, engineering and other related disciplines;
2. develop thinking, reasoning, communication and modelling skills through a mathematical approach to problem-solving;
3. connect ideas within mathematics and apply mathematics in the contexts of sciences, engineering and other related disciplines; and
4. experience and appreciate the nature and beauty of mathematics and its value in life and other disciplines.

Use of Graphing Calculators (GC)

The use of GC will be expected. The examination papers will be set with the assumption that candidates will have access to a GC.

H2 Math Syllabus Outline

S/N	Topic	Sub-Topics
	Pure Mathematics	
1	**Functions & Graphs**	• Functions • Graphs & Transformations • Equations & Inequalities
2	**Sequences & Series**	• Sequences & Series
3	**Vectors**	• Basic properties of vectors in two- & three dimensions • Scalar & vector products in vectors • Three-dimensional vector geometry
4	**Introduction to Complex Numbers**	• Complex numbers expressed in cartesian form • Complex numbers expressed in polar form
5	**Calculus**	• Differentiation • Maclaurin's Series • Integration Techniques • Definite Integrals • Differential Equations
	Probability & Statistics	
6	**Probability & Statistics**	• Probability • Discrete random variables • Normal distribution • Sampling • Hypothesis testing • Correlation coefficient & Linear regression

Course Requirements
Knowledge of the content of the O-Level Mathematics and Additional Mathematics is assumed.

Students who wish to offer H2 Math without O level Additional Mathematics are required to sit for a test on the relevant O level Assumed Knowledge. The objective of the test is to help students to make an informed decision on A level subject combination.

ASSUMED KNOWLEDGE

Content from O-Level Additional Mathematics	
ALGEBRA	
A1	Equations and inequalities • conditions for a quadratic equation to have: (i) two real roots (ii) two equal roots (iii) no real roots • conditions for $ax^2 + bx + c$ to be always positive (or always negative) • solving simultaneous equations with at least one linear equation, by substitution
A2	Indices and surds • four operations on indices and surds • rationalising the denominator
A3	Polynomials and partial fractions • multiplication and division of polynomials • use of remainder and factor theorems • partial fractions with cases where the denominator is not more complicated than: – $(ax + b)(cx + d)$ – $(ax + b)(cx + d)^2$ – $(ax + b)(x^2 + c^2)$
A4	Power, Exponential, Logarithmic, and Modulus functions • power functions $y = ax^n$, where n is a simple rational number, and their graphs • functions a^x, e^x, $\log_a x$, $\ln x$ and their graphs • laws of logarithms • equivalence of $y = a^x$ and $x = \log_a y$ • change of base of logarithms • function $\lvert x \rvert$ and graph of $\lvert f(x) \rvert$, where $f(x)$ is linear, quadratic or trigonometric • solving simple equations involving exponential and logarithmic functions
GEOMETRY AND TRIGONOMETRY	
B5	Coordinate geometry in two dimensions • graphs of equations $y^2 = kx$ • coordinate geometry of the circle with the equation in the form $(x – a)^2 + (y – b)^2 = r^2$ or $x^2 + y^2 + 2gx + 2fy + c = 0$
B6	Trigonometric functions, identities and equations • six trigonometric functions, and principal values of the inverses of sine, cosine and tangent • trigonometric equations and identities (see List of Formulae) • expression of $a \cos \theta + b \sin \theta$ in the forms $R \sin(\theta \pm \alpha)$ and $R \cos(\theta \pm \alpha)$

Content from O-Level Additional Mathematics	
CALCULUS	
C7	Differentiation and integration • derivative of f(x) as the gradient of the tangent to the graph of y = f(x) at a point • derivative as rate of change • derivatives of x^n for any rational n, sin x, cos x, tan x, e^x and ln x, together with constant multiples, sums and differences • derivatives of composite functions • derivatives of products and quotients of functions • increasing and decreasing functions • stationary points (maximum and minimum turning points and points of inflexion) • use of second derivative test to discriminate between maxima and minima • connected rates of change • maxima and minima problems • integration as the reverse of differentiation • integration of x^n for any rational n, e^x, sin x, cos x, $\sec^2 x$ and their constant multiples, sums and differences • integration of $(ax + b)^n$ for any rational n, $\sin(ax + b)$, $\cos(ax + b)$ and e^{ax+b}

Assessment Objectives (AO)
There are three levels of assessment objectives for the examination.
The assessment will test candidates' abilities to:

AO1 understand and apply mathematical concepts and skills in a variety of problems, including those that may be set in unfamiliar contexts, or require integration of concepts and skills from more than one topic;

AO2 formulate real-world problems mathematically, solve the mathematical problems, interpret and evaluate the mathematical solutions in the context of the problems; and

AO3 reason and communicate mathematically through making deductions and writing mathematical explanations, arguments and proofs.

Scheme of Assessment

Paper	Description	Duration	Marks	Weighting
1	Pure Mathematics	3 hours	100	50%
2	Pure Mathematics and Probability & Statistics	3 hours	100	50%

Paper 1 (3 hours)
A paper consisting of about 10 to 12 questions of different lengths and marks based on the Pure Mathematics section of the syllabus.
There will be **at least two questions** (each at least 12 marks) on application of Mathematics in **real-world contexts**, including those from sciences and engineering. Candidates will be expected to answer *ALL* questions.

Paper 2 (3 hours)
A paper consisting of 2 sections, Sections A and B.

Section A (Pure Mathematics – 40 marks) will consist of about 4 to 5 questions of different lengths and marks based on the Pure Mathematics section of the syllabus.

Section B (Probability & Statistics – 60 marks) will consist of 6 to 8 questions of different lengths and marks based on the Probability & Statistics section of the syllabus.

There will be **at least two questions** in **Section B** (each at least 12 marks) on application of Mathematics in **real-world contexts**, including those from sciences and engineering.

Candidates will be expected to answer ***ALL*** questions.

Possible list of H2 Mathematics applications and contexts:

Applications and contexts	Some possible topics involved
Kinematics and dynamics (e.g. free fall, projectile motion, collisions)	Functions; Calculus; Vectors
Optimisation problems (e.g. maximising strength, minimising surface area)	Inequalities; System of linear equations; Calculus
Electrical circuits	Complex numbers; Calculus
Population growth, radioactive decay, heating and cooling problems	Differential equations
Financial maths (e.g. banking, insurance)	Sequences and series; Probability; Sampling distributions
Standardised testing	Normal distribution; Probability
Market research (e.g. consumer preferences, product claims)	Sampling distributions; Hypothesis testing; Correlation and regression
Clinical research (e.g. correlation studies)	Sampling distributions; Hypothesis testing; Correlation and regression

H3 Mathematics
Subject Code: 9820

H3 Mathematics is offered to JC2 students of strong ability and keen interest in Mathematics and is designed with an emphasis on independent and self-directed learning. Candidates are required to simultaneously offer H2 Mathematics and must have strong foundation in mathematical conceptual understanding and algebraic manipulation skills.

H3 Mathematics provides students, who intend to pursue mathematics at the university, with an insight into the practice of a mathematician. It equips students with the knowledge and skills to understand and write mathematical statements, proofs and solutions, and the techniques and results that come in helpful in their work. Students will develop these competencies through proving mathematical results and solving ***challenging*** and ***non-routine*** mathematical problems in the course of the learning.

Course Objectives
To enable students to:
1. acquire advanced problem-solving skills and methods of proof by learning useful mathematical results and techniques to solve non-routine problems and prove statements
2. develop rigour in mathematical argument and precision in the use of mathematical language through the writing and evaluation of mathematical proofs and solutions
3. experience and appreciate the practice, value and rigour of mathematics as a discipline.

Use of Graphing Calculators (GC)
The use of GC will be expected. The examination papers will be set with the assumption that candidates will have access to GC.

Course Requirements
Knowledge of the content of **H2 Mathematics** is assumed. H3 Mathematics is for students who have a strong aptitude for, and are passionate about learning of Mathematics. Candidates are expected to achieve **a high distinction grade in H2 Mathematics at the JC1 Promotional Examinations and satisfy all college requirements for taking H3 subjects.**

Syllabus Outline
(1) H2 Mathematics content areas
(a) Functions, e.g. graphs, symmetries, derivatives, integrals, differential equations, limiting behaviours, bounds.
(b) Sequences and series, e.g. general terms, sum, limiting behaviours, bounds.
The examples in **(a)** and **(b)** above illustrate some types of problems that are based on content in H2 Mathematics.

(2) Additional content areas (beyond H2 Math)
(a) Inequalities: AM–GM inequality, Cauchy-Schwarz inequality, triangle inequality.
(b) Numbers: primes, coprimes, divisibility, greatest common divisor, division algorithm, congruences and modular arithmetic.
(c) Counting: distribution problems, Stirling numbers of the second kind,

recurrence equations, bijection principle, principle of inclusion and exclusion.

The above define the expected scope of content knowledge that may be assessed. Notwithstanding the content areas defined above, students will also prove results and solve problems outside these defined areas or at the intersection of two or more such areas using their ability to understand and apply given definitions or results.

Mathematical Skills

Students are expected to apply the following skills:

Skills	Examples
a) Communicate mathematical ideas using mathematical language	• Terms such as 'Definition' and 'Theorem' • Conditional statements (such as 'if *P* then *Q*' and '*P* if and only if *Q*') • Necessary and sufficient conditions • Existential and universal quantifiers (such as 'there exists', 'for each', 'for all') • Logical connectives (such as 'and', 'or', 'not', 'implies') • Converse, inverse, contrapositive and negation of statements • Set notation and language
b) Develop and critically evaluate mathematical arguments using mathematical reasoning principles, including methods of proof	• Direct proof • Proof by mathematical induction • Disproof by counterexample • Proof by contradiction • Proof of existence • Proof by construction • Pigeonhole principle • Symmetry principle
c) Solve mathematical problems using problem solving heuristics	• Working backwards • Uncovering pattern and structure • Solving a simpler/similar problem • Considering cases • Restating the problem (e.g. contrapositive)

Assessment Objectives (AO)

There are three levels of assessment objectives for the examination.
The assessment will test candidates' abilities to:

AO1 understand and apply mathematical concepts, skills and results to solve non-routine problems, including those that may require integration of concepts and skills from more than one topic;
AO2 understand and apply advanced methods and techniques of proof to establish the truth or falsity of a mathematical statement and
AO3 reason and communicate in precise mathematical language through the writing and evaluation of mathematical proofs and solutions.

Scheme of Assessment

For the examination in H3 Mathematics, there will be one 3-hour paper marked out of 100. The paper will consist of 8 to 10 questions of different lengths, and each question is worth 9 to 16 marks. Candidates will be expected to answer all questions.

H1 Biology
Subject Code: 8876

Course Requirement
Students intending to read H1 Biology should have knowledge and understanding of Biology at GCE O-Level, either as a single subject or as part of a balanced science course.

Outline of Syllabus
The syllabus is divided into four core ideas and one extension topic.

A. The four core ideas are:
   1. The Cell and Biomolecules of Life
   2. Genetics and Inheritance
   3. Energetics
   4. Biological Evolution

B. The extension topic is:
   1. Impact of Climate Change on Animals and Plants

Scheme of Assessment

Paper	Type of Paper	Duration	Marks	Weighting
1	Multiple Choice	1 h	30	33 %
2	Structured and free-response questions	2 h	60	67 %

Paper 1

This paper will consist of 30 compulsory multiple choice questions.

Paper 2

Section A (45 marks) will consist of a variable number of structured questions, all compulsory, including at least one data-based or comprehension-type question. The databased question(s) will constitute 10-15 marks of the paper.

Section B (15 marks) will consist of two free-response questions, from which candidates will **choose one**. The quality of scientific argumentation and written communication will be given a percentage of the marks available.

H2 Biology
Subject Code: 9744

Course Requirement
Candidates will be assumed to have knowledge and understanding of GCE O-Level Biology, as a single or as part of a balanced Science course.

Outline of Syllabus
The syllabus is divided into four core ideas and two extension topics.

A. The four core ideas are:
   1. The Cell and Biomolecules of Life
   2. Genetics and Inheritance
   3. Energy and Equilibrium
   4. Biological Evolution

B. The two extension topics are:
   1. Infectious Diseases
   2. Impact of Climate Change on Animals and Plants

Scheme of Assessment

Paper	Type of Paper	Duration	Marks	Weighting (%)
1	Multiple Choice	1 h	30	15
2	Structured Questions	2 h	100	30
3	Long Structured and Free-response Questions	2 h	75	35
4	Practical Paper	2 h 30 min	55	20

Paper 1
This paper will consist of 30 compulsory multiple choice questions.

Paper 2
A variable number of compulsory structured questions including data-based or comprehensive-type questions.

Paper 3
Section A comprises two or more compulsory **long** structured questions. There will be one or more stimulus materials which may be taken or adapted from a source such as a scientific journal or book which may not necessarily relate directly to the content of the syllabus. Questions may require candidates to explain terms used in the passage, analyse data, justify decisions, perform calculations and draw conclusions based on information in the stimulus material.
Section B comprises two free-response questions, from which candidates will **choose one**. The quality of scientific argumentation and written communication will be given a percentage of the marks available.

Paper 4 (Practical Paper)
This paper will assess the following skill areas:
- Planning (P): 5%
- Manipulation, measurement and observation (MMO)
- Presentation of data and observations (PDO)
- Analysis, conclusions and evaluation (ACE)

} 15%

H1 Chemistry
Subject Code: 8873

Course Requirement

Candidates will be assumed to have knowledge and understanding of Chemistry at GCE O-Level as a single subject or as part of a balanced science course.

Course Content

Core/Extension	Topics
Core Idea 1: Matter	1. Atomic Structure
Core Idea 2: Structure and Properties	1. Chemical Bonding 2. Theories of Acids and Bases 3. The Periodic Table
Core Idea 3: Transformation	1. The Mole Concept and Stoichiometry 2. Chemical Energetics: Thermochemistry 3. Reaction Kinetics 4. Chemical Equilibria
Extension: Materials	1. Nanomaterials 2. Polymers - Introduction to Organic Chemistry - Isomerism - Hydrocarbons - Halogen derivatives - Hydroxy compounds - Carbonyl compounds - Carboxylic acids and esters - Amines and amides

Scheme of Assessment

Paper	Type of Paper	Duration	Weighting	Remarks
1	Multiple choice	1 h	33 %	30 questions (30 marks)
2.	Structured	2 h	67 %	Sect A: A variable number of structured questions including data-based questions. (60 marks) Sect B: 2 choose 1 (20 marks)

H2 Chemistry
Subject Code: (9729)

Course Requirement

Candidates will be assumed to have knowledge and understanding of Chemistry at GCE O-Level as a single subject or part of a balanced science course.

Course Content

Core/Extension	Topics
Core Idea 1: Matter	1. Atomic Structure
Core Idea 2: Structure and Properties	1. Chemical Bonding 2. The Gaseous State 3. Theories of Acids and Bases 4. The Periodic Table
Core Idea 3: Transformation	1. The Mole Concept and Stoichiometry 2. Chemical Energetics: Thermochemistry and Thermodynamics (Gibbs Free Energy and Entropy) 3. Reaction Kinetics 4. Chemical Equilibria
Extension	1. Chemistry of Aqueous Solutions - Acid-base Equilibria - Solubility Equilibria 2. Organic Chemistry - Introduction to Organic Chemistry - Isomerism - Hydrocarbons - Halogen derivatives - Hydroxy compounds - Carbonyl compounds - Carboxylic acids and derivatives - Nitrogen compounds 3. Electrochemistry 4. An Introduction to the Chemistry of Transition Elements

Scheme of Assessment

Paper	Type of Paper	Duration	Weighting	Remarks
1	Multiple choice	1 h	15 %	30 questions (30 marks)
2.	Structured	2 h	30 %	A variable number of structured questions with one or two data-based (75 marks)
3	Free response questions	2 h	35 %	Sect A: 3-4 compulsory free response questions (60 marks) Sect B: 2 choose 1 (20 marks)
4	Practical	2 h 30 min	20 %	Skills assessed are - Planning (P) - Manipulation, measurement and observation. (MMO) - Presentation of data and observations. (PDO) - Analysis, conclusions and evaluation. (ACE) (55 marks) ***Note:*** *The assessment of (P): 5%* *The assessment of (MMO, PDO, ACE): 15%*

H3 Chemistry
Subject Code: 9813

Course Requirement

H3 Chemistry is offered to JC2 students of strong ability and keen interest in chemistry, and is designed with an emphasis on independent and self-directed learning. Candidates should simultaneously offer H2 Chemistry and will be assumed to have knowledge and understanding of Chemistry at H2 level.

Course Content

Additional content in H3 Chemistry	Topics
1. Spectroscopic Techniques	1.1 Basic principles of Spectroscopy 1.2 Utraviolet/visible Spectroscopy 1.3 Infra-red (IR) Spectroscopy 1.4 Nuclear Magnetic Resonance (NMR) Spectroscopy 1.5 Mass Spectrometry
2. Further Organic Mechanisms	2.1 Molecular Stereochemistry 2.2 Basic Physical Organic Chemistry 2.3 Nucleophilic Substitution 2.4 Elimination

Scheme of Assessment

Candidates will take a 2 h 30 min paper (100 marks total). This paper consists of 2 sections and will include questions that require candidates to integrate knowledge and understanding from different sections in the syllabus.

Section A	40 marks	This section will consist of a variable number of compulsory free response questions including 1 or 2 stimulus-based questions. The stimulus-based question(s) constitute(s) 15-20 marks for this paper.
Section B	60 marks	Candidates will be required to answer 2 out of 3 free response questions. Each question will carry 20 marks.

H1 Physics
Subject Code: 8867

Course Requirements

Students intending to read H1 Physics should have knowledge and understanding of Physics at GCE O-Level, either as a single subject or as part of a balanced science course. They should also be familiar with calculus, vectors, trigonometric relations and logarithmic expressions.

Course Content

The topics covered in H1 Physics are as follows:

Sections	Topics
I. Measurement	1. Measurement
II. Newtonian Mechanics	2. Kinematics 3. Dynamics 4. Forces 5. Work, Energy, Power 6. Motion in a Circle and Orbits
III. Electricity and Magnetism	7. Current of Electricity 8. D.C. Circuits 9. Electromagnetism
IV. Nuclear Physics	10. Nuclear Physics

Scheme of Assessment

Paper	Type of Paper	Duration	Weighting (%)	Marks
1	Multiple Choice	1 h	33	30
2	Structured Questions	2 h	67	80

H2 Physics
Subject Code: 9749

Course Requirements

Candidates will be assumed to have knowledge and understanding of GCE O-Level Physics, as a single subject or as part of a balanced Science course. They should also be familiar with calculus, vectors, trigonometric relations and logarithmic expressions.

Course Content

The topics covered in H2 Physics are as follows:

Sections	Topics
I. Measurement	1. Measurement
II. Newtonian Mechanics	2. Kinematics 3. Dynamics 4. Forces 5. Work, Energy, Power 6. Motion in a Circle 7. Gravitational Field
III. Thermal Physics	8. Temperature and Ideal Gases 9. First Law of Thermodynamics
IV. Oscillations and Waves	10. Oscillations 11. Wave Motion 12. Superposition
V. Electricity and Magnetism	13. Electric Fields 14. Current of Electricity 15. D.C. Circuits 16. Electromagnetism 17. Electromagnetic Induction 18. Alternating Current
VI. Modern Physics	19. Quantum Physics 20. Nuclear Physics

Scheme of Assessment

Paper	Type of Paper	Duration	Weighting (%)	Marks
1	Multiple Choice	1 h	15	30
2	Structured Questions	2 h	30	80
3	Long Structured Questions	2 h	35	80
4	Practical	2 h 30 min	20	55

H3 Physics
Subject Code: 9814

Introduction

The H3 Physics syllabus has been designed to build on and extend the knowledge, understanding and skills acquired from the H2 Physics (9749) syllabus. It caters to students of strong ability and keen interest in physics and is designed with a strong emphasis on independent and self-directed learning. Students should simultaneously offer H2 Physics. The H3 Physics syllabus is meant to provide greater depth and rigour in the subject for students pursuing further studies in physics-related fields

Course Content

The topics covered in H3 Physics are as follows:

Sections	Topics
A. Newtonian Mechanics	1. Inertial Frames (non-relativistic) 2. Rotational Motion 3. Planetary and Satellite Motion
B. Electricity and Magnetism	4. Electric and Magnetic Fields 5. Capacitors and Inductors

Scheme of Assessment

There is one paper of 3 hours duration for this subject. This paper will consist of two sections and will include questions which require candidates to integrate knowledge and understanding from different areas of the syllabus.

Section A (60 marks)
This section will consist of a variable number of compulsory structured questions. The last of these will be a stimulus-based question which will constitute 15-20 marks.

Section B (40 marks)
This section will consist of a choice of two from three 20-mark longer structured questions. Questions will be set in which knowledge of differential and/or integral calculus will be advantageous.

H2 Art
Subject Code: 9750

Course Objectives

1. Cultivate deeper understanding and appreciation of visual arts within social and cultural contexts;
2. Encourage experimentation and innovation though exploration and creative use of materials and processes;
3. Increase proficiency in the use of art and design principles to communicate ideas and concepts;
4. Develop critical and analytical skills through research, exploration and creation of artworks;
5. Foster self-confidence and a sense of achievement through the practice of visual arts;
6. Lay the foundation for lifelong interest in the visual arts.

Course Content

Candidates taking the H2 Level Art will be required to offer
Paper 1: Study of Visual Arts (SOVA) and **Paper 2: Coursework**

The Study of Visual Arts (SOVA):

- emphasises the development of visual literacy through critical and creative thinking by encouraging personal responses to art appreciation.
- emphasises the development of critical thinking skills such as description, analysis, interpretation and evaluation.
- provides students with opportunities to respond to and discover insights from artists/artworks.

The content for Study of Visual Arts is organised along two broad themes:
Visual Arts and Representations and **Visual Arts and Society**

Visual Arts and Representations

- provides a broad framework for the investigation of form and content and touch on ideas and concepts underpinning visual representation.
- Topics: Realistic Representations, Abstract Representations, New Media Representations.

Visual Arts and Society

- Draws on the diverse realms of human experience to examine Art as a system for the communication of social values, beliefs and opinions.
- Topics: About People, About Society, About Culture.

Scheme of Assessment

Paper	Description	Weighting
Paper 1: Study of Visual Arts (Compulsory)	3-Hour Written Paper	40%
Paper 2: Coursework (Compulsory)	One Coursework unit comprises the finished artwork and not more than eight A2 sheets of preliminary/supporting studies.	60%

H1 & H2 Economics

Subject Codes: 8843 (H1) and 9570 (H2)

Course Objectives for H1 (8843) and H2 (9570) Economics:

The H1 (8843) and H2 (9570) Economics syllabuses provide the basis for broad understanding of Economics. The syllabuses aim to develop in candidates:

1. an understanding of fundamental economic concepts, theories and principles, and of the tools and methods of analysis used by economists;
2. the ability to use the tools and methods of economic reasoning to explain and analyse economic issues, and to evaluate perspectives and decisions of economic agents;
3. the habit of reading critically, from a variety of sources, to gain information about the changing economic activities and policies at national and international levels;
4. the ability to use evidence in making well-reasoned economic arguments to arrive at rational and considered decisions.

Course Content H1 Economics (8843)

- **Theme 1: The Central Economic Problem**
- **Theme 2: Markets**
- **Theme 3: The National Economy**

Assessment Format for H1 Economics (8843):

Students sit for one written paper, comprising two compulsory case studies

Duration: 3 hrs	
Paper 1 (Case-Studies) (80 marks; weighted 100%)	**Case Study Questions** Candidates are to answer all questions for each case study. Each question carries 40 marks.

Course Content for H2 Economics (9570)

- **Theme 1: The Central Economic Problem**
- **Theme 2: Markets**
- **Theme 3: The National and International Economy**

Assessment Format for H2 Economics (9570):

Students sit for two written papers, comprising case study and essay questions.

Total time: 4 hrs 30mins	
Paper 1 2hrs 30mins (40%)	**Case Study Questions** Candidates are to answer 2 compulsory case study questions. Each question carries 30 marks.
Paper 2 2hrs 30mins (60%)	**Essay Questions** Section A comprises 3 essay questions focusing *mainly* on microeconomics and Section B comprises another 3 essay questions focusing *mainly* on macroeconomics. Candidates are to answer a total of 3 essay questions: One each from Section A & Section B and the third question can be chosen from either section. Each question carries 25 marks.

*For a more detailed description of the syllabi, please refer to SEAB website at www.seab.gov.sg

H1 Geography
Subject Code: 8834

Aims and Learning Outcomes:

Knowledge
The syllabus requires students to develop an understanding of:

- the uniqueness of places;
- the dynamic and complex interactions and interdependence between natural environments and human environments at various scales;
- the evolution of landscapes and development of issues over time;
- the processes that shape spaces, places and the environment at various scales;
- the connections, trends and patterns in different parts of Asia and the rest of the world;
- a range of contemporary issues in different parts of Asia and the rest of the world through geographical perspectives; and
- knowledge from different subfields of geography to understand different approaches to solve real-world problems and achieve sustainable development.

Skills
The syllabus seeks to equip students with the ability to:

- consider evidence and different viewpoints to develop logical arguments and explanations;
- analyse, evaluate and reflect on information from a geographical perspective to make informed and sound decisions;
- construct understanding through inquiry using different data collection and analysis methods; and
- use and evaluate data representation techniques to communicate findings.

Values
The syllabus seeks to encourage students to:

- be inspired by the splendour of natural environments and human ingenuity;
- care for delicate ecosystems and understand the importance of environmentally sustainable lifestyles;
- develop as global citizens, seek harmony and respect others in a culturally diverse world; and
- contribute responsibly towards the building of a robust and inclusive society.

Syllabus Content
H1 Geography is designed around two main clusters of content.

Cluster 1 Sustainable Future and Climate Change

- Topic 1.1: Cities in a Sustainable Future
    - Sustainable Urban Development
    - Sustainable Cities
    - Liveable Cities

- Topic 1.2: The Future with Climate Change
    - The Science of Climate Change
    - Possible Effects of Climate Change
    - Responses to Climate Change

Cluster 2 Fieldwork

- Community response to climate change
- Needs analysis of the elderly living in an urban neighbourhood

Examination Format

Duration: 3 hours (100%)		
Section A (30%)	One compulsory structured question that assesses students' mastery of Cluster 2: Fieldwork.	The question carries 30 marks and comprises no more than 6 sub-parts. It includes a 10-mark evaluative sub-part.
Section B (44%)	Two compulsory structured questions that assess students' mastery of Cluster 1: Sustainable Future and Climate Change.	Each question carries 22 marks and comprises no more than 5 sub-parts. Each question may be on a specific topic or a combination of topics within Cluster 1.
Section C (26%)	Three evaluative questions on Cluster 1 will be set, but only TWO need to be answered. Each question carries 13 marks.	

H2 Geography
Subject Code: 9173

Aims and Learning Outcomes
Please refer to the course objectives listed in H1 Geography.

Course Content
H2 Geography examines four clusters of content that would allow students to study Geography holistically as an integrated subject. It combines physical and human geography, exposing students to up-to-date topics within the discipline.

Cluster 1 Development, Economy and Environment

- Topic 1.1: Environment and Resources
  - Understanding Sustainable Development
  - Environment and Resources
  - Managing Resources

- Topic 1.2: Development and the Global Economy
  - Development
  - Geography of the Global Economy and Transnational Corporations (TNCs)
  - Relative Influence of Actors in Shaping the Global Economy

Cluster 2 Tropical Environments

- Topic 2.1: Tropical Climates and Drainage Basins
  - Tropical Climates
  - Drainage Basin Hydrology
  - Floods in the Humid Tropics

- Topic 2.2: Landforms in the Tropics
  - Geomorphic Processes
  - Karst Landscapes in the Humid Tropics
  - Fluvial Landforms in the Humid Tropics

Cluster 3 Sustainable Future and Climate Change

- Topic 3.1: Cities in a Sustainable Future
  - Sustainable Urban Development
  - Sustainable Cities
  - Liveable Cities

- Topic 3.2: The Future with Climate Change
  - The Science of Climate Change
  - Possible Effects of Climate Change
  - Responses to Climate Change

Cluster 4 Fieldwork

- Community response to climate change
- Needs analysis of the elderly living in an urban neighbourhood
- Fluvial flood risk and strategies to mitigate it

Examination Format

Paper 1 – 3 hours (100 m; 50%)		
Section A (60 m)	Two compulsory structured question that assesses students' mastery of Clusters 1 and 2.	Each question carries 30 marks and comprises no more than 6 sub-parts. Each question may be on a specific topic or a combination of topics within the cluster.
Section B (40 m)	Four evaluative questions on Clusters 1 and 2 will be set, but only TWO need to be answered. • Cluster 1 – Either Qn 3 or Qn 4 • Cluster 2 – Either Qn 5 or Qn 6 Each question carries 20 marks.	

Paper 2 – 3 hours (90 m; 50%)		
Section A (40 m)	One compulsory structured question that assesses students' mastery of Cluster 4: Fieldwork.	The question carries 40 marks and comprises no more than 8 sub-parts. It includes a 10-mark evaluative sub-part.
Section B (30 m)	One compulsory structured question that assesses students' mastery of Cluster 3: Sustainable Future and Climate Change.	The question carries 30 marks and comprises no more than 6 sub-parts. Each question may be on a specific topic or a combination of topics within Cluster 3.
Section C (20 m)	Two evaluative questions on Cluster 3 will be set, but only ONE need to be answered. • Cluster 3 – Either Qn 3 or Qn 4 Each question carries 20 marks.	

H3 Geography (9822)

H3 Geography is intended for students who demonstrate strong aptitude, passion, and interest in Geography. It provides opportunities for students to explore geographical issues and events in greater depth and promotes an appreciation of the nature of geography as a discipline. The H3 Geography syllabus is designed to offer intellectual challenge and rigour as it expects students to think independently and develop critical inquiry. It takes the form of a taught element and a Research Essay on a topic of the student's choice. The H3 Geography syllabus builds on the competencies acquired in H2 Geography and requires students to demonstrate geographical knowledge in greater depth and breadth.

Students will submit a 3000–3500-word Research Essay based on a topic of their choice which had been approved in advance by Cambridge International Examinations. They will conduct an individual investigation in an area of geographical interest, examine a variety of evidence, and interpret and evaluate the evidence to reach informed conclusions. The Research Essay should be completed over an extended period of about 10 months between Nov/Dec in JC1 and Sept in JC2.

H1 History
Subject Code: 8838

Course Objectives

The H1 History syllabus seeks to:

1. develop in learners the dispositions to be curious about the past and open to multiple perspectives;
2. engage in historical inquiry to develop confident, self directed, critical and reflective thinkers;
3. understand historical concepts, methods and processes to make informed judgments of the past and to better understand the present;
4. develop historical knowledge and understanding to develop local, regional and global awareness and cross cultural skills; and
5. enhance appreciation of the past to develop a sense of identity and cultivate a concerned citizen.

Course Content

A. Compulsory Source-Based Study:

Theme I: The Development of the Cold War, 1945–1991

- The Emergence of Bipolarity after the Second World War
- Manifestations of the Global Cold War
- End of the Cold War

B. Thematic Study:

Theme II: The Cold War and East Asia, 1945-1991

- China and the Cold War (1950-1991)
- Japan and the Cold War (1952-1991)

Theme III: The Cold War and Southeast Asia, 1945-1991

- Manifestations of the Cold War in Southeast Asia
- ASEAN and the Cold War (1967-1991)
- Singapore and the Cold War (1965-1991)

Scheme of Assessment

Candidates will be required to sit for **one** written paper of which the duration is **three hours**. The paper is divided into two sections. Candidates are required to answer the compulsory source-based study in Section A and two essay questions in Section B.

The Cold War and the Modern World (1945-1991)	
Section A (40%)	**Theme 1: The Development of the Cold War, 1945–1991** Candidates will answer the compulsory source-based case study set comprising two sub-questions. (a): Compare 2 sources (10 marks; 10%) (b): Test assertion using all sources (30 marks; 30%)
Section B (60%)	Candidates will answer: • 1 out of 2 essay questions set on Theme II: The Cold War and East Asia, 1945-1991 (30 marks; 30%) • 1 out of 2 essay questions set on Theme III: The Cold War and Southeast Asia, 1945-1991 (30 marks; 30%)

H2 History
Subject Code: 9174

Course Objectives
Please refer to the course objectives listed in H1 History.

Course Content
Candidates must offer two papers, Papers 1 and 2.

Paper 1: The Changing International Order, 1945-2000
Theme I
Understanding the Cold War, 1945–1991:
- The Emergence of the Cold War after the Second World War
- Manifestations of the Global Cold War
- End of the Cold War

Theme II
The Development of the Global Economy, 1945-2000:
- Growth and Challenges in the Global Economy
- Transformation of East Asia (Japan and China)

Theme III
Conflict and Cooperation (1945-2000):
- Causes, Development and Management of Inter-state Conflicts: Indo-Pakistani Conflict (1945-1972) and Arab-Israeli Conflict (1945-1979)
- Causes, Development and Management of Intra-state Conflicts: Congo Crisis (1960-1965) and Bosnian War (1992-1995)

Paper 2: Developments in Southeast Asia, Independence-2000
Theme I
Forming Nation-States:
- Establishing political structures and legitimacy
- Consolidation of power
- Pursuit of national unity

Theme II
Economic Change after Independence
- Economic change in Southeast Asia
- Outcomes of economic change

Theme III
Regional Conflicts and Cooperation
- Inter-state Tensions and Cooperation
- ASEAN

Scheme of Assessment
Candidates will be required to sit for two written papers, Paper 1 and 2, of which the duration is three hours per paper. Each paper is divided into two sections. Candidates are required to answer the compulsory source-based study in Section A and two essay questions in Section B.

Paper 1: The Changing International Order, 1945-2000 (50% weighting)

Section	Item Description	Marks
A (Source-Based Study)	**Theme I: Understanding the Cold War, 1945–1991** Candidates will answer the compulsory Source-Based Study question, comprising two sub-questions: a) Compare two sources (10 marks; 5%) b) Test assertion using all sources (30 marks; 15%)	40 marks (20%)
B (Essays)	Candidates will answer: • 1 out of 2 essay questions set on Theme II: The Development of the Global Economy, 1945-2000 (30 marks; 15%). • 1 out of 2 essay questions set on Theme III: Conflict and Cooperation, 1945-2000 (30 marks; 15%).	60 marks (30%)

Paper 2: Developments in Southeast Asia, Independence-2000 (50% weighting)

Section	Item Description	Marks
A (Source-Based Study)	**Theme III: Regional Conflicts and Cooperation** Candidates will answer the compulsory Source-Based Study question, comprising two sub-questions: a) Compare two sources (10 marks; 5%) b) Test assertion using all sources (30 marks; 15%)	40 marks (20%)
B (Essays)	Candidates will answer: • 1 out of 2 essay questions set on Theme II: Forming Nation-States (30 marks; 15%). • 1 out of 2 essay questions set on Theme III: Economic Change after Independence (30 marks; 15%).	60 marks (30%)

H3 History (9823)

H3 History is intended for students who demonstrate strong aptitude, passion and interest in History. It provides opportunities for students to explore historical issues and events in greater depth and promotes an appreciation of the nature of history as a discipline. The H3 History syllabus is designed to offer intellectual challenge and rigour as it expects students to think independently and develop critical inquiry. It takes the form of a taught element and a Research Essay on a topic of the student's choice. The H3 History syllabus builds on the competencies acquired in H2 History and requires students to demonstrate historical knowledge in greater depth and breadth.

Students will submit a 3000–3500 word Research Essay based on a topic of their choice which had been approved in advance by Cambridge International Examinations. They will conduct an individual investigation in an area of historical interest, examine a variety of evidence, and interpret and evaluate the evidence to reach informed conclusions. The Research Essay should be completed over an extended period of about 10 months between Nov/Dec in JC1 and Sept in JC2.

Literature in English
Subject Codes: 8832 (H1), 9509 (H2), 9805 (H3)

Course Objectives
To develop in students:
1. an appreciation of, and informed personal response to, Literature in English
2. a love of reading, and the ability to read critically
3. an understanding of the historical and cultural contexts for literary production
4. an understanding of the nature and methods of literary study
5. the interdependent skills of reading, analysis and communication
6. effective, persuasive and appropriate communication of ideas

Assessment Objectives
Candidates should be able to:
1. make an informed personal and critical response to texts and account for their responses
2. demonstrate an understanding of how the literary context of a text informs their understanding
3. critically analyse and evaluate ways in which writers' choices of form, structure and language shape meaning
4. clearly communicate the knowledge, understanding and insights appropriate to literary study

Scheme of Assessment
- There is **one** compulsory paper (Paper 1) that **both H1 and H2** candidates will offer.
- There are **two** elective papers (Papers 2 or 3) available.

  The College offers Paper 3 to H2 candidates.

- Each paper will be three hours long. Candidates will answer three questions in each paper. Questions are given equal weighting in the computation of marks for the paper (i.e. $33\frac{1}{3}$% each).
- Examinations are **open book**: candidates will be allowed to bring copies of their set texts into the examination room.

Paper 1: Reading Literature (Compulsory Paper)
Paper 1 is an introductory paper designed to provide students with a broad exposure to literary study, focusing on the three genres of writing in Literature.
It will consist of **three sections**, each centred on a particular genre.

Section A: Poetry
(H2) This will be **an unseen section** in which **two questions will be set** focusing primarily on response and comparison skills. These questions will require the candidate to respond to and critically compare two unseen poems. The candidate will answer **one question only**.

(H1) This will be **an unseen section** in which **two questions will be set** focusing primarily on response skills. Students will be required to respond critically to a single unseen poem. The candidate will answer o**ne question only**.

Section B: Prose and Section C: Drama
In these two sections, the student **(H1 & H2)** will study **one novel** in Section B and **one play** in Section C.

Two questions will be set for **each text** in each section, focusing primarily on analysis skills. One question will be an essay question and the other will be a passage-based question. The candidate will answer **one question on each text**.

Papers 2 - 3: Elective Papers (H2 only)

These papers are designed to allow students to build on the foundation gained in Paper 1, and to study Literature in greater depth. **Candidates study only one elective paper**. Candidates will study **three texts** in their chosen paper.
The examination consists of three sections.

- **Section A** will consist of unseen extracts on the period or topic. **Two** questions will be set of which candidates will be required to do **one**. These questions will require the candidate to respond critically to the extracts set.

- **Section B** will focus on a comparison of two of the set texts. **Two** questions will be set of which candidates will be required to do **one**.

- **Section C** will focus on essay questions set on all three texts. The same texts used for Section B should **not** be used for Section C. **Two** questions will be set on each text of which the candidate will be required to do **one**.

H3 Literature
This is intended for students who display an exceptional ability and interest in the study of Literature, and are willing to pursue their studies to a greater depth and with greater specialisation.

H3 students will be assessed via a **research essay**, written on a topic chosen with the guidance of a teacher and the approval of CIE. This essay should be **3,000-3,500 words in length**.

In addition, the students have to produce **an evaluative commentary** on the essay of **800-1200 words in length**.

The essay should focus on an area of literary study, show evidence of extensive reading and research, adhere to an academic essay format and use conventions such as bibliography, references, and in-text citations. The essay should be completed over an extended period of 10 months in JC2.

H2 Chinese Language and Literature 华文与文学
Subject Code: 9575/1, 9575/2 & 9575/3

1 本科是遵照教育部《大学先修班华文课程标准》的教学目标及教学内容而设的。修完该课程的二年级学生在高二年底参加考试。

2 本科试卷包括下列三个部分 ：

- 试卷（一）语文卷（作文）（笔答） 1 小时 15 分钟（35/17.5%）
- 试卷（二）语文卷（语文理解与运用）（电子版考试）1 小时 45 分钟（65/32.5%）
- 试卷（三）文学卷（笔答） 3 小时 （100/50%）

3 试卷一考查学生的语文运用能力。学生在考作文时准予使用教育部所规定的词典。

4 试卷二考查学生的语文运用能力，考试以电脑输入方式进行。

5 试卷三考查学生对文学教材的理解、欣赏和分析能力，考试以开卷形式进行，考生可携带所规定的文本进场。

6 出题蓝图 ：

试卷（一 ）：语文部分（写作）（35 /17.5%）

序数	考查项目	方式	范围	题 数	分数比重
一	作文	开放式	抒情文、记叙文、说明文 、议论文；准许学生使用教育部所规定的词典。	4 选 1	35/17.5%

试卷（二）：语文部分（语文理解与应用）（电子版考试）（65 /32.5%）

序数	考查项目	方式	范围	题 数	分数比重
一	阅读理解一	开放式	-	5	32/15%
二	阅读理解二	*开放式	-	4	33/15%

*根据两个生活语料设题，如报章社论、新闻报道、通告、广告、海报、报告书、建议书、网上论坛贴文、博客文章、电邮等，其中一道试题是短评。

试卷（三）：文学部分（100/50%）

序数	考查项目	方式	范围	题数	分数比重
一	古代散文与诗词	开放式	指定文言文 5 篇	必答题	10/5%
			指定诗词 9 首（古代 6 首；现当代 3 首）	2 选 1	15/7.5%
二	现当代小说	开放式	指定短篇小说 4 篇	2 选 1	25/12.5%
三	现代戏剧	开放式	指定现代戏剧：郭宝崑戏剧	2 选 1	25/12.5%
四	文学作品赏析	开放式	课外文学作品：微型小说和现当代诗歌	2 选 1	25/12.5%

表一：语文部分的课程框架

三大主题框架		
关系	变化	选择

表二：H2 指定文学作品包括：

文言文篇目			
序号	作品	作 者	备注
1	《邹忌讽齐王纳谏》	-	先秦
2	《桃花源记》	陶渊明	晋
3	《马说》	韩愈	唐
4	《纵囚论》	欧阳修	宋
5	《柳敬亭说书》	张岱	明
韵文篇目			
序号	作品	作 者	备注
1	古诗十九首（其一）《行行复行行》	----	古诗
2	《行路难》（其一）	李白	唐诗
3	《旅夜书怀》	杜甫	唐诗
4	《鹊桥仙》（纤云弄巧）	秦观	宋词
5	《念奴娇》（大江东去）	苏轼	宋词
6	《声声慢》（寻寻觅觅）	李清照	宋词
7	《心跳》	闻一多	新诗
8	《苹果定律》*	南子	新诗
9	《爱的辩证》（一题两式）	洛夫	新诗
现当代小说			
序号	作品	作 者	备注
1	《药》	鲁迅	短篇小说
2	《一把青》	白先勇	短篇小说
3	《本次列车终点》	王安忆	短篇小说
4	《不存在的情人》*	英培安	短篇小说
现代戏剧			
序号	作品	作 者	备注
1	戏剧两部：* 《傻姑娘与怪老树》 《嗤呸店》	郭宝崑	本地戏剧

*本地作品

H2 MALAY LANGUAGE AND LITERATURE
Subject Code: 9576/1, 9576/2 & 9576/3

Matlamat Kursus Bahasa

Membina kemahiran pelajar untuk:
(a) mentafsirkan dan menilai maklumat dan perincian penting dalam teks lisan dan tulisan tentang pelbagai topik dengan menggunakan bahasa yang baku;
(b) membuat kesimpulan yang jitu tentang sesuatu teks dan mengaitkannya dengan pengalaman pelajar;
(c) melahirkan, menyampaikan dan bertukar-tukar pandangan dengan jelas dan berstruktur
menggunakan lensa yang berbeza tentang pelbagai topik semasa berkomunikasi;
(d) menggunakan beberapa strategi yang sesuai untuk menulis esei naratif dengan jelas dan
tersusun untuk menggambarkan peristiwa dan pengalaman atau menulis esei perbincangan
yang mampu memperkukuh sudut pandangan dengan berlandaskan alasan-alasan dan bukti-bukti yang wajar; dan
(e) memberikan komen tentang pelbagai topik di luar bidang mereka dan dapat menyampaikan
pendapat mereka dengan ringkas, padat dan jitu.

Matlamat Kursus Kesusasteraan

Membina kemahiran pelajar untuk:
(a) menyelami teks dan mengaitkan diri mereka dengan pelbagai teks serta membuat renungan
berdasarkan pengalaman hidup mereka;
(b) memahami unsur-unsur kesusasteraan dalam genre yang berbeza, mengapresiasi nilai
estetik teks dan penggunaan gaya bahasa penulis dengan minda yang perseptif dan ingin
tahu;
(c) menganalisis gagasan utama dan persoalan-persoalan dalam kesemua teks dan meneroka
kepentingan sesuatu teks itu terhadap masyarakat dan dunia;
(d) memahami teks dengan membuat kaitan antara konteks yang terdapat dalam teks dengan
dunia tempat tinggal mereka. Mereka boleh membuat renungan tentang pegangan nilai, perspektif dan identiti mereka serta meningkatkan kesedaran menerusi lensa yang berbeza-beza;
(e) mengkonsepkan maksud melalui penulisan, menggambarkan peristiwa dan pengalaman
serta menyampaikan pandangan mereka dengan bukti-bukti, alasan-alasan dan hujahan, dan juga menggabungkan dan menyampaikan respons mereka kepada orang lain; dan
(f) dapat mencipta karya-karya asli dengan gaya penulisan dan pendekatan mereka tersendiri.

Format Penilaian

Format peperiksaan bagi Bahasa dan Kesusasteraan Melayu H2 Peringkat Lanjutan terbahagi
kepada:

Kertas 1: Karangan (1 jam 15 minit: 35 markah)

Kertas 1 - terdapat satu bahagian sahaja.

Calon dikehendaki menulis karangan yang panjangnya tidak kurang daripada 460 patah perkataan tentang salah satu topik yang diberikan. Calon dibenarkan untuk menggunakan kamus yang diluluskan.

Kertas 2 (e-Peperiksaan): Kefahaman (1 jam 45 min: 65 markah)

Kertas 2 - terbahagi kepada dua bahagian.

Bahagian A: Kefahaman dan Kosa Kata (32 markah)

Calon dikehendaki menjawab empat soalan kefahaman dan soalan kosa kata.

Bahagian B: Kefahaman dan Komentari (33 markah)

Calon dikehendaki menjawab tiga soalan kefahaman dan menulis komentari yang panjangnya tidak melebihi 160 patah perkataan berdasarkan dua teks sumber yang diberikan.

Kertas 3: Kesusasteraan (3 jam: 100 markah)

Kertas 3 terbahagi kepada empat bahagian:

Bahagian A	Bahagian B	Bahagian C	Bahagian D
Novel dan Cerpen	Puisi Tradisional dan Puisi Moden	Drama	Analisis Teks Bebas

Calon dikehendaki menjawab empat soalan kesemuanya; SATU soalan daripada setiap bahagian. Soalan-soalan dalam kertas ini berbentuk *open book*. Calon dibenarkan untuk merujuk kepada buku-buku teks yang telah ditetapkan.

Buku Teks

1. *Novel Batas Langit* (Edisi Pelajar) oleh Mohamed Latiff Mohamed, terbitan Angkatan Sasterawan ’50, 2021
2. *Antologi Titik Pertemuan*, terbitan Angkatan Sasterawan ’50, 2021

H2 Tamil Language and Literature
Subject Code: 9577/1, 9577/2 & 9577/3

சிங்கப்பூர் - கேம்பிரிட்ஜ் பொதுக் கல்விச் சான்றிதழ்
(மேல் நிலைத் தேர்வு)

உயர்தரம் 2 தமிழ் மொழி இலக்கியம்

உயர்தரம் 2 தேர்வு எழுதுவோர் வினாத்தாள் ஒன்றுக்கு விடையளிப்பதுடன் வினாத்தாள் இரண்டு மற்றும் வினாத்தாள் மூன்றிற்கும் விடையளிக்க வேண்டும்.

வினாத்தாள் 1 9577/1 கட்டுரை

கொடுக்கப்பட்டுள்ள நான்கு தலைப்புகளில் ஏதேனும் ஒன்றுக்கு 350 சொற்களில் **கட்டுரை** எழுத வேண்டும். (35 மதிப்பெண்கள்)

வினாத்தாள் 2 9577/2 (மின்னியல் தேர்வு)

இவ்வினாத்தாளில் இரண்டு பிரிவுகள் உள்ளன.

'அ' பிரிவில் ஒரு பனுவலும் அதனையொட்டி ஐந்து வினாக்களும் இடம்பெற்றுள்ளன.
'ஆ' பிரிவில் இரண்டு பனுவல்களும் அவற்றையொட்டி நான்கு வினாக்களும் இடம்பெற்றுள்ளன. இவ்விரு பனுவல்களையும் கருத்தூன்றிப் படித்து இவற்றையொட்டி அமைந்த வினாக்கள் அனைத்துக்கும் சொந்த நடையில் விடை எழுத வேண்டும்.

அ பிரிவு (32 மதிப்பெண்கள்)

ஆ பிரிவு (33 மதிப்பெண்கள்)

வினாத்தாள் 3 9577/3 **இலக்கியம்**

நாவல் மற்றும் சிறுகதை, கவிதை, நாடகம், இலக்கியத் திறனாய்வு என்ற நான்கு பிரிவுகளும் இலக்கியம் பயிலும் மாணவர்களுக்குரியது. மொத்தம் நான்கு வினாக்களுக்கு விடைஎழுத வேண்டும். ஒவ்வொரு வினாவிற்கும் 25 மதிப்பெண்கள் வழங்கப்படும்.
(மொத்த மதிப்பெண்கள் 100)

H1 Chinese 华文
Subject Code: 8655/1 & 8655/2

1 所有修完中学华文课程的学生必修，并于高一年底参加'A'水准考试。考获'O'水准高级华文等级 A1 - D7 的学生可以免修。

2 本科试卷是遵照教育部《大学先修班华文课程标准》的相关教学目标及教学内容而编制的。课程的教学目标旨在加强学生的听、说、读、写和语言综合运用的能力，使学生能够有效地与人沟通。

3 本科试卷主要考查学生下列语文能力：

- 聆听
- 会话
- 词语的认识和语言的应用
- 阅读理解
- 写不同文体的文章

4 本科考试包括下列两个试卷：

1. 试卷一：

第一部分：写作（60 分）

第二部分：语文理解与运用（80 分）

试卷		考查项目	方式	范围	题数	分数/比重	备注
一	第一部分	写作	开放式	记叙文 说明文 议论文	4 选 1	60/30%	文章的字数在 500 以上。 学生可以使用考评局规定的词典。
	第二部分	综合填空	多项选择	一个短文	10	20/10%	
		阅读理解一	多项选择 自由作答	1 至 2 个实用性语料，如广告、传单、新闻报道等	6	20/10%	
		阅读理解二	自由作答 长文缩短	一个短文 根据篇章的段落，缩写成不超过 70 字的短文	9	40/20%	
共					26	**140/70%**	

2. 试卷二：

口试（50 分）

听力理解（10 分）

试卷	考查项目	方式	范围	题数	分数/比重	备注
二	口试					
	口头报告	开放式	课程三大主题： 1. 文化 2. 关系 3. 变化	1	20/10%	根据所提供的话题，结合录像短片的内容，然后呈献一个不超过 2 分钟的口头报告。
	讨论	开放式		1	30/15%	主考员根据口头报告的内容，跟学生进行讨论。
	听力理解	多项选择	一个语段，一个简短对话，以及三个理解篇章 包括日常会话、广播、访谈、故事、新闻报道等	10	10/5%	先听录音，然后回答问题。
共				12	**60/30%**	

Chinese B 华文 B
Subject Code: 8611/1, 8611/2 & 8611/3

1. 所有修完中学华文 B 课程，以及考获'O'水准华文等级 D7 - F9 的学生必修，并于高一年底参加'A'水准考试。

2. 本科试卷是遵照教育部《高中华文 B 课程标准》的相关教学目标及教学内容而编制的。课程的教学目标旨在以学生的先备知识与技能为基础，进一步强化其听、说、读、写、口语与书面互动的能力。

3. 本科考试包括下列三个试卷：

   1. 试卷一：

      写作（20 分）

试卷	考查项目	方式	范围	题数	分数/比重	备注
一	实用文	开放式	电子邮件 日记	2 选 1	20/20%	在电脑上进行写作，并通过电脑系统呈交答案。 字数在 200 以上。 学生可以使用考评局规定的词典。
共				1	**20/20%**	

   2. 试卷二：

      语文理解与应用（30 分）

试卷	考查项目	方式	范围	题数	分数/比重	备注
二	语文应用	多项选择	3 至 4 个段落或短文	10	10/10%	在电脑上进行作答，并通过电脑系统呈交答案。
	阅读理解	多项选择	3 至 4 个实用性语料，如广告、传单、新闻报道、日常对话等。	10	20/20%	
共				20	**30/30%**	

3. 试卷三：

口试（35 分）

听力理解（15 分）

试卷	考查项目	方式	范围	题数	分数/比重	备注
三	口试					
	口头报告	开放式	课程主题： 1. 文化	1	15/15%	根据制定的主题（文化），呈献一个不超过2分钟的口头报告。
	会话	开放式	课程主题： 2. 关系 3. 变化	1	20/20%	针对所提供的录像短片，以及主考员的提问，跟主考员进行一段对话。
	听力理解	多项选择	三个简短对话或语段，以及三个理解篇章 包括日常会话、广播、故事、新闻报道等	10	15/15%	先听录音，然后回答问题。
共				12	**50/50%**	

BAHASA MELAYU H1
Kod Subjek: 8656/1 & 8656/2

BAHASA MELAYU B
Kod Subjek: 8613/1, 8613/2 & 8613/3

Matlamat
Kursus Bahasa Melayu H1 Peringkat Lanjutan (BM H1) dan Bahasa Melayu B Peringkat Lanjutan (BM B) bertujuan membangun pelajar-pelajar yang aktif dalam bahasa Melayu untuk berkomunikasi secara cekap dalam kehidupan seharian. Makanya, kedua-dua kurikulum ini memberikan penekanan untuk meningkatkan pengetahuan dan kemahiran mendengar, bertutur, membaca, menulis, interaksi lisan dan interaksi penulisan yang diperoleh di sekolah rendah dan menengah.

Para pelajar juga akan memperoleh, membangun dan mengaplikasikan kemahiran-kemahiran daripada tiga domain kemahiran abad ke-21 - Kemahiran Komunikasi, Kolaborasi dan Informasi; Literasi Sivik, Kesedaran Global dan Kemahiran Silang Budaya; dan Kemahiran Berfikir Kritis dan Inventif.

Kandungan
Kurikulum BM H1 dan BM B akan diajarkan berasaskan kerangka tiga tema luas, iaitu **Budaya**, **Perhubungan** dan **Perubahan.**

Format Penilaian bagi Bahasa Melayu H1 Peringkat Lanjutan

Kertas	Bahagian	Komponen	Markah / Timbangan
Kertas 1 (3 jam)	Bahagian 1 (1 jam 30 minit)	**Karangan** 1. Ekspositori 2. Naratif/Deskriptif 3. Argumentatif 4. Rangsangan grafik (terdiri daripada 3-4 gambar)	60 / 30%
	Bahagian 2 (1 jam 30 minit)	**Penggunaan Bahasa, Kefahaman & Peringkasan** A. Peribahasa (10m/5%) B. Kefahaman Objektif (10m/5%) C. Mengedit Teks (20m/10%) D. Kefahaman Subjektif (40m/20%)	80 / 40%
Kertas 2 (45 minit)	Lisan (15 minit)	A: Penyampaian Lisan (2 minit)	20 / 10%
		B: Perbincangan berdasarkan Penyampaian Lisan	30 / 15%
	Kefahaman Mendengar (30 minit)	10 soalan berbentuk aneka pilihan (MCQ) berdasarkan lima teks autentik pelbagai genre misalnya dialog, rencana, cerpen, berita ringkas, pengumuman dll.	10 / 5%
		Jumlah	**200 / 100%**

Format Penilaian bagi Bahasa Melayu B Peringkat Lanjutan

Kertas	Komponen		Markah / Timbangan
Kertas 1 (50 minit)	**Penulisan Fungsional** 1. E-mel 2. Blog, forum dan lain-lain lagi berdasarkan rangsangan autentik (gambar, poster dan lain-lainnya)		20 / 20%
Kertas 2 (1 jam)	**Penggunaan Bahasa dan Kefahaman** 1. Tatabahasa (10m) 2. Kefahaman (20m)		30 / 30%
Kertas 3 (45 minit)	Lisan (15 minit)	A: Penyampaian Lisan (2 minit berdasarkan topik pilihan)	15 / 15%
		B: Perbualan (berdasarkan klip video)	20 / 20%
	Kefahaman Mendengar (30 minit)	10 soalan berbentuk aneka pilihan (MCQ) berdasarkan enam teks autentik pelbagai genre seperti iklan, risalah, menu dan laporan berita.	15 / 15%
		Jumlah	**100 / 100%**

Perhatian:
Kursus Bahasa Melayu B Peringkat Lanjutan ialah lanjutan daripada kursus Bahasa Melayu B di peringkat 'O'. Oleh sebab mata pelajaran ini bukan dianggap sebagai mata pelajaran peringkat H1 atau H2, pelajar hanya diberikan gred 'Kepujian' (*Merit*), 'Lulus' (*Pass*) atau 'Tidak bergred' (*Ungraded*).

H1 Tamil
Subject Code: 8657

சிங்கப்பூர் - கேம்பிரிட்ஜ் பொதுக் கல்விச் சான்றிதழ்
(மேல் நிலைத் தேர்வு)

தமிழ்மொழிப் பாடத்திட்டம்
உயர்தரம் 1 தமிழ்மொழி (**H1 TL 8657/1 & 8657/2)**

உயர்தரம் 1 தேர்வு எழுதுவோர் வினாத்தாள் ஒன்றுக்கு விடையளிப்பதுடன் வாய்மொழித் தேர்விலும் கேட்டல் கருத்தறிதல் தேர்விலும் பங்கேற்க வேண்டும்.

வினாத்தாள் 1 8657/1 (மூன்று மணி நேரம்)
வினாத்தாள் இரண்டு பகுதிகளைக் கொண்டிருக்கும்.

பகுதி 1
கொடுக்கப்பட்டுள்ள நான்கு தலைப்புகளுள் ஏதேனும் ஒன்றினைப்பற்றி 300 சொற்களில் கட்டுரை எழுத வேண்டும். (60 மதிப்பெண்கள்)

பகுதி 2

A1 பிழை திருத்தம் (10 மதிப்பெண்கள்)

A2 மரபுத்தொடர்கள் இணைமொழிகள் (10 மதிப்பெண்கள்)

B3 முன்னுணர்வுக் கருத்தறிதல் (20 மதிப்பெண்கள்)

C4 சுயவிடைக் கருத்தறிதல் (40 மதிப்பெண்கள்)

தாள் 2 8657/2 வாய்மொழித் தேர்வு

1 ஒளிக்காட்சியை ஒட்டிய வாய்மொழிப் படைப்பு (20 மதிப்பெண்கள்)

2 வாய்மொழிப் படைப்பை ஒட்டிய கருத்துரையாடல் (30 மதிப்பெண்கள்)

வினாத்தாள் 2 8657/2 கேட்டல் கருத்தறிதல் (10 மதிப்பெண்கள்)

மொத்த மதிப்பெண்கள் 200 (100**%)**

TAMIL 'B'
Subject Code: 8614

சிங்கப்பூர் - கேம்பிரிட்ஜ் பொதுக் கல்விச் சான்றிதழ்
(மேல் நிலைத் தேர்வு)
தமிழ்மொழிப் பாடத்திட்டம்

TAMIL 'B' (8614/1, 8614/2 & 8614/3)

இப்பாடம் மொத்தம் மூன்று வினாத்தாள்களைக் கொண்டது.

வினாத்தாள் 1 8614/1 (50 நிமிடங்கள்)

மின்னஞ்சல் அல்லது வலைப்பூ ஆகிய இரண்டில் ஏதேனும் ஒன்றினைத் தேர்வு செய்து 125 சொற்களுக்குக் குறையாமல் கணினியில் தட்டச்சு செய்ய வேண்டும்.

வினாத்தாள் 2 8614/2 (1மணி நேரம்)

A1 முன்னுணர்வுக் கருத்தறிதல்
A2 முன்னுணர்வுக் கருத்தறிதல்
A3 முன்னுணர்வுக் கருத்தறிதல்
B4 கருத்து விளக்கப்படக் கருத்தறிதல்
C5 தெரிவு விடைக் கருத்தறிதல்
C6 தெரிவு விடைக் கருத்தறிதல்
C7 தெரிவு விடைக் கருத்தறிதல்

தாள் 3 8614/3 வாய்மொழித் தேர்வு

இவ்வினாத்தாள் வாய்மொழிப் படைப்பு மற்றும் ஒளிக்காட்சியை ஒட்டிய உரையாடல் பகுதிகளை உள்ளடக்கி இருக்கும்.

தாள் 3 8614/3 கேட்டல் கருத்தறிதல்

இவ்வினாத்தாள் கேட்டல் கருத்தறிதல் பகுதியை உள்ளடக்கியிருக்கும்.

Physical Education

Physical education is an integral aspect of St Andrew's Junior College's holistic education anchored in the belief in developing all-rounded individuals who are primed to live and work in a globalised world.

The purpose of physical education is to enable students to demonstrate individually and with others the physical skills, practices and values to enjoy a lifetime of active, healthy living.

Objectives

The physical education programme develops in students:
A range of skills through participation in regular and varied physical education experiences. These skills enable students to enjoy movement, discover interests, and achieve personal goals related to participation in physical activity.
Competency in movement. This provides the foundation for continual skill acquisition and facilitates future successful participation in physical activity resulting from changing life patterns.

Course Content

1. Every student will be given the opportunity to participate in at least 3 physical activities.
2. Students are given the opportunity to select from a range of activities provided by the school.
3. Students will be given the opportunity to play in recreational competitions, and to participate in organising them.
4. Students will attend sports/health related talks.

Assessment

Every student receives training towards meeting the standards of the Physical Fitness Test (PFT). The PFT is conducted annually for JC2 students in the 1st

semester and is compulsory for all students except those certified medically unfit to take the test.

There are specific regulations governing the conduct of physical education. These are:

1. Attendance will be taken at all PE sessions. Absentees must provide to their PE teachers at the earliest opportunity, proper document (e.g. medical certificates) to support their absenteeism, and may have to make up for missed PE lessons.
2. Only students with valid medical certificates will be exempted from PE lesson.
3. Students wishing to excuse themselves from PE lessons must report to their PE teachers in advance to seek permission.
4. Students who are excused from PE lessons must remain in the designated location during PE lessons.
5. Students not properly attired for PE lessons will be considered as being absent. They may then have to make up for their absence on stipulated days assigned by the PE Department. Only the official college PE T-shirt and shorts are accepted as proper PE attire.
6. Student representatives of various CCAs are not exempted from PE lessons unless their respective CCA teachers-in-charge have sought specific permission on their behalf from HOD PE/CCA.

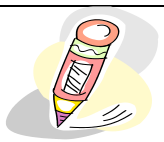
Weight Management Programme

The height and weight of all students are measured at least once a year. Students who are found to be not within the accepted weight range will be enrolled in our Weight Management Programme. Students whose BMI-for-age is in the 90th percentile and above will attend a compulsory workshop yearly. Underweight students will receive support, education and such intervention measures as deemed necessary.

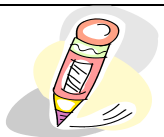
Once enrolled in the College's Weight Management Programme, a student's attendance for all activities of the programme is compulsory and takes priority over all CCA activities.

A student graduates from the College's Weight Management Programme when he achieves his acceptable BMI.

NOTES



NOTES



2023 Calendar

JANUARY

M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

FEBRUARY

M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

MARCH

M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

APRIL

M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

MAY

M	T	W	T	F	S	S
1	2	3	4	4	5	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

JUNE

M	T	W	T	F	S	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

JULY

M	T	W	T	F	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

AUGUST

M	T	W	T	F	S	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

SEPTEMBER

M	T	W	T	F	S	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

OCTOBER

M	T	W	T	F	S	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

NOVEMBER

M	T	W	T	F	S	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

DECEMBER

M	T	W	T	F	S	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

2023 Scheduled Public Holidays
*Sun 1 Jan: New Year's Day
**Sun 22 Jan and Mon 23 Jan: Chinese New Year
Fri 7 Apr: Good Friday
***Sat 22 Apr: Hari Raya Puasa
Mon 1 May: Labour Day
Fri 2 Jun: Vesak Day
Thu 29 Jun: Hari Raya Haji
Wed 9 Aug: National Day
*Sun 12 Nov: Deepavali
Mon 25 Dec: Christmas Day
2023 Scheduled School Holidays
***Sun 2 Jul: Youth Day
Thu 10 Aug: Day after National Day
Fri 1 Sep: Teachers' Day
2023 School Vacation
After Term 1: Sat 11 Mar to Sun 19 Mar
After Term 2: Sat 27 May to Sun 25 Jun
After Term 3: Sat 2 Sep to Sun 10 Sep
After Term 4 (JC1) Sat 25 Nov to Sat 31 Dec
After Term 4 (JC2): End of A-Level exams to 31 Dec

Remarks:

* The following Monday will be a public holiday

** The following Tuesday, 24 Jan will be a public holiday

*** The following Monday will be a scheduled school holiday

☐ School Vacation.

Front Cover Designed By: Mr Sim Hao Jie (SAJC Alumni, 08S01)

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