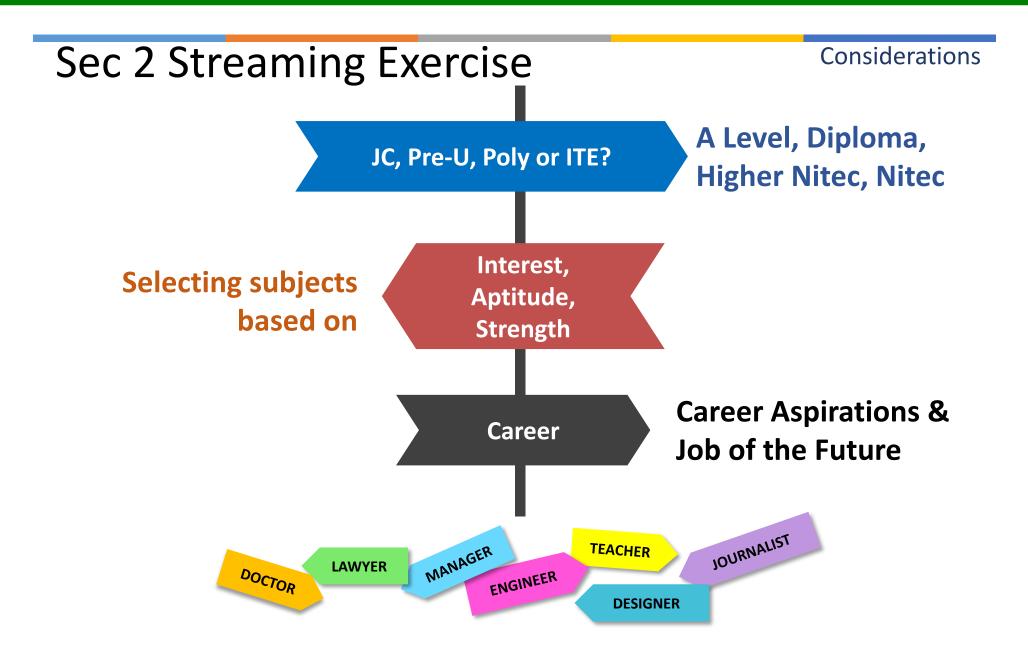
# Subject Combinations for Secondary 3 2022



Mr. Ng Jenn Yang
Head of Department
Information Communication Technology



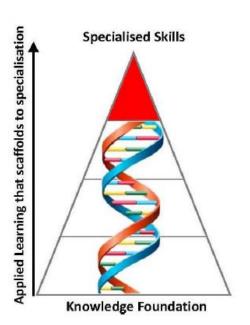
## **Future Skills in Post-Secondary Study and Work**

# DBS Partners AWS To Future-Proof Employees With AI & Machine Learning Skills



by Fintechnews Singapore / August 18, 2020





#### Industry-readiness and

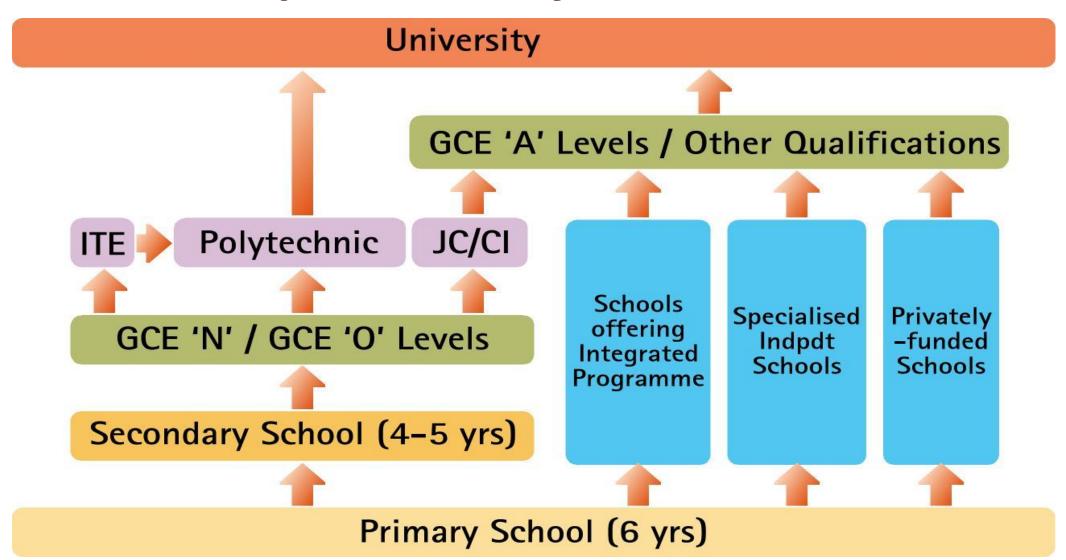
- Transferable Skills
- Communication skills
- Professional networks
- Global and Regional perspectives

#### SIT DNA

- Thinking Tinkerers
- Able to Learn,
   Unlearn and Relearn
- Catalysts for Transformation
- Grounded in the Community

Singapore Institute of Technology DNA

# **Multiple Pathways in Education**





# What are the various Post-Secondary School options available?

### **3 MAIN TYPES OF OPTIONS**

# 1. Junior Colleges (JCs) or Millennia Institute

Prepares students for the GCE 'A' level examination



# 3. Institute of Technical Education (ITE)

Equips students with technical knowledge and skills relevant to the industry.

## 2. Polytechnics / LaSalle / NAFA

Trains students with relevant skills for the workplace in a knowledge-based economy.

# FOR STUDENTS ON N-LEVEL COURSE (NORMAL (ACADEMIC) & NORMAL (TECHNICAL))

# What are your options after N Levels?

- 1. Poly Foundation Programme (PFP)
- 2. Direct-Entry-Scheme to Poly Programme (DPP)
- 3. ITE Nitec Programme
- 4. Progress to Sec 5

## **POLYTECHNIC PATH**



## Range of Polytechnic courses

















Extracted from Ngee Ann Polytechnic website

https://www.np.edu.sg/dipl omasforolevel/Pages/defaul t.aspx



# Polytechnic Foundation Programme 1 (PFP)

- One of the two through-train pathways to polytechnics for N(A) students
- An alternative to Sec 5
- A diploma-specific foundation programme conducted over two academic semesters at polytechnics



https://pfp.polytechnic.edu.sg/PFP/index.html



### **Criteria for PFP**



- (a) Top 10% of the Sec 4N(A) national cohort
- (b) **12** points or less for EMB3 aggregate (*before* deduction of CCA bonus points)
- (c) At least N(A)-level grade 3 for all subjects used in the computation of ELMAB3 (certain courses require an EL grade of 2)
- (d) Eligible students will be given the option to apply *after* the release of the GCE 'O' Level results in January the year they graduate from Sec 4N(A) (students applying for PFP must first progress to Sec 5NA)



## **Criteria for PFP**



For Courses featured in <b>Group 1</b>	Minimum Required Grades
English Language Syllabus A	3
Mathematics Syllabus A / Additional Mathematics	3
One of these relevant subjects: - Design and Technology - Food and Nutrition - Science (Chemistry, Biology) - Science (Physics, Biology) - Science (Physics, Chemistry)	3
Any two other subjects excluding CCA	3

#### **Group 1 Courses**

- Applied Sciences
- Built Environment
- Business & Management\* (\*some courses classified under Group 2)
- Engineering
- Health Sciences
- Information & Digital Technologies
- Maritime Studies
- Media & Design

<sup>\*</sup>RP: Aviation Mgt, Ind & Ops Mgt, Supply Chain Mgt

<sup>\*</sup>TP: Aviation Mgt, Biz Processes & Sys Engr, Financial Biz Informatics



## **Criteria for PFP**



For Courses featured in Group 2	Minimum Required Grades
English Language Syllabus A	2
Mathematics Syllabus A / Additional Mathematics	3
One of these relevant subjects: - Art - Literature in English - History - Combined Humanities - Geography - Principles of Accounts	3
Any two other subjects excluding CCA	3

#### **Group 2 Courses**

- Business & Management
- Humanities
- Media & Design\*\*

(\*\*some courses classified under Group 1)

\*\*NP: Chinese Media & Comm; Film, Sound & Music; Mass Comm; Media Post-Production \*\*RP: Arts & Theatre Mgt; Mass Comm; Media

Production & Design

\*\*SP: Media & Comm

# Direct-Entry-Scheme to Polytechnic 2 Programme (**DPP**)

 DPP allows 4N(A) students to be admitted directly to a 2-year *Higher Nitec* programme <u>without</u> having to sit for the O Level examinations or undergo a *Nitec* programme.

• Students who successfully compete the course and attain the required minimum qualifying *Higher Nitec* Grade Point Average (GPA) are guaranteed a place in one of the polytechnic diploma courses that are mapped to their *Higher Nitec* course. <a href="https://www.ite.edu.sg/admissions/full-time-courses/higher-nitec/dpp">https://www.ite.edu.sg/admissions/full-time-courses/higher-nitec/dpp</a>



## **Criteria for DPP**



- Obtained an EMB3 aggregate of 19 points or better (excluding CCA bonus points); and
- Met the course-specific entry requirements:
- a) For Applied Sciences, Engineering and Info-Communications Technology courses: EL- 4, Maths- 4, any three other subjects (excluding CCA)- 5
- b) For Business & Services courses:

  EL- 3, Maths- 4, any three other subjects (excluding CCA)- 5



# Progression to Poly from DPP

	For Progression to			
Higher Nitec Courses	1st Year	2nd Year		
	of Relevant Polytechnic Diploma Course			
Applied Sciences #	Raw <i>Higher Nitec</i> GPA ≥ <b>2.5</b> ^	N.A.		
Engineering and Info- Communications Technology #	Raw <i>Higher Nitec</i> GPA ≥ <b>2.5</b> ^	Raw <i>Higher Nitec</i> GPA ≥ <b>3.5^</b>		
Business & Services	Raw <i>Higher Nitec</i> GPA ≥ <b>3.0</b> ^	N.A.		

<sup>^</sup>excluding CCA bonus pt <a href="https://www.ite.edu.sg/admissions/full-time-courses/higher-nitec/dpp">https://www.ite.edu.sg/admissions/full-time-courses/higher-nitec/dpp</a>

# Mapping of DPP Higher Nitec Courses to Poly Diploma Courses

Students admitted to *Higher Nitec* DPP courses in AY2020 are guaranteed a place in one of the polytechnic diploma courses<sup>1</sup> mapped to their *Higher Nitec* course shown below, provided they meet the following minimum qualifying GPA scores upon the completion of their *Higher Nitec* course:

Higher Nitec	Mapped Polytechnic Courses for articulation fron	Offered		lifying GPA <sup>[3]</sup>	
DPP Course <sup>[2]</sup>	Higher Nitec DPP Course	by	Year 1 Entry [4]	Year 2 Entry [5]	
<b>Applied Science</b>	es				
Chemical	Biologics & Process Technology	NYP	2.5	-	
Technology	Chemical & Pharmaceutical Technology	NYP	2.5	-	
	Nanotechnology & Materials Science	NYP	2.5	-	
	Environmental Science	RP	2.5	-	
	Pharmaceutical Sciences	RP	2.5	-	
Engineering					
Civil &	Architecture	NYP	2.5	-	
Structural	Industrial & Operations Management	RP	2.5	-	
Engineering	Architecture	SP	2.5	-	
Design	Civil Engineering (Previously known as Civil	SP	2.5	_	
	Engineering with Business)	51		_	
	Clean Energy	TP	2.5	-	
	Green Building & Sustainability	TP	2.5	-	
	Integrated Facility Management	TP	2.5	-	
Electrical	Aerospace Engineering	NP	2.5	-	
Engineering	Automation & Mechatronic Systems	NP	2.5	-	
	Biomedical Engineering	NP	2.5	-	
	Common Engineering Programme	NP	2.5	-	
	Electrical Engineering	NP	2.5	3.5	
	Electronic & Computer Engineering	NP	2.5	3.5	
i		1			

For the list of Polytechnic Diploma courses you can apply for under the Direct Entry Scheme to Polytechnic Programme (DPP), access

https://www.ite.edu.sg/docs/default-source/admissions-docs/full-time/dpp/dpp-courses-to-polytechnic-mapping-for-dpp-2020-intake.pdf?sfvrsn=3d85ee13 2

Applicable to both 4NA & 4NT students!

# EAE Early Admissions Exercise 3

- provides students conditional offers for admission to ITE prior to receiving their final grades
- provides students conditional offers for admission to ITE prior to receiving their final grades students selected based on their aptitudes, interests, relevant work experience and achievements in sports, arts, leadership, entrepreneurship and community service, apart from academic grades
- to meet the minimum entry requirement
- apply by <u>April in the Sec 4N(A) or 4N(T) year</u>

Lifelong Learners, Exemplary Leaders

**Applicable** to both 4NA & 4NT students!

# **ITE Nitec Programme**



- □ 3 GCE "N" Passes
- □ Grade 1 5 or Grade A D in EL or Maths depending on course requirements



Institute of Technical Education

Applicable to both 4NA & 4NT students!

# **ITE Nitec Programme**

#### **School of Applied & Health Sciences**

- Nitec in Applied Food Science
- Nitec in Chemical Process Technology
- Nitec in Community Care & Social Services
- Nitec in Nursing
- Nitec in Opticianry

#### **School of Business & Services**

- · Nitec in Beauty & Wellness
- · Nitec in Business Administration
- Nitec in Business Services
- Nitec in Fitness Training
- Nitec in Floristry
- Nitec in Hair Fashion & Design
- Nitec in Logistics Services
- · Nitec in Retail Services
- Nitec in Retail Services (3-year)
- Nitec in Travel & Tourism Services

#### School of Design & Media

- Nitec in Architectural Technology
- Nitec in Digital Animation
- Nitec in Fashion Apparel Production & Design
- Nitec in Interior & Exhibition Design
- Nitec in Product Design
- Nitec in Video Production
- · Nitec in Visual Communication

#### School of Electronics & Info-comm Technology

- · Nitec in Electronics & Internet of Things
- Nitec in Electronics, Computer Networking & Communications
- Nitec in Infocomm Technology
- Nitec in Microelectronics
- Nitec in Security Technology
- · Nitec in Web Applications

#### School of Engineering

- Nitec in Aerospace Avionics
- Nitec in Aerospace Machining Technology
- Nitec in Aerospace Technology
- Nitec in Automotive Technology
- Nitec in Built Environment (Mechanical & Electrical Services)
- Nitec in Built Environment (Mechanical & Electrical Services) (3year)
- Nitec in Built Environment (Vertical Transportation)
- Nitec in Digital & Precision Engineering
- Nitec in Electrical Technology (Lighting & Sound)
- Nitec in Electrical Technology (Power & Control)
- Nitec in Mechanical Technology
- Nitec in Mechanical Technology (3-year)
- Nitec in Mechatronics & Robotics
- Nitec in Rapid Transit Technology
- Nitec in Urban Greenery & Landscape

#### **School of Hospitality**

- Nitec in Asian Culinary Arts
- Nitec in Hospitality Operations
- Nitec in Pastry & Baking
- Nitec in Western Culinary Arts

Applicable to both 4NA & 4NT students!

# ITE Nitec Programme

GCE N(A)/N(T)-level

**GCE O-level** 

**Minimum Required Grades** 

School	School Course		MA	MA/SC	Other 1	Other 2	Other 1	Other 2
	Applied Food Science							
Applied & Health	Chemical Process Technology			5, D	5, D	5, D	E8	
• •	Community Care & Social Services							E8
Sciences	Opticianry							
	Nursing	5, D	5, D		5, D			
	Beauty & Wellness	Cc	mple	ted GC	CE 'N' o	or GCE	'O' Le	vel
	Business Administration						E8	E8
	Business Services							
	Fitness Training	5, D			5, D	5, D		
Business & Services	Floristry							
	Travel & Tourism Service							
	Hair Fashion & Design	Completed GCE 'N' or GCE 'O' Level;						
	Logistics Services	Retail Services (3-year) is for <b>GCE N(T)</b>						
	Retail Services	st	tuden	ts with	n 0 or :	1 'N' L	evel pa	ass
	Architectural Technology							
	Interior & Exhibition Design		5, D		5, D	5, D		E8
	Visual Communication						_ E8	
Design & Media	Fashion Apparel Production & Design			5, D	5, D	5, D		
	Video Production	5, D			5, D	5, D		
	Digital Animation				. 101.1			
	Product Design	Completed GCE 'N' or GCE 'O' Leve						evei

N(A)-Level: Numerical Grades

> N(T)-Level: Alphabetical Grades

**Applicable** to both 4NA **& 4NT** students!

# ITE Nitec Programme

GCE N(A)/N(T)-level

**GCE O-level** 

**Minimum Required Grades** 

School	Course	EL	МА	MA/SC	Other 1	Other 2	Other 1	Other 2	
	Electronics & Internet of Things		5, D		5,D	5,D			
Electronics &	Electronics, Computer Networking & Communications								
Info-comm	Infocomm Technology			5, D	5, D	5, D	E8	E8	
	Microelectronics			J 3, D	3, 0	3, 0			
Technology	Web Applications								
	Security Technology	С	ompl	eted G	CE 'N	or Go	CE 'O'	Level	
	Aerospace Avionics								
	Aerospace Machining Technology		5, D		5, D	5, D			
	Electrical Technology (Lighting & Sound)		3, 0		3, 0	3, 0	E8	E8	
	Electrical Technology (Power & Control)								
	Aerospace Technology					, D 5, D		EO	
	Digital & Precision Engineering			5, D	5 D				
Engineering	Mechatronics & Robotics			] 5, D	3, D				
	Rapid Transit Technology								
	Automotive Technology						N		
	Built Environment (Mechanical & Electrical Services)								
	Built Environment (Vertical Transportation)	С	ompl	eted G	GCE 'N	or Go	CE 'O'	Level	
	Mechanical Technology								
	Urban Greenery & Landscape								
	Hospitality Operations	5,							
Hospitality	Pastry & Baking	5, D			5, D	5, D	E8	E8	
Hospitality	Western Culinary Arts								
	Asian Culinary Arts	C	ompl	eted G	CE 'N	or Go	CE 'O'	Level	22

N(A)-Level: **Numerical Grades** 

> N(T)-Level: Alphabetical Grades



# Subject Combinations for Secondary 3 2022



# 3 Normal Academic Subject Combinations in 2022



# Sec 3 NA (Subjects) in 2022

L - LANGUAGE	CS - SCIENCE	MA - MATHEMATICS	H - HUMANITIES	C - COURSEWORK
1. *English	1. Sci (Biology, Chemistry)	1. *Mathematics (E Maths)	1. *Combined Humanities	1. Art
2. *Mother Tongue	2. Sci (Physics, Chemistry)	2. Additional Maths (A Maths)	(Social Studies & Geography/History)	2. Design & Technology (DT)
		3. Principle of Accounts (POA)		3. Food & Nutrition (FN)
		4. Computing		

#### \*Compulsory Subject

Note: Final subjects offered in 2022 will be subjected to changes due to demand and availability of resources.



## **Sec 3NA Subject Combinations in 2022**

#### **Points of Discussion:**

- 1. Total Number of Subjects
  - 6 Subjects
  - 7 Subjects
- 2. Subject Combinations (categorized based on subject type)



# Sec 3 NA Subject Combinations in 2022 (6 Subjects)

SUBJECT	OPTION 1
1	English Language
2	Mother Tongue
3	E Maths
4	(SS, Geography) or (SS, History)
5	Science (Phy, Chem) or Science (Bio, Chem)
6	Coursework (Art or DT or FN) or POA or #A Maths

**Choices for Subject 4 to 6** 



# Sec 3 NA Subject Combinations in 2022 (7 Subjects)

SUBJECT	OPTION 2
1	English Language
2	Mother Tongue
3	E Maths
4	(SS, Geography) or (SS, History)
5	Science (Phy, Chem) or Science (Bio, Chem)
6	Coursework (Art or DT or FN) or POA or #A Maths
*7	Computing

\*To take a 7<sup>th</sup> subject – a set of additional criteria applies.

Subject	bject Criteria					
Computing	At least 65% in Sec 2 overall					
	<ul> <li>At least 65% in Sec 2 Mathematics</li> </ul>					



## **Sec 3NA Subject Combinations in 2022**

Subject Combination			Subject			No. of Subjects				
1	2L	1SC	1H	-	ЗМА	7				
2	2L	1SC	1H	1C	2MA	7				
3	2L	1SC	1H	-	2MA	6				
4	2L	1SC	1H	1C	1MA	6				
		SC - Combined Science Sci (Phy, Chem) Sci (Bio, Chem)	H - Humanities * Humanities (Social Studies & Geography /History)	<ul> <li>#C - Coursework</li> <li>Art</li> <li>Design &amp; Technology</li> <li>Food &amp; Nutrition</li> </ul>	<ul><li>MA - Maths</li><li>* E Maths</li><li>* #A Maths/POA</li><li>**Computing</li></ul>					
	# Either A Maths or # A Maths (N) is only	Compulsory subject Either A Maths or POA or Coursework A Maths (N) is only offered to students taking out-of-stream Mathematics (O) *Computing is the only 7 <sup>th</sup> Subject								

#### **Example**

Student A is offering Subject Combination 2:

- 1) English Language
- 2) Malay Language
- 3) Science (Biology, Chemistry)
- 4) Humanities(Social Studies, Geography)
- 5) Food & Nutrition
- 6) E Maths
- 7) Computing

Note: Final subjects offered in 2022 will be subjected to change due to demand and availability of resources.



# Out-of-stream subjects (O level)

**Lower Secondary**Subject-Based Banding (SBB)



<u>Upper Secondary</u>
Out-of-stream (OOS) subjects

#### Out-of-stream (O level) subjects offered:

- 1. English Language
- 2. Mathematics
- 3. Science (Physics, Chemistry) / Science (Biology, Chemistry)
- 4. Mother Tongue
- <u>Existing students</u> who are being offered SBB at Sec 2 can continue to be offered <u>out-of-stream subject</u> when he obtains a <u>pass</u> in the subject (at a higher level) in Sec 2.
- <u>New students</u> who would like to be offered <u>out-of-stream subjects</u> will need to attain at least <u>65%</u> for the subjects at Sec 2.

#### **Example**

Student B is offering the following subjects:

- 1) English Language (OOS)
- 2) Malay Language (OOS)
- 3) Science (Physics, Chemistry)
- 4) Humanities (Social Studies, History)
- 5) Food & Nutrition
- 6) E Maths (OOS)



<sup>\*</sup> Students cannot offer more than 3 out-of-stream subjects.

## **Promotion Criteria**

#### **Promotion from 2NA to 3NA**

Grade 5 or better in English Language and 2 other subjects

OR

Pass in 4 subjects

#### **Lateral Transfer from 2NA to 3EX**

Attain a minimum of 70% in overall percentage, students to be deemed able to cope with the rigour of the more demanding course especially in the area of literacy and numeracy.



## Schedule

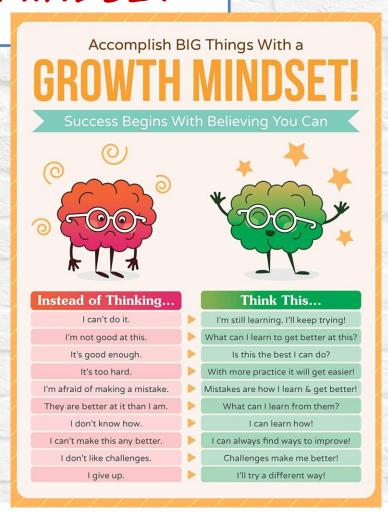
- Aug-Sept 2021 Subject Combination Survey
- Oct 2021 (After end-of-year examination) Streaming Exercise
- End Oct 2021 Release of Streaming Exercise Results

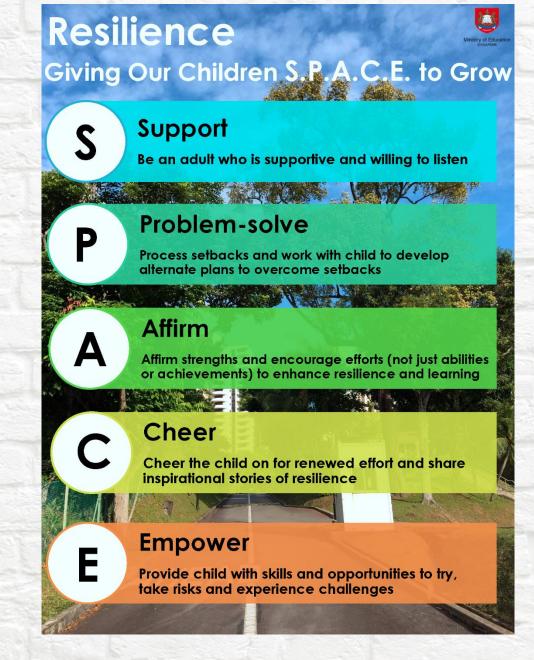


## **BUILD MINDSET & STRONG FOUNDATION**



# Help your child develop Growth MINDSET





We can intentionally role-model resilience & use S.P.A.C.E. language.



