VIRTUAL EDITION

Reactor Pre-Incubator

A hands-on, *online* entrepreneurship programme

Level 3 & 4
Designed for students aged 17 to 24

4-Week Online Programme
Self-Paced Course
2-4 hours per week

| Singapore | Jakarta | Bangkok | Ho Chi Minh | Manila |
| Hong Kong | Kuala Lumpur | Seoul | Tokyo | Perth | Dubai |

VIRTUAL EDITION

Hands-on, real-life activities done in the safety of home.

EntreCamp (Virtual Edition) is an online bootcamp that students can participate in whilst staying completely indoors. As schools observe social distancing and preventive measures, we've built a completely immersive digital experience to impart entrepreneurial skills for students taking classes from home.

EntreCamp (Virtual Edition) is compatible with all laptops and tablets. All you need is an internet connection.

VIRTUAL EDITION

Students need digital working skills now, more than ever.

The EntreCamp (Virtual Edition) introduces students to best-in-class software that are used by startups and tech companies worldwide. Being familiar with these online tools helps students to better apply for internships, and allow them to thrive in the Future of Work.

BEST-IN-CLASS TECH SOFTWARE

G Suite

slack

Trello

xero

pipedrive

VIRTUAL EDITION

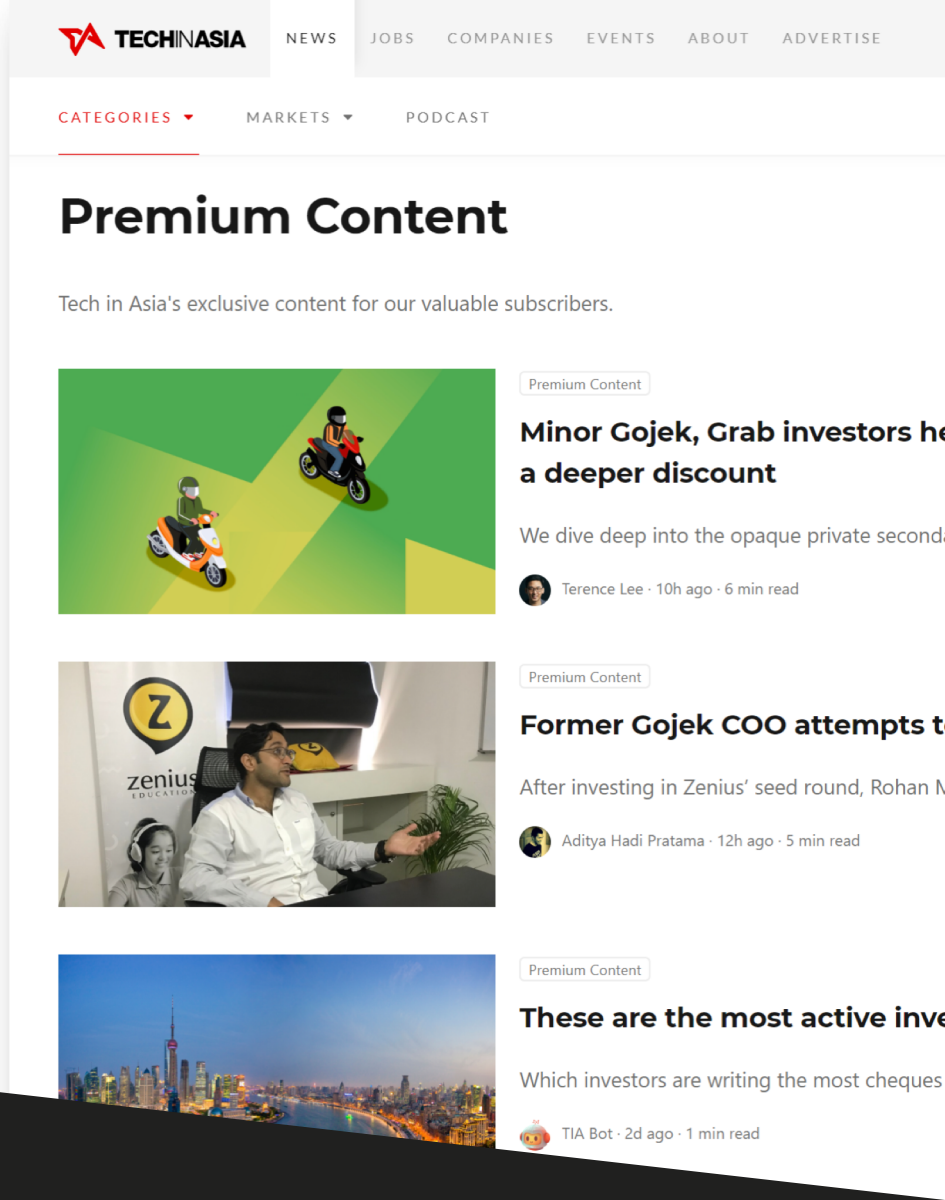
Our textbooks get updated once every 4 hours.

The world of technology moves at the speed of information, and curriculum updates need to match up. EntreCamp (Virtual Edition) introduces students to the most current company case studies and market analysis from all across Asia.

As part of EntreCamp (Virtual Edition), each student will get access to TechinAsia Premium.

OFFICIAL CONTENT PARTNER

TECHINASIA



VIRTUAL EDITION

A syllabus focused on emerging startups from all over South-East Asia.

With a population of 622m and growing, ASEAN is expected to become the world's fourth largest economy by 2030. EntreCamp (Virtual Edition) is the only startup programme that trains students to harness the potential South-East Asia by introducing them to tech companies and startup founders across ASEAN.

Grab carousell

EntreCamp (Virtual Edition) uses regional startup examples and highlights ASEAN entrepreneurs.

99.co YOUR WAY HOME Warung PINTAR tokopedia

SHOPBACK The Smarter Way ruang guru traveloka






VIRTUAL EDITION

A blockchain certificate that students can proudly put on their LinkedIn profile.

EntreCamp (Virtual Edition) prepares students for an internship in a startup or tech company. Our blockchain-enabled certificate can be verified by prospective employers, and students can use this as part of their personal statement or job application.

As part of EntreCamp (Virtual Edition), each graduate will get a personalized certificate. This can be downloaded and printed anytime.

COMPATIBLE WITH

LinkedIn

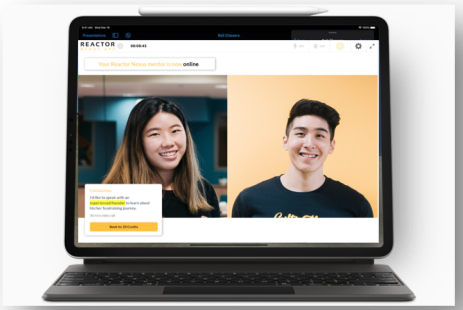
VIRTUAL EDITION

REACTOR SCHOOL

How It Works

1. Students log in online from the safety of home.

EntreCamp works with any kind of laptop, tablet or mobile phone. All you need as a Wi-Fi connection.



2. Instructors deliver challenges and experiential activities.

Through a series of design challenges and hands-on digital experiences, our Reactor Learning Experience Designers (LXDs) will be online to help students pick-up various technical and soft-skills.

3. Students learn to deliver work and collaborate online.

By learning to work effectively online, EntreCamp prepares students for remote/virtual internships, as well as how to lead their own startup team.

VIRTUAL EDITION

Programme Overview

Date: 4-Week Programme
Time: Approximately 2-4hr per Week
Independent, Self-Paced Learning with Mentorship Consultation

Venue: Online; Students Attend from Home
Minimum 5

Learning Objectives

1. This 4-week self-paced programme will expose students to the **new venture creation cycle**, and equip them with fundamental mindset and skills for startups.

1. Students will pick up **technical skills** and **soft skills**, by experiencing what it means to be a co-founder. Students are expected to demonstrate an **entrepreneurial mindset** over the course of the programme, as well as pick up startup best practices such as user-centric design, lean methodology, validation and value creation.

2. At the end of the bootcamp, students will deliver an **abridged investor pitch deck** with an accompanying **prototype** to a panel of investors.

VIRTUAL EDITION Reactor Pre-Incubator

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Programme Modules

LEVEL 3 & 4
College Y1 to Y4
For Ages 19 to 24

1. Startups 101
Level 3 & 4
Introduction to Startup Entrepreneurship

2. Personal Aspirations
Level 3 & 4
Reflection and Goal Setting

3. Problem Identification
Level 3 & 4
Identify Problems worth solving

4. Solution Ideation
Level 3 & 4
Ideate and Evaluate Solution

5. Team Formation
Level 3 & 4
Team Aspirations & Pitch Hiring

6. Minimum Viable Product
Level 3 & 4
Build MVP to Validate Solution

7. Customer Validation
Level 3 & 4
Validate Assumptions with Users

8. Market Opportunity
Level 3 & 4
Visioning and Analysing Markets

9. Unique Value Proposition
Level 3 & 4
Competitive Analysis to Define Positioning

10. Business Models & Financial Projections
Level 3 & 4
Build a Sustainable Business Model

11. Pitching
Level 3 & 4
Prepare and Deliver a Pitch

12. What's Next
Level 3 & 4
Prepare and Deliver a Pitch

VIRTUAL EDITION

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Programme Itinerary

Reactor suggests students set aside **2 hours per module/challenge** for the self-paced Pre-Incubator Programme.

		Team Self-paced Learning Module / Activity	Weekly Team Challenge	Description
Week 1	*4.0 hrs*	Kickoff	-	Learn more about the programme, meet your mentors and classmates.
	4.0 hrs	M1. Startups 101 M2. Personal Aspirations	Personal Aspirations Canvas	Complete *Personal Aspirations Canvas* describing personal strengths, improvement areas, values, interests and goals related to becoming an entrepreneur.
	2.0 hrs	M3. Problem Identification M4. Solution Ideation	Ideathon Pitch	Record a 30-sec video pitching your solution based on an identified problem to your target customer.
	2.0 hrs	M5. Team Formation	Team Alignment Canvas	Form a team and complete the *Team Alignment Canvas* as a 1-page poster.
Week 2	*2.0 hrs*	M6. Minimum Viable Product	Building an MVP	Create MVP and/or Testing Tools with the goal of testing your solution with actual users.
	2.0 hrs	M7. Customer Validation	Validate & Gain Traction - Round 1	Validate your ideas through experiments, and record your results using a *Validation Board.*
	2.0 hrs	-	Mock Pitch - Round 1	Record a 2-minute video of your team giving a Pitch to investors, describing your progress and validated learnings thus far.
Week 3	*2.0 hrs*	M8. Market Opportunity M9. Unique Value Proposition	Market Positioning	Create an investor pitch deck to justify why your market has potential, based on market sizing and competitive analysis.
	2.0 hrs	M10. Business Models & Financial Projections	Business Model	Create an investor pitch deck explaining your primary business model and financial projections, so as to convince them to invest in your business.
	2.0 hrs	-	Validate & Gain Traction - Round 2	Validate your ideas through experiments, and record your results using a *Validation Board.*
	2.0 hrs	M11. Pitching	Mock Pitch - Round 2	Create an investor pitch deck to explain the results of your customer validation tests using your MVPs.
Week 4	*2.0 hrs*	-	Validate & Gain Traction - Round 3	Validate your ideas through experiments, and record your results using a *Validation Board.*
	2.0 hrs	M12. What's Next?	Team Reflection & Action Plan	Reflect progress and learnings, and propose next steps to improve and gain more experience or exposure in entrepreneurship.
	2.0 hrs	Demo Day	Investor Pitch	Record a 5-minute video of your team giving a pitch to investors, describing your product and validated learnings thus far.
Every Week	*10 mins*	Weekly Update	-	Every week, students will track their progress, learning and morale, and set goals for the coming week.

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Sample Module Details

The following outlines how each of the modules will be conducted during the programme. A full set of module details are available upon request.

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LEVEL 3 & 4 For Ages 17 to 24

1. Startups 101

What is a startup? How are startups different from a business? What is the startup journey like?

Students will understand the differences between startups and businesses. This will give them a high-level overview of the entrepreneurship world and what the journey entails.

Learning Outcomes

At the end of this segment, students should be able to;-

- Identify startups that inspire them.
- Examine these startups and why they inspire them.

REACTOR SCHOOL

LEVEL 3 & 4 For Ages 17 to 24

2. Personal Aspirations

What are my strengths and areas of improvements? What are my interests and passions? What are my individual entrepreneurial aspirations?

Students will reflect their personal strengths and areas of improvements, as well as values, passions and interests related to becoming an entrepreneur. This will help them define their goals and aspirations in starting a business.

Learning Outcomes

At the end of this segment, students should be able to;-

- Identify their strengths and areas of improvements.
- Identify their core values.
- Identify their interests and passions.
- Identify their goals and commitment level in becoming an entrepreneur.

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LEVEL 3 & 4 For Ages 17 to 24

3. Problem Identification

How do I learn about my customers' pain points?
How do I translate my customers' biggest pain points into key features?
Why is it important for a business to solve user pain points?
How do I identify and choose a good problem to solve?

Students will learn that providing value through solving user problems is the heart of any business, and will learn how to identify problems worth solving.

Learning Outcomes

At the end of this session, students should be able to;-

- Observe users to identify possible opportunities.
- Break down the identified opportunities into its underlying problems.
- Define the problems as challenge statements.
- Decide on a challenge statement to solve for.

REACTOR SCHOOL

LEVEL 3 & 4 For Ages 17 to 24

4. Solution Ideation

How do I evaluate my ideas?
How do I express my solution clearly and succinctly?

Students will learn an important principle that what defines a good solution is the problem it solves, and not because they are unique or technologically impressive. To define the right solution, students will also learn ideation and idea prioritisation techniques.

Learning Outcomes

At the end of this segment, students should be able to;-

- Ideate solutions for the challenge statement.
- Prioritise and select a solution.

REACTOR SCHOOL

LEVEL 3 & 4 For Ages 17 to 24

5. Team Formation

Why start a startup? What are my individual entrepreneurial aspirations and strengths? How do I find and choose co-founders? What is an ideal team like? How do we resolve conflicts or disagreements?

Students will form teams, and learn more about their teammates' personal strengths and interests to maximise their contribution. They will appreciate the skills needed in a startup team that is geared for success, and commit to the mindful application of these behaviours throughout their startup journey with their teammates, including shared values, managing diversity and conflict.

Learning Outcomes

At the end of this session, students should have;-

- Formed a team
- Identified their team's entrepreneurial aspirations and passions.
- Identified their personal strengths and weaknesses to appreciate the importance of diversity in a team.
- Come to an agreement on the commitment level and roles of each member, as well as the goals of the team.

REACTOR SCHOOL

LEVEL 3 & 4 For Ages 17 to 24

6. Minimum Viable Product

What is an MVP? Why are MVPs important? How do we build an MVP? What is the difference between Wireframes and Prototypes?

Students will learn about the importance of building and iterating MVPs to validate their solution.

Learning Outcomes

At the end of this session, students should have;-

- Identified a core feature based on their solution's assumption(s).
- Built an MVP explaining the core features of their solution.

REACTOR SCHOOL

LEVEL 3 & 4 For Ages 17 to 24

7. Customer Validation

What is the difference between users and customers? How do I get honest and valuable feedback from potential users/customers?

Students will learn the importance of customer validation and have real-world practice in asking the right questions.

Learning Outcomes

At the end of this session, students should be able to;-

- Identify assumptions of your solution.
- Choose the right users to test and validate your solution.
- Identify key metrics for your tests, focusing on actionable (not vanity) metrics that you an accurate gauge of what customers really feel about your product.
- Define good validation questions.
- Should have tested the MVPs with users and collect user feedback.
- Should be able to analyse feedback to conclude if the solution is validated, and incorporate feedback for future action.

REACTOR SCHOOL

LEVEL 3 & 4 For Ages 17 to 24

8. Market Opportunity

Why is it important to aim for a sizable market? How do we estimate the size of a market?

Students will discover how to build a sustainable business around their vision, by defining the business model and planning financial projections.

Learning Outcomes

At the end of this segment, students should be able to;-

- Identify the markets to focus on, explaining their reasons and assumptions.
- Determine the size of their identified market(s) using top-down analysis, explaining reasons and assumptions.
- Determine the size of their identified market(s) using bottom-up analysis, explaining reasons and assumptions.

REACTOR SCHOOL

LEVEL 3 & 4 For Ages 17 to 24

9. Unique Value Proposition

How do I identify my key competitors? How do I know if there is potential in my industry? How do I stand out from my competitors?

Students will learn to better position their product in the market by analysing the competition in their industry.

Learning Outcomes

At the end of this session, students should be able to;-

- Identify relevant competitors in your industry.
- Determine market potential based on competitive analysis.
- Identify and explain your unique value proposition and unfair competitive advantage(s) compared to your competitors.

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LEVEL 3 & 4 For Ages 17 to 24

10. Business Models & Financial Projections

What are some common business models? How do we build a sustainable business that addresses the demands of my customers? How do we assess when our business will become profitable? How do we set realistic startup financial goals?

Students will discover how to build a sustainable business around their vision, by defining their business model and assessing the profitability of their startup.

Learning Outcomes

At the end of this session, students should have;-

- Identified the channels to reach their customers.
- Identified the key metrics for the channels.
- Identified revenue streams and expected returns for the identified channels, justifying your assumptions.
- Evaluated and selected your primary business model.
- Identify and explain your costs based on historical and/or bottom-up projections.
- Estimate the expected returns following a realistic timeframe.

REACTOR SCHOOL

LEVEL 3 & 4 For Ages 17 to 24

11. Pitching

Why do entrepreneurs pitch? Why are pitch decks important when starting a company? How do we structure and visualise an effective pitch deck?

Students will prepare and deliver a compelling pitch by preparing a pitch narrative and applying key visual design principles to communicate effectively.

Learning Outcomes

At the end of this session, students should be able to;-

- List down the key points following the pitch deck outline.
- Explain the key points clearly and succinctly as a narrative, including data to support your key points.
- Illustrate the key points using simple and clear visuals.
- Prepare oneself in managing his or her tone, content, and confidence.

Sample Rubrics/Criteria

Judging Rubrics & Evaluation Criteria

	CRITERION	SCORE	TO BE OB
VALIDATION	1 Problem-Solution Fit	1 2 3 4 5 6	• The team has identif and has correctly ide • The team has put pe proposed solution. Sc comprehensively add
VALIDATION	2 Market Validation	1 2 3 4 5 6	• The team is able to p otherwise, to demon consumers are willing • There is significant t adoption are grounde
EXECUTION	3 Business Model	1 2 3 4 5 6	• The team has determ and activities defined • The team moves fast business and sales ac operationalize its pla
EXECUTION	4 Prototype & Demo	1 2 3 4 5 6	• The team has design minimum viable proc of the proposed idea • The team is able to d there is clear alignme

Team Name:	Total Score:	Recommend for Finals: Y / N	Remarks:

REACTOR SCHOOL

LEVEL 3 & 4 For Ages 17 to 24

12. What's Next

Why is failure inevitable but important?
What can I do to learn more about the startup world?

Students will understand what it means to learn and grow productively as an entrepreneur.

Learning Outcomes

At the end of this session, students should;-

- Reflect what happened and what they've learnt throughout the process.
- Reflect what could have been done differently.
- Propose next steps to improve and gain more experience or exposure in entrepreneurship.

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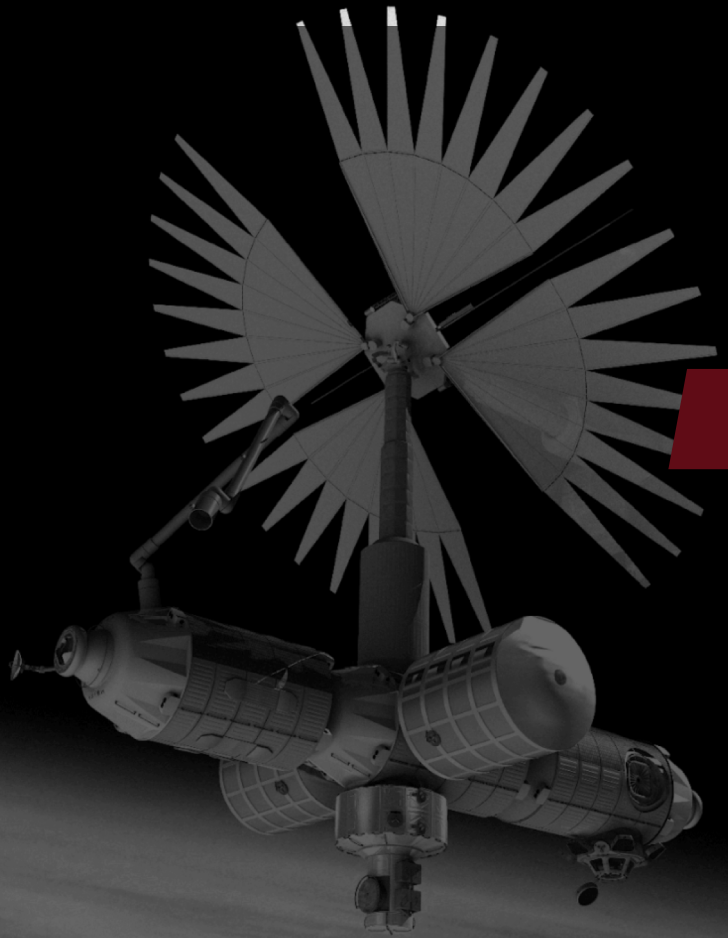

Implementation & Costs

The following outlines how we can implement this programme for your school, and how we can work together to fund it successfully.

Differences between F2F & Virtual Learning

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The Virtual programme is *not* a replica of the F2F programme. To make sure that the learning experience is not diluted even though it is remote, it is uniquely designed in consideration of your student learning needs & virtual learning behaviours.

Item	F2F Learning Experience	Virtual Learning Experience	How we are adding value for Virtual Programme
Delivery	Students are focused and engaged for the duration of the workshop.	Students' focus will be in shorter bursts. It is more difficult to engage or manage them remotely.	We are using gamification and breaking down lessons into smaller chunks, to make sure students continue to be engaged.
Consultation	Students consult facilitators or ask peers during the F2F workshop.	Students learn more independently when remote, and may reach out to facilitators to clarify doubts. This means that ratio of facilitator to student consultation is 1:1. Some students are less extroverted, and will not reach out to facilitators, becoming disengaged.	We are offering various communication channels catered to both extroverted and introverted students, to personalise learning. We are engaging 3 additional facilitators for a total of 30 additional man-hours. The flight and accommodation cost for sending one trainer is less than engaging 3 trainers for 30 hours. Hence in total we are actually spending more to run this programme.
Administrative Support	Admin set up is more important *before* the workshop. Consolidation of results is done after the workshop	Admin set-up is required for every webinar conducted, including consolidation of results and feedback.	More admin support is required for differentiated learning required in virtual learning.
Content Materials	Students learn and apply content through hands-on activities. For example, students interact with real users to understand their needs. Therefore, content is highly practical.	To make learning practical & useful even though students are unable to interview real users due to COVID, we are adapting *new* digital-only content & techniques. For example, students are guided to use digital techniques to conduct "Empathy Mapping"	We are offering new digital-only content and learning activities.
Technology (Tools & Platforms)	• Data storage of learning artifacts • Online surveys	• Webinar platforms • Data storage of learning artifacts • Communications platforms • Online gamified Leaderboard • Online quizzes • Online surveys	We are committing more digital tools and platforms to provide an engaging and personalised virtual learning experience.
Data Reports & Learning Artifacts			We want to share useful analytics and insights about student performance that we've observed from utilising tech tools and platforms.

REACTOR SCHOOL

Our International Clients & Track Record

Reactor has worked with various education institutions and partners, both locally and abroad, to deliver the best in entrepreneurial education and intrapreneurship development courses.

Our students and alumni have represented Singapore at various local and international competitions, often clinching championship titles and/or honourable mentions.

International Representation

Our participants & alumni have won competitions locally and worldwide.

SAGE GLOBAL Students for the Advancement of Global Entrepreneurship

Youth Innovation Challenge 2016

business@school

GES MALAYSIA 2013

EO GSEA GLOBAL STUDENT ENTREPRENEUR AWARDS

Our Partners in ASEAN

REACTOR SCHOOL

Singapore
National University of Singapore Enterprise
Nanyang Technopreneurship Centre
Pollinate
National Youth Council
Ministry for Culture, Community and Youth
*SCAPE
US Embassy & Department of State
British High Commission
Temasek Young Societal Leaders
IKEA
Development Bank of Singapore
Enterprise Singapore
Action Community for Entrepreneurship

Malaysia
Malaysian Global Innovation & Creativity Centre (MaGIC)
Digi
SMA-TEGAS
iCube

Laos
Stella

Thailand
Hubba Thailand
University of Thai Chamber of Commerce
Valor Healthcare

Myanmar
UTCC Yangon
UTCC Mandalay

Vietnam
Saigon Innovation Hub
Fulbright University Vietnam

Philippines
Entrepreneurship Educators Association of the Philippines
PowerMac

Cambodia
Mangrove Learning

Jakarta
Callup Indonesia
PIAGET Academy

Regional
Apple
Reapra
TEDx

Global
Global Entrepreneurship Summit (GES)
Commonwealth Youth Forum (CYF)
Sandbox Network
United Nations Development Programme (UNDP)
United Nations Educational, Scientific and Cultural Organization (UNESCO)
United Nations Children's Fund (UNICEF)

*Selected partners. This list is non-exhaustive.

Our Client Schools (Selected)

REACTOR SCHOOL

Secondary Schools, Middle Schools & High Schools

Raffles Institution
Anglo-Chinese School Independent
Hwa Chong Institution
CHIJ St Nicholas Girls' School
Loyang Secondary School
Yuying Secondary School
Catholic High School
Methodist Girls' School
Cedar Girls Secondary School
St Gabriel's Secondary School
Commonwealth Secondary School
Broadrick Secondary School
Hillgrove Secondary School
Anderson Secondary School
Bowen Secondary School
Nanyang Girls' High School
Yusof Ishak Secondary School

United World College South East Asia
GEMS World Academy
Global Indian International School

Junior Colleges, Polytechnics & Senior High Schools

Raffles Junior College
Innova-Yishun Junior College
Anderson Serangoon Junior College
Tampines Junior College
Eunoia Junior College
Temasek Polytechnic
Ngee Ann Polytechnic
Republic Polytechnic
Nanyang Polytechnic
Singapore Polytechnic

Nanyang Academy of Fine Arts
School of Science and Technology
International Community School, Bangkok

Lawrence S Ting School, Ho Chi Minh

Colleges & Universities

National University of Singapore
NUS School of Public Policy
Nanyang Technological University
Nanyang Technopreneurship Centre
NTUitive
Singapore Management University
SMU Institute of Innovation & Entrepreneurship
SMU Real Business
Singapore University of Technology and Design
Singapore University of Social Sciences
Singapore Institute of Technology
Singapore Institute of Management University
Murdoch University, Singapore

Yale-NUS College
Fulbright University Vietnam, Ho Chi Minh
BINUS University. Jakarta
Murdoch University, Dubai
Murdoch University, Perth
Chulalongkorn University Faculty of Medicine
Chula Medical Innovation Centre

*Selected schools. This list is non-exhaustive.