

Innovative Education: Public-Private Partnership for Developing International Trading Talent

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The education sector is often criticized for the growing gap between what business needs and what education provides. This paper discusses an innovative use of tripartite public-private partnership (PPP) of the government, university and industry partners to design, build, operate and finance the delivery of the international trading program (ITP) in Nanyang Technological University (NTU) as a complement to the contracting model of government provision and university production of education. The program operation is institutionalized with a centre of excellence and its advisory board. A corporate partnership scheme provides the financial foundation and industry commitment to ensure program sustainability.

INTRODUCTION

A paradox in many labour markets is the co-existence of a war for talent and under employment, or even unemployment, for young graduates. The education sector often takes the flak for the growing gap between what business needs and what education provides (Mourshed, Farrell and Barton, 2013). Educators need to be responsive to the business needs in a world of rapid change arising from globalization and technological innovation, and yet universities are not the most agile of organizations. This paper discusses some innovations in the journey towards setting up an international trading program (ITP) in Nanyang Technological University (NTU) to produce the graduates the international trading business is looking for. The lessons learned in this journey may provide inspirations for future adoption in other educational institutions.

SINGAPORE LABOUR MARKET FOR INTERNATIONAL TRADING

Singapore is destined to be a trader in the global economy due to the competitive advantage conferred by her strategic location in the global trade route. Huff (1997) argues that Singapore's economic history until the 1960s is the story of a staple port (for tin, rubber and petroleum), and thereafter it looks to multinational enterprises to diversify into manufacturing and services. A staple port needs to be situated near its hinterland (where surplus commodity is produced and exported) to efficiently provide complementary services – namely transportation, warehousing, processing, trade financing and marketing

– to complete the value chain. The relationship between the staple port and its hinterland is tightly linked through firms based in the staple port investing in production in the hinterland. Huff shows that there is no lack of Singapore based entrepreneurs that took up that role. Since the 1970s, locally manufactured goods become a significant addition to Singapore’s international trade. Furthermore, multinational enterprises with regional headquarters in Singapore complement local entrepreneurs in the staple port-hinterland network.

This brief economic history of Singapore help us make sense of two facts. First, Singapore is a major commodities trading hub globally, and home to the decision-making and risk management functions for global commodity traders. Wholesale trade accounted for 1 in 10 jobs, i.e. more than 350,000 jobs, in Singapore in 2013. It constitute 16% of Singapore’s value-add, and is a key contributor to Singapore’s services sectors. Second, the diverse type of complementary services attracts different specialists who can benefit from an integrated view of the whole value chain. For example, an engineer may begin his career in processing commodity for re-export and progress to lead a business unit for that commodity. An accounting graduate may move to the same position starting from trade financing. There is no specialist qualification (e.g. BA for hotel management) for the trade sector unlike the case of tourism and hospitality industry. Without a structured foundation in international trading, skills accumulate slowly through on-the-job training and can limit one’s career advancement and progress.

EDUCATION AS A GOVERNMENT PROCURED SERVICE

Education is a significant expenditure in the fiscal budget of every (local or national) government in the world. In the case of Singapore, educational expenditure is about 12% of actual total operating expenditure (about SGD 12.9 billion in 2015), and is only smaller than the expenditure for defence in the fiscal budget. Provision of education as a government procured service arises from the expectation of the polity and the economic argument that education has positive externality¹. In Singapore, the government provides for its citizen (and permanent residents) highly subsidized public education that coexist with privately provided education. The government need not produce the educational services it provides, although that is traditionally the case in many countries.

Today in Singapore, the government generally produces basic education (primary, secondary and pre-university schools) in-house, i.e. teachers are employees of the Ministry of Education and school assets are government property. The curriculum across schools is coordinated by the Ministry of Education, and students sit for a common examination when graduating from primary, secondary and pre-university schools² (schools organize their annual examinations). Every citizen is eligible for basic education at nominal cost in public schools. However in the higher education sector, especially the autonomous universities³, government provision remains through subventions and grants, while production is “contracted” to entities each established by a Singapore statute to own assets, grant qualifications, hire professors and staff on their terms, receive subventions and grants, and collect fees. With subvention, fee collection functions as co-payment for the education service delivered. Hence, the delivery of mainstream education service for Singapore citizen uses two models – in house production for basic education, and contracting with co-payment for university education.

IE Singapore (International Enterprise Singapore), the government agency that promotes international trading, became interested in expanding Singapore’s talent pool that has strong technical background for international trading in 2014. IE Singapore observed that while international trading companies use Singapore as a major hub and locate their regional headquarters here, there are very few Singaporean in the senior management positions in these headquarters. IE Singapore also observed that international trading of commodities – such as oil, minerals and agricultural products – requires deep technical expertise. Furthermore, many senior executives of trading companies are educated in engineering and have gained experience on the business aspects of the whole value chain in international trading. IE Singapore is keen to have a program that produce Singaporean graduates who have strong foundation to become job-ready for key sectors in international trading with potential to assume senior positions in the

longer term. Industry involvement in the program is important for long-term success, but appears difficult with the current contracting model. There needs to be an innovative solution.

Ministry of Finance Singapore (2014) states that Public-Private Partnership (PPP) is a form of procurement introduced in 2004 under the Best Sourcing framework to encourage public agencies to engage private sector providers in non-core government services if it is more efficient to do so. The PPP models are typically a variation of the Design-Build-Finance-Operate (DBFO) model involving the private sector in some or all of these activities. The keyword in PPP is partnership, which according to National Council for Public-Private Partnerships (2013) is one in which both parties contribute to the service and both derive some future benefit from the joint activities. A tripartite partnership of IE Singapore, NTU and industry partners in a PPP arrangement to design, operate, build and finance the delivery of ITP to produce graduates that meet business needs is the proposed solution for ITP operating within the overall framework of the current contracting model.

DESIGNING A PROGRAM FOR JOB READY GRADUATE

IE Singapore worked with two colleges in NTU (the College of Engineering and the Nanyang Business School) throughout 2014 and launched the International Trading Program (ITP) and the Centre of Excellence International Trading (CEIT) in 2015. The associate deans of both colleges, who subsequently become members of the executive committee of CEIT provide continuity to the pioneering work, were instrumental in establishing the program, program validation by the industry, and recruiting the pioneer corporate partners in 2014. The CEIT team (director and staff) is formally established in 2015 with the launch of the centre, and the Advisory Board is established in the same year with five pioneer corporate partners (and representatives from the colleges and IE Singapore). The number of corporate partners represented in the Advisory Board subsequently expanded to ten, consisting of five pioneer partners and five other corporate partners on rotation. Corporate partnership is renewable every four years with annual contribution to the endowment fund.

Benefiting the Most Students

After identifying the program objective⁴, the immediate issue is to identify the qualification that may be earned from the program and the sources of students. Like many universities, NTU uses an academic credit system to measure learning using student workload as proxy⁵. Sufficient credit needs to be earned for awarding a qualification (e.g. earning the Bachelor of Business Administration (BBA) degree requires earning 108 credit, which is called AU or academic unit in NTU). One credit for a typical one-semester (13 weeks) course is one hour of lecture/tutorial per week, and no credit is earned if the student fails the overall assessment of the course. The academic administration oversees the credit system, and use it as a tool for quality assurance and accreditation purpose.

The credit system has two important ramifications for program design. First, in line with NTU education's objective of preparing students for the working world⁶, the curriculum structure of every qualification will have major requirements relating to the technical aspects of the qualification and general education requirement for broadening study (e.g. soft skills and cross-cultural knowledge). The major requirement consists of core courses for the qualification (e.g. BBA) and the major prescribed electives for specialization within the qualification (e.g. BBA (Marketing) requires completing the major prescribed elective courses in marketing and core courses of BBA to be awarded the degree). Within this overall framework, variations such as major (requires minimum 30 credits) and minor (requires minimum 15 credits), double major, double degree and other combinations are created. Second, the credit requirements and the restrictions on academic load (16 to 21 credits per semester for full time student) give rise to the normal candidature period (usually 3 or 4 years depending on the qualification). Variation of the actual candidature period arises from repeating a course, being granted permission to take more academic load, exemption and so on.

During the program design, the team decided not to offer a specialized undergraduate qualification and opted to offer specializations under existing qualifications in College of Engineering and Nanyang

Business School instead. There are two reasons: First, students who may benefit from the program come from the engineering and business schools. It is beneficial to have students from both schools in the same class because they can learn from each other’s perspectives. Second, program validation for a new degree program (which is 108 credit for a 3 years business degree and about 138 credits for a 4-year engineering degree) will be substantial. In particular, this would need College approvals, NTU approvals from intercollegiate and interdisciplinary committees, the Provost and the President; as well as NTU Board of Trustees and finally, the Singapore Ministry of Education. Coordinating a joint degree across two Colleges is cumbersome. Furthermore, both schools have substantial administrative experience in offering specializations, sometime in collaboration with other schools. For example, the business school offers BBA with six specializations (e.g. marketing), double degrees (e.g. business and computing), second major in business (for economic degree from the School of Social Science and for engineering degree from College of Engineering), and minor in business (for NTU degree outside the business school). The team also decided to issue a certificate to participants for completing the ITP.

Five groups of students are identified for the ITP specialization – business major with banking and finance specialization (ITP), double degree in accountancy and business with banking and finance specialization (ITP), engineering with second major in business (ITP), maritime studies with specialization in ITP, and maritime studies with second major in business (ITP). The students generally join the program after their first year undergraduate studies and being selected for the program. These students fall into three categories (business, engineering and maritime studies students) as follows:

Business School Students

There are two groups of students from the business school taking the banking and finance (ITP) specialization – those taking the 3-year business degree, and those taking the 4-year double degree in business and accountancy. Both groups join the ITP specialization at the end of year one and take eight courses and one (of two) prescribed elective. As of 2017/2018 academic year, the courses and the associated academic unit are as follows:

TABLE 1
ITP COURSES FOR BUSINESS SCHOOL STUDENTS, BANKING, AND FINANCE
SPECIALIZATION (ITP Track)

ITP Track Courses for Business Students	AU
1. BF2201 Investments	4
2. BF2207 International Finance	4
3. BF2209 Derivative Securities	4
4. BF3201 Corporate Finance and Strategy	4
5. BF2301 International Tax and Trading Law	3
6. BF3211 Commodities Trading and Risk Management	3
7. MS4670 Commodities’ Geology and Metallurgy	3
8. BF4001 Industry Seminar	1
MT1003 Trade Practices & Incoterm OR MT3006 Ship Chartering	3

The total credit for the courses is 29 AU and is therefore a major specialization. Except for BF3201 Corporate Finance and Strategy, the above courses are also prescribed for ITP specialization for engineering students with a second major in business.

Engineering Students

Engineering students taking a 4 year course to earn a bachelor of engineering degree with specialization⁷ and can take a second major. For the second major in business, ITP is one of the six specializations offered (the other five are accounting, banking and finance, business analytics, marketing and operations management). Students are admitted at the end of year 1 and take four business foundation courses, seven ITP track courses and one (of two) prescribed elective. As of 2017/2018 academic year, the courses and the associated academic unit are as follows:

TABLE 2
ITP COURSES FOR ENGINEERING STUDENTS WITH
SECOND MAJOR IN BUSINESS (ITP TRACK)

Business Foundation Courses (4 courses)	AU
1. AD1101 Financial Accounting	4
2. AB1201 Financial Management	3
3. AB1501 Marketing	3
4. BE1401 Business Operations and Processes	4
ITP Track Courses (7 courses)	
1. BF2201 Investments	4
2. BF2207 International Finance	4
3. BF2209 Derivative Securities	4
4. BF2301 International Tax and Trading Law	3
5. BF3211 Commodities Trading and Risk Management	3
6. MS4670 Commodities' Geology and Metallurgy	3
7. BF4001 Industry Seminar	1
MT1003 Trade Practices & Incoterm OR MT3006 Ship Chartering	3

The total credit for the courses is 39 AU. Compared with business students, engineering students take four more foundational courses (total 14 AU) and one less core course (BF3201 Corporate Finance and Strategy). The foundational courses are needed as prerequisite for the core courses. One core course is removed to make the required credit comparable with other specializations for engineering with a second major in business (typically 35 AU). A higher credit requirement can reduce the attractiveness and cause students to choose other specialization.

Maritime Studies Students

The Bachelor of Science for Maritime Studies is offered by the School of Civil and Environmental Engineering (within the College of Engineering) in collaboration with the BI Norwegian Business School, and caters to developing talent for the shipping industry. ITP specialisation is offered for Maritime Studies degree, and the Second Major in Business (ITP). As of 2017/2018 academic year, students are admitted at the end of year 1 and take six courses for 16 AU as follows:

TABLE 3
ITP COURSES FOR MARITIME STUDIES STUDENTS, SECOND MAJOR IN
BUSINESS OR ITP SPECIALIZATION

ITP Track Courses for Maritime Studies Students	AU
BF2301 International Tax and Trading Law	3
BF3211 Commodities Trading and Risk Management	3
MS4670 Commodities' Geology and Metallurgy	3
BF4001 Industry Seminar	1
MT1003 Trade Practice and Incoterms	3
MT3006 Ship Chartering	3

Maritime Studies curriculum, unlike the curriculum for engineering degree, include the business foundation courses. Furthermore, MT1003 Trade Practice and Incoterms, and MT3006 Ship Chartering are core courses for the Maritime Studies degree. While 16 AU appears sufficient only for a minor (which is the case of the Maritime Studies with ITP specialization), the second major in business (ITP) has additional business courses not listed above to make up the 30 AU requirement for a major.

The seemingly complicated programming is designed to meet the needs of multiple stakeholders, and the programming is possible due to the academic credit system. Students that may benefit from ITP come from three sources – business, engineering and maritime studies – in two colleges, each group with different levels of preparation. It is necessary to customize programming to benefit the most students. Furthermore, the modular design enable updating the ITP component when the need arises⁸ instead of changing five course curricula. The academic administration needs to assure the quality of programming (at the academic workload level at the minimum) which ties back to program validation and accreditation. While collaborating in ITP, the colleges also need to maintain operational independence to administer other programs in the business and engineering disciplines.

Being Responsive to Business Needs

While courses lay the foundation for the knowledge base for practice, practice innovation takes time to become teaching material for the courses. To be responsive to business needs, practical tools are used whenever possible. For example, students train in the Finance Trading Lab using Bloomberg and Thomson Reuters to gain experience with the actual tools used for trading financial instruments, analysing financial data and managing risk. The program also supplements its courses with industry seminar, internship and experiential learning.

Industry seminar is mandatory for all three groups of students. The seminars are administered as a speaker series where practitioners interact with the students on practical issues faced by the industry, current trends, needs and challenges. The interaction deepens the understanding on how knowledge is used to solve real world problems.

Internship is the second interface students have with the industry. Internship is a requirement in the primary degree with allocated academic credit. While it is not compulsory for an ITP student to do their internship in commodity trading firms, CEIT facilitates internship opportunities for them by allowing the corporate partners to have priority in interviewing the ITP students for internship positions with them (it is up to both parties to agree on the internship arrangement). Internship opportunities span a broad spectrum of jobs across the entire trading value chain, and across the various sub-sectors of international trading, which include oil & gas, metals and mining, and agri-commodities. Students not only acquire trading industry-related work experience, both locally and overseas, but also have a much better understanding of the job requirements, career prospects and inner workings of the companies making these permanent job offers that in turn enable them to better gauge their own interest in the jobs. When

the student graduates, many successful internships turn into job offers by the companies that the interns worked at.

As part of their comprehensive training, ITP students engage in experiential learning – which includes local industry site visits, overseas study missions and networking sessions with industry practitioners – every semester. Local site visits are typically day trips to various facilities and offices. Many global companies have established operations in Singapore, some as regional or global headquarters. Overseas study missions provide more time for acquiring more in-depth understanding of the various real-life, on-the-ground operations of the overseas host companies. For example, ITP students visited Wilmar's operation in the experiential learning trip to Indonesia (Padang and Surabaya) in October 2017 to gain first-hand experience on agri-commodities business, and visit South32, BP and Chevron in Perth in March 2018 to gain insight into metals and minerals business.

The industry seminars, internship and experiential learning are not a substitute for coursework, but complement the courses to deliver a holistic package of learning experience. These complements also help students to build the contacts and network for their search for internship, full-time placements and connections for their future careers. The value of these activities accrue to participating companies to shape the learning content for the industry, gaining early opportunity to screen for talent and building a reputation to attract them, having a platform for collaboration and industry visibility.

The Roles of Centre of Excellence International Trading⁹ (CEIT)

The benefits of the program design comes at a cost – its administration is more complex than can be easily accommodated within existing (departmental) administration in either of the colleges. Therefore, the Centre of Excellence International Trading (CEIT) is set up within the Nanyang Business School to coordinate with the administration of both colleges for the program. However, in the PPP framework, CEIT plays a key role in designing, building, financing and operating the ITP in collaboration with the key stakeholders in the public and private sectors. The CEIT Advisory Board is established comprising senior leaders of the colleges, IE Singapore, and key trading companies. The advisory board is the governance body for the program, providing the direction and stewardship over the program and designated fund, and keeps stakeholders actively involved for continuous improvement and hence the program's long term success.

Inputs from the CEIT Advisory Board is critical during the design and building phase of the program. The program design team interviewed industry executives regarding key requirements for such a program and obtained industry approval for the final design of the ITP curriculum for engineering and business students. Senior leadership from IE Singapore and the trading companies provide insights on the projected demand for talent given the government's plan for developing the sector and the skills that business needs, and senior leaders from the university brings the perspective of the inner workings of academia and how constraints may be overcome.

In the operation of the program, CEIT leverages its Advisory Board's network to gain access to companies for internship and visits; speakers for industry seminar, conferences and closed door forums; facilitate research and publication in international trading and undertake projects related to the trading industries. The centre interfaces with the administration of the colleges in administering the program and go the extra mile to bring in practitioner to teach/ co-teach in the program. For example, the design team worked very hard to get a senior industry professional, who was just retiring, to help teach the International Tax and Trading Law course.

Under the contracting model, students who are Singapore citizen and permanent resident are given government subvention that substantially reduces the amount of fees paid. This arrangement works well for the coursework component but does not support the overseas experiential learning trips, i.e. the additional financial burden may significantly reduce student participation in an important aspect of the program. The centre, under the leadership of its Advisory Board, establishes a fund to support relevant initiatives through a corporate partnership program. Each participating company contributes an annual amount to an endowment fund over four years to join as corporate partner during the period, with the government matching 1.5 times the corporate contribution. The endowment is invested and consistent

amount of the return on invested capital is withdrawn annually to fund activities supporting CEIT's mission to produce industry-ready graduates. As a corporate partner, IE Singapore contribute a seed fund to the endowment and an output grant (on a per graduated student basis). Sustainable financing provides the assurance that the Centre is able to carry out its mission and contribute to international trading in Singapore. The Advisory Board is the governance body to ensure the appropriate use of the fund. For example, the fund has been used to award three ITP scholarships in 2015, subsidize the experiential learning trip in 2017, funding of industry seminars (5 in 2016, 14 in 2017), closed door forums (2 each in 2016 and 2017) and workshops on topics relevant to the industry. Seminars are about two hours long and focus on learning for the students (a student report is needed for assessment); forums are more interactive, attended mostly by industry participants and organized off-site; workshops are longer (full day or multiple half-days) to teach a particular skill. A list of these activities in 2016-2017, with dates and topics, is presented in Appendix A.

PROGRAM ACHIEVEMENT

Since beginning with 24 students in 2015, the program has steadily increased intake to 84 in 2016 and 90 in 2017. The enrolled students in 2018 consists of 24 from engineering, 77 from maritime studies and 79 from the business school. Students generally take 2-3 years to complete the ITP component for their 3-4 years undergraduate course. The long-term target is to have annual intake of 100 students.

Over the three years, 20-30 students were provided with internships each year through the corporate partners. Most of the students get permanent jobs offered after their internship with the companies. The centre also provide a resume book of graduating students exclusively to corporate partners for their review.

The corporate partnership is progressing well, 19 companies (see Appendix B) have been recruited by January 2018, and the list is growing. Ten of these corporate partners are represented on the CEIT Advisory Board by a senior company executive (together with representatives from NTU and IE Singapore).

The ITP has gained traction and is likely to achieve the targeted intake in the near future. The long-term success of the program will depend on the continuous improvement in the quality of the program to attract strong candidates whose careers progress to senior leadership in international trading companies in Singapore. Sometime in the future, an ITP alumni association can be organized to contribute to the success of future generation of ITP students.

LESSONS FOR INNOVATOR IN EDUCATION

There are three lessons that we learn from the journey thus far. First, effective collaboration of key stakeholders is required to produce graduates that business needs. The business has to have direct experience with graduates and share insights on the skills needed (both current and future needs). Government agency responsible for industry development (IE Singapore is responsible for developing the international trading sector in Singapore) can complement business insights at the industry level, especially about future demand and planned government policies. University contributes in-depth knowledge on delivering academic programs as the producer of graduates. To be effective, the collaboration should not be a one-off exercise but a long-term commitment to continuously contribute time and resources for the success of the program.

Second, to foster long-term commitment with stakeholders from both public and private sectors, a formal mechanism (the CEIT and its Advisory Board) is required. It turns out that the mechanism is a form of PPP, which according to Schaeffer and Loveridge (2002), ideally ensures that "all partners share in the rewards and decision making and assume full responsibility for the risks of their joint activities"

Third, the joint activities undertaken by the PPP need not be a revamp of the entire system, but as a complement built on existing foundation. This idea is novel because research in PPP for education – such as Patrinos et al, 2009 – present PPP arrangements as a continuum. However, in practice, it is more

productive to work within the system and innovate around its complexities rather than to work outside it. Autonomous universities in Singapore are generally funded using a contracting model where the university receives a fixed subvention (varies with the degree awarded) for each eligible student. The academic credit system allows crossing disciplinary barriers when designing programs and yet maintain the efficiency. One thing that cannot be overcome is that course content may take time to respond to new business needs and some learning are simply more effective through experiential learning. The existing system that is effective for the provision of classroom-based courses can be complemented by PPP arrangement to enhance industry seminar, internship and experiential learning trips.

The journey for the ITP to produce graduates that international trading business needs, with the ambition that some of these graduates become senior leaders of international trading companies in Singapore, has only just begun. It will take at least a decade to see the ambition come true, but the prospect is promising.

ENDNOTES

1. Access to basic education is a citizen right recognized in a number of international conventions, e.g. the International Covenant on Economic, Social and Cultural Rights, and has become a responsibility of the government (especially at the level of local government). The economic argument is that populations that are more educated have lower crime rates and higher productivity, which is beneficial to the society over and above the benefit of higher income obtained by a more educated individual, and is a positive externality. The economic argument means that education should be subsidized but individual should “co-pay” in its provision.
2. These are respectively the Primary School Leaving Examination, the GCE ‘Ordinary’/‘Normal’ level examinations and the GCE ‘Advanced’ level examination.
3. These universities are established as corporate bodies independent of the government (e.g. NTU is established by the Nanyang Technological University Act) but receive subvention and grants from the government. Private universities (e.g. INSEAD Asia campus) do not generally receive government funding and are regulated by the Private Education Regulation enforced by the Committee for Private Education.
4. To produce graduates who have strong foundation to become job-ready for key sectors in international trading
5. [http://www.ntu.edu.sg/Students/Undergraduate/AcademicServices/Pages/AcademicUnitSystem\(AUS\).aspx](http://www.ntu.edu.sg/Students/Undergraduate/AcademicServices/Pages/AcademicUnitSystem(AUS).aspx)
6. http://www.ntu.edu.sg/Academics/NTUEducation/Pages/Preparing_students_for_the_working_world.aspx
7. NTU currently offers eight engineering specializations, i.e. aerospace engineering, bioengineering, chemical and molecular engineering, civil engineering, computer engineering, materials engineering, environmental engineering, and mechanical engineering
8. The program is regularly reviewed. From academic year 2018/2019, the course BF2209 Derivative Securities will be updated and the credit for the Industry Seminar will be reduced to zero.
9. <http://ceit.ntu.edu.sg/Pages/Home.aspx>

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APPENDIX A: LIST OF SEMINAR, FORUM AND WORKSHOP ORGANIZED IN 2016-2017

Date	Topic
26-Jul-16	Industry Seminar: Speakers' Series - "A Career in Commodities and Resources"
18-Aug-16	Industry Seminar: Speakers' Series - BP Discovery Day
19-Aug-16	Industry Seminar: Speaker Series - World Crude Oil & Refining
19-Aug-16	Forum: "Is The Federal Reserve Behind or Ahead of The Curve?"
4-Oct-16	Industry Seminar: Speakers' Series - "The Risks in Commodities Trading"
11-Oct-16	Industry Seminar: Platform Training - Thomson Reuters & Bloomberg
12-Oct-16	"Write it Right" Resume Workshop
21-Oct-16	Forum: "2016 U.S. Presidential Elections: How Will It Impact Global Markets?"
11-Jan-17	Industry Seminar: Speakers' Series - "The Outlook of China's Debt Capital Market"
13-Jan-17	Forum: "Global China Global Impact"
18-Jan-17	Industry Seminar: Speakers' Series - "Working in Resource Commodity Trading Industry"
25-Jan-17	Industry Seminar: Special Topic - Agri Commodities
8-Feb-17	Industry Seminar: Speakers' Series - Overview & Trader Perspective on Agri Commodities Market
13-Feb-17	Industry Seminar: Special Topic - Trade Finance
7-Mar-17	Industry Seminar: Speakers' Series - "From Feedstock to Solutions: Adding Value through Plastics "
13-Mar-17	Industry Seminar: Speakers' Series - "Panel – Sharing on Proprietary Trading Industry"
21-Mar-17	Industry Seminar: Special Topic - Supply Chain Finance
30-Mar-17	Industry Seminar: Special Topic - Structured Finance
23-May-17	Forum: Global Leadership changes - Opportunities for Cooperation or More Conflict?
14-Jun-17	Career Workshop: Kick Start Your Career Preparations
21-Jun-17	"The Core of Oil Trading" Workshop
11-Aug-17	Special Topic: Agri-Commodities
15-Aug-17	Speaker Series: Application of Game Theory in Oil Trading
12-Sep-17	Special Topic: Trade Finance
17-Oct-17	Special Topic: Supply Chain Finance

Source: <http://ceit.ntu.edu.sg/NewsnEvents/Pages/Events.aspx>.
 More details about the event can be obtained following the link

APPENDIX B: LIST OF CORPORATE PARTNERS IN 2018

1. Borouge Pte Ltd
2. Bright Ruby Resources Pte Limited
3. ChemChina (Singapore) Pte Ltd
4. Chevron U.S.A Inc. (Singapore Branch)
5. China Aviation Oil (Singapore) Corporation Ltd
6. CJ International Asia Pte Ltd
7. Eagle Metal International Pte Ltd.
8. Glencore Agriculture Pte Ltd
9. International Enterprise Singapore*
10. Lobb Heng Pte Ltd
11. Mitsui & Co. (Asia Pacific) Pte Ltd.
12. Peter Cremer (Singapore) GmbH
13. Petrobras Singapore Pte Ltd
14. Prosperity Steel United Singapore Pte Ltd
15. RGE Pte Ltd
16. South32 Marketing Pte Ltd
17. Summit Asia Pacific Pte Ltd
18. TopTip Holding Pte Ltd
19. Trafigura Pte Ltd
20. Wilmar International Limited

*IE Singapore is a public entity and not a company