# Science, Technology, Prototyping, Practice and Policy Workshop (STP<sup>3</sup>) 2019 Outline Prepared by SEC February, 15<sup>th</sup> 2019

The <u>Science</u>, <u>Technology</u>, <u>Prototyping</u>, <u>Practice</u> and <u>Policy</u> Workshop (STP³) 2019 brings graduate students together in Singapore to explore complex challenges of our time. Participants will be exposed to people, ideas, places and technologies that shape the future of society. Participants of the STP³ will develop strategies for transferring findings pertaining to societal challenges into practice under the theme of 'Future of Urban Society'. These challenges relate to climate change, ageing societies, inequality, migration, stress and other human health problems, environmental degradation, access to resources, poverty, etc.

The Singaporean society is particularly vulnerable due to its geographic location, small size and density At the same time, the city state is well aware of its vulnerabilities and is forward looking in how it adopts new technologies such as data and digital technologies and testbeds new ideas. It offers a unique environment to study its approach towards urban design, transportation, ecosystem services, computer science, artificial intelligence, cognition and perception, citizen design science, robotics and automation efforts.

During two weeks candidates will directly engage with researchers at CREATE. They will visit research centres, meet government officials and fellow students from the local and overseas CREATE partner universities. Next to a dense and innovative learning format the STP<sup>3</sup> is also about experiencing the Singaporean culture and its vibrant research environment. STP<sup>3</sup> participants work in small groups, using design thinking, mentored by CREATE researchers. Participants will stay in the NUS campus housing for the duration of the workshop. The STP<sup>3</sup> is framed by seminars and excursion and guided by mentors. Participants will develop their research questions in small interdisciplinary groups to then prototype (code, simulate, build, write, visualise, model) them.

#### For whom?

Graduate students from all CREATE partner universities and local universities.

#### When?

10<sup>th</sup> of June - 21<sup>th</sup> of June 2019

#### Where?

CREATE Tower, 1 CREATE Way, Singapore 138602

## How to apply?

CREATE partner universities develop their own internal selection process. All students should be selected by March 19<sup>th</sup> 2019. (See ETH poster and webpage as a reference)

## What's included for the students?

- Two week mentored programme of STP<sup>3</sup> 2019 in Singapore
- Accommodation in new NUS student housing (if paid by their CREATE host institution)
- Studio space and facilities at CREATE

- Materials for prototyping
- Programme brochure
- Local transport by MRT (EZ-Link card with S\$ 20 value) and tour bus for excursions
- Welcome and closing dinner, receptions and coffee breaks.
- Liability insurance at CREATE (S\$ 25) for a month
- Wi-Fi access on campus and in housing
- (as a reference ETH offers 3 ETCS for completion of the workshop to its students)

## What's not included for the students?

- Flights between to Singapore and back (if needed)
- Regular meals. Please note that ample and inexpensive dining options are available on campus and in the city.
- Participants need to arrange for travel insurance themselves (if needed)
- Visa fees if applicable. Please note that participants enter as tourists. Please see: https://www.ica.gov.sg/visitor/visitor\_entryvisa

#### Timeline:

- Mid-February: Call for participation out
- 19 March 2019 Closing date of applications
- March: Development of programme with CREATE partners
- End-March: Announcement of selection to students
- April: Planning for the event in Singapore with CREATE partners
- May: Teach the mentors: Design Thinking workshop for mentors in Singapore provided by SEC
- May: Finalisation of STP<sup>3</sup> 2019 programme
- June: STP<sup>3</sup> 2019 takes place in Singapore
- July: Financial overview and report

# Diagram of weeks 2 & 3 of June 2019:

# SCIENCE, TECHNOLOGY, PROTOTYPING, PRACTICE & POLICY WORKSHOP (STP3)

Week 2: June 10.-14.

Scientific exposure

Prototyping

Lectures and visits

Design thinking workshops

Week 3: June 17.-21.

Final presentation