

School of Science and Technology, Singapore



22 November 2024

GALESS Singapore Conference Information Pack 2 (IP2)

Introduction

Welcome to the fourth edition of the GALESS TiltShift Challenge, domain: Empty Pocket.

We are pleased to provide you with more detailed information about the TiltShift Challenge, themed "Empty Pocket," which will be held in Singapore from June 29 – July 4, 2025. The organizing school for this event is the School of Science and Technology, Singapore (SST). <u>URL: https://www.sst.edu.sg/</u>

The TiltShift Challenge involves an initial research phase followed by an in-person conference. The research phase will run from November 1, 2024, to June 1, 2025. During this period, the GALESS Helpdesk and the local organizing team in Singapore will be available to answer any questions. Further details for team registration are expected in December 2024.

Research activities should take place within a school setting, with each team consisting of four students (aged 15-19) and up to two guiding teachers (or the Principal). Teams may also consult experts from their school, local community, and region as "living libraries" and use other external resources to support their research findings.

A written report will be submitted by June 1, 2025 (Week 23). At the conference in Singapore, teams will present their findings through a PowerPoint presentation and an AO printed poster.

Participating Schools



S/No.	School	Website
1	Camberwell Girls Grammar School	https://cggs.vic.edu.au/
	Melbourne, Australia	
	4 students / 1 guiding teacher	
2	Center for Young Scientists	https://www.cys.or.id/
	Indonesia	
	4 students / 1 guiding teacher	
3	Detroit County Day School	https://www.dcds.edu/
	Detroit, USA	
	4 students / 1 guiding teacher	
4	Dillmann Gymnasium	https://dillmann-
	Stuttgart, Germany	gymnasium.de/gymnasium/start
	3 students / 1 guiding teacher	
5	Mahidol Wittayanusorn School	https://www.mwit.ac.th/en/home/
	Bangkok, Thailand	
	4 students / 1 guiding teacher	
6	Wieder Gymnasium	https://www.wiednergymnasium.at/
	Vienna, Austria	
	8 students / 1 guiding teacher / 1 Principal	
7	School of Science and Technology, Singapore	https://www.sst.edu.sg/
	Singapore	
	4 students / 1 guiding teacher	

Final Team-Registration

Details for final team-registration will be collected by the GALESS front-desk (info@galess.org) and the organizing school (email: galess@ssts.edu.sg): December 01, 2024.

December 01, 2024. We require at that time :

- full school-name, address of school, phone number of school
- student-name details, gender and date of birth
- guiding teacher name(s), designation & contact details (email address and phone number)
- name(s) of living library/(ies)
- name reserve stand-by student

(Data only to be used for GALESS Certificate production)

The Conference Offer

Conference fee: USD350 per student/teacher. Invoice from SST on April 01, 2025. Full payment to SST by April 22, 2025.

GALESS Registration & CA fee: EURO 50 per student/teacher. Invoice from GALESS Front desk directly after full registration on December 01, 2024.

Accommodations: Students and teachers will be housed in hotels during the conference at your own cost.

We advise to book the accommodation as soon as possible directly at the hotel with your own room preferences for room and dates. Guiding teachers are advised to stay in the same hotel as a permanent guide for their team.

We strongly recommend that you obtain insurance which will cover your obligations regarding the trip to Singapore, including the payments due to cancellation by yourself or your team members.

It is your responsibility to ensure that the insurance coverage you purchase is adequate for your private needs.

We strongly recommend you arrange VISA requirements for you and your students in time. Invitation Letters, if necessary, will be provided by the organizing school, based on request.

Accommodation recommendations

The local organizing team in Singapore has secured preferential rates at the following hotels for delegates attending the Singapore GALESS 2025 conference. Transportation between these recommended accommodations and the conference venue will also be provided and arranged by the team. More details are specified in the conference agenda.





Please note that no rooms are currently held by the hotels, and bookings are subject to availability at the time of confirmation. Given that July is a peak travel month in Singapore, we encourage you to make your reservations early to ensure availability.

1) Park Avenue Rochester

Rates start from: SGD210++ per room per night [twin sharing]

Nearest train station: Buona Vista

Preferential link: Global Alliance of Leading Edge Schools for Sustainability Conferences

(GALESS)

Code's Validity period: Now – June 01, 2025 Stay Period: June 28, 2025 – July 06, 2025

2) Citadines Connect Rochester Singapore

Rates start from: SGD220++ per room per night [twin sharing]

Nearest train station: Buona Vista

Preferential code: CITADINESXGALESS [key in under "corporate code"]

Code's Validity period: Now – July 06, 2025 Stay Period: June 28, 2025 – July 06, 2025

Transport

Transport from Singapore Changi Airport to the designated hotels will be provided on Day 0, June 29, 2025. Similarly, transport from these hotels to the airport will be arranged on Day 5, July 03, 2025. Teams arriving before Day 0 or departing after Day 5 will need to arrange their own airport transportation.

Teams will be transported daily by bus from the above hotels to the conference centre.

Teams will be transported by bus from the conference centre to the above hotels on Day 1, June 30, 2025 and Day 4, July 03, 2025.

On Day 2, July 01, 2025 and Day 3, July 02, 2025, after the Learning Journey and Cultural Experience, teams may explore the vicinity further, dine at their leisure, and return to the hotel at their convenience.



Meals

Tea break and lunch will be provided on conference days. Dinner is not provided to allow teams the flexibility to explore local cuisine and immerse themselves in the cultural dining experiences of the host country.

In addition, on Day 1, June 30, 2025, teams can look forward to a Welcome Lunch, a warm kick-off to set the stage for an engaging and collaborative conference experience.

On Day 4, July 3, 2025, teams will enjoy a Lunch Party and set up Cultural Exchange Booths to showcase their country's culture and lifestyle. These activities celebrate their achievements, foster cross-cultural friendships, and lay the groundwork for future international collaboration.

School of Science and Technology, Singapore Contact details:

Local Project-coordination: Mr Tan Hoe Teck (galess@ssts.edu.sg) Local Research-coordination: Ms Amelia Loh (galess@ssts.edu.sg)

GALESS Research Setting



TiltShift Challenge

The TiltShift Challenge is meant to enthuse students to undertake action to 'catch their future' through a process of contemplation, research and creativity. Students are asked to complete academic assignments or tasks and will then be presented with group challenges among various schools all over the world. We invite students to engage in the larger problems facing them, their school, their community and beyond borders, thus enticing them to extend their learning boundaries beyond their classroom-walls, with challenges that are invariably more complex.

Structure of TiltShift Challenges

There are three basic features that characterize these challenges:

- The challenge presents the task, the question (thesis), or the issue which the students will address and contribute to solve. The challenge is presented by either a well-known politician, a specialist or a practitioner, or an expert team connected to the organizing school.
- In groups of 4, the students will complete the task guided by a Teacher-Mentor. Either a well-known politician or specialist or practitioner from your immediate local living environment, whose function can be described as a 'living library' is available for advice and consultation.
- The solutions or tasks completed will be presented twofold. First, there must be a written description of the solution or task completed in a research-report. Secondly, the solution/task needs to be presented in a challenge situation with other teams during a conference. A group of experts will act as critical jury-panel (CP), judging the contributions. The CP consists of a local jury-team and the GALESS Jury Board. The research reports of all teams, involved in the same challenge during the calendar-year, will be published in a Challenge book as well as on the GALESS website.

TiltShift Challenge Empty Pocket 2025



The TiltShift Challenge aims to raise awareness around complex issues related to the theme "Empty Pocket," encouraging sustainable and responsible solutions from young people worldwide.

Research Setting: The challenge includes a detailed timetable, website resources, and information on deliverables, including judging and assessment criteria. These will be provided in three Information Packs throughout the research period. Certificates of participation will be awarded to each team at the conclusion of the challenge.

In all circumstances, our efforts remain aligned with the GALESS mission to inspire students to work towards global sustainability.

Thesis Description from the expert team:



- 1. Investigate your country's poverty status in the perspective of International Standards.
- 2. Discuss sustainable measures to eradicate poverty in terms of capability and social exclusion. Introduce STEM solutions and include possible international collaboration in your proposal.

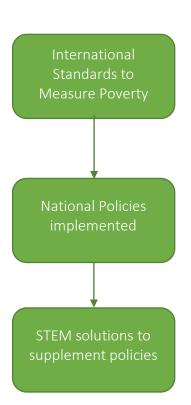
Do answer the Thesis using the guiding questions stated below.

Question 1: Investigate your country's poverty status.

- a) How does your country fare in the Multidimensional Poverty Index (MPI) developed by the Oxford Poverty & Human Development Initiative (OPHI)?
- b) Examine the challenges faced by vulnerable groups in your country. How does your country fare in terms of degrees of social exclusion of the vulnerable population?

Question 2: Discussing measures taken to eradicate poverty.

- a) Discuss and evaluate three policies your country has implemented to alleviate poverty, focusing on either capability enhancement or social exclusion reduction.
- b) Propose a new or improve on an existing STEM solution that can be adopted to reduce poverty. Describe the scientific and technological concepts utilised and design a prototype to illustrate the proposed solution.



¹Refer to https://ophi.org.uk/what-global-mpi for more information on the Multidimensional Poverty Index.

²STEM solutions stand for solutions that involve Science, Technology, Engineering and Math.

Step-by-step Guide for Dealing with Ethical Dilemmas



Phase 1: Explore dilemma

Make an inventory of the questions, and seek answers to gain a comprehensive understanding of the situation through factual information. Consider questions such as: Is the issue clearly defined? What factual information is still missing? How does the situation appear from different perspectives? What additional information is needed? Which studies are still required?

When discussing the dilemma, engage with the various disciplines connected to the case. Try to understand and empathize with each discipline's viewpoint. In this phase, focus strictly on the facts—there is no room for personal opinions at this stage.

Phase 2: Identification

Identify the individuals and groups involved in the situation, along with their responsibilities and the arguments they present. Examine the moral basis of these arguments, including the underlying values and norms that inform their positions.

Phase 3: Weighing arguments

This phase is the most critical. Here, you systematically compare the pros and cons of each argument, carefully evaluating them to make an informed assessment for the specific case. Weighing and balancing these arguments is essential but challenging, as ethics is rarely clear-cut. Consensus may sometimes be achievable, though not always.

The goal is to assess which arguments hold the greatest importance in the given context. Ethical theories, along with principles like subsidiarity and proportionality, can provide useful guidance. Additionally, thought experiments may offer insight—by hypothetically altering certain facts, you can more clearly highlight key aspects of the case and better balance the arguments presented.

Phase 4: Formulating the conclusion

At the end of the analysis, you will formulate the conclusion. Consider whether and how any negative impacts resulting from this conclusion can be minimized.

Research Report



Basic Report Specifications

- Word length 2500-5000
- References and all other sources must be acknowledged
- Word length of the written report must be shown clearly on the report. Reports that are **10** % **over** the permitted word length will not be accepted.

Information gathering and application

Sufficient breadth and depth of pertinent information; information extends beyond local context to regional context. Identifies the dilemma, including pertinent facts; states what course of action must be decided.

Analysis of Arguments

Determines stakeholders involved and identify 2-3 arguments and evaluates their consequences effectively.

Weighing and Balancing Arguments

Arguments are *sufficiently* evaluated. Identifies and applies at least one appropriate theoretical or ethical framework for evaluating alternatives.

Formulation of Conclusion

Identifies and explains an appropriate conclusion, and proposes a plan for implementing it. Linkage between content and global sustainability issues or threats is *sufficient*; *significance* at a global level is *sufficient*.

Report Layout Specifications

More information about the layout of the report can be found in the GALESS Information Pack 2 Deliverables (see attachment 1 in this document).

Delivery Student data, Research Abstract and Final Research Report



1. School / Student data

Send the following confirmation details to info@galess.org and galess@ssts.edu.sg as soon as possible.

- Name of your school,
- Address of school,
- Phone number of school,
- Name, email address & phone number of Teacher-Mentor of the team,
- Number of team members (max 4 including extra stand-by student)
- Names of team members (TM) including an extra stand-by-student, provide the following: TM Surname TM First name TM Date of birth TM Gender,
- Name of External Resource(s) acting as 'living library'.

2. Research Abstract

Send the Research Abstract to info@galess.org and galess@ssts.edu.sg before March 1, 2025.

An abstract is a concise summary of your research paper, typically one paragraph (150-250 words) that highlights the main objectives, methods, results, and conclusions of your work. Your abstract will be published on the GALESS website.

3. Final Research Report

Send your final research report to info@galess.org and galess@ssts.edu.sg before June 1, 2025.

Your research report will be published on the GALESS website one week before the conference and will be published in the GALESS Challenge book Empty Pocket end of 2025.



Road to the Conference

Further important dates are stated as follows:

December 01, 2024 Closing date full registration school-teams.

December 01, 2024 Invoice GALESS CA fee, EUR 50,- per participant.

March 01, 2025 Delivery of Research Abstract.

April 01, 2025 Invoice SST conference fee, USD 350,- per participant. Full payment

to SST by April 22, 2025.

May 01, 2025 Information Pack 3. Conference Week Final Agenda & Activities.

June 01, 2025 Delivery of Final Research Report.

June 29- July 04, 2025 Conference week Singapore, presentations of reports and student

certificates.

January 01, 2026 Publication research reports – Challenge book Empty Pocket.

Further Q & A

1. Addressing Q&A

If you have operational questions about the conference itself and the local agenda, please address to the organizer: galess@ssts.edu.sg

Questions and comments about research abstracts, student registrations, living library registrations, mentor registrations and possible mutations in registration data, jury activities, address to info@galess.org.

2. Publications

Research reports and student data are registered in the GALESS information system for certificate production and research-book production. Research-reports will be published on the website of GALESS not earlier than one week before the conference.

3. Agenda Conference week.

The final agenda for the conference week will be published in Information Pack 3. A provisional agenda is included in this Information Pack 2.



4. Insurance

We strongly recommend that you obtain insurance which will cover your obligations regarding the trip to Singapore, including the payments due to cancellation by yourself or your team members.

It is your responsibility to ensure that the insurance coverage you purchase is adequate for your private needs.

5. VISA requirements

We strongly recommend you arrange VISA requirements for you and your students in time. Invitation Letters, if necessary, will be provided by the organizing school (School of Science and Technology, Singapore) based on request.

6. GALESS Database access

Information Pack 2 comes with a manual to get access to the GALESS website & database. See your mail-attachments included in the mail "Information Pack 2".

7. Invoices

Invoice GALESS CA fee will be in EUR and invoice Conference fee will be in USD.

Please make sure that you will use in any payment to GALESS and the organizing school the option: "OUR bank transfer", which means that the sender of the payment will bear all the bank-payment transaction-fees.

Provisional Agenda

June 29 to July 04, 2025



Date	Activity	Remarks	
June 29, 2025	Arrival teams in Singapore	SST personnel meet and greet	
(Sunday)	Transfer to accommodation	Transport provided	
June 30, 2025	Breakfast at accommodation		
(Monday)	• 8:15 AM Pick up from accommodation	SST personnel	
	to SST	Transport provided	
	Arrival at SST and Opening Ceremony		
	• 9:00 AM to 10:45 AM	Tea break provided	
	Group picture & School Tour		
	• 10:45 AM to 11:30 AM		
	Student Activity 1		
	• 11:30 AM to 1:00 PM		
	11.30 / ((/ 1.30 / (//		
	Welcome Lunch		
	• 1:00 PM to 3:00 PM	Lunch provided	
	Student Activity 2		
	• 3:00 PM to 4:30 PM		
	Depart for accommodation	Transport provided	
	• 5:00 PM	Dinner not provided	
July 1, 2025	Breakfast at accommodation	Diffici flot provided	
(Tuesday)	8:15 AM Pick up from accommodation	SST personnel	
	to SST	Transport provided	
	Briefing and Student Poster Presentations		
	(all groups)	Tea break provided	
	• 9:00 AM to 12:00 PM	·	
	Lunch		
	• 12:00 PM to 1:00 PM	Lunch provided	
	Learning Journey and Cultural Experience	Transport provided	
	• 1:00 PM to 4:30 PM		
	Explore the heritage district and enjoy		
	dining at your leisure		



July 2, 2025	Breakfast at accommodation		
(Wednesday)	• 8:15 AM Pick up from accommodation	SST personnel	
	to SST	Transport provided	
	Student Presentations (Group 1 to 5)		
	• 9:00 AM to 12:30 PM	Tea break provided	
	Lunch		
	• 12:30 PM to 1:30 PM	Lunch provided	
	Learning Journey and Cultural Experience • 1:30 PM to 4:30 PM	Transport provided	
	Explore the heritage district and enjoy dining at your leisure		
July 3, 2025	Breakfast at accommodation		
(Thursday)	• 8:15 AM Pick up from accommodation	SST personnel	
	to SST	Transport provided	
	Student Presentations (Group 6 to 10)		
	• 9:00 AM to 12:30 PM	Tea break provided	
	Lunch Party		
	• 12:30 PM to 2:30 PM	Lunch provided	
	Cultural Exchange Booth and Closing • 2:30 to 4:00 PM		
	2.30 to 1.00 1 101		
	Depart for accommodation	Transport provided	
	• 4:30 PM	Dinner not provided	
July 4, 2025	Departure Teams	SST personnel	
(Friday)	Transfer from accommodation to airport	Transport provided	



Attachment 1

GALESS TiltShift Conference. Information Pack 2 GALESS Deliverables.

Your research results should be published in a document with a standard format setting.

The Thesis Title,

The title should highlighting the research location/region/country and your social/cultural setting in the challenge.

Team: FirstName1 LastName1, FirstName2 LastName2

Name of Institute, Country, Corresponding Email of teacher IC

Abstract

An abstract is a concise summary of your research paper should be placed here. It is typically one paragraph (150-250 words) that highlights the main objectives, methods, results, and conclusions of your work.

Keywords

keyword1, keyword2, keyword3 (max of 5 keywords)



1 Introduction

Before you start writing your paper, first read the following instructions regarding manuscript preparation in order to have a uniform layout throughout the proceedings.

Your manuscript file should be in PDF format.

2 Basic formatting instructions

2.1 Page layout

The page size must be standard **A4** (210 mm wide and 297 mm high). MS Word users should first declare so to the printer connected to their computer by clicking on printer options, paper size. Then, under MS Word, click on file, page layout, and size. Units should be set in centimeters (one inch equals 2.54 cm). To do so under MS Word, click on "Tools", then "Options", then "General.

Do not insert page numbers!

All four margins (left, right, top and bottom) must be set to 1.5 cm. To do so under MS Word, click on file, page layout, margins.

The text should be written in two columns, 1 cm apart from each other, and 8.5 cm wide. Exceptions may occur when writing long equations or inserting wide graphs or pictures.

The whole text should be typed using the Times New Roman font, with a size as specified in Table 1.

2.2 Paragraph formatting

The body of the paper (style **Normal** in MS Word) should be aligned justified and not indented. 10 pt font should be used. A vertical spacing of 4 pt should be inserted between paragraphs.

2.3 Sections, subsections

Both levels of sections (**Heading 1-2** styles in MS Word) should be left aligned. The vertical spacing before and after section marks is given in Table 1.

2.4 Tables

Tables should be centered in the column (or page, if the size of the table makes it necessary), followed by a 9 pt font caption placed **above** the table. They should be separated from the text by a 12 pt spacing.



Table 1: Paragraph formats

Paragraph	Font size	Spacing		
style		Above	Below	Align
Title	14 pt	0 pt	12 pt	center
Authors	12 pt	0 pt	0 pt	center
Address	10 pt, italic	4 pt	0 pt	center
Heading 1	14 pt	21 pt	12 pt	left
Heading 2	13 pt	12 pt	12 pt	left
Normal	10 pt	4 pt	0 pt	justified
Reference Heading	14 pt	21 pt	12 pt	left

2.5 Figures

Figures should be centered in the column using a 9 pt font. (or page, if the size of the figure makes it necessary), followed by a caption, as shown in Fig.1. They should be placed below the figure.



Figure A: Text over here.



2.6 Equations

Equations should be centered and identified by a number, as following:

$$\sum_{i=1}^n i^3 = \left(rac{n(n+1)}{2}
ight)^2$$
 Eq.(1)

Refer to equation number 1 as Eq.(1).

Please use the International System of Units.

3 Content

3.1 The scope of the investigation

Please clearly explain local versus more general considerations in coherence and consistency regarding the thesis.

3.2 Method of the investigation

Please clearly explain the way you included your environmental resources in the report (including way of consulting), step by step development in a process-description/thinking, timing of the research-efforts, referential aspects etc.

Please clearly explain your own contribution to the investigation with arguments, considerations etc.

3.3 Results of investigation

4 Conclusion(s)

Thank you for following these instructions. It will be good to conclude with some recommendations of future works that can be done.

Acknowledgements

References & further resources

The reference section should not be numbered (please use the style Reference heading).

Quotes in the text should be given by numbers enclosed in bracket [1], in the order that appears in the text. Multiple quotes should be written together, separated by commas [1, 2] or [1-5] for quotes that contain more than 3 references.

- [1] Doyle, Arthur Conan (1893). *The Original illustrated 'Strand' Sherlock Holmes* (1989 ed.). Ware, England: Wordsworth. pp. 354–355.
- [2] Rowling, J.K. (1997). Harry Potter and the Philosopher's Stone. Bloomsbury. pp. 109–113.