



## **TINKER CAMP (DECEMBER 2018)**

### **ABOUT TINKER CAMP:**

Science Centre Singapore's 2D1N *TINKER CAMP* at the Tinkering Studio is back again for the fifth time! We are back with more, from brainstorming workshops to 3D printing and prototyping our own mini-golf course. We are also including a Greek Exhibition tour. Ready, set, tinker!

Set-up in collaboration with San Francisco's science centre, The Exploratorium, The Tinkering Studio encourages creative learning and exploration.

The hands-on nature of *TINKER CAMP* brings out the essentiality of science and engineering in everyday settings. Campers will be introduced to working with real tools, like soldering iron, drill, hand-saw, hot glue gun, hammer, etc., under the expert supervision of our Chef Tinkerers.

Apart from learning STEAM (Science, Technology, Engineering, Art and Mathematics) topics, *TINKER CAMP* builds a foundation of innovation, social scaffolding, and teamwork for these tinkerers who will one day pave a future of collaboration, sustainable living and confident inventors of society.

### **TARGET AGE GROUP:**

9 – 12 years old

### **DATES:**

07 – 08 December 2018 (Friday – Saturday)

### **DURATION:**

2 Days, 1 Night: 9:00am (Friday) – 2:00pm (Saturday)

### **COST:**

\$400 per participant (excluding 7% GST)

### **NUMBER OF PARTICIPANTS:**

Minimum: 15 pax

Maximum: 20 pax (Registration closes once we have 20 participants)

### **QUESTIONS:**

E-mail Ms Fatin at [Fatin\\_IESA@science.edu.sg](mailto:Fatin_IESA@science.edu.sg) or contact her at 6425 2524.

## ITINERARY (1)

### Day 1

TIME	DESCRIPTION
9.00 am	Welcome to Science Centre Singapore
9.30 am	<b>3D Printing</b> Realise your 2D imaginations into 3D forms! Infuse creativity with the help of software to create and personalise your own name tag.
11.10 am	<b>Marble Run Sculpture</b> From a marble maze to a marble roller coaster, create an epic marble adventure using recycled materials in this engineering challenge.
12:30pm	<b>Lunch</b>
1:30pm	<b>Paper Circuitry</b> Using copper tapes, LED and coin battery, re-discover electricity; explore switches, parallel and series circuitry.
3.00pm	<b>Greek Exhibition</b> Get inspired by over 40 inventions of Ancient Greece in <i>Ancient Greek Technology Travelling Exhibition</i> .
4.00pm	<b>Cardboard Automaton</b> Combining mechanical movements and story-telling, this playful machine covers topics such as cams, levers and linkages.
5.30pm	<b>Dinner</b>
6.30pm	<b>Luminous Lantern</b> From making the lantern structure to the light switch to designing the type of shadows the lantern will portray; topics of STEAM (science, technology, engineering, arts and mathematics) will be explored.
8.00pm	<b>Night Walk</b> A test of courage and friendship in this thrilling twilight adventure as we wander Eco-Garden in a different light.
9.30pm	<b>Shower and Supper</b>
10.30pm	<b>Movie time</b>
11.00pm	<b>Catching Zzzzs</b>

### Day 2

TIME	DESCRIPTION
7.30am	<b>Wash-up and Breakfast</b>
8.30am	<b>Scribble Bot</b> Create a robot that scribbles unpredictable patterns using an offset motor.
9.30am	<b>Mini Golf Course (Part I)</b> Think creating a mini golf course is child's play? It is child's expression accompanied by the mechanical, electrical and structural engineering concepts learnt throughout the camp.
11.30am	<b>Lunch</b>
12.30pm	<b>Mini Golf course (Part II)</b> Continuation of golf course creation.
1.30pm	<b>Mini Golf championships *</b> Tee off in our indoor mini golf course designed by our junior chef tinkerers.
2.00pm	<b>Goodbye Junior Chef Tinkerers</b>

Note: Programmes are subjected to change due to unforeseen circumstances

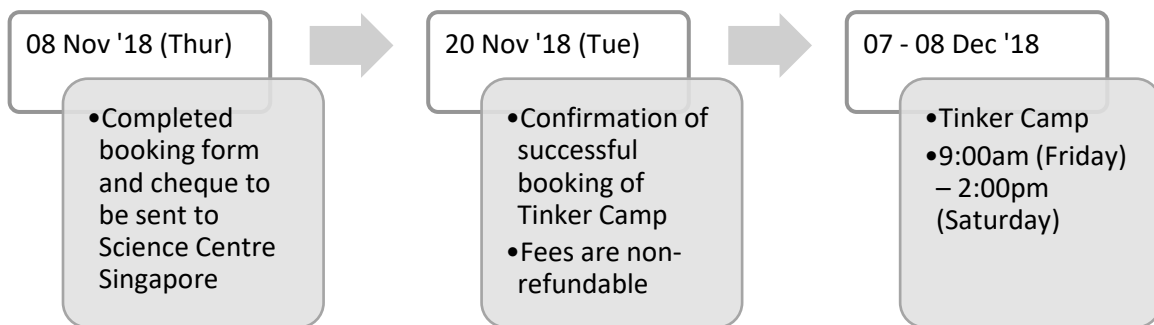
## ITINERARY (2)

*\*Parents are invited to Inventor's Exhibition. Parents are to arrive at 1.30pm. 2 complimentary tickets are given per participant. Any additional family members, standard charges to the Centre applies.*

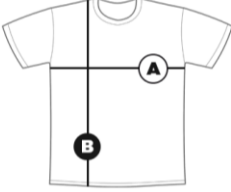
### Terms and Conditions

1. Registration form and cheque can either be mailed to the Science Centre or dropped off at the Visitor Services Centre during office hours by **08 Nov 2018**.
2. Price includes Science Centre admission, all meals and conducted workshops stated in the itinerary.
3. Programme is available on a first-come-first basis and will commence with the minimum of 15 participants. In the case of cancellation of camp, cheques will be returned.
4. Confirmation of camp will be made known by **20 Nov 2018** via email or phone.
5. Fees paid are non-refundable after **20 Nov 2018**. However, replacement of participant are permitted.
6. In the event of wet weather, The Tinkering Studio reserves the right to replace affected outdoor programmes with indoor programmes deemed suitable.

### Summarised timeline of Tinker Camp application



## TINKER CAMP DECEMBER 2018 BOOKING FORM

FOR TINKER CAMP PARTICIPANT																								
<b>NAME OF PARTICIPANT:</b>																								
<b>AGE:</b>	<b>GENDER:</b> M / F	<b>SCHOOL:</b>																						
<b>DIET CONSIDERATION &amp; FOOD ALLERGIES:</b> NORMAL / VEGETARIAN / HALAL / OTHERS:		<b>T-SHIRT SIZE:</b> XS / S / M / L / XL																						
<b>ALLERGIES AND/OR REQUIRE MEDICATION:</b>		<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 2px;">Size</th> <th style="padding: 2px;">Width <b>A</b></th> <th style="padding: 2px;">Length <b>B</b></th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"><b>XS (3/4)</b></td> <td style="padding: 2px;">32 cm</td> <td style="padding: 2px;">42 cm</td> </tr> <tr> <td style="padding: 2px;"><b>S (5/6)</b></td> <td style="padding: 2px;">36cm</td> <td style="padding: 2px;">46 cm</td> </tr> <tr> <td style="padding: 2px;"><b>M (7/8)</b></td> <td style="padding: 2px;">40 cm</td> <td style="padding: 2px;">52 cm</td> </tr> <tr> <td style="padding: 2px;"><b>L (9/11)</b></td> <td style="padding: 2px;">42cm</td> <td style="padding: 2px;">55 cm</td> </tr> <tr> <td style="padding: 2px;"><b>XL (12/14)</b></td> <td style="padding: 2px;">45 cm</td> <td style="padding: 2px;">59 cm</td> </tr> <tr> <td style="padding: 2px;"><b>Tolerance</b></td> <td style="padding: 2px;"><b>1.27 cm</b></td> <td style="padding: 2px;"><b>1.27 cm</b></td> </tr> </tbody> </table>	Size	Width <b>A</b>	Length <b>B</b>	<b>XS (3/4)</b>	32 cm	42 cm	<b>S (5/6)</b>	36cm	46 cm	<b>M (7/8)</b>	40 cm	52 cm	<b>L (9/11)</b>	42cm	55 cm	<b>XL (12/14)</b>	45 cm	59 cm	<b>Tolerance</b>	<b>1.27 cm</b>	<b>1.27 cm</b>	
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<b>MEDICAL DECLARATION</b>																								
		<b>NO</b>	<b>YES</b>	If Yes, please give details (state medical condition, consulting doctor, current medical condition, etc)																				
1. Has your child / ward ever been told he/ she had symptoms of or suffered from or received treatment for any health problems such as																								
(a) Stroke, high blood pressure, chest discomfort, heart murmur or any related disorder?		<input type="checkbox"/>	<input type="checkbox"/>																					
(b) Asthma, chest or breathing complaints?		<input type="checkbox"/>	<input type="checkbox"/>																					
(c) Fits or other disorders or disabilities not mentioned above?		<input type="checkbox"/>	<input type="checkbox"/>																					
(d) Any other illnesses, operation or treatment in the past 5 years not mentioned above?		<input type="checkbox"/>	<input type="checkbox"/>																					
2. Has your child / ward had or been advised to have any diagnostic tests such as:																								
(a) X-ray, ECG, ultrasound, biopsy or blood screen?		<input type="checkbox"/>	<input type="checkbox"/>																					
(b) Any other tests not mentioned above?		<input type="checkbox"/>	<input type="checkbox"/>																					
FOR PARENT/LEGAL GUARDIAN																								
<b>NAME:</b>		<b>RELATION TO CHILD:</b>																						
<b>HOME NO.:</b>	<b>MOBILE NO.:</b>	<b>EMAIL:</b>																						
<b>ADDRESS:</b>		<b>POSTAL CODE:</b>																						

### Booking and Payment Procedures

1. Completed booking form should reach us by **08 Nov 2018**.
2. Please email Booking Form to [Fatin\\_IESA@science.edu.sg](mailto:Fatin_IESA@science.edu.sg) and return the original copy with a crossed cheque made payable to **Science Centre Board** for the sum of SGD 428 (7% GST included) to:  

c/o Fatin Iesa  
 Science Centre Singapore  
 15 Science Centre Road,  
 Singapore 609081
3. Registration form and cheque can be mailed to the Science Centre or dropped off at the Visitor Services Centre during office hours before **08 Nov 2018**.

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### Cancellation

1. # In the case of cancellation of camp, cheques will be returned.

### Disclaimer

*Any person who takes part in Tinker Camp does so entirely at his/her own risk and shall be deemed to have understood the risks associated with Tinker Camp. Science Centre Singapore, their employees and agents will take all necessary precautions to ensure the safety of the participants but shall **not** be responsible for any death, personal injury or damage howsoever sustained or arising out of his/her participation in Tinker Camp. Science Centre Singapore shall, in any circumstances and at their sole discretion, provide such immediate first aid and/or medical treatment as it shall deem reasonable and at their expense. Any such immediate first aid and/or medical treatment rendered shall **not** be taken as an admission of liability in any way for any personal injury howsoever sustained or arising. Photographs taken during Tinker Camp may be used for future promotional materials (printed/ electronic) by Science Centre Singapore.*

### Parent / Guardian Consent

I, \_\_\_\_\_ (parent / guardian), NRIC/FIN no. \_\_\_\_\_  
 acknowledge the information regarding the above mentioned activity and hereby \* **give consent / do not give consent** to his/ her participation for the Tinker Camp held on 07 – 08 December 2018. I confirm that I am not aware of any medical conditions (other than those mentioned above) which may prevent my child/ ward from participating fully in all the activities.

\_\_\_\_\_  
 Signature

\_\_\_\_\_  
 Date