



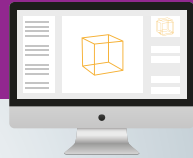
Shop at our first ever kids market! Not only do you support budding entrepreneurs but you will enjoy all the Cape Town Science Centre's exhibits and cool techy programme.

**DATES:** 9 December 2017  
**TIME:** 10:00-13:00  
**COST:** Standard CTSC Entry fee\*

*\* Please note that all visitors will be required to pay a standard entry fee except for market traders and one assistant or family member.*

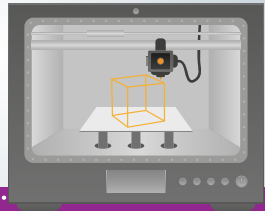
# 3D DESIGN

## & PRINTING



### THE FUTURE IS HERE!

Learn how 3D Printing is changing the future, design and print your own name.



**DATES:** 7 December 2017 - 16 January 2018  
(See calendar for specific days)

**TIMES:** 10:00  
**AGES:** Suitable for ages 8+  
**COST:** R20 for 2 - 4 characters  
R30 for more than 5 characters

**BOOKINGS:** info@ctsc.org.za or 021 300 3200

# MINECRAFT CODE CONNECT

Collaborate, solve problems and learn how to code in your favourite game, Minecraft!

**DATES:** 6 December 2017 - 15 January 2018  
(See calendar for specific days)

**TIME:** 14:00  
**AGES:** Suitable for ages 7+  
**COST:** R50

**BOOKINGS:** info@ctsc.org.za or 021 300 3200



# APP BUILDING WORKSHOP

If App building is your cup of tea, then this is the perfect workshop to get you closer to unlocking your full potential. Learn the basic skills of building your own App which you can use to programme a robot.

**DATES:** 12, 13 & 14 December 2017  
**TIMES:** 11:00  
**AGES:** Suitable for ages 10+  
**COST:** R170

**BOOKINGS:** info@ctsc.org.za or 021 300 3200



CTSC

CapeTownScienceCentre



# HOLIDAY PROGRAMME

6 December '17 - 16 January '18

## DESIGN YOUR FUTURE!

### PROGRAMME HIGHLIGHTS:

- Flight Simulations
- 3D Design and Printing
- Minecraft Code Connect
- Smart Design Demonstrations
- VR Viewer Demonstrations
- App Building Workshop
- Bee Bots

### CTSC MEMBERSHIP

Become a **Member** and for less than R7 a week, get unlimited entry to the Cape Town Science Centre for a year. Ask at the Ticket Office for details.

### OPENING HOURS & ENTRY FEES

Monday to Saturday 9:00 - 16:30 | Sundays & Public Holidays 10:00 - 16:30  
CLOSED on 25 December & 1 January  
Youth & Adults R55 | Pensioners R25 | Family (4 people) R200



Information correct at time of going to print. Programme is subject to change without notice. The Cape Town Science Centre is a registered non-profit organisation (031-701-NPO) and Public Benefit Organisation (18/11/13/2663). All funds received directly support educational programmes and exhibits. We value and encourage your support.

### CAPE TOWN SCIENCE CENTRE

370B Main Road, Observatory | 33° 56' 17" S 18° 27' 50" E  
021 300 3200 | info@ctsc.org.za | www.ctsc.org.za

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
		<b>6 December</b> 11:00 Marshmallow Tower 12:00 Camera Obscura 12:00 Smart Design Demo 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 Cut & Design shapes	<b>7 December</b> 10:00 3D Design & Print 11:00 Paper Parachute 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Bee Bots 15:00 Wrapping Paper	<b>8 December</b> 11:00 Lego Designs 12:00 Camera Obscura 12:00 Smart Design Demo 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 Spectroscope	<b>9 December</b> 10:00 3D Design & Print 10:00 Kids Market 11:00 Design using Code 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Bee Bots 15:00 Snowflake Light	<b>10 December</b> 11:00 Design a Boat 12:00 Camera Obscura 12:00 Smart Design Demo 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 Cut & Design shapes
<b>11 December</b> 10:00 3D Design & Print 11:00 Wrapping paper 12:00 Camera Obscura 12:00 Smart Design Demo 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 Christmas Origami	<b>12 December</b> 11:00 Christmas Wreath 11:00 App Building 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Bee Bots 15:00 The invisible ink	<b>13 December</b> 10:00 3D Design & Print 11:00 App Building 11:00 Playdough 12:00 Camera Obscura 12:00 Smart Design Demo 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 Paper Strips Fir Tree	<b>14 December</b> 11:00 Marshmallow Tower 11:00 App Building 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Bee Bots 15:00 Christmas Wreath	<b>15 December</b> 10:00 3D Design & Print 11:00 Design using code 12:00 Camera Obscura 12:00 Smart Design Demo 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 Snowflake Light	<b>16 December</b> 11:00 Lego Designs 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Bee Bots 15:00 Cut & Design Shapes	<b>17 December</b> 10:00 3D Design & Print 11:00 Paper Strips Fir Tree 12:00 Camera Obscura 12:00 Smart Design Demo 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 Wrapping Paper
<b>18 December</b> 11:00 Paper Parachute 12:00 Camera Obscura 12:00 Smart Design Demo 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 The invisible ink	<b>19 December</b> 10:00 3D Design & Print 11:00 Christmas Wreath 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Bee Bots 15:00 Spectroscope	<b>20 December</b> 11:00 Design a Boat 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 Christmas Origami	<b>21 December</b> 10:00 3D Design & Print 11:00 Playdough 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Bee Bots 15:00 Cut & Design Shapes	<b>22 December</b> 11:00 Paper Strips Fir Tree 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 Design Using Code	<b>23 December</b> 10:00 3D Design & Print 11:00 Lego Designs 12:00 Camera Obscura 13:00 Science Show 14:00 Bee Bots 15:00 Marshmallow Tower	<b>24 December</b> 11:00 Christmas Wreath 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 The invisible ink
<b>CTSC CLOSED</b> 	<b>25 December</b> 10:00 3D Design & Print 11:00 Paper Parachute 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Bee Bots 15:00 Wrapping Paper	<b>26 December</b> 11:00 Lego designs 12:00 Camera Obscura 12:00 Smart Design Demo 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 Christmas Origami	<b>27 December</b> 10:00 3D Design & Print 11:00 Marshmallow Tower 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Bee Bots 15:00 Snowflake Light	<b>28 December</b> 11:00 Paper Strips Fir 12:00 Camera Obscura 12:00 Smart Design Demo 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 The Invisible Ink	<b>29 December</b> 10:00 3D Design & Print 11:00 Playdough 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Bee Bots 15:00 Snowflake Light	<b>30 December</b> 11:00 Design Using Code 12:00 Camera Obscura 12:00 Smart Design Demo 13:00 Science Show 14:00 Camera Obscura 14:00 Bee Bots 15:00 Cut & Design Shapes
<b>CTSC CLOSED</b> 	<b>31 January</b> 10:00 3D Design & Print 11:00 Jumping Frog 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Bee Bots 15:00 Tea Bag Rockets	<b>1 January</b> 10:00 3D Design & Print 11:00 Summer Olympics 12:00 Camera Obscura 12:00 Smart Design Demo 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 Walking Water	<b>2 January</b> 11:00 Summer Olympics 12:00 Camera Obscura 12:00 Smart Design Demo 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 Walking Water	<b>3 January</b> 10:00 3D Design & Print 11:00 Jack in the Box 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Bee Bots 15:00 Glow in the Dark Bowling	<b>4 January</b> 11:00 Colourful Chemical 12:00 Camera Obscura 12:00 Smart Design Demo 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 Tea Bag Rockets	<b>5 January</b> 10:00 3D Design & Print 11:00 Glow in the Dark Bowling 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 Tea Bag Rockets
<b>8 January</b> 10:00 3D Design & Print 11:00 Jack in the Box 12:00 Camera Obscura 12:00 Smart Design Demo 13:00 Science Show 14:00 Minecraft Code 15:00 Tea Bag Rockets	<b>9 January</b> 11:00 Colourful Chemical 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Bee Bots 15:00 Walking Water	<b>10 January</b> 10:00 3D Design & Print 11:00 Jumping Frog 12:00 Camera Obscura 12:00 Smart Design Demo 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 Summer Olympics	<b>11 January</b> 11:00 Glow in the Dark Bowling 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Bee Bots 15:00 Jack in the Box	<b>12 January</b> 10:00 3D Design & Print 11:00 Colourful Chemical 12:00 Camera Obscura 12:00 Smart Design Demo 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 Tea Bag Rockets	<b>13 January</b> 11:00 Summer Olympics 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Bee Bots 15:00 Jumping Frog	<b>14 January</b> 10:00 3D Design & Print 11:00 Jack in the Box 12:00 Camera Obscura 12:00 Smart Design Demo 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 Walking Water
<b>15 January</b> 11:00 Glow in the Dark 12:00 Camera Obscura 12:00 Smart Design Demo 13:00 Science Show 14:00 Camera Obscura 14:00 Minecraft Code 15:00 Summer Olympics	<b>16 January</b> 10:00 3D Design & Print 11:00 Colourful Chemical 12:00 Camera Obscura 13:00 Science Show 14:00 Camera Obscura 14:00 Bee Bots 15:00 Jumping Frog					

# ACTIVITIES

Please note that activities are free unless otherwise stated. Standard entry fees to the CTSC apply to all visitors.

**FLIGHT SIMULATION** (Ages 8+ • Entry fee + R10 per ride)  
Learn how to fly a real sit-inside flight simulator.  
This demonstration is sponsored by the Sakhikamva Foundation.

**BEE BOTS** (Ages 3-8 • Entry fee)  
Use basic programming skills to run a gauntlet of obstacles with Bee Bot.

**SMART DESIGN DEMONSTRATION** (Whole family • Entry fee)  
Learn how to use an interactive whiteboard to design, draw or dissect digital images or to play educational games.

**VR VIEWERS DEMONSTRATION** (Whole family • Entry fee)  
Start your Virtual Reality (VR) journey for a immersive experience.

**CHRISTMAS ORIGAMI** (Ages 8+ • Entry Fee)  
Learn how to design your own unique Christmas origami and be the next fortune teller.

**PAPER STRIPS FIR TREE** (Ages 6+ • Entry fee + R5)  
Come and join us as we design a simple Paper Strips Fir Tree, just in time for holiday preparation.

**CHRISTMAS WREATH** (Ages 6+ • Entry fee)  
A little Christmas crafting goes a long way. Have some fun in designing your own Christmas wreath and hang it on your door.

**SNOWFLAKE LIGHT CATCHERS** (Ages 6+ • Entry fee)  
Design your own unique snowflake and take it home with you.

**DESIGN A BOAT** (Age 8+ • Entry fee)  
Learn about the science behind the floating & sailing of boats, while you build your own using recyclable material.

**HOMEMADE PLAYDOUGH** (Ages 6+ • Entry fee + R5)  
Make children's toys, while learning the difference between a mixture and a solution.

**DESIGN USING CODE** (Ages 8+ • Entry fee)  
Learn how to code a Sprite to design shapes and objects.

**BUILD A MARSHMALLOW TOWER** (Ages 8+ • Entry fee + R5)  
Learn about gravity, engineering and architecture in a fun way.

**DESIGN WRAPPING PAPER** (Ages 6+ • Entry fee)  
Learn about designing patterns, symmetry and fractals.

**INVISIBLE INK** (Whole family • entry fee)  
Making invisible ink, you can pretend you are a secret agent as you keep all your secret codes and messages hidden from others.

**COLOURFUL CHEMICAL REACTIONS** (Whole family • entry fee)  
Join us as we add food colouring to the ingredient list to prompt even more discoveries!

# HOLIDAY REGULARS

**CAMERA OBSCURA**  
**Daily @ 12:00 & 14:00** (weather dependant)  
Join us on one of our Camera Obscura tours for a 360° view of the surrounding area. Listen out for announcements.

**SCIENCE SHOW**  
**Daily @ 13:00**  
Our daily Science Shows will excite while nurturing awareness that science is a part of our daily lives.

**CUB WEDNESDAYS**  
Cubs, Brownies and Scouts from any pack will be given free entry to the CTSC on Wednesdays during the holidays provided they come dressed in their Cub, Brownie or Scouts uniform.

**WALKING WATER** (Whole family • entry fee)  
Have fun, experience a demonstration of water movement and discover the scientific facts behind it.

**HOMEMADE SPECTROSCOPE** (Ages 6+ • Entry fee)  
Make a homemade spectroscope with a few simple materials and explore the spectrum of different light sources.

**COMMUNICATIVE LEGO DESIGNS** (Ages 8+ • Entry fee)  
Use Lego blocks to design or imitate a given structure while using your communication skills wisely.

**GLOW IN THE DARK BOWLING** (Ages 6+ • Entry fee)  
Join us as we make bowling easier and fun for kids.

**SUMMER OLYMPICS** (Ages 6+ • Entry fee)  
If you are an outdoor person, this will be your time to shine. It might be a little tricky, but the competition with others will make it more fun.

**CUTTING & DESIGNING SHAPES** (Whole family • Entry fee)  
Learn how to design & cut out different shapes using paper material.

**DESIGN A PAPER PARACHUTE** (Ages 6+ • Entry fee)  
Join us as we help kids design their own wind resistant parachute.

**JUMPING FROG** (Ages 8+ • Entry fee)  
Learn about different types of energy and see how each type of energy is applied when you make your own jumping frog.

**TEA BAG ROCKETS** (Whole family • Entry fee)  
Learn about the movement of air molecules and discover why the warm air can make the empty teabag fly.

**JACK IN THE BOX** (Ages 6+ • Entry fee)  
Make your own Jack in the Box from paper, while having a fun engineering experience.