

The graphic for 'Summer STEM Camp' features the word 'Summer' in a large, black, cursive script font, with the 'S' starting from a large yellow circle. Below it, the words 'STEM Camp' are written in a bold, black, sans-serif font. The background is a light blue gradient with white circuit lines and gear icons.

# Summer STEM Camp



10 days Summer Program repeated every 2 weeks.  
4 programs for 4 age groups (6-8 | 9-11 | 12-14 | 15+).  
A combination of amazing activities concerning  
robotics, renewable energy, engineering, coding,  
3D printing, aviation and much more...



# SUMMER CAMP

(Age 6-8/9-11/12-14)



Two weeks for: 250 \$  
One week for: 180 \$  
1 day for: 50 \$

**RSVP: 01/611 604**  
**71/920 150**



# SUMMER CAMP

(Age 6-8/9-11/12-14)



July 2 – July 13

July 16 – July 27

July 30 – August 10

August 13 – August 24

August 27 – September 7





# SUMMER CAMP

## (Age 6-8)



Summer Camp/ Week 1	2018	Monday	Tuesday	Wednesday	Thursday	Friday
	July	2	3	4	5	6
9:00-11:15	Age: 6 - 8	TLE-02 (Balancoire)	Little Bits	ROA(Kicker + Keeper)	Solar Oven	ROB
11:15-11:45	<b>Break</b>					
11:45 - 14:00	Age: 6 - 8	ROA (Car)	TLE-02 (Gravity car+Well)	Architecture	TLE-03 (Tower Crane)	Technology



# SUMMER CAMP

## (Age 6-8)



Summer Camp/ Week 2	2018	Monday	Tuesday	Wednesday	Thursday	Friday
	July	9	10	11	12	13
9:00-11:15	Age: 6 - 8	C1P	Dizzyland	Electric circuit	Creativity	TLE-03 (Caroussel)
11:15-11:45	<b>Break</b>					
11:45 - 14:00	Age: 6 - 8	Coding	Power Up	Civil Engineering	Amusement Park	Do It Yourself (DIY)



# SUMMER CAMP

## (Age 9-11)



Summer Camp/ Week 1	2018	Monday	Tuesday	Wednesday	Thursday	Friday
	July	2	3	4	5	6
9:00-11:15	Age: 9 - 11	ROB (Swing)	C1P (MRI)	Architecture	Renewable Energy (Solar car)	Civil Engineering
11:15-11:45	<b>Break</b>					
11:45 - 14:00	Age: 9 - 11	TLE-05 (Remote control car)	Krypton	TLE-04 (Automated car)	Power Up	3D printing



# SUMMER CAMP

## (Age 9-11)



Summer Camp/ Week 2	2018	Monday	Tuesday	Wednesday	Thursday	Friday
	July	9	10	11	12	13
9:00-11:15	Age: 9 - 11	Pneumatic	ROC (Crane)	Zip Flyer	Ed Blocks	WER
11:15-11:45	<b>Break</b>					
11:45 - 14:00	Age: 9 - 11	Coding	Renewable Energy (Windmill)	Safety on the road	Do It Yourself (DIY)	WER





# SUMMER CAMP

## (Age 12-14)



Summer Camp/ Week 1	2018	Monday	Tuesday	Wednesday	Thursday	Friday
	July	2	3	4	5	6
9:00-11:15	Age: 12 - 14	Pneumatic	Civil Engineering	Edpy	Power Up	WER
11:15-11:45	<b>Break</b>					
11:45 - 14:00	Age: 12 - 14	Renewable Energy (Red windmill)	3D printing	Zip Flyer	Krypton	WER



# SUMMER CAMP

## (Age 12-14)



Summer Camp/ Week 2	2018	Monday	Tuesday	Wednesday	Thursday	Friday
	July	9	10	11	12	13
9:00-11:15	Age: 12 - 14	TLE-06 (Mini Humanoid)	C1P (Forklift)	Python	TLE-05 (Elevator)	Arduino
11:15-11:45	<b>Break</b>					
11:45 - 14:00	Age: 12 - 14	RL1 (TLE BOT)	C1P (Forklift)	TLE-07 (S-Station)	Javascript	Do it yourself (DIY)



# SUMMER CAMP

(Age 15+)



Two weeks for: 350 \$

One week for: 220 \$

1 day for: 60 \$

**RSVP: 01/611 604**

**71/920 150**

Hosted by



#2018\_STEM\_For\_ALL  
[www.thelittleengineer.com](http://www.thelittleengineer.com)



# SUMMER CAMP

(Age 15+)



July 16 – July 27

July 30 – August 10

August 13 – August 24

August 27 – September 7

Hosted by



#2018\_STEM\_For\_ALL  
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# SUMMER CAMP

## (Age 15+)



### JOURNEY WITH AN ENGINEER

Summer Camp/ Week 1	2018	Monday	Tuesday	Wednesday	Thursday	Friday
	July	16	17	18	19	20
9:00-11:15	Age: 15+	Civil Engineering	Mechanical Engineering	Automation Engineering	Mechatronics Engineering	Project Management
11:15-11:45	<b>Break</b>					
11:45 - 14:00	Age: 15+	Civil Engineering	Mechanical Engineering	Automation Engineering	Mechatronics Engineering	Project Management





# SUMMER CAMP

## (Age 15+)



### JOURNEY WITH AN ENGINEER

Summer Camp/ Week 2	2018	Monday	Tuesday	Wednesday	Thursday	Friday
	July	23	24	25	26	27
9:00-11:15	Age: 15+	Internet of things (IOT)	Internet of things (IOT)	Internet of things (IOT)	Internet of things (IOT)	Internet of things (IOT)
11:15-11:45	<b>Break</b>					
11:45 - 14:00	Age: 15+	Internet of things (IOT)	Internet of things (IOT)	Internet of things (IOT)	Internet of things (IOT)	Internet of things (IOT)

## Balance Scale

Pupils will learn how to measure weight and how to make the beam in balance.

## Little Bits

Students will explore the world of electronics in fun, colorful and exciting manner. Once they understand this concept they will be asked to structurally integrate components to invent systems.

## ROA (Goal Keeper+Kicker)

Students will build and program a mechanical leg that is motorized to swing and kick a paper ball and a goal keeper that is motorized to move back and fourth to block a paper ball from a goal.

## Solar Oven

Explore the science of solar thermal energy – a green and renewable source of energy.

## Turning Wheel

Students will learn how to transfer horizontal motion into vertical motion.

## Car

Students will build and program a car that moves forwards and backwards.

## Well+Gravity Car

Learning about gravity and how speed is affected by weight.

## Architecture

Using more than 8 kits, students will be able to build real life structures and buildings inspired from London bridge and the Big Ben.

## Tower Crane

Students will be able to build a crane and execute a mission using it. The mission will be carrying a crane operating of lifting items from point A to point B.

## House with a fan

Students will assemble a house and get to know how fans are used in different seasons where they have to switch the direction of the fan rotation along with the blades to produce good airflow

## Dizzyland

Students will be introduced to the world of gears, building rides including motors with hand control.

## Electric Circuit

The students will get to know how to control the electric current and they will be exposed to the basics of electricity and how it works from the generation to the usages in our daily life as labs, motors and switches.

## Caroussel

Understanding the main feature of mechanics and motion transition.

## Power up

This is a very exciting activity where students will be building and testing a paper folded airplane. Through this interactive session, learners will acquire new knowledge in aviation.

## Civil Engineering

In this activity, students will get to know more about Civil engineering. Students will explore topics such as structures, foundations, beams and other, altogether to make them aware of how civil engineers really work.

## Amusement Park

Pupils will be exposed to what is behind this industry, how to construct and program similar models.



## Swing

Introduction to robotics using graphical programming.

## MRI

Students will assemble a simulate the MRI, in this activity they will have to know the main functionalities of this machine in the medical sector.

## Architecture

Using more than 8 kits, students will be able to build real life structures and buildings inspired from London bridge and the Big Ben.

## Solar Car

Students will be introduced to the renewable energy and they will have to perform a solar car race in order to see the most efficient way of exposing the car to the sun.

## Civil Engineering

In this activity, students will get to know more about Civil engineering. Students will explore topics such as structures, foundations, beams and other, altogether to make them aware of how civil engineers really work.

## Krypton

Using Abilix Technology, student will build and control robots from scratch and control it wirelessly using flow chart programming.

## Automated car

Students will use sensors, motors and controller to get closer to the real application of engineering.

## Power up

This is a very exciting activity where students will be building and testing a paper folded airplane. Through this interactive session, learners will acquire new knowledge in aviation.

## 3D Printing

The Little Engineer will proudly show its learners the transitions between the digital and the physical world while using the 3D printing process where learners will have to design, build and 3D print their models.

## Pneumatic

Students will learn about pneumatic and how to use it by moving objects and do complex movements.

## Crane

Students will be able to build a crane and execute a mission using it. The mission will be carrying a crane operating of lifting items from point A to point B.

## Zip Flyer

Using this exciting activity, student will be able to build a zip-flyer, which will have to be operated by the students to fly the wheel as high as it can.

## Ed Blocks

Using this unique robot, the students will be able to code and control a robot in a way that is very interesting, they will go through the basics of programming of multiple functions of the robot to reach a sumo-bot competition.

## WER

Students will be engaged in a scientific competition where robots have to complete missions in the most efficient ways

## Windmill

Learners will be introduced to wind energy by constructing a windmill and discovering how electricity is generated.

## Safety on the road

Students will be exposed to the best practices while driving, they know how a basic car move and what are the rules and regulations to have a safe trip while driving around the cities of Lebanon and they will be informed of basic maintenance procedure so their cars operate safely.



## Pneumatic

Students will learn about pneumatic and how to use it by moving objects and do complex movements.

## Civil Engineering

In this activity, students will get to know more about Civil engineering. Students will explore topics such as structures, foundations, beams and other, altogether to make them aware of how civil engineers really work.

## Edpy

Using this unique robot, the students will be able to code and control a robot in a way that is very interesting, they will go through the basics of the programming of multiple functions of the robot to reach a sumo-bot competition. Using Python

## Power Up

This is a very exciting activity where students will be building and testing a paper folded airplane. Through this interactive session, learners will acquire new knowledge in aviation.



## WER

Students will be engaged in a scientific competition where robots have to complete missions in the most efficient ways.

## Red windmill

Learners will be introduced to wind energy by constructing a windmill and discovering how electricity is generated.

## 3D printing

The Little Engineer will proudly show its learners the transitions between the digital and the physical world while using the 3D printing process where learners will have to design, build and 3D print their models.

## Zip Flyer

Using this exciting activity, student will be able to build a zip-flyer, which will have to be operated by the students to fly the wheel as high as it can.

## Krypton

Using Abilix Technology, student will build and control robots from scratch and control it wirelessly using flow chart programming.

## Mini Humanoid

Students will be introduced to the basics of intelligent servo motors controls which is an introduction to an exciting course at TLE known as TLE-08

## Forklift

Students will build and program a vehicle that operates usually in factories in order to lift objects and transfer them from point A to point B.

## Python

Students will learn how to code using high level of programming language and structure program to do specific function.

## Elevator

Students will get the chance to build an elevator and program it. They will explore how in real life elevators work.

## Arduino

Students will be able to create, control and operate micro-electronic equipment using the famous Arduino board.

## TLE Bot

Students will build a car, program it and execute different missions.

## S-Station

Students will use sensors, motors and controller to get closer to the real application of engineering.

## Javascript

Students will be able to code, build and amend websites using the famous JavaScript language where they will get to see in naked eye how sites are built from scratch.

## Journey with an Engineer

Over a week, the students at TLE will be exposed to multiple engineering sectors with real engineers from the field. They will know more about their daily lives at work, how they operate, how they build their projects and how they manage them. The scope of this journey covers a day with a Mechatronics Engineer, Mechanical Engineer, Civil Engineer, Electronics Engineer and a project manager that works with them closely on daily basis.

## IOT

In this course, students will be exposed and learn more about telecommunications, electronics and in general the internet. They will be able to control the WIFI signal around them in order to run/operate items they can see in their daily life such as a lamp, a motor or even a router at home. They will build small web pages to control things around them wirelessly through Wi-Fi.