





JUNIOR SUMMER CAMP 2022 SCHEDULE

Studio One Hotel, Studio City

STEM (9:30 AM TO 11:30 AM) TECHNOLOGY (11:45 AM TO 1:30 PM) WEEK NO. (Break from 10:30 am to 10:45 am) Break (11:30 pm to 11:45 pm) **STEM Wizards: App Building:** Week1 Have fun mixing things up like wizards Create your own simple apps as a solution July 12 - 15 to a problem through a series of design creating fun chemical reactions in this week of mysterious, magical science challenges while learning the fundamental programming concepts and software experiments! development process. **STEM Fairy Tales: Virtual Robotics:** Week2 Design and engineer a solution to the Code a real VEX robot with a drivetrain, July 18 - 22 problem of the central character in the object pickup, sensors, GPS, and a pen on popular fairy tales – like designing a house an immersive, gamified interface that gives more variety to coding activities. for the Three Little Piggies that can withstand the huffs and puffs of the 'wolf'. **Earth Ambassadors: Robotics with LEGO SPIKE Essential:** Week 3 Learn how you can make a difference in the Design, create, and code great science July 25 - 29 planet with a series of STEM activities like projects with LEGO elements, motors, learning modern farming techniques, and sensors, and code them using an creating solar-powered car and windmill, easy, intuitive, coding interface etc. **Ancient Civilizations: Robotics with WeDo 2.0:** Week 4 Explore ancient civilizations by designing Design, create, and code great science Aug 1 - 5 and engineering prototypes of various projects with LEGO elements, motors, and cool and unconventional contraptions sensors, and code them using an easy, and tools used in ancient civilizations intuitive, coding interface. around the world. **Inventing Rube Goldberg Machine: Robotics with mBot:** Week 5 Learn to design and create a Rube Explore the electronics of a robot like the Aug 8 - 12 Goldberg machine by testing various motors, various sensors with this simple, mechanisms through the week with a easy-to-run Arduino-based robot that can fully functional Rube Goldberg machine be programmed with simple block-based towards the end of the week. coding. **3D Modelling: Defying Gravity:** Week 6 Dig deeper into understanding this Learn to create 3D designs using a CAD Aug 15 - 19 invisible, inevitable force of nature with a software while gaining a different series of STEM activities where you get to perspective on the shapes of everyday play around with gravity - for example, objects and develop understanding of creating a balancing bird that balances at different views of the shapes thereby the tip of the beak or a walking paper improving the spatial imagination skills. horse that seems to walk without any external force acting on it. Water, Water, Everywhere: **Robotics with WeDo 2.0:** Week 7 Learn more about water – the Design, create, and code great science Aug 22 - 26 projects with LEGO elements, motors, characteristics of water with a variety of fun experiments, tell the time with a DIY and sensors, and code them using an water clock, build dams like beavers to easy, intuitive, coding interface. prevent flash floods, and learn ways to get



clean water from dirty water.