





*APPRENTICE ENGINEER (ages 3 to 5) \$400 for 8 x 1-hour sessions or \$220 for 4 x 1-hour weekday sessions

An introductory ourse to basic mechanisms that aims to foster curiosity and the love of learning among our youngest participants. Children will start with Duplo® and progress to using Lego®. They will get to develop fine motor skills and visual-spatial abilities, while exploring concepts such as cause and effect, gears, pulleys and more.



(ages < 6) \$400 for 8 x 1-hour sessions or \$220 for 4 x 1-hour weekday sessions (ages 6 to 8) \$360 for 8 x 1-hour sessions or \$200 for 4 x 1-hour weekday sessions

Through hands on projects building Lego® machines, children will be exposed to a variety of mechanical concepts and the science of physics, such as friction, gravity gears and levers, as well as their real life applications. The course will also enhance their critical thinking and problem solving skills.

*SENIOR ENGINEER

(ages 8+) \$360 for 8 x 1-hour sessions or 4 x 2-hour sessions or \$200 for 4 x 1-hour weekday sessions

This course is for older participants or those who have completed Junior engineering. Children are challenged with more complex Lego® machines, and will continue to learn about various physics and engineering concepts, including gear ratios, lever classes, stability, among others. They will be inspired to become more confident learners and problem solvers.



(ages 8+or those who have completed Senior Engineer) \$360 for 8 x 1-hour sessions or 4 x 2-hour sessions or \$200 for 4 x 1-hour weekday sessions

Children will take one step further from making their Lego® machines to programming them, based on Lego® NXT, Mindstorms EV3 and Spike Prime systems. They will learn basic computer coding and develop logical thinking. Using science, engineering and computational concepts, children will bring their builds to life.



(ages 8+) \$360 for 8 x 1-hour sessions or 4 x 2-hour sessions or \$200 for 4 x 1-hour weekday sessions

This discovery-based course aims to stimulate creativity and improve planning and organizational skills in our participants. Children will learn how to create a storyboard and digitalize their ideas, turning them into animation using Lego® elements. They will plan, script, shoot and direct their own "movie", complete with voice recording and dialogue, music and sound effects.



(ages 8+) \$400 for 8 x 1-hour sessions Saturdays only

This course provides an introduction to 3D design and printing, covering design thinking and key considerations. It teaches the use of Tinkeread for 3D modelling and allows participants to design and print their own innovative products to take home.

*Currently, only these programs are available at our Shaw Centre branch.

**For Robotics, only WeDo robotics are offered at our Shaw Centre branch.

Schedule

1pm - 2 pm 2:30 pm - 3:30pm