

Engineer Squad

Sample Weekly Learning Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
8H30	Receiving students	Receiving students	Receiving students	Receiving students	Receiving students
9h30	Introduction to 3D 3D coordinate system	Team project sign-up Introduction to Engineering design	Design of the first prototype Preliminary design on paper	Science 101 Topic depends on the project	Peer review by other teams Q & A by instructors
10h40	Snack/water break	Snack break	Snack break	Snack break	Snack break
11h00	3-D design Practice drawing	How to use search engine Team role sign-up	Introduction to Computer aided design(12+)	Project de-bug Computer aided design(12+)	Presentation dry-run
12h15	Lunch Break	Picnic/ lunch	Lunch Break	Picnic/ lunch	Team practice
13h20	Team up! Team project brain- storming	Team up! Introduction to materials How to find and purchase	Team up! Review of the prototype Presentation 1 to the class	Team up! Preparing for presentation of the prototype 1st peer evaluation	Free practice time decided by teams
15h00	Snack break	Snack break	Snack break		Semi-FINAL PRESENTATION TO PARENTS!!
15h30	Picking up starts Or team practice/meeting	Picking up starts Or team practice/meeting	Picking up starts Or team practice/meeting	Picking up starts Or team practice/meeting	
16H30	End of the day	End of the day	End of the day	End of the day	End of the week

GOALS: Understand basic principle and process of an engineering design
How to present ideas/designs
How to research
Team work, work with teammates
Basic knowledge of physics and materials
Using CAD software (12+)

Learning structure: 25% instruction
25% independent/team research
25% peer learning
25% communication/presentation

2023 Engineer Squad Theme:
Solar energy / Life hacker

Possible projects:
Solar heater/dryer
Solar tracker
Coin sorter
Crazy table