



Sustainable Development Goals in Education

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A repeatable education model based on Industry 4.0 competencies, business and family values



- **Constructors** - wood, metal, plastic
 - why the car wheels slip at the start and how to increase traction?
- **Programming** - Scratch, ScottieGo, Kodu etc.
- **Robotics** - BeeBot, ProBot, Dobot roboarms, Ozobot
 - with self-built mechanisms (shovels, coin turning), production (laser engraving) - conveyor line, etc.
- **Electronics**
 - joule "thief" (from "empty" batteries) etc.
- **Prototyping** - 3D: pens, printing, scanner
 - houses, your own sculpture, electric car parts, etc.
- **Complex projects** - 3D, CNC milling/ laser cutting
 - electric flashlight, rolling car races, ramps, detail and pressure experiments, paper bridge races (the most durable bridge of 4 A4 pages), etc
- **Filming, animation** – GIF, green screen (directing, lighting, angles, multiple cameras, acting, editing)



Each student:

- with parents create 2 to 3 technically creative projects at home;
- publicly introduce the project in their group;
- participates on the Technically Creative Works Day;
- in Parents' Day train parents on a previously learned topic.



All lessons with descriptions, photos, videos: facebook.com/itcentrs/