# CLASSROOM COURSE V1.0

Robots Got Talents™ Classroom Courses

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#### THIS COURSE CONTAINS:

- Robots Got Talents Student Zone
- Robots Got Talents Teacher Zone
- Robots Got Talents WeDo 2.0 Course Book
- Advertising Material, Logos and Handouts
- Robots Got Talents Certificates Template
- WEDO WHEELS Course Lesson Plan

#### And much more



#### COURSE INTRODUCTION WEDO WHEELS CLASSROOM COURSE

WeDo Wheels is a Classroom Course by Robots Got Talents<sup>™</sup> for Elementary school students. Throughout this course participants will learn about Robotics, Programming and Automotive Engineering as They Design, Build and Program their own Self Driving Cars/ Robots using the LEGO Education WeDo 2.0 Platform. This Course includes all needed material to produce the best course experience for Students and Teachers;

Student Zone containing Topic by Topic Presentations, Guides and Nine LEGO<sup>®</sup> WeDo 2.0 Building and Programming Activities with video tutorials.

Teacher Zone containing the Course Book [Elementary Robotics], presentations, quiz answers, Advertising Material, Lesson Plans and teacher guides.

WeDo Wheels Classroom Course consists of six lessons that cover all the topics and activities mentioned in the next page.

Good Luck Everyone,

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# WEDO WHEELS

ROBOTS GOT TALENTS COURSE

## Page 2

#### **LESSON ONE:**

- Robotics Introduction
- Robots characteristics
- Robots Uses
- WeDo 2.0 Introduction
- WeDo 2.0 Main Parts

#### **LESSON TWO:**

- WeDo 2.0 Programming
- Software User Interface
- WeDo 2.0 Blocks
- Building Exercise 1
- Vehicle frame and body

#### **LESSON THREE:**

- WeDo 2.0 Building Pieces
- Motor Blocks
- Programming Exercise 1
- Engines
- Fuel System
- Types of Robots

#### **LESSON FOUR:**

- Building Exercise 2
- Input Blocks
- Powertrain System
- Exhaust System
- Programming Exercise 2
- Output Blocks

#### **LESSON FIVE:**

- Programming Exercise 3
- Cooling System
- Flow Blocks
- Programming Exercise 4
- Steering System
- Other Systems

#### **LESSON SIX:**

- Sensor Blocks
- Programming Exercise 5
- Self-Driving Cars
- Course Summary
- Graduation Project

#### **EXTRA LDD LESSON:**

- Lego Digital Designer Modes
- LDD Build Mode UI
- Building Tools & Brick Palette
- LDD Controls
- Keyboard Shortcuts
- Exporting/Importing Models
- LDD View Mode UI
- View Mode Tools
- Building Guide Mode UI



## **HOSTING THE COURSE**

#### WEDO WHEELS CLASSROOM V1

#### Step One:

Any school or educational organization with +10 students could simply host any of Robots Got Talents Courses or Camps courses by filling the Signup form Available in the Website and within 2 days you will receive the chosen course login password via mail.

#### Step Two:

After receiving your login password, Open the teacher zone and download the lesson Plan, books, presentations and premade advertisements. Robots Got Talents also offer a free PDF version of Robots Got Talents WeDo 2.0 Course Book [Elementary Robotics] by Youssef Osman for all course participants (don't forget to print it).

#### **Step Three:**

The next step is opening the Students Zone, The Student zone is a lesson by lesson plane made by the course developers guide the participants throughout the course.

### What should you include in your Classroom

To produce the best Experience for the course participants you should have the following items:

- Computer/laptop for each Course participant that have access to Robots Got Talents Website
- Internet access
- Teacher PC that have access to WeDo 2.0 Software and Robots Got Talents Website
- Additional Materials as Projector, Tablets
- WeDo 2.0 Software & LEGO DIGITAL DESIGNER on all Computer Devices or (Tablets and IPads are not recommended)
- Student Zone Handouts for students
- LEGO EDUCATION WeDo 2.0 Core Set for each 2-5 Students



## DISTANCE EDUCATION WEDO WHEELS COURSE V1

Using Robots Got Talents Online Teaching Plan won't give the event participants the full course experience as currently there are no any WeDo 2.0 Simulators or On-Screen Robotics Programs, so they would only practice programming and won't have the opportunity to use physical robots. If creating an actual event may be dangerous for your students due to the Coronavirus/ Covid19 Pandemic, please use the following steps and always remember <u>safety comes first</u>;

#### Step One:

Choose one of Robots Got Talents classroom courses, and fill the course sign up form

#### Step Two:

After receiving the login passcodes via mail, send the Student Zone Passcodes privately to your students.

#### **Step Three:**

Choose a video conference software and allow screen sharing (Top 3 Video Conferencing Software in 2020 according to <u>g2.com</u> 1. Zoom 2. Cisco Webex Meetings 3. Skype.)

#### **Step Four**

Open the Teacher Zone from the Robots Got Talents Website and ask the course participants to open the Student Zone Start the course with your students you can use the screen sharing feature if needed.

#### **Step Five**

Send Additional Documents from the Teacher Zone to your Students, as books, course documents, lesson plan, and Student handouts, to help them throughout the course.

#### **Step Six**

Follow the Lesson Plan and make sure to download all the software/s needed before starting the first session, and ask your Students to do so.

For any help please read: <u>https://www.robotsgottalents.com/post/robotsgottalents-distanceeducation</u> or contact <u>info@robotsgottalents.com</u>, <u>robotsgottalents@yahoo.com</u>

#### Important Notes:

Robots Got Talents want to ensure that everything in the course is working probably so each session the course directors are advised to send <u>minimum of 3 photos</u> that shows that everything working probably.

The person filling the form will be registered as a national course director; if the organization is willing to change the course director they must send a mail to robotsgottalents@yahoo.com or info@robotsgottalnets.com

All teachers using Course the form must use the Robots Got Talents Course Plane. Organizations are allowed to add extra lessons for graduations or course introduction.

Organizations are allowed to use this course for commercial uses <u>with</u> including Robots Got Talents name but they are not allowed to sell the course or the course resources. Read the Terms and Conditions for further information.

## **TERMS & CONDITIONS:**

Robots Got Talents 2020, 2021

- Organizations using the course are <u>not allowed</u> to use course guides, presentations or logos in any other course, camp or challenge
- Each time the organization wants to repeat the course they <u>must</u> refill the form
- You are <u>not allowed</u> to share or give the course to any other organization without Robots Got Talents permission.
- You are <u>allowed</u> to use this course for commercial uses with including Robots Got Talents name.
- All students <u>must</u> be given Robots Got Talents course certificate
- National Course directors <u>must</u> send 3 photos each day in the course to show that everything is good.
- You are <u>not allowed</u> to edit course presentations or guides
- By starting the Animal Kingdom Jr Classroom Course you agree on all Robots Got Talents terms and conditions.
- For publishing any of the courses photos on social media you must tag Robots Got Talents or use the hash tag (#robotsgottalents)



## FEEL FREE TO CONTACT US FOR FURTHER QUESTIONS