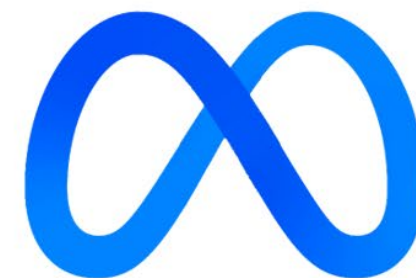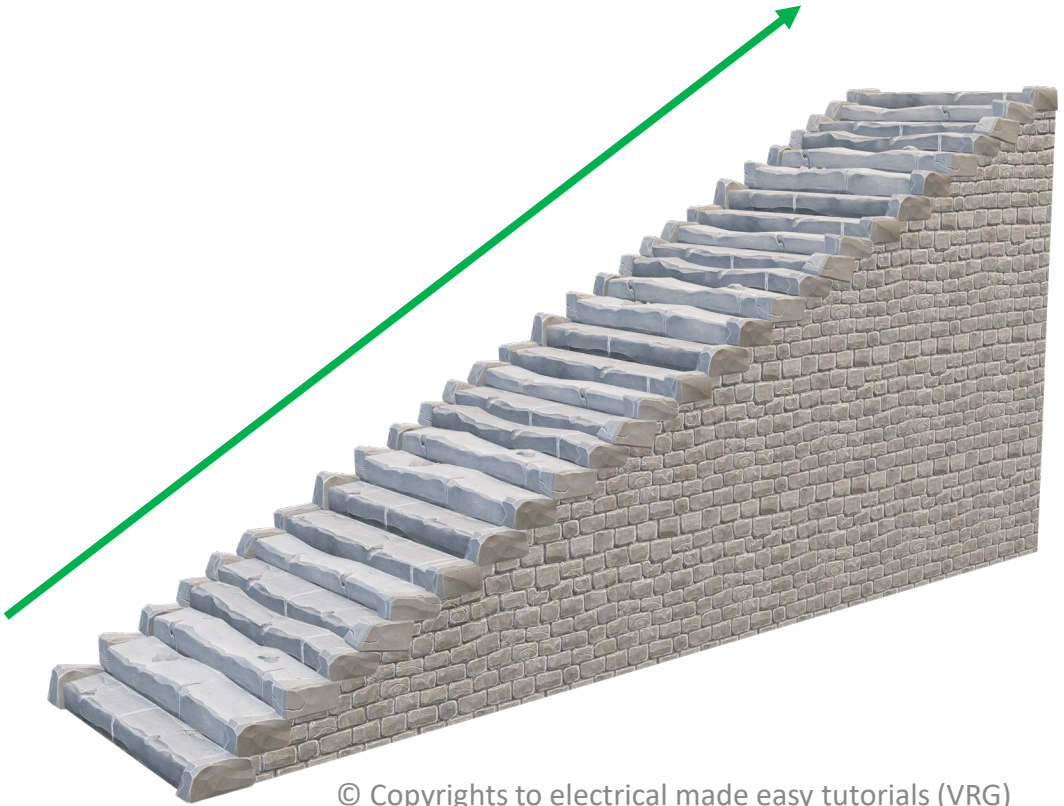# Welcome
Electrical Made Easy Tutorials

Professional Course On Embedded Hardware Development To Achieve Your Dream Job

Gains From This Course

✓ Become a skilled hardware/electrical engineer.

✓ Makes your professional job easy.

✓ Learn things you won't find it on Google search.

✓ Get into dream job.

Overview Of Course

1. **Product Development Life Cycle Interview Preparation**
   - ✓ Regulatory compliance
   - ✓ Manufacturing and Operation
   - ✓ Hardware Product Development

2. **Technical Interview Preparation**
   - ✓ Analog and Digital
   - ✓ System Design and Architecture.
   - ✓ Signal Integrity (SI) and Power Integrity (PI)
   - ✓ Hardware verification and validation.
   - ✓ Test and Measurement Instrumentation.
   - ✓ RF desense, EMI/EMC/ESD Debug and Mitigation.

3. **Behavioral Interview Preparation**
   - ✓ Situation and scenarios with examples.
   - ✓ How to answer using STAR method.
   - ✓ Project and Program Management.
   - ✓ Leadership and management questions.
   - ✓ Interview hack techniques.

Roles and Responsibilities of Hardware or Electrical or Electronics Engineer in Product Development

Hardware or electrical engineers play a crucial role in the development of embedded systems by designing and creating the hardware systems and components. Their responsibilities include but not limited to:

- ✓ Defining and documenting design requirements,
- ✓ Carefully selecting and specifying essential parts and components like microprocessor, microcontrollers, memories etc.
- ✓ Developing architectural block diagrams,
- ✓ Performing SPICE circuit simulations including RF, analog, digital and mixed signals.
- ✓ Performing signal integrity (SI) and power integrity (PI) checks.
- ✓ Designing detailed schematics and PCB layouts,
- ✓ Bringing up the circuit board,
- ✓ Debugging and testing to ensure the design meets specifications,
- ✓ Supporting the manufacturing process,
- ✓ Ensuring compliance with regulatory standards such as EMI, EMC, ESD mitigations.

These engineers must possess strong problem-solving abilities, and have experience with a variety of hardware development tools and technologies. They work closely with software engineers to ensure the seamless integration of hardware and software components.