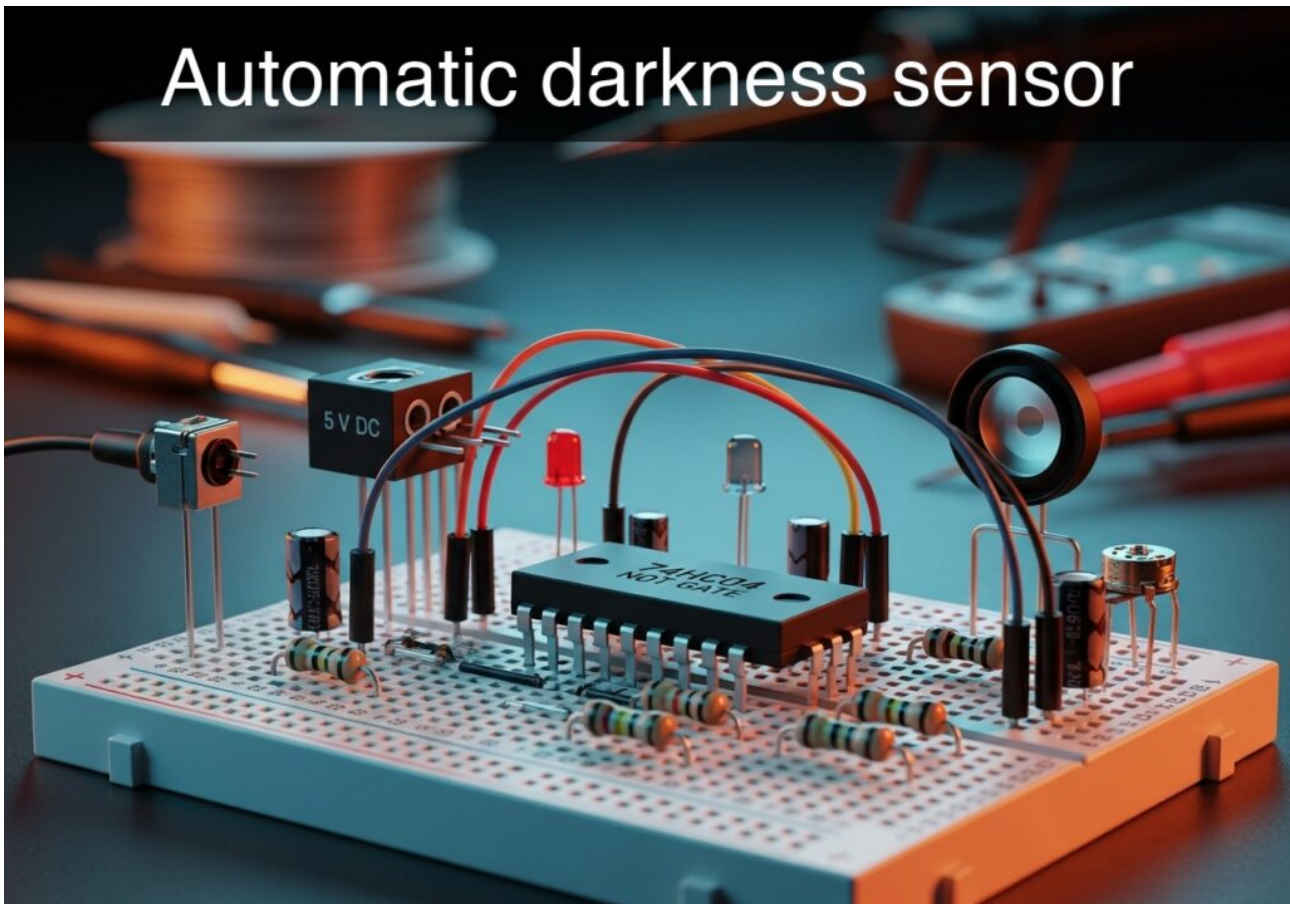


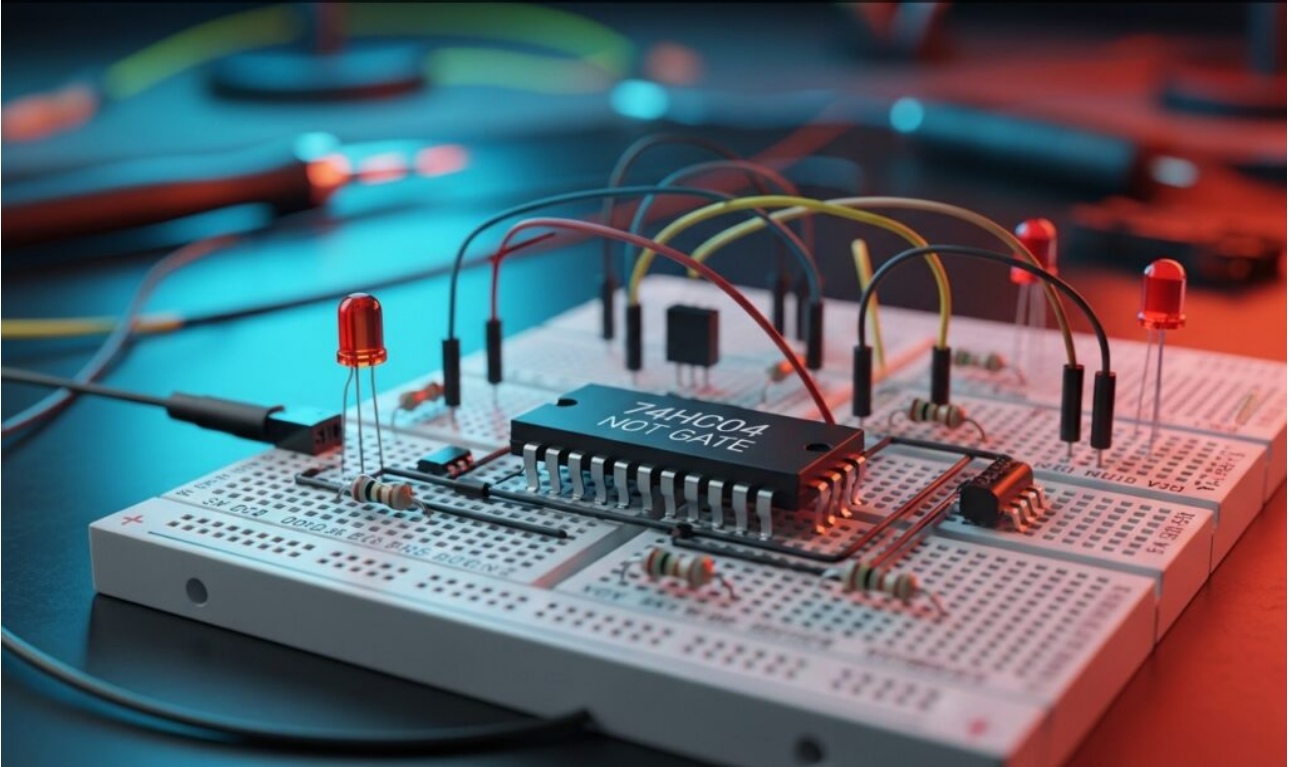
Practical case: Automatic darkness sensor



Master Digital Electronics by building an automatic night light. Use a NOT gate and LDR to detect darkness and trigger an LED, learning practical sensor logic.

Practical case: Open door alarm

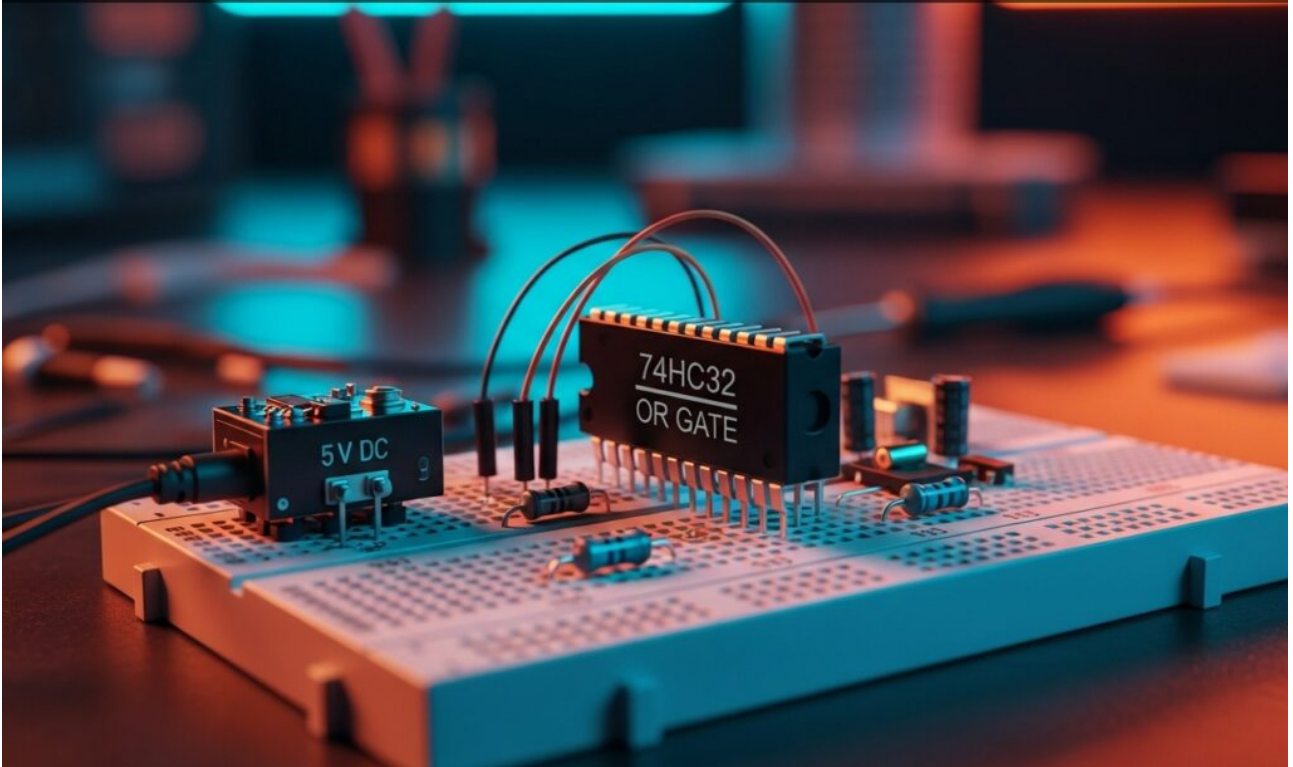
Open door alarm



Master Digital Electronics by building a security circuit with a NOT gate. Learn to trigger an LED warning signal instantly when a switch contact opens.

Practical case: Multi-perimeter intrusion detection

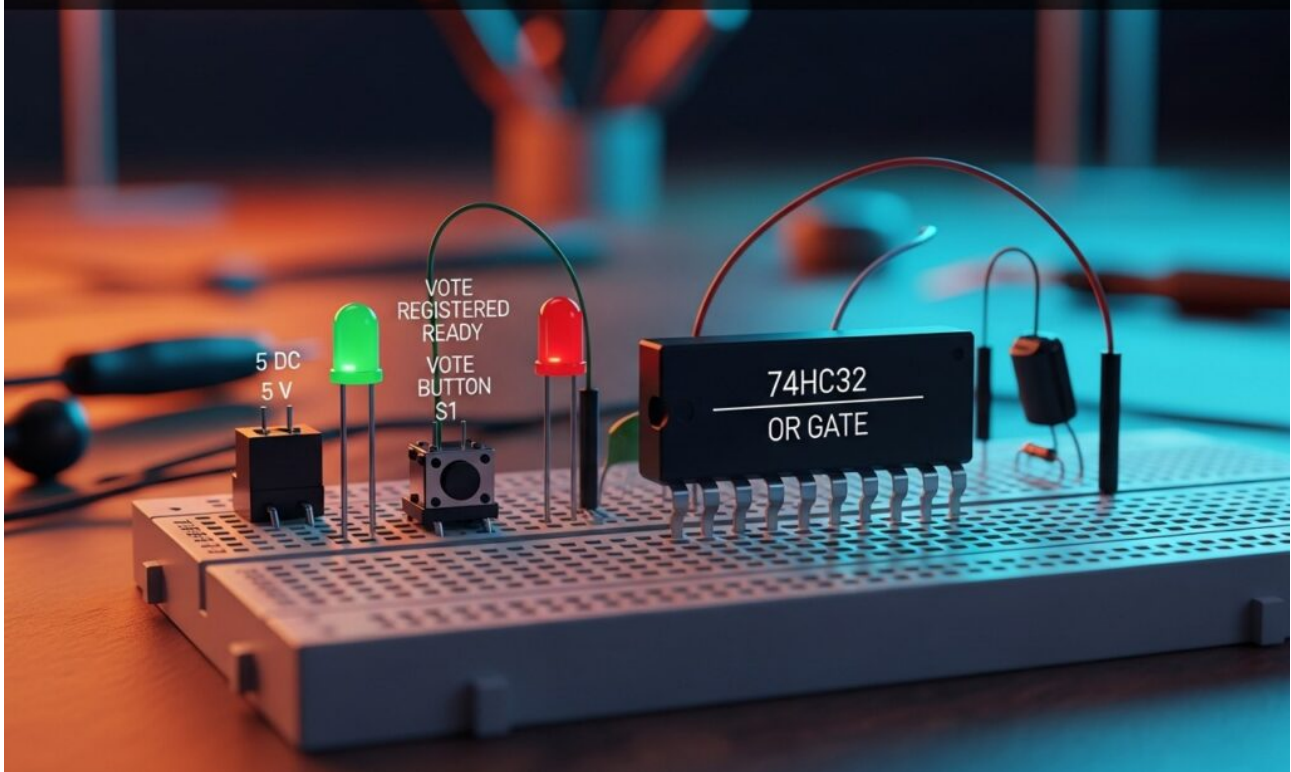
Multi-perimeter intrusion detection



Master Digital Electronics by building a 4-zone security alarm. Use an OR gate to trigger a relay and siren instantly when any single access point is breached.

Practical case: Simple electronic voting system

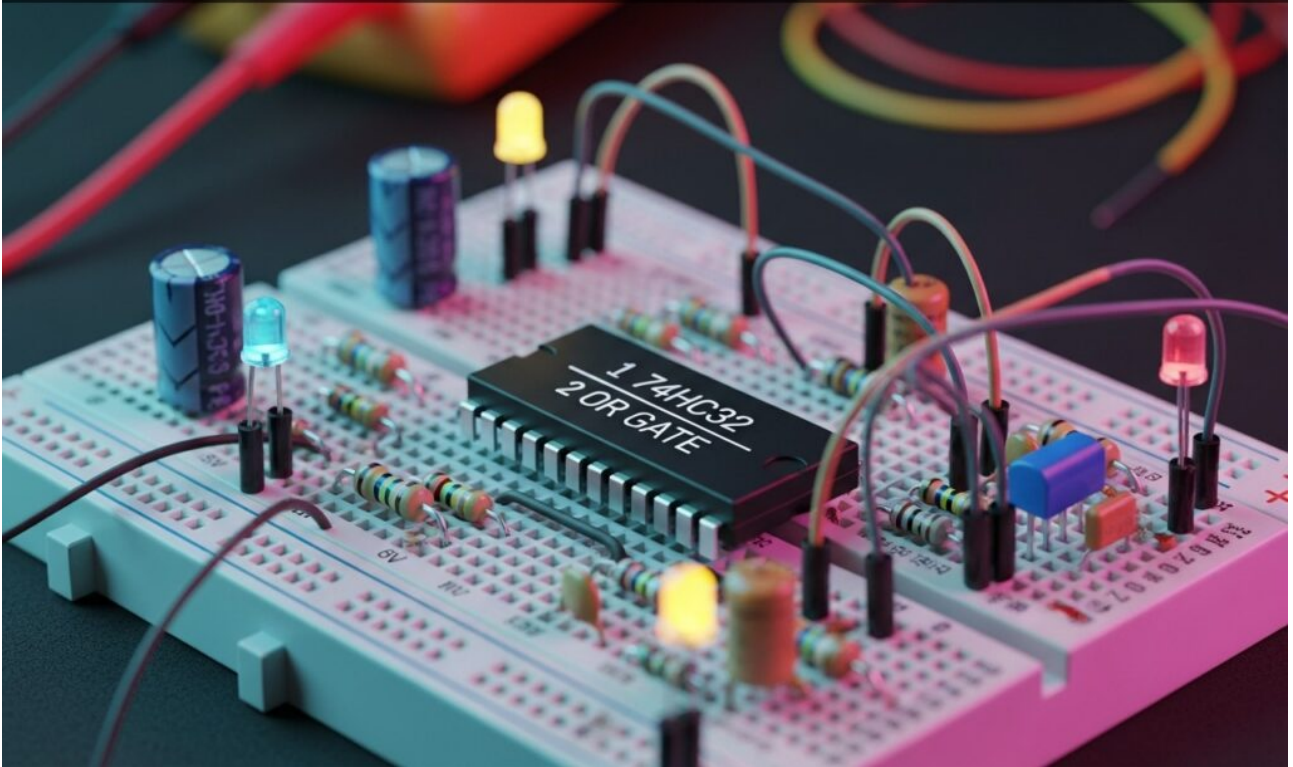
Simple electronic voting system



Master Digital Electronics by building a voting system with an OR gate. Design a circuit that triggers a visual signal when any judge activates a switch.

Practical case: Production Line Fault Monitoring

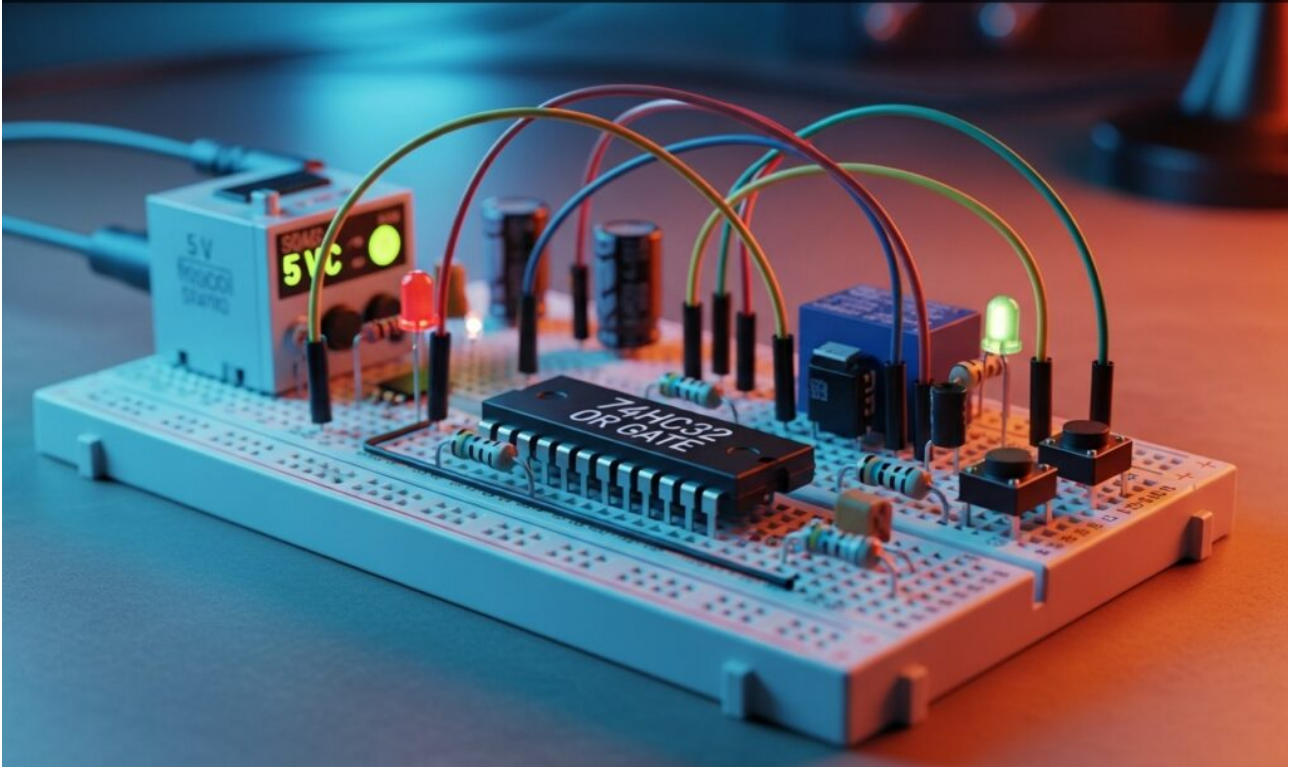
Production Line Fault Monitoring



Master Digital Electronics by building a safety circuit with an OR gate. Stop a conveyor belt instantly when temperature or jam sensors detect faults.

Practical case: Redundant motor starter system

Redundant motor starter system



Master Digital Electronics by building a dual-start motor control circuit. Use an OR gate to trigger a relay and drive heavy loads from two distinct locations.