WhatWeNeedToDO   (And the TOOLS we need)

WIRING

WIRES

- CUT
  - Wire cutter
- STRIP INSULATION
  - Wire Stripper
- FORM / BEND / HOLD
  - Pliers / Needle-nose pliers
- JOIN
  - Twist
  - Solder
  - Attach Terminals
  - Attach connectors
  - Attach to Terminal Strips

SOLDERING

- SOLDER
  - Types of soldering metal alloys: Tin/Lead 70%/30%, Lead=free, 100%lead (plumbing) WithFlux (electronics)
  - Soldering Irons
    - Power / proper temperature
    - Keeping tip clean
  - CLEAN the materials to be soldered
- PRINTED CIRCUIT BOARDS
  - CLEAN board, pins of larger components
  - See HOW TO SOLDER PRINTED CIRCUITS
  - Unsoldering "solder-wick"

USING BREADBOARDS and PROTO BOARDS

See info: HERE

PROJECT CONSTRUCTION:

You may want to create and design new things!   Maybe Interactive Objects, Art Installations, Intelligent machines, Robots, Weather Stations and other automated systems. If you're starting on a more complex project you will be more successful and less frustrated if you do some good PLANNING.   Here are some pointers:

- INTERACTION DESIGN PLANNING

- ELECTRICAL PLANNING
- MECHANICAL PLANNING
- CODE PLANNING