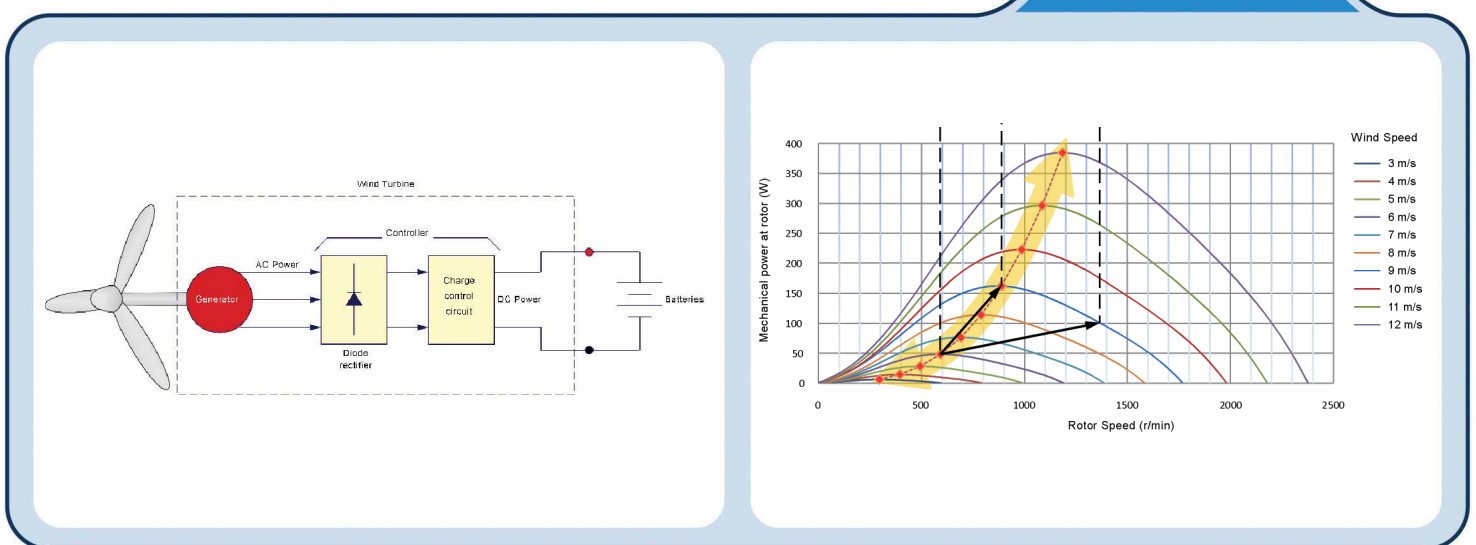


Introduction to Wind Power

Course 86353

The Introduction to Wind Power course explores the small-scale production of electricity using a fixed-pitch, direct-drive wind turbine. In this course, students examine how a wind turbine produces electricity from wind power, as well as how to store this electric energy in batteries to ensure electric power is available when there is no wind or during low-wind periods. In lab exercises, the Lab-Volt Wind Turbine Emulator is used to realistically emulate wind blowing on the rotor of a small wind turbine, causing the wind turbine generator to operate exactly as if it would if subjected to actual wind.



Topic Coverage:

- » Explore wind turbines and small-scale wind power.
- » Study the voltage-speed and torque-current characteristics of a wind turbine generator.
- » Learn how wind power varies with wind speed.
- » Discover how to store in batteries the energy produced by wind turbines.
- » Bonus content: using the equipment in this course, the Lead-Acid Batteries course can also be completed.

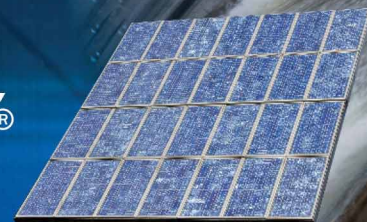
Features and Benefits:

- » Real wind turbine emulation inside your classroom!
- » Features a real wind turbine generator to study complete behavior of an actual wind turbine.

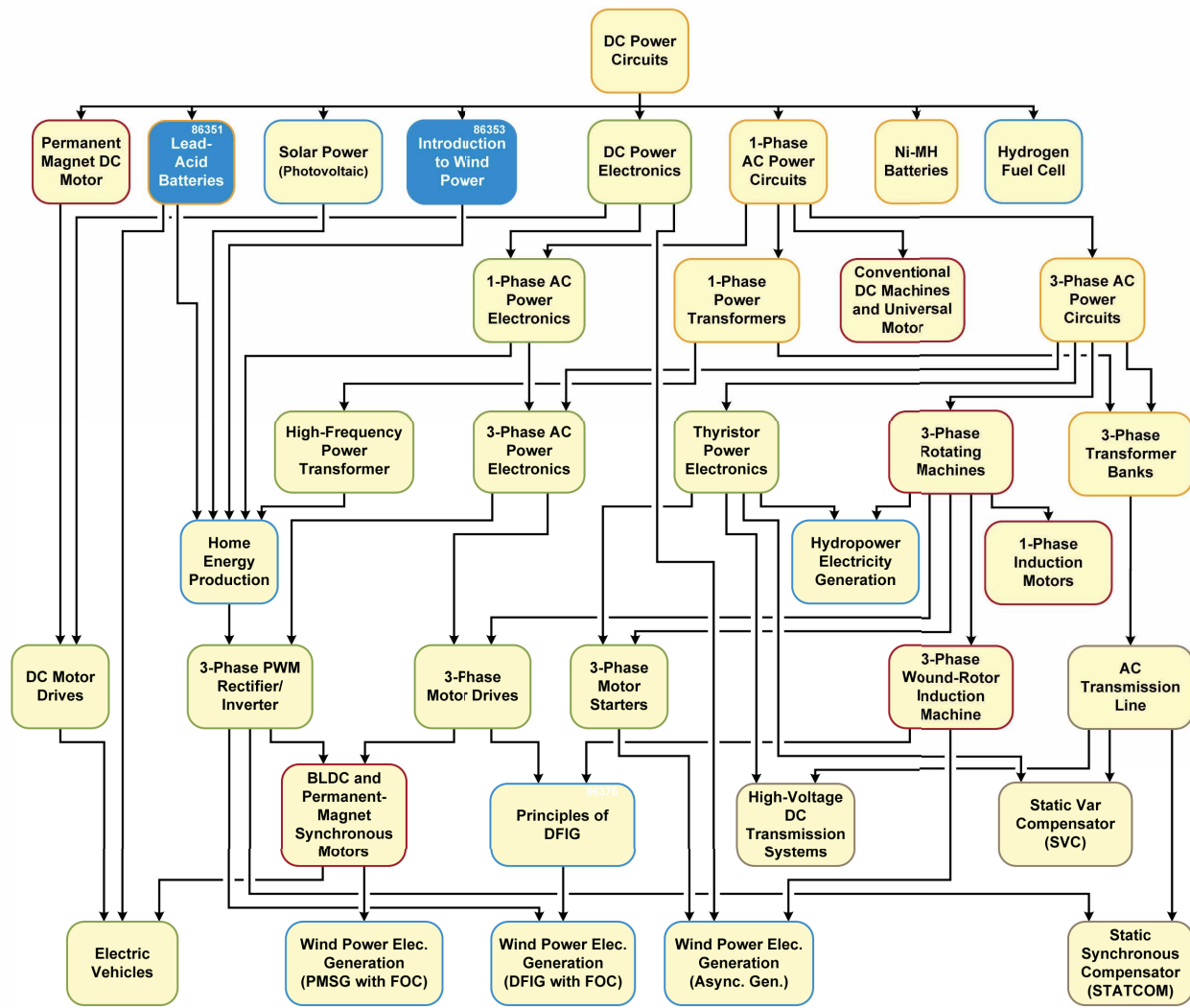
4Q DYNAMOMETER
POWER SUPPLY



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Lab-Volt Electric Power Technology Training Program



Equipment

Qty	Model	Description	Qty	Model	Description
1	8131	Three-Module Workstation	1	8960-D	Four-Quadrant Dynamometer/Power Supply
1	8216	Wind Turbine Generator/Controller	1	86353/-1	Student Manual/Instructor Guide
1	8311	Resistive Load			Bonus content
1	8801	Lead-Acid Batteries	1	86351/-1	Student Manual/Instructor Guide
1	8802-1	Lead-Acid Battery Pack			
1	8942	Timing Belt			
1	8951-L	Connection Leads			

Lab-Volt reserves the right to make product improvements at any time and without notice. **Note:** A computer is required to perform the exercises.

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