Build skills for wind turbine operation, maintenance, and troubleshooting

FESTO





Hands-on. Safe. Realistic.

BZEE develops certified industry-relevant training courses to promote excellence in the wind energy sector. Future wind turbine service technicians can build and sharpen their expertise with wind turbine systems and wind energy technology thanks to learning solutions by Festo Didactic.

Extensive practical experimentation on realistic, yet didactic equipment is key to learning success.

Future BZEE wind turbine technicians can use our didactic learning solutions to build and sharpen their skills in wind turbine hydraulics, mechanics, and electronics/electrical systems.

Festo Didactic is a BZEE recommended training equipment provider.

Refer to the matrix on next page to see suggested learning solutions for specific BZEE courses.

You can also see these solutions in our Wind Power Training Demo Room:

→ bit.ly/Wind-Power-Training-Demo-Room

For complete product details:

- → www.festo-didactic.com
- → labvolt.festo.com

Contact a Festo Didactic sales representative to design or expand your wind power training facilities.

Matrix BZEE courses / Festo Didactic products

BZEE- Code	BZEE Course	Nacelle – Wind Turbine Learning System	<u>Electrical/Hydraulic</u> Pitch Hubs	Hydraulics <u>TP 501, 502, 601, 602, 701, 702</u>	FluidSIM (simulation software)	Mechanical Drives Learning System	Electromechanical systems (EMS)*	Wind Power TP 8012	Industrial Wiring*	Basic Motor Controls TP 1221	Servo Brake and Drive System TP 1410	Sensor Technology <u>TP 1311</u> and <u>TP 1312</u>	FACET Electronics Learning System*	Fund. of Electricity/Electronics TP 1011
Wind to the	- marked -													
-MEC-02	e mechanics Mechanical systems and components – basics	ν,												
-MEC-02	Inspection of bearings, shafts, gears	X	X X			X X								
-MEC-04	Brake systems maintenance	X	^	х		X								
-MEC-05	Lubricants, filter technology, oil analysis	X	Х	X		X								
-MEC-06	Power drive sockets (hydraulic, electric, mechanical)	х				^								
-MEC-07	Function and maintenance of yaw systems	х												
Wind turbin	e hydraulics Hydraulics principles	х	х	х	x									
-HYD-02	Assembly/maintenance of hydraulic units	X	X	x	X									
-HYD-03	Assembly/maintenance of hydraulic pumps & valves	X	X	x	X									
-HYD-04	Assembly/maintenance of hydraulic systems	Х	Х	х	x									
-HYD-05	Assembly/maintenance of electrohydraulic controls	Х	X	х	x									
-HYD-06	Assembly/maint. of prop. hydr. controls & servo valves	х	х	х	х									
-HYD-07	Assembly/maint. of hydraulic pitch and brake systems	х	х	х	х									
-HYD-08	Assembly/maint. of hydrodynamic/hydrokinetic drives				х									
	,				1	1	I	I		I	I			I
Wind turbin	e electronics and electrical systems			I	I	I	I	I		I	I			I
-ELT-01	Principles of electrical engineering						Х						Х	Х
-ELT-04	Electrically skilled person for specified assembly assignments						Х		Х				Х	Х
-ELT-09	Generators and electric motors	Х	Х				Х	Х		Х	Х			
-ELT-10	Transformers						Х							
-ELT-11	Inverter maintenance and troubleshooting	Х	Х				Х	Х		Х				
-ELT-12	Electrical measurement techniques	Х	Х				Х	Х	Х	Х	Х		Х	Х
-ELT-13	Sensor installations in wind turbines	Х										Х		
-ELT-14	Wind turbine electronics	X					Х						Х	Х
-ELT-15	Wind farm network	Х												
Wind energy technology														
-WET-01	WT technology – systems and components	Х	Х				Х		Х	Х				
-WET-02	Wind turbine aerodynamics	х	х											

^{*} This learning solution cannot be delivered to European countries that require CE compliance.