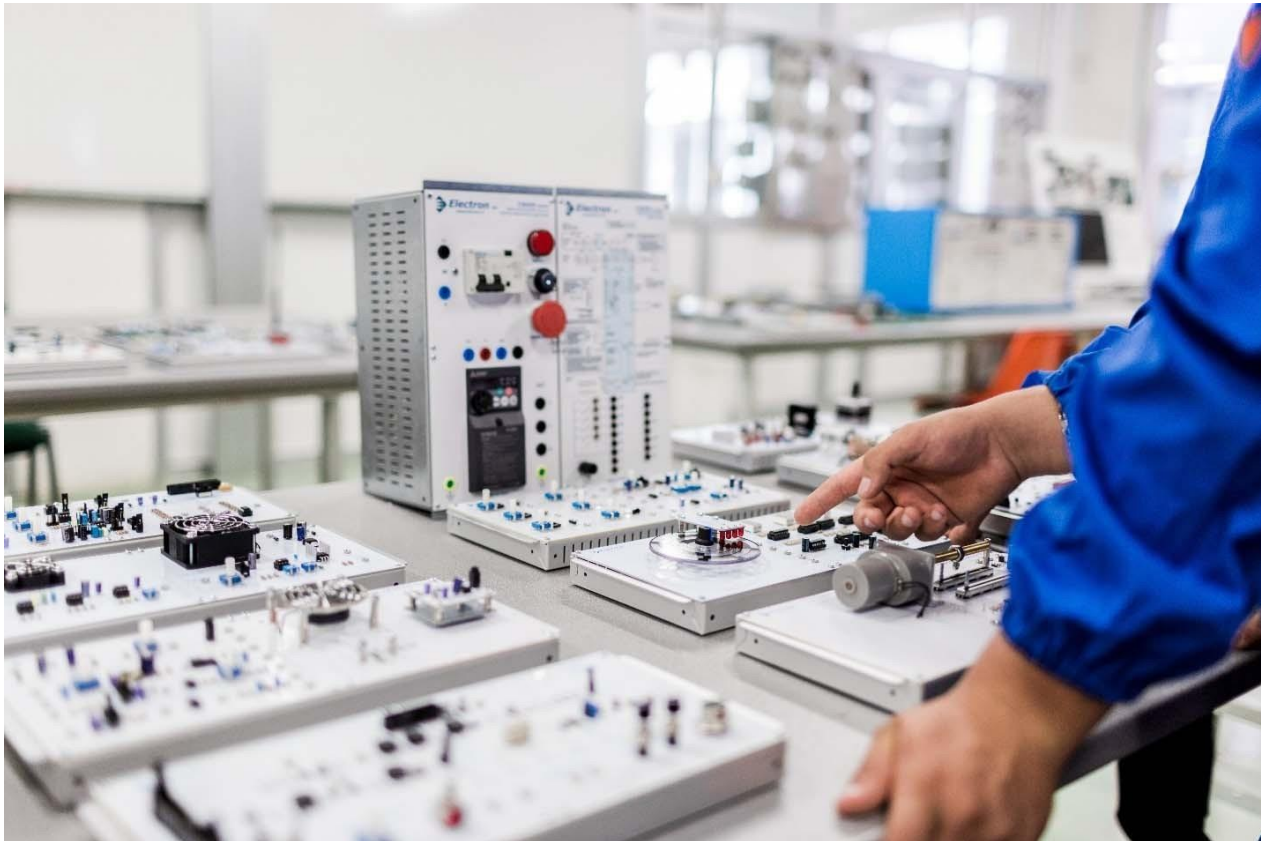




## Lab 8 - CONTROL & POWER ELECTRONICS



This laboratory includes various modules to experiment circuits and principles commonly recurrent in the field of power electronics, transducers, and controls.

It is organized in a modular form and consists of a set of experiment boards with a common power supply.

Also included are actuators and interface with software for connecting the modules to a PC.

Each module is provided with a user manual that explains its characteristics and use.

### TRAINING STATIONS LIST

8.1	TRANSDUCERS AND CONTROLS
8.2	PROCESS CONTROL
8.3	POWER ELECTRONICS

# Equipment List

LAB N°	Item N°	TITLE	CODE	Total Qty	Stud WS 1	Stud WS 2	Stud WS 3	Stud WS 4	Stud WS 5	Stud WS 6	Stud WS 7	Stud WS 8	Teach WS	LAB
<b>CONTROL &amp; POWER ELECTRONICS LABORATORY</b>														
8 For 16 to 32 students working at the same time. See complete catalogue to see product description and other details.														
<b>TRANSUCERS AND CONTROLS ELECTRONICS</b>														
<b>8 TRANSUCERS AND CONTROLS BASIC C35B</b>														
8	1	1 TEMPERATURE CONTROL TRAINER	B3510A C3510A	4	1	1			1	1				
8	1	2 LIGHT CONTROL TRAINER	B3510C C3510C	4	1	1			1	1				
8	1	3 SPEED CONTROL TRAINER	B3510G C3510G	4	1	1			1	1				
8	1	4 SOUND AND VIBRATION TRANSUCERS TRAINER	B3510H C3510H	4	1	1			1	1				
8	1	5 POSITION CONTROL TRAINER	B3510J C3510J	4	1	1			1	1				
8	1	6 ON/OFF SENSORS AND ACTUATORS TRAINER	B3510L C3510L	4			1	1			1	1		
8	1	7 AIR FLOW MEASUREMENTS TRAINER	B3510M C3510M	4			1	1			1	1		
8	1	8 DIFFERENTIAL PRESSURE TRANSUCERS TRAINER	B3510N C3510N	4			1	1			1	1		
8	1	9 ROTATIONAL POSITION ENCODERS TRAINER	B3510P C3510P	4			1	1			1	1		
8	1	10 FLUID LEVEL TRANSUCERS TRAINER	B3510U C3510U	4			1	1			1	1		
8	1	11 AC DC POWER SUPPLY	C12 PS	8	1	1	1	1	1	1	1	1	1	
<b>8 PROCESS CONTROL TRAINER</b>														
8	2	1 PROCESS SIMULATOR	B3510D C3510D	4	1	1			1	1				
8	2	2 PROCESS CONTROLLER TRAINER	B3510E C3510E	4	1	1			1	1				
8	3	3 FAULT PROGRAMMER	FS1E	1										1
8	3	4 AC DC POWER SUPPLY	C12 PS	8	1	1	1	1	1	1	1	1	1	
<b>8 TRANSUCERS AND CONTROLS (EXPANSION) C35U</b>														
8	3	1 R.L.C, MEASUREMENTS TRAINER	B3510B	2	1				1					
8	3	2 STRAIN GAUGE TRAINER	B3510F C3510F	2	1				1					
8	3	3 ULTRASONIC TRANSUCERS TRAINER	B3510I	2		1				1				
8	3	4 VARIABLE CAPACITANCE TRANSUCERS (LVCT) TRAINER	B3510K	2		1				1				
8	3	5 LINEAR VARIABLE DIFFERENTIAL TRANSFORMER TRAINER	B3510Q	2			1				1			
8	3	6 AC MOTOR CONTROL TRAINER	B3510S	4			1	1			1	1		
8	3	7 STEPPER MOTOR CONTROL TRAINER	B3510T C3510T	4			1	1			1	1		
<b>8 POWER &amp; CONTROLS ELECTRONICS</b>														
<b>8 POWER ELECTRONICS (BASIC) B36B</b>														
8	4	1 POWER ELECTRONICS TRAINER	C3600	2	1				1					
8	4	2 INDUSTRIAL ELECTRONICS TRAINER	C3601	4		1	1			1	1			
8	4	3 DC MOTOR CONTROL WITH THYRISTORS	C3607	2				1				1		
8	4	4 AC MOTOR CONTROL TRAINER (PWM)	C3620 GS	2				1				1		
8	4	5 DC MOTOR CONTROL TECHNOLOGY TRAINER	B3650	2	1				1					
8	4	6 SQUIRREL CAGE MOTOR	A4220SL	2	1				1					
8	4	7 DC COMPOUND EXCITATION MOTOR-GENERATOR	A4240SL	2	1				1					
8	4	8 BRAKE GENERATOR	A4430S	2	1				1					
8	4	9 VARIABLE LOAD FOR BRAKE GENERATOR	A4430RS	2	1				1					
8	4	10 TACHO GENERATOR	A4880	2	1				1					
<b>8 POWER &amp; CONTROLS ELECTRONICS EXPANSION B36U</b>														
8	5	1 DC MOTOR CONTROL TRAINER (PWM)	B3610G	2	1				1					
8	5	2 TACHO GENERATOR / BRAKING UNIT	B3611	2		1				1				
8	5	3 PC INTERFACE FOR DC MOTOR CONTROLLERS	C3615	2		1				1				
8	5	4 STEPPER MOTOR TRAINER	B3626	2			1				1			
8	5	5 BRUSHLESS DC MOTOR TRAINER	B3628	2			1				1			
8	5	6 ANALOG SERVO SYSTEM TRAINER	B3660	2				1				1		
8	5	7 DIGITAL SERVO SYSTEM TRAINER	B3665	2				1				1		
<b>FURNITURE, METERS, POWER SUPPLIES &amp; ACCESSORIES</b>														
<b>FM FURNITURE</b>														
FM	1	1 WORK TABLE	F1110A	8	1	1	1	1	1	1	1	1		
FM	1	2 MOBILE LOWER CABINET	F11 4146	8	1	1	1	1	1	1	1	1		
FM	1	3 STUDENT STOOL	F11 1718	24	3	3	3	3	3	3	3	3		
FM	1	4 TEACHER'S DESK	F11 2126	1									1	
FM	1	5 TEACHER'S CHAIR	F11 5000	1									1	
FM	1	6 CABINET FOR TOOLS & INSTRUMENTS	F11 3310	4										4
FM	1	7 TROLLEY	F1151 R1	4										4
<b>FM MEASURING INSTRUMENTS &amp; POWER SUPPLIES</b>														
FM	2	1 ANALOGUE MULTIMETER	AM 7080	4										4
FM	2	2 DIGITAL MULTIMETER	DM Y68	4										4
FM	2	6 DUAL TRACE OSCILLOSCOPE	AO HZ4318	2										2