























































Activity	Start Date	End Date	Timeline	Amer Paric	Mohamed Rekaby	Alexander Wilms	Start Date	Duration
Entire Project	4/11/2017	10/1/2017					0	183
Refurbishing the hardware	4/11/2017	6/7/2017		x	x	x	0	67
First meeting with Prof. Rogalski	4/11/2017	4/11/2017		x	x	x	0	10
Writing documentation	4/11/2017	10/6/2017		x	x	x	0	188
Meeting with Mr. Weinerth to get to know the system	4/19/2017	4/19/2017		x	x	x	8	10
Updated the schematic wiring diagram & sent it to Prof. Rogalski, switched to PFC200	4/25/2017	4/25/2017				x	14	10
Discuss PLC card selection with Mr Weinerth	4/25/2017	4/25/2017				x	14	10
Testing of the old sensors	4/26/2017	4/26/2017		x	x	x	15	10
Sent initial parts list to Prof. Rogalski	5/3/2017	5/3/2017				x	22	10
1st purchase at Bauhaus	5/3/2017	5/3/2017		x		x	22	10
Prof. Rogalski sent the parts list to Wago	5/4/2017	5/4/2017					23	10
Mr. Weinerth received the offer from Wago, we chose to use external relays	5/10/2017	5/10/2017					29	10
2nd purchase at Bauhaus	5/11/2017	5/11/2017		x		x	30	10
Preparing the midterm presentation	6/2/2017	6/2/2017		x	x	x	52	10
Setup of PLC, starting to create functions & visualization	6/2/2017	6/2/2017			x		52	10
Purchase of acrylic glue & Repair of column	6/6/2017	6/6/2017		x			56	10
Holding the presentation, test the glued column -> watertight, but overflow at the top	6/7/2017	6/7/2017		x	x		57	10
Wago PLC arrived	6/29/2017	6/29/2017					79	10
Creation of Gantt chart	8/4/2017	8/4/2017				x	115	10
Writing to SIKA sales engineer for pressure sensor offer	8/4/2017	8/4/2017				x	115	10
Successful test run of the PLC	8/7/2017	8/11/2017			x	x	118	14
Cutting PLC mounting rails & installing them the PLC in the cabinet	8/7/2017	8/11/2017			x	x	118	14
Porting existing PLC logic from CoDeSys to e!Cockpit and adapting it	8/7/2017	8/11/2017			x	x	118	14
Selecting PLC case and display mount	8/7/2017	8/9/2017			x	x	118	12
Ordering PLC case	8/9/2017	8/9/2017			x	x	120	10
Ordering display mount	8/9/2017	8/9/2017				x	120	10
Received offer from SIKA	8/10/2017	8/10/2017					121	10
Recreating the CoDeSys visualizations in e!COCKPIT and improving them	8/10/2017	9/20/2017			x	x	121	51
Selecting the 2nd pressure sensor from ELDOER & sending order to the university department in charge of more expensive purchases	8/10/2017	8/14/2017				x	121	14
Getting the touch panel to work	8/10/2017	8/18/2017			x		121	18
Wiring the PLC	8/14/2017	8/18/2017					125	14
Moving the PLC to D21	8/14/2017	8/14/2017			x	x	125	10
Mounting the touch panel	8/16/2017	8/16/2017			x	x	127	10
Removal of all old wires	8/16/2017	8/16/2017				x	127	10
Planning the wiring of the valve position sensor & soldering the voltage divider	8/16/2017	8/22/2017			x	x	127	16
Writing to the university department responsible for purchases to find out about the status of the Ebay order	8/17/2017	8/18/2017				x	128	11
Ordering pressure sensor from BD SENSORS	8/18/2017	8/18/2017				x	129	10
Configuring PID function block	8/18/2017	8/18/2017			x		129	10
3rd purchase at Bauhaus	9/7/2017	9/7/2017		x			149	10
Installation of a new connector and pipes for the pump	9/7/2017	9/7/2017		x			149	10
BD SENSORS pressure sensor arrived	9/8/2017	9/8/2017		x			150	10

Testing pressure sensor with PLC	9/10/2017	9/13/2017		x			152	13
Testing pump being controlled via PLC	9/11/2017	9/13/2017		x	x	x	153	12
Installation of the pressure sensor	9/11/2017	9/11/2017		x	x		153	10
Modeling of the plant and controller design	9/11/2017	9/22/2017		x	x		153	21
4rd purchase at Bauhaus	9/18/2017	9/18/2017		x			160	10
Removal of the Venturi meter and installation of new hose	9/20/2017	9/20/2017		x			162	10
5th shopping in Bauhaus, purchasing a funnel and a hose to make filling the reservoir easier	9/26/2017	9/26/2017		x	x	x	168	10
Cleaning the filling station	9/26/2017	9/26/2017		x	x	x	168	10
Removal of all superfluous parts	9/26/2017	9/26/2017		x			168	10
Finalizing The Report	9/26/2017	10/3/2017		x	x	x	168	17
Acceptance test	9/28/2017	9/28/2017		x	x	x	170	10
Cleaning the filling station	9/28/2017	9/28/2017		x	x		170	10
Preparing final presentation	9/28/2017	9/28/2017		x	x	x	170	10
Bringing system to D21	cancelled		#VALUE!				#VALUE!	#VALUE! !