

TSV Delivered (15%)	TSV 1	Fix "Active Light" on Control PCB (5%)	TSV 1.1	Verify and document correct working of active light (25%)						
			TSV 1.2	Circuit/Code corrected (25%)						
			TSV 1.3	Error Found in code/circuit (25%)						
			TSV 1.4	Verified existence of problem in light (25%)						
	TSV 2	AMS Delivered (20%)	TSV 2.1	Testing new AMS boards (60%)	TSV 2.1.1	Record AMS boards status (25%)				
					TSV 2.1.2	28 Functional AMS boards (25%)				
					TSV 2.1.3	verify/calibrate using the AMSVU (25%)				
			TSV 2.2	AMS boards watchdog frequency recognized (40%)	TSV 2.1.4	Document boards and their current status (25%)				
			TSV 2.2.1	Fixed AMS boards watchdog frequency (50%)	TSV 2.2.2	Record list of parameters (watchdog frequency) of AMS boards which are not recognized (50%)				
					TSV 2.2.2.1	Attach crystal to PacMAN (50%)				
	TSV 3	PACKMAN Delivered (25%)	TSV 3.1	Replace Crystal on PacMAN with better part (25%)	TSV 3.1.1	Order new crystal (50%)				
					TSV 3.1.2	4 PACMan with potential Workability (50%)				
			TSV 3.2	4 PACMan working with test unit (25%)	TSV 3.2.1	Document current status of two PacMAN (50%)				
					TSV 3.2.2	Establish UART communication with TSV (50%)				
			TSV 3.3	Functional USB UART (25%)	TSV 3.3.1	Establish communication with USB UART to realterm (50%)				
					TSV 3.3.2	Test circuit with fixed lower limit in code (35%)				
			TSV 3.4	Limit lower boundary of cell voltage (25%)	TSV 3.4.1	Fix code for lower limit (35%)				
					TSV 3.4.2	Determine source of problem for limitation (30%)				
			TSV 4	Individual PACKs Delivered (15%)	TSV 4.1	Update Fuse in Packs (200A to 300A) (25%)	TSV 4.1.1	Document risks of new fuses associated with other HV system (25%)		
							TSV 4.1.2	Document correct functionality of packs with new fuses (25%)		
	TSV 4.1.3	Replace old fuses with new fuses (25%)								
	TSV 4.1.4	Order/procure correct fuses (25%)								
	TSV 4.2	Clocks working properly in all Packs (25%)			TSV 4.2.1	verify correct working of packs 3 and 4 (25%)				
					TSV 4.2.2	Fixed Pack 3 clock (25%)				
					TSV 4.2.3	Fixed Pack 4 clock (25%)				
					TSV 4.2.4	Record current status of packs 3 and 4 clock (25%)				
	TSV 4.3	Pack 1 Rewired (25%)			TSV 4.3.1	Replaced Wiring of Pack 1 (50%)				
					TSV 4.3.2	List of Wires that need to be changed (50%)				
	TSV 4.4	Anderson connectors Replaced (25%)			TSV 4.4.1	Connectors Replaced (35%)				
					TSV 4.4.2	Order new connectors (30%)				
	TSV 4.4.3	Make a list of the parts used which are discontinued (35%)	TSV 5.1.1	Engrave individual parts (50%)						
			TSV 5.1.2	List of parts to be engraved (50%)						
	TSV 5	Mechanical Parts Delivered (10%)	TSV 5.2	Firewall Connected (50%)	TSV 5.2.1	Connectors changed (50%)				
					TSV 5.2.2	Connectors Ordered (Mechanical team) (50%)				
	TSV 6	SOC Algorithm Programming (15%)	TSV 6.1	Discharging Algorithm (50%)	TSV 6.1.1	Test plan (25%) Shuyu Jia				
					TSV 6.1.2	Circuit Modeling (25%) Shuyu Jia				
					TSV 6.1.3	Data collection(25%) Shuyu Jia				
			TSV 6.2	Charging Algorithm (50%)	TSV 6.1.4	Data analysis (25%) Shuyu Jia				
					TSV 6.2.1	Test plan (25%) Shuyu Jia				
					TSV 6.2.2	Circuit Modeling (25%) Shuyu Jia				
	TSV 6.2.3	Data collection (25%) Shuyu Jia	TSV 6.2.4	Data analysis (25%) Shuyu Jia						
	TSV 7	Management (10%)	TSV 7.1	PDR Delivered (20%)						
			TSV 7.2	CDR Delivered (20%)						
			TSV 7.3	User Manual Delivered (20%)						
			TSV 7.4	Maintenance Manual Delivered (20%)						
			TSV 7.5	Final Poster Delivered (20%)						

Dyno	Dyno 1	Dyno Room Setup (40%)	Dyno 1.1	Motor installation & setup (20%)
			Dyno 1.2	GLV installation & setup (20%)
			Dyno 1.3	Cooling installation & setup (20%)
			Dyno 1.4	TSI replacement installed (20%)
			Dyno 1.5	Dyno software setup (20%)
	Dyno 2	System integration in Dyno room (30%)		
	Dyno 3	Dyno Software update (30%)	Dyno 3.1	Document current bug (40%)
			Dyno 3.2	Fix the bugs (60%)
	Dyno 4	Management (10%)	Dyno 4.1	PDR Delivered (20%)
			Dyno 4.2	CDR Delivered (20%)
Dyno 4.3			User Manual Delivered (20%)	
Dyno 4.4			Maintenance Manual Delivered (20%)	
Dyno 4.5			Final Poster Delivered (20%)	
VSCADA	SCADA 1	Store CAN data (20%)	SCADA 1.1	Install PeeWee (10%)
			SCADA 1.2	Determine the sampling rate of CAN data (10%)
			SCADA 1.3	Create the data file using PeeWee (20%)
			SCADA 1.4	Create Sqlite Scheme (20%)
			SCADA 1.5	Create PeeWee models (20%)
			SCADA 1.6	Create functions that store CAN data into database (20%)
	SCADA 2	Monitor Data (15%)	SCADA 2.1	Determine if any values from CAN data exceed the maximum allowed values and flag them in database (30%)
			SCADA 2.2	Parse Binary CAN data to a readable form (70%)
	SCADA 3	Display CAN data for driver (20%)	SCADA 3.1	Create a display that can cycle through views (30%)
			SCADA 3.2	Display important data values (30%)
			SCADA 3.3	Display data values that have caused a fault (30%)
			SCADA 3.4	Order new display that will fit in the car (10%)
	SCADA 4	Integrate Pi with the Car (20%)	SCADA 4.1	Confirm that Pi stays in high power mode (25%)
			SCADA 4.2	Test receive data from TSV (25%)
			SCADA 4.3	Test receive data from TSI (25%)
			SCADA 4.4	Test that a user can SSH into Pi from laptop (25%)
	SCADA 5	Interact with Pi in car (15%)	SCADA 5.1	Setup Wifi module on Pi (50%)
			SCADA 5.2	Test range of SSH, if necessary, integrate Wifi-extender Module (50%)
	SCADA 6	Management (10%)	SCADA 6.1	PDR Delivered (20%)
			SCADA 6.2	CDR Delivered (20%)
			SCADA 6.3	User Manual Delivered (20%)
			SCADA 6.4	Maintenance Manual Delivered (20%)
			SCADA 6.5	Final Poster Delivered (20%)

GLV System Delivered	GLV 1	Functional SSOK lamp (45%)	GLV 1.1	SSOK Lamp Selected & Ordered (20%)
			GLV 1.2	SSOK Lamp wired (40%)
			GLV 1.3	SSOK Lamp tested (40%)
	GLV 2	Functional GLV in new box (45%)	GLV 2.1	Acquire the new GLV box from ME (20%)
			GLV 2.2	Rewire GLV in the new box (40%)
			GLV 2.3	Tested GLV in the new box (40%)
	GLV 3	Management (10%)	GLV 3.1	PDR Delivered (20%)
			GLV 3.2	CDR Delivered (20%)
			GLV 3.3	User Manual Delivered (20%)
			GLV 3.4	Maintenance Manual Delivered (20%)
GLV 3.5			Final Poster Delivered (20%)	
Cooling System Delivered	Cooling 1	Cooling System set up in Dyno room (45%)	Cooling 1.1	DC/DC converter selected & Ordered (40%)
			Cooling 1.2	Integrate the converter with the motor (60%)
			Cooling 2.1	Acquire new cooling system box (20%)
	Cooling 2	Functional Cooling system in new box (45%)	Cooling 2.2	Integrate current cooling system in the box (40%)
			Cooling 2.3	Functional cooling system with the motor (40%)
			Cooling 3.1	PDR Delivered (20%)
	Cooling 3	Management (10%)	Cooling 3.2	CDR Delivered (20%)
			Cooling 3.3	User Manual Delivered (20%)
			Cooling 3.4	Maintenance Manual Delivered (20%)
			Cooling 3.5	Final Poster Delivered (20%)

Management	MGMT 1	Weekly Status Report (10%)	MGMT 1.1	Weekly Status Report - week 1 (7.14%)
			MGMT 1.2	Weekly Status Report - week 2 (7.14%)
			MGMT 1.3	Weekly Status Report - week 3 (7.14%)
			MGMT 1.4	Weekly Status Report - week 4 (7.14%)
			MGMT 1.5	Weekly Status Report- week 5 (7.14%)
			MGMT 1.6	Weekly Status Report- week 6 (7.14%)
			MGMT 1.7	Weekly Status Report- week 7 (7.14%)
			MGMT 1.8	Weekly Status Report- week 8 (7.14%)
			MGMT 1.9	Weekly Status Report- week 9 (7.14%)
			MGMT 1.10	Weekly Status Report- week 10 (7.14%)
			MGMT 1.11	Weekly Status Report- week 11 (7.14%)
			MGMT 1.12	Weekly Status Report- week 12 (7.14%)
			MGMT 1.13	Weekly Status Report- week 13 (7.14%)
			MGMT 1.14	Weekly Status Report- week 14 (7.14%)
	MGMT 2	ECE documentation Delivered (20%)	MGMT 2.1	PDR Delivered (20%)
			MGMT 2.2	CDR Delivered (20%)
			MGMT 2.3	User Manual Delivered (20%)
			MGMT 2.4	Maintenance Manual Delivered (20%)
			MGMT 2.5	Final Poster Delivered (20%)
	MGMT 3	Photo Management (5%)	MGMT 3.1	Document all the required photographs that need to be taken (50%)
			MGMT 3.2	Take all the pictures (50%)
	MGMT 4	Sticker Management (5%)	MGMT 4.1	Document all the required stickers that need to place on the car (40%)
			MGMT 4.2	Select and order/make stickers (30%)
			MGMT 4.3	Place all the stickers (30%)
	MGMT 5	Fuse Verification (10%)	MGMT 5.1	Document all the existing fuses on the car (25%)
			MGMT 5.2	Document /cross reference existing fuses with the rules (25%)
			MGMT 5.3	Select and order fuses (25%)
			MGMT 5.4	Replace fuses (25%)
	MGMT 6	ATP Delivered (10%)	MGMT 6.1	Document all the rules and requirements in section EV 10 (100%)
	MGMT 7	Video (10%)		
			MGMT 8.1	Program Submission (2%) 12/08/2017
		MGMT 8.2	ESF-1 (10%) 11/10/2017	
		MGMT 8.3	Team Photo (1%) 12/08/2017	
		MGMT 8.4	Interim Project Management Report (5%) 02/02/2018	
		MGMT 8.5	Impact Attenuator Data (15%) 02/09/2018	

MGMT 8	Formula Electric Forms Delivered (20%)	MGMT 8.6	Site Pre-Registration (1%) 02/16/2018		
		MGMT 8.7	Failure Mode Effects Analysis (10%) 02/23/2018		
		MGMT 8.8	ESF-2 (10%) 02/23/2018		
		MGMT 8.9	Design Reports (15%) 03/23/2018		
		MGMT 8.10	Sustainability Report (15%) 03/23/2018		
		MGMT 8.11	Design Specification Sheet (15%) 03/23/2017		
		MGMT 8.12	Mentor Request (1%)		
		MGMT 9	Weekly WBS Updates (10%)	MGMT 9.1	Weekly WBS Update - week 1 (7.14%)
				MGMT 9.2	Weekly WBS Update - week 2 (7.14%)
				MGMT 9.3	Weekly WBS Update - week 3 (7.14%)
				MGMT 9.4	Weekly WBS Update - week 4 (7.14%)
				MGMT 9.5	Weekly WBS Update - week 5 (7.14%)
				MGMT 9.6	Weekly WBS Update - week 6 (7.14%)
				MGMT 9.7	Weekly WBS Update - week 7 (7.14%)
MGMT 9.8	Weekly WBS Update - week 8 (7.14%)				
MGMT 9.9	Weekly WBS Update - week 9 (7.14%)				
MGMT 9.10	Weekly WBS Update - week 10 (7.14%)				
MGMT 9.11	Weekly WBS Update - week 11 (7.14%)				
MGMT 9.12	Weekly WBS Update - week 12 (7.14%)				
MGMT 9.13	Weekly WBS Update - week 13 (7.14%)				
MGMT 9.14	Weekly WBS Update - week 14 (7.14%)				
			* not all the MGMT 8 are required for ECE		

TSI Delivered	TSI 1	TSI Integration (15%)	TSI 1.1	Updated TSI in System Diagram (10%)		
			TSI 1.2	Status Signals (10%)	TSI 1.2.1	RTDS (Ready to Drive Signal) Delivered
					TSI 1.2.2	TSAL (Left and Right) Delivered
					TSI 1.2.3	Brake Light Delivered
			TSI 1.3	Foot Pedals (20%)		
			TSI 1.4	Cockpit (20%)		
	TSI 1.5	Accumulator (20%)				
	TSI 1.6	Motor Controller (20%)				
	TSI 2	Enclosure Delivered (10%)	TSI 2.1	Enclosure Assembled with Necessary Connections (30%)		
			TSI 2.2	Parts Ordered (10%)		
			TSI 2.3	New Connector Plate Delivered (10%)		
			TSI 2.4	Connector Plate Schematic (20%)		
			TSI 2.5	Enclosure Schematic (30%)		
	TSI 3	TSI Internals Delivered (15%)	TSI 3.1	Calibration of Current Sensor (20%)		
			TSI 3.2	IMD Test (20%)		
			TSI 3.3	TSI Internals Built/Wired (20%)		
			TSI 3.4	Internal Wiring Diagram (40%)		
	TSI 4	Board Delivered (25%)	TSI 4.1	Throttle Plausibility (20%)	TSI 4.1.1	Throttle Isolation (25%)
					TSI 4.1.2	APPS 5V Offset Bias (25%)
					TSI 4.1.3	Verification of Open/Short Window Range (25%)
					TSI 4.1.4	Verification of Plausibility Range (25%)
			TSI 4.2	Brake System (20%)	TSI 4.2.1	Brake overtravel delivered (40%)
					TSI 4.2.2	Brake press input (40%)
					TSI 4.2.3	Brake Light Delivered (20%)
			TSI 4.3	Updated Circuit Schematic Delivered (20%)		
			TSI 4.4	PCB Schematic Delivered (20%)		
			TSI 4.5	Test of Old Board (20%)		
	TSI 5	Firmware Delivered (25%)	TSI 5.1	Current Measuring Delivered (20%)		
TSI 5.2			IMD Status Delivered (20%)			
TSI 5.3			Temperature Sensor Delivered (20%)			
TSI 5.4			Communication to VSCADA Delivered (20%)	TSI 5.4.1	Ability to send current measurement (20%)	
				TSI 5.4.2	Ability to send temperature measurement (20%)	
				TSI 5.4.3	Ability to send IMD status (20%)	
				TSI 5.4.4	Ability to send brake overtravel status (20%)	
TSI 5.4.5	Ability to set throttle to 0 from VSCADA (20%)					
TSI 5.5	Safety Loop and Drive States Delivered (20%)	TSI 5.5.1	RTDS Sound Delivered			
TSI 6	Paperwork/Management (10%)	TSI 6.1	PDR Delivered (20%)			
		TSI 6.2	CDR Delivered (20%)			
		TSI 6.3	User Manual Delivered (20%)			
		TSI 6.4	Maintenance Manual Delivered (20%)			
		TSI 6.5	Final Poster Delivered (20%)			
		TSI 6.6	List of Rules			
		TSI 6.7	Parts List/Bill of Materials			
		TSI 6.8	Acceptance Test Plan			