

NAME		STATUS		LOGISTICS	
S.NO	TASK	SUBTASK	STATUS	UPDATE DATE	
1	BFMC KIT	Condition Check Test Run	2	ARRIVED	12/1/2025
1.1	BFMC KIT			COMPLETE	12/10/2025
1.2	BFMC KIT			COMPLETE	12/10/2025
2	TASK	SUBTASK	STATUS	UPDATE DATE	
2.1	Track Design	Race and test track Analysis	COMPLETE	12/11/2025	
2.2	Track Design	Material Analysis	COMPLETE	12/11/2025	
2.3	Track Design	Vendor Approach	COMPLETE	12/12/2025	
2.4	Track Design	BOM	COMPLETE	12/13/2025	
2.5	Track Design	Track Printing	YET TO ARRIVE	12/21/2025	
2.6	Track Design	Developing Own track	COMPLETE	12/16/2025	
2.7	Track Design	3D printng Components	COMPLETE	12/17/2025	
2.8	Track Design	Finalising Track Build	COMPLETE	12/19/2025	
3	TASK	SUBTASK	STATUS	UPDATE DATE	
3.1	Embedded System	STM32 Environment Setup	COMPLETE	12/18/2025	
3.2	Embedded System	Default Firmware Analysis	COMPLETE	12/19/2025	
3.3	Embedded System	Serial Communication Test	COMPLETE	12/20/2025	
3.4	Embedded System	Manual Actuation Control	COMPLETE	12/20/2025	
3.5	Embedded System	PWM Calibration	IN PROGRESS	12/21/2025	
3.6	Embedded System	Failsafe Implementation	IN PROGRESS	12/22/2025	
3.7	Embedded System	Drive Mode States	Planned	-	
4	TASK	SUBTASK	STATUS	UPDATE DATE	
4.1	Software (Pi)	BFMC Codebase Study	COMPLETE	12/12/2025	
4.2	Software (Pi)	Software Baseline Stabilization	COMPLETE	12/14/2025	
4.3	Software (Pi)	Python Runtime Isolation Strategy	COMPLETE	12/17/2025	
4.4	Software (Pi)	Serial Control Module	COMPLETE	12/18/2025	
4.5	Software (Pi)	Control Logic Refactoring	IN PROGRESS	12/20/2025	
4.6	Software (Pi)	FSM Design	PLANNED	—	
4.7	Software (Pi)	Logging & Debug Utilities	PLANNED	—	

5	TASK	SUBTASK	STATUS	UPDATE DATE
5.1	Perception System	Dataset Study (Roboflow)	COMPLETE	12/18/2025
5.2	Perception System	Model Training (Offline)	COMPLETE	12/19/2025
5.3	Perception System	Integration Planning	COMPLETE	12/21/2025
5.4	Perception System	Real-Time Integration	PLANNED (Phase 2)	—

DESCRIPTION	
WORKING CONDITION	DESCRIPTION
NA	
GOOD	Checked if there is any damage occurred while shipping
GOOD	Run manual control tests with BFMC Default program provided
WORKING CONDITION	DESCRIPTION
NA	Analysed and observed all the tracks that are provided in the website
NA	Searched for the material and analysed which would be feasible
NA	Approached Vendor to know the actual pricing of products
NA	Prepared BOM covering what we needed and asked for funds
NA	Separated the whole track into 11 segments and given that for printing
GOOD	The delay from vendor was predicted and so started to develop our own
GOOD	Printed all the traffic sign poles for the track
GOOD	Development and finalising of track was done
WORKING CONDITION	DESCRIPTION
GOOD	STM32CubeIDE setup, flashing and debugging verified
GOOD	Studied BFMC default firmware for PWM, steering and speed control
GOOD	Verified UART/USB serial communication between Pi and STM32
GOOD	Steering and throttle controlled via serial commands
STABLE	Servo center alignment and ESC range tuning
STABLE	Stop vehicle on signal loss or invalid command
-	MANUAL, AUTONOMOUS and EMERGENCY states
WORKING CONDITION	DESCRIPTION
GOOD	Analysed Brain folder structure and execution flow
GOOD	Adopted official BFMC OS and runtime environment
GOOD	Separated BFMC control runtime from vision runtime
GOOD	Clean abstraction for sending speed and steering commands
STABLE	Preparing control pipeline for autonomous logic
-	High-level decision logic for driving behavior
-	Runtime logs for debugging and evaluation

WORKING CONDITION	DESCRIPTION
GOOD	Analysed BFMC-specific dataset for feasibility
GOOD	YOLO-based object detection model trained offline
GOOD	Defined event-based perception-to-control strategy
—	Integration with BFMC Brain via IPC