## A. Domain : Precision Farming

Sr. No.	Domain / Subdomain	Project Title	Outputs	Class	Disciplines	Technologies/ Skillsets	Team Members	Start Date	Completion Date	Project Status	Remarks
1.	Surface Autonomous Agro Electric Vehicle (SAEV)	Architecture Design. System Integration.	Agro Robot.	PG Ph D	All	Multiple					
1.1	Agro Electric Vehicle Body	Agro EV Body Development.	Agro EV Body Frame.	UG PG	Mech	Mech Engg, Vehicle design, Catia					
1.2	Agro Electric Vehicle Mech Drives and Navigation	Agro EV Mech Drives and Navigation Development.	Agro EV Mech Drives and Navigation mechanism.	UG PG	Mech	Mech Engg, Vehicle design, Catia					
1.3	Agro Electric Vehicle Transmission System	Agro EV Transmission System Development.	Agro EV Power Train & Transmission System.	UG PG	Mech	Mech Engg, Vehicle design, Catia					
1.4	Agro Electric Vehicle Power Source	Agro EV Power Source Development	Agro EV Power Source.	UG PG	Mech	Mech Engg, Vehicle design, Catia					
1.5	Agro Electric Vehicle Electrical Systems	Electrical Architecture Design for Agro EV.	Agro EV Electrical Architecture and Wiring	UG PG	Elec, ETC	Vehicle Electrical system design,					

1.6	Agro Electric Vehicle Electric Drives and Actuators	Electric Drives and Actuators for Agro EV.	Agro EV I Electric Drives and Actuators	UG PG	Elec, ETC	Electric drives and actuators.						
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1.7	Agro Electric Vehicle Controllers	Agro Electric Vehicle Controller Design.	Agro Electric Vehicle Controller.	UG PG	ETC, CS	ISO Standards, Embedded Design, AI, CPP, Wireless Tech., Matlab			
1.8	Agro Electric Vehicle Visual Sensor	Agro Electric Vehicle Visual Sensor Design.	Agro Electric Vehicle Camera System.	UG PG	ETC, CS	ISO Standards, Embedded Design, AI, CPP, Wireless Tech., Matlab			
1.9	Agro Electric Vehicle Radar Sensor	Agro Electric Vehicle Radar Sensor Design.	Agro Electric Vehicle Radar System.	UG PG	ETC, CS	ISO Standards, Embedded Design, AI, CPP, Wireless Tech., Matlab			
1.10	Agro Electric Vehicle Lidar Sensor	Agro Electric Vehicle Lidar Sensor Design.	Agro Electric Vehicle Lidar System.	UG PG	ETC, CS	ISO Standards, Embedded Design, AI, CPP, Wireless Tech., Matlab			
1.11	Agro Electric Vehicle Position Sensor	Agro Electric Vehicle Position Sensor Design.	Agro Electric Vehicle Positioning System.	UG PG	ETC, CS	ISO Standards, Embedded Design, AI, CPP, Wireless Tech., Matlab			
1.12	Agro Electric Vehicle Gyro Sensor	Agro Electric Vehicle Stability Sensor Design.	Agro Electric Vehicle Stability System.	UG PG	ETC, CS	ISO Standards, Embedded Design, AI, CPP,			

						Wireless Tech., Matlab			
1.13	Smart Diagnostic Camera	Smart Diagnostic Camera system Design	Smart Diagnostic Camera System	UG PG	ETC, CS	ISO Standards, Embedded Design, Al, CPP, Wireless Tech., Matlab			

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1.14	Agro Electric Vehicle Communication Interface	Agro Electric Vehicle Communication Interface Design	Agro Electric Vehicle Communication Interface Stack	UG PG	ETC, CS	Embedded Design, AI, Communication Standards and Protocols Wireless Tech.			
1.15	Agro Electric Vehicle User Interface	Agro Electric Vehicle User Interface Design.	Agro Electric Vehicle User Interface.	UG PG	ETC, CS	Embedded Design, AI, Communication Standards and Protocols Wireless Tech.			
1.16	Weeding Implement	Weeding Implement Design.	Weeding Implement Attachment.	UG PG	Mech, Elec	Mech / Agri Engg. Catia			
1.17	Agriculture Sprayer	Agriculture Sprayer Design.	Agriculture Sprayer Attachment.	UG PG	Mech, Elec	Mech / Agri Engg. Catia			

2.	Arial Autonomous Vehicle (Drone)	Drone Architecture Design. System Integration.	Agro Drone.	PG Ph D	All	Multiple			
2.1	Drone Frame / Body	Drone Frame Body Design Development.	Drone Body Frame.	UG PG	Mech	Mech Engg, Vehicle design, Catia			
2.2	Drone Drives and Navigation Mechanism	Drone Drives and Navigation Mechanism Design / Development.	Drone Drives and Navigation Mechanism	UG PG	Mech	Mech Engg, Vehicle design, Catia			

2.3	Drone Power Source / Charging System	Drone Power Source / Charging System Design Development	Drone Power Source / Charging System	UG PG	Mech	Mech Engg, Vehicle design, Catia			
2.4	Drone Electrical Systems	Electrical Architecture Design for Drone	Drone Electrical Architecture and Wiring	UG PG	Elec, ETC	Vehicle Electrical system design,			
2.5	Drone Electric Drives and Actuators	Electric Drives and Actuators Design and Selection for Drone	Drone Electric Drives and Actuators	UG PG	Elec, ETC	Electric drives and actuators.			

2.6	Drone Flight Controller	Drone Flight Controller Selection and Design.	Drone Flight Controller	UG PG	ETC, CS	ISO / Opendrone Standards, Embedded Design, AI, CPP, Wireless Tech., Matlab			
2.7	Drone Visual Sensor	Drone Visual Sensor Design./ Selection	Drone Camera System.	UG PG	ETC, CS	ISO / Opendrone Standards, Embedded Design, AI, CPP, Wireless Tech., Matlab			
2.8	Drone Radar Sensor	Drone Radar Sensor Design / Selection	Drone Radar System.	UG PG	ETC, CS	ISO / Opendrone Standards, Embedded Design, AI, CPP, Wireless Tech., Matlab			

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2.9	Drone Lidar Sensor	Drone Lidar Sensor Design./ Selection	Drone Lidar System.	UG PG	ETC, CS	ISO / Opendrone Standards, Embedded Design, AI, CPP, Wireless Tech., Matlab			
2.10	Drone Position Sensor	Drone Position Sensor Design./ Selection	Drone Positioning System.	UG PG	ETC, CS	ISO / Opendrone Standards, Embedded Design, AI, CPP, Wireless Tech., Matlab			
2.11	Drone Gyro Sensor	Drone Stability Sensor Design.	Drone Stability System.	UG PG	ETC, CS	ISO Standards, Embedded Design, AI, CPP, Wireless Tech., Matlab			
2.12	Smart Diagnostic Camera	Smart Diagnostic Camera system Design	Smart Diagnostic Camera System	UG PG	ETC, CS	ISO Standards, Embedded Design, AI, CPP, Wireless Tech., Matlab			
2.13	Drone Communication Interface	Drone Communication Interface Design	Drone Communication Interface Stack	UG PG	ETC, CS	Embedded Design, Al, Communication Standards and Protocols Wireless Tech.			
2.14	Drone User Interface App	Drone User Interface App Design./ Development	Drone User Interface App	UG PG	ETC, CS	Embedded Design, AI, Communication Standards and Protocols Wireless Tech.			
2.15	Drone Agriculture Sprayer	Drone Agriculture Sprayer Design.	Drone Agriculture Sprayer Attachment.	UG PG	Mech, Elec	Mech / Agri Engg. Catia			

B. Domain : Intelligent Transportation Systems (ITS)

Sr. No.	Domain / Subdomain	Project Title	Outputs	Disciplines	Technologies/ Skillsets	Team Members	Start Date	Completion Date	Project Status	Remarks