

**Literature Review must include the followings:**

**1) Sensor Fusion / State Estimation Algorithms**

Minimum coverage: EKF, UKF, PF.

For each algorithm include:

- Conceptual description
- Mathematical formulation
- Strengths and weaknesses
- Computational cost
- Suitability for small autonomous vehicles
- Open-source availability

**2) Path Planning Algorithms**

Minimum coverage: A\*, D\*, Hybrid A\*, PRM, BIT\*, FMT\*, RRT\*, Trajectory Optimization

Discuss:

- Completeness & optimality
- Runtime
- Smoothness
- Scalability
- Use in GPS-denied / cluttered environments

**3) Control Algorithms**

Minimum coverage: PID, LQR, MPC, CBF-based safety

Discuss:

- Stability guarantees
- Suitability for path tracking
- Real-time feasibility
- Integration with planners

**4) Summary Tables**

Provide comparison tables such as:

- Planner optimality vs. runtime
- Estimator accuracy vs. computational load
- Controller robustness vs. complexity

These tables must be reviewer-friendly.