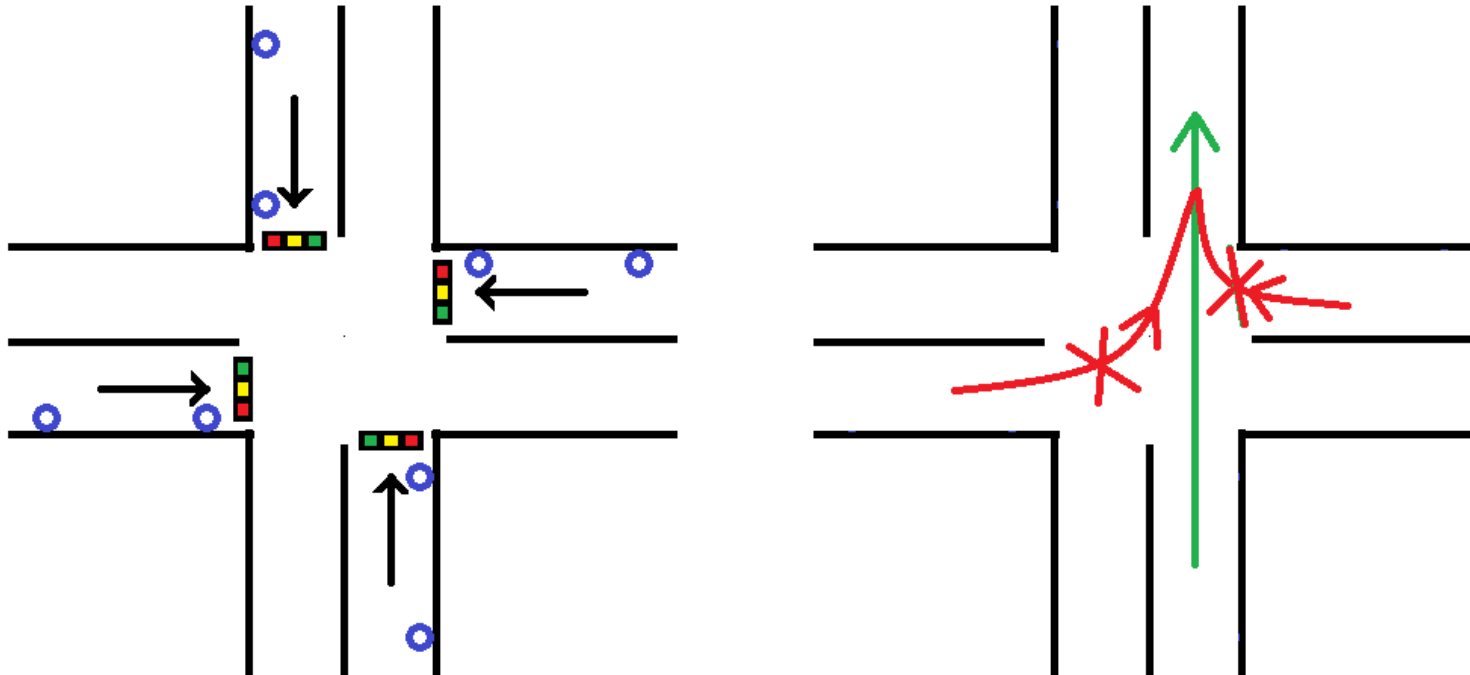# ECE413 Project 1 – Traffic Light

- Design and implementation of smart traffic light controller.

- Each direction has 4 lanes and can possibly have multiple lights as you wish.

- Adjust light order to avoid any intersecting paths (example in the left figure).

- Adjust light time based on 2 sensors at each light at 1st & 5th positions (illustrated in the right figure).

- Part A (2 weeks): System design, light algorithm, controller specs, FSM design, testbench, simulation. Part B (1 week): Synthesis, DFT, GL simulation.

- Deadlines: Part A: 8/12/2024. Part B: 15/12/2024.