# UNMANNED AERIAL VEHICLE (UAV)

# UAV 4003 UAV Pilot Ground School (4-1-3)

Ground school training is designed to prepare the student to operate the training aircraft for flight and includes technical and operating details of training aircraft systems and flight line and safety procedures. **Prerequisites:** AVS 2133, AVS 3113, AVS 4012

### UAV 4012 UAV Pilot General Handling Ground School (3-1-2)

Students are taught the specific details of airfield operating procedures, aircraft flight procedures and aircraft manoeuver procedures for VFR conditions. All aspects of general handling are covered including takeoff, landing, climbing, descending, turning, level flight, circuits, emergency recovery, and aerobatics.

Prerequisites: UAV 4003

#### UAV 4022 UAV Pilot General Handling Flying (3-1-2)

Students practice general handling flight, applying all information and skills provided by previous courses. Students carry out airfield operating procedures, aircraft flight procedures and aircraft manoeuver procedures for VFR conditions. Basic flight profiles for general handling are covered including take-off, landing, climbing, descending, turning, level flight and circuits.

#### Prerequisites: UAV 4012

# UAV 4031 UAV Pilot Instrument Flying (2-1-1)

Students practice flight using only instruments for attitude and location reference. Students adhere to Instrument Flight Rules and follow instrument flight procedures for flight and navigation. Students will fly standard departures and arrivals and will navigation to IFR and local operating procedures using radio navigation aids. **Prerequisites:** UAV 4003

### UAV 4041 UAV Pilot Navigation Flying (2-1-1)

Students apply navigational procedures and techniques to fly an aircraft in accordance with a navigational plan, using navigation maps, charts and navigation radio aids. Students practice visual navigation and radio aid navigation.

Prerequisites: UAV 4003

### UAV 4103 Unmanned Aircraft Operations (4-1-3)

This course will prepare the student to be able to select a UAV system to achieve a specific military output and to determine how to configure and use that UAV to achieve the mission goals. The considerations and constraints on UAV operation due to civil and military airspace control are discussed.

Prerequisites: UAV 4022

#### UAV 4113 Unmanned Vehicle Systems (4-1-3)

Students will study the wide range of systems commonly found on UAVs, including propulsion, payload, automation and remote control, communications and sensing systems. **Prerequisites:** UAV 4022

### UAV 4203 UAV Ground School (4-1-3)

Ground school training is designed to prepare the student to operate the training aircraft for flight and includes technical and operating details of training aircraft systems and flight line and safety procedures **Prerequisites:** UAV 4022

# UAV 4213 UAV Flight Training (Simulated) (4-1-3)

Students apply flight path control and navigation skills obtained in manned flight courses and couple them with fundamental theoretical knowledge of unmanned aviation to remotely operate a generic fixed-wing UAS simulator as pilot. The students will conduct launch and recovery procedures, fly the UAV on a variety of general handling and mission flight profiles, and will practice emergency handling procedures. **Prerequisites:** UAV 4203, UAV 4103, UAV 4113

#### UAV 4223 UAV Mission Training (Simulated) (4-1-3)

Students apply fundamental theoretical knowledge of UAS operations, sensors and payloads to remotely operate a generic fixed-wing UAS simulator as Sensor Operator; and then as part of a crew, as both Pilot and Sensor Operator. Students will plan and conduct a variety of UAS missions which will involve safe flight control and navigation of the UAV, and correct operation and control of the UAS payload sensors. **Prerequisites:** UAV 4203, UAV 4213