

Fire Services Training • Ambulance Services Training • Specialized Training

Mission Statement

Our Vision

To serve Hong Kong by making it a safe place to live and work.

Mission

- To protect life and property from fire or other calamity.
- To give advice on fire protection measures and fire hazards.
- To educate the community and to promote the public awareness on fire safety.
- To render ambulance aid to the sick and the injured and convey them to hospital.

Values

- Upholding high standards of integrity.
- Striving for professionalism and continuous improvement.
- Dedication and commitment to providing quality service.
- Readiness in meeting challenge and accepting accountability.
- Maintaining high spirit and esprit de corps among staff members.

Our Core Functions

Fire Suppression

Respond rapidly to fire calls and carry out effectively both land-based and marine fire-fighting operation.

Rescue Services

Provide effective and efficient rescue services on land and at sea.

Fire Protection

Advise the public on fire protection measures; promote public awareness of fire safety; enforce fire services legislation and handle licensing and certification issues.

Emergency Ambulance Services

Respond expeditiously to ambulance calls and provide effective, efficient and advanced emergency ambulance services.



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THE FIRE AND AMBULANCE SERVICES ACADEMY

The mission of the Hong Kong Fire Services Department (FSD) is to protect life and property from fire and other calamities. To better fulfill its mission to save those in distress and protect the community, the Department strives for continuous advancement in its services in the areas of firefighting, rescue, emergency ambulance, mobilising & communications and fire protection.

The Fire and Ambulance Services Academy (FASA), situated at No. 11 Pak Shing Kok Road, Tseung Kwan O, Hong Kong, was commissioned in January 2016. Constructed at a cost of HK\$3.5 billion, FASA well-equipped with state of art training facilities to offer a wide range of training from foundation fire and ambulance training to advanced techniques in dealing with disasters. It also serves as a breeding ground for firefighters, ambulance staff, mobilising & communications and workshop personnel who will be better trained to serve the community.

TRAINING AT THE ACADEMY

With an area of about 158,000 square metres, FASA provides over 500 residential training places. It mainly provides foundation training for new fire and ambulance recruits and in-service training courses for various grades of serving members. FASA will also provide training courses relating to fire and ambulance services for other government departments, private sectors, and its local and overseas counterparts.

Teaching facilities in FASA include a Fire and Ambulance Services Education Centre cum Museum, lecture rooms, an auditorium, a multi-purpose hall, computer rooms, a resource centre, a mock court, a press interview room, a press conference room, law enforcement interview rooms, simulated dangerous goods stores, ambulance practical training rooms, a simulated accident and emergency room of hospital and a disinfection room. The new campus also provides physical training facilities which include a physical training complex with gymnasium, an aquatic rescue pool, an outdoor physical training ground, an adventure challenge course and a jogging track.







3. SPECIALISED TRAINING FACILITIES

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3 SPECIALISED TRAINING FACILITIES

The specialised training facilities mainly cover emergency scenarios which are relatively complex and large-scale, including incidents related to buildings, transportation, marine and water, gas plant, aircraft, hazardous materials and structural collapse. All these incidents could possibly be encountered by firemen and ambulancemen, and their impact could be relatively serious and widespread. The simulators enable fire and ambulance personnel to receive realistic training in a safe simulated setting, so that they can be better equipped with firefighting and rescue techniques to enhance operational efficiency.

3.0 Training Facilities Directory

Compartment Fire Behaviour Training



Fuel Tank Incident Training



High Angle Rescue Training

Aircraft Incident Training





Aquatic Incident Training



Ambulance Services Training



Traffic Incident Training



Petrol Filling Station Incident Training





Driving Training



Rescue Training Tower



Hazardous Materials Training



Burn House



3.1 Burn House

The diversity of building materials used, the complexity of building layouts as well as the variety of materials used in furniture and stored in premises in various types of buildings make it more challenging for firefighters to carry out their firefighting and rescue duties. In view of this, advanced indoor live fire training facilities are provided in FASA to enhance their firefighting capability in handling various types of fire incidents. With reference to previous fire incidents, the Burn House simulates a number of indoor fire scenarios, including sub-divided units in old buildings, hotels,



industrial buildings and karaokes. Vivid live fire, high temperature, audio effect and smoke are simulated to help trainees acquire better firefighting and rescue techniques in a safe and controlled environment.

3.2 Rescue Training Tower

In view of the proliferation of high-rise buildings in Hong Kong, the Department always prepares for incidents that might occur in all kinds of buildings. The Rescue Training Tower is a ten-storey building in which an array of settings, including shopping centre, old residential building, public housing estate, factory and commercial building with curtain wall, are simulated on different floors and at the building faćade. Scenarios of persons being locked in a lift are also simulated. Trainees can practise strategies and techniques of firefighting, rescue and causality handling in various kinds of buildings. The Rescue Training Tower can also facilitate the specialised training of the High Angle Rescue Team.







3.3 Ambulance Services Training

One of the advantages of pooling the Ambulance Service Training facilities in this area is that trainees can go through a simulated process that starts from responding to an ambulance call, carrying out patient assessment, administering medical treatment, handing over a patient to hospital staff and conducting disinfection in one go. During the comprehensive training, the trainees would first receive a call on board the Simulated Ambulance Compartment. After unloading the equipment, the trainees will bring along the equipment to the simulated scene in the Syndicate Room, where they would perform patient treatment as per Patient Assessment Model. The patient will then be transported to the "Simulated Ambulance Compartment" on a stretcher, and further treatment, stabilisation, intervention and examination will be carried out on board the compartment. Lastly, the patient will be conveyed to the A&E Department Simulation Room for handover procedures. Disinfection procedures will also be practised in the Disinfection Simulation Room.







In addition, the simulated Accident and Emergency Room can simulate the environment of a hospital, thereby to provide ambulance personnel with effective training on handing over patients to medical staff of hospital. Handling patients with infectious disease poses major risks to ambulance personnel while carrying out their operational duties. Meanwhile, the Disinfection Room provides a realistic training site for ambulance personnel to practise disinfection procedures.

3.4 Compartment Fire Behaviour Training (CFBT)

Firefighters have to deal with various types of building fires and unavoidably face the extreme threats of "flashovers" and "backdraughts" during indoor firefighting. The multi-storey Compartment Fire Behaviour Training facility can simulate "ventilation", "flashover" and "backdraught" effects. It will help to enhance the response capability and readiness of firefighters who work under extreme heat and smoke-filled conditions.

CFBT Simulator

The CFBT simulator is a 3-storey structure constructed from 19 numbers of 40-foot freight containers. A total of 4 fire zones are designed on G/F of the compartment and carbonaceous fuel (chipboards) will be burnt in those fire zones. Thermocouples are installed in designated monitoring points to measure and record the temperature during training. Hot smoke generated from fire zones can be diverted to 1/F and 2/F by hatches to simulate different kinds of fire scenarios for the trainees to practise different search & rescue and ventilation strategies. The training will help enhancing the safety and efficiency of fire personnel under extreme circumstances.



The Backdraught Demonstration Unit

It is a 6m-long structure with fire protection lining and a temperature monitoring system. It is used to demonstrate fire progression and extreme fire behaviour. Trainees are able to witness various stages of fire development as well as signs and symptoms of extreme fire behaviours such as flashovers and backdraughts at a safe distance.



3.5 Traffic Incident Training

Simulations of Railway Station and Train Tunnel

The entire railway network in Hong Kong is woven by numerous railway lines with underground stations and tunnels. Given the multitude of daily railway commuters in Hong Kong, any incident occurred at an underground railway station or tunnel may pose potential risks of causing significant loss of lives and properties. The simulated railway station and rail tunnel can provide a more realistic simulation of large-scale railway incidents and train fire. With this facility, firefighters and ambulance personnel can practise the operational procedures, evacuation strategies, firefighting techniques and mass casualty handling.



Simulations of Road Tunnel and Highways

Hong Kong's roads are among the most heavily used in the world. The roads in Hong Kong are interwoven into an extensive network of road tunnels and highways. Given the heavy traffic, any road traffic incident inside a road tunnel or a highway may result in significant loss of lives. The simulated road tunnel and highways can provide a more realistic simulation of large-scale road traffic accidents involving heavy vehicle, bus, private car or oil tanker. With this facility, firefighters and ambulance personnel can practise rescue techniques on extrication, vehicle stabilisation and mass casualty handling.



3.6 Fuel Tank and Petrol Filling Station Incident Training

Incidents at oil depots may involve fire and oil spillage. If handled improperly, it may lead to serious disasters. Oil tank simulator can allow trainees to experience the circumstances they may face in an oil tank fire, thereby strengthening the training of firefighters in this respect. Besides, there are a lot of large-scale LPG tanks in Hong Kong. In the event of fire, the cylinder pressure will rapidly increase, which may lead to cylinder rupture, gas leakage or explosion accident. The LPG tank simulator can provide valuable opportunities for trainees on the proper handling of fire involving an LPG tank.



There are innumerable fuel and LPG filling stations throughout the territory, with many of them being located in densely populated areas. Any incident involving a filling station may cause serious damage to properties and loss of lives. The fuel and LPG filling station simulators can strengthen training on firefighting and rescue operations involving multiple casualties.



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3.7 Aquatic Incident Training

Simulation of Vessel Fire

As the interior environment and structure of a ship are different from those of a building, firefighters face far greater challenges when performing firefighting and rescue duties on board a vessel. The ship fire simulator simulates the environment of a four-deck ship, in which the lowest deck is modeled on a cargo ship while the other three decks a cruise liner. There are a number of live fire training compartments in the mock-up ship for simulation of scenarios in passenger compartment, engine room, heated oil piping, etc.



Simulation of Swift Water Rescue

In the past, there were a number of serious flooding incidents in Hong Kong. Swift water sporadically brought about by heavy rain may lead to loss of lives. The swift water rescue simulator, which simulates an outdoor river channel encircling the ship fire simulator, will create artificial swift water effects so as to enhance trainees' techniques and response capability in swift water.



3.8 Aircraft Incident Training

An aircraft incident may result in a large number of casualties and occur not only at the airport but at other locations in Hong Kong. As the firefighting and rescue techniques for aircraft incidents are quite different from those employed in other major incidents, the aircraft fire simulator featuring various types of aircrafts including Airbus A380 and Boeing B767 can provide a more realistic training venue for firefighters and ambulance staff as well as the Mobilization and Communications Group to practise the operational procedures, evacuation strategies and firefighting techniques, and their response capability in handling mass casualty incidents will also be enhanced.



3.9 Hazardous Materials (HazMat) Training

While Hong Kong has relevant legislation in place to regulate the manufacture, conveyance and storage of hazardous materials such as chemicals and radioactive materials, the Department will stay alert to HazMat incidents as such incidents may put the lives and properties of the community at risk. Professional knowledge, techniques, tools and training are instrumental in dealing with such incidents. Over recent years, the Department has been striving to enhance its capability in handling HazMat incidents, and the Service HazMat Team has been set up in this regard. The simulated HazMat training area provides a simulated gas leakage chamber, a HazMat laboratory, a dangerous goods store, a chlorine store, etc. Trainees can acquaint themselves with operational strategies, skills of using various detectors and protective equipment, and the sealing and decontamination techniques during HazMat incidents.



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3.10 Urban Search and Rescue (USAR) Training

The main duty of USAR Team is to carry out search and rescue of victims trapped or buried underneath the rubble after structural collapse, landslides or other major incidents occurred locally or overseas. The Urban Search and Rescue Training Ground, which simulates building collapse scenarios, provides training on search and rescue operations under adverse circumstances such as landslides and building collapse incidents. An underground concrete conduit is also provided to enable trainees to conduct rescue and casualty handling training in a realistic but safe environment.



3.11 High Angle Rescue (HAR) Training

The main duty of the High Angle Rescue Team (HART) is to carry out rescue operations at high angle locations with special features such as cable cars, tower cranes, bridge towers, scaffoldings at construction sites and suspended working platforms of high-rise buildings. Various high angle training facilities are provided in the Technical Rescue Training Area, which include a HAR tower, a simulated tower crane and a simulated cable car system for the training of HAR technique s to be employed by rescuers in various scenarios.



3.12 **Driving Training**



The pledged response times of the Department for calls to fires in buildings are 6 minutes for the built-up areas and 9 to 23 minutes for areas of dispersed risks and isolated developments. For emergency ambulance service, the target response time is 12 minutes. In order to meet the Department's pledge for the densely populated environment in Hong Kong, it is crucial that the emergency driving training focus on the safe control of fire appliance and ambulance. The Driving Training Centre provides an advanced driving training simulator and a designated training ground for emergency driving training. Besides, the road network inside FASA is also designed to simulate the real driving environment in Hong Kong for driving training purpose.



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4.

FOUNDATION TRAINING PROGRAMMES

4.1 Station Officer (Operational) Foundation Training Course	P.17
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4.1 Station Officer (Operational) Foundation Training Course

Course Aims:

The course is designed to foster ethical and professional values among newly recruited station officers; to introduce them to the basic knowledge of fire services and relevant legislation and policies; and to equip them with administration, leadership, firefighting and rescue skills essential for the discharge of their duties.

Course Contents:

- Vision, Mission and Values of the Hong Kong Fire Services Department;
 Discipline, Integrity and Ethics Development
- 2. Departmental Administration, Management and Procedures
- 3. Fire Science and Fire Engineering
- 4. Officership Development and Basic Firemanship
- 5. Supervision of Basic Technical Rescue
- 6. Incident Command and Control
- 7. Mobilising and Communications
- 8. Fire Protection and Law Enforcement

Course Duration: 26 weeks

4.2 Fireman / Firewoman (Operational / Marine) Foundation Training Course

Course Aims:

The course is designed to provide training for newly recruited firemen to meet the operational requirements, and to equip them with the basic knowledge of fire services and firefighting and rescue skills essential for the discharge of their duties.

Course Contents:

- Vision, Mission and Values of the Hong Kong Fire Services Department;
 Discipline, Integrity and Ethics Development
- Departmental Administration and Orders
- 3. Basic Fire Science
- 4. Basic Firemanship
- 5. Basic Technical Rescue
- 6. Firefighting in High-rise Buildings and Other Premises
- 7. Communications System and Equipment
- 8. Fire Protection and Legislation

Course Duration: 26 weeks

4.3 Ambulance Officer Foundation Training Course

Course Aims:

The course is designed to foster ethical and professional values among newly recruited ambulance officers; to introduce them to the basic knowledge of ambulance services and relevant legislation and policies; to equip them with administration and leadership skills essential for the discharge of their duties; and to provide them with training in the use of paramedic equipment.

Course Contents:

- Vision, Mission and Values of the Hong Kong Fire Services Department;
 Discipline, Integrity and Ethics Development
- 2. Departmental Administration, Management and Procedures
- 3. Human Anatomy and Physiology
- 4. Ambulance Aid and Patient Assessment Model
- 5. The Use of Paramedic Equipment
- Trauma Management
- 7. Ambulance Depot Administration and Management
- 8. Incident Command System and Major Incident Procedures

Course Duration: 26 weeks

4.4 Ambulanceman / Ambulancewoman Foundation Training Course

Course Aims:

The course is designed to provide training for newly recruited ambulancemen / ambulancewomen to meet the operational requirements; to equip them with the basic knowledge and skills of ambulance services essential for the discharge of their duties; and to provide them with training in the use of ambulance equipment.

Course Contents:

- Relevant Fire Services Ordinances and Departmental General Orders; Conduct and Discipline; Squad Drills and Physical Fitness Training; Management of Stress at Workplace; Customer Services
- Airway Management; Cardiopulmonary Resuscitation; The Use of Ambulance Equipment for Basic Life Support
- Ambulance Aid; Anatomy and Physiology; Patient Assessment Model; Basic Knowledge of EMA II Protocol and Equipment
- Operational Guidelines and Command Standing Orders; Knowledge and Equipment of Loading Patients; Basic Knowledge of Firefighting and Fire Protection; Fracture Management; Pain Management; On-car Attachment
- Emotional Intelligence; Negotiation Skills; Visits to the Government Flying Service, Hospitals, Public Mortuaries, etc.; Talks by Various Parties / Organisations on Ambulance Services and Safe Ways to Discharge Duties

Course Duration: 26 weeks

4.5 Senior Fireman / Firewoman (Control) Foundation Training Course

Course Aims:

The course is designed to provide training for newly recruited senior firemen / firewomen (control) to meet the operational requirements; to equip them with the knowledge and skills to provide fire service assistance and handle fire safety complaints and enquiries about fire hazards. It also covers an introduction to the mobilising systems and communications equipment in the Fire Services Communications Centre and Mobile Command Units.

Course Contents:

- Vision, Mission and Values of the Hong Kong Fire Services Department; Discipline, Integrity and Ethics Development
- Relevant Fire Services Ordinances and Departmental General Orders; Squad Drills
- Mobilising Systems and Communication Equipment in the Fire Services Communications Centre and Mobile Command Units
- 4. Mobilising and Communications Procedures
- 5. Radiotelephony Procedures and Operational Messages
- 6. Map Reading and Topographical Information
- 7. Basic Fire Science
- Basic Ambulance Aid

Course Duration: 12 weeks



5. DRIVING TRAINING PROGRAMMES

5.1	Hydraulic Platform Cage Operation Course	P.2
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5.3	Group I (Special) Fire Motorcycle (FMC) / Emergency Medical Assistant Motorcycle (EMAMC) Course	P.22
5.4	Group II (Fire) Driving Course	P.23
5.5	Special Appliance Driving Course	P.24
5.6	37m cc/37m cs/39m Turntable Ladder/42m Aerial Ladder Platform Course	P.24
5.7	52m/55m cs/56m Turntable Ladder Course	P.2
5.8	37m cc, 37m cs and 39m Turntable Ladders Integrated Course	P.2
5.9	37m cc Turntable Ladder and 42m Aerial Ladder Platform / 56m Turntable Ladder Integrated Course	P.20
5.10	37m cc. 52m cc and 55m cs/56m Turntable Ladders Integrated Course	P.20



5.1 Hydraulic Platform Cage Operation Course

Course Aims:

The course is designed to provide qualification training in the operation of Hydraulic Platforms. It covers a range of topics, including regular inspections and fault-finding, to ensure high standards of operation.

Course Contents:

- General Introduction
- Principal Dimension and Data
- Operating Instructions
- 4. Massive External Rescues
- Examination
- 6. Evaluations and Debriefing
- 7. Contingencies

Course Duration: 5 days

5.2 Group I (Fire) Driving Course

Course Aims:

The course is designed to provide qualification training in the driving of Group I (Fire) Appliances. It covers a range of topics, including regular inspections and fault-finding, to ensure high standards of driving.

Course Contents:

- 1. Introduction to the Controls of Motor Cars and Classification of Fire Services Appliances
- 2. Road Users' Code and Departmental General Orders
- 3. Driving Preparation
- Beginning to Drive
- 5. On the Road
- Dealing with Hills
- Manoeuvring
- 8. Road Observation
- 9. Driving to Emergency Calls
- 10. Servicing and Maintenance Routines
- 11. Examination
- 12. Evaluations and Debriefing
- 13. Contingencies

Course Duration: 12 days

5.3 Group I (Special) Fire Motorcycle (FMC) / Emergency Medical Assistant Motorcycle (EMAMC) Course

Course Aims:

The course is designed to provide qualification training in the driving of FMCs or EMAMCs. It covers a range of topics, including regular inspections and fault-finding, to ensure high standards of motorcycle driving.

Course Contents:

- Introduction to the Controls of Motorcycles and Classification of Fire Services Appliances
- 2. Road Users' Code and Departmental General Orders
- Driving Preparation
- 4. Beginning to Drive
- 5. On the Road
- 6. Dealing with Hills (Gradients)
- Manoeuvring
- 8. Road Observation
- 9. Operation of Firexpress Firefighting Units
- 10. Driving to Emergency Calls
- 11. Servicing and Maintenance Routines
- 12. Examination
- 13. Evaluations and Debriefing
- 14. Contingencies

Course Duration: 15 days



5.4 Group II (Fire) Driving Course

Course Aims:

The course is designed to provide qualification training in the driving of Group II (Fire) Appliances. It also covers a range of topics, including regular inspections and fault-finding, to ensure high standards of driving.

Course Contents:

- 1. Introduction to the Controls of Motor Cars and Classification of Fire Services Appliances
- 2. Refresher Course on Road Users' Code and Departmental General Orders
- 3. Refresher Course on Driving Preparation
- 4. Refresher Course on Pump Operation
- 5. Steering, Gear Changing and Clutch Control
- 6. Use of Speed
- 7. Road Observation
- 8. Drivers' Signals
- 9. Manoeuvring
- Driving to Emergency Calls
- 11. Servicing and Maintenance Routines
- 12. Examination
- 13. Evaluations and Debriefing
- Contingencies

Course Duration: 12 days



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5.5 Special Appliance Driving Course

Course Aims:

The course is designed to provide training for participants with Group I or Group II driving qualification in the driving / operation of Special Appliances. It covers a range of topics, including regular inspections and fault-finding, to ensure high standards of driving.

Course Contents:

- General Introduction to Special Appliances
- Principal Dimension and Data
- Operating Instructions
- Manoeuvring
- Servicing and Maintenance Routines
- Examination
- Evaluations and Debriefing
- Contingencies

Course Duration: 3 days / 5 days



5.6 37m cc/37m cs/39m Turntable Ladder/42m Aerial Ladder Platform Course

Course Aims:

The course is designed to provide qualification training in the operation of 37m cc/37m cs/39m Turntable Ladder/42m Aerial Ladder Platform to ensure proper and effective use of the appliance. It covers a range of topics, including regular inspections, fault-finding and rectification.

Course Contents:

- 1. General Introduction
- Turret Mechanism and Aerial Ladder Platform Assembly
- Control Station
- Safety Devices
- 5. Siting, Control Techniques and Siting Factors
- Operation of Ladders, Rescue Cages; Driving of Aerial Ladder Platforms
- Specifications of 37m cc/37m cs/39m Turntable Ladders/42m Aerial Ladder Platforms; Principal Dimension and Data
- Manoeuvring and Operating Instructions
- 9. Servicing and Maintenance Routines
- 10. Examination
- Evaluations and Debriefing



Course Duration: 8 days

5.7 52m/55m cs/56m Turntable Ladder Course

Course Aims:

The course is designed to provide qualification training in the operation of 52m/55m cs/56m Turntable Ladder to ensure proper and effective use of the appliance. It covers a range of topics, including regular inspections, fault-finding and rectification.

Course Contents:

- General Introduction
- 2. Turret mechanism and Ladder Assembly
- 3. Control Station
- Safety Devices
- 5. Siting, Control Techniques and Siting Factors
- 6. Operation of Ladders and Rescue Cages; Driving of Turntable Ladders
- Specifications of 52m/55m cs/56m Turntable Ladders; Principal Dimension and Data
- 8. Manoeuvring and Operating Instructions
- 9. Servicing and Maintenance Routines
- 10. Examination
- 11. Evaluations and Debriefing

Course Duration: 10 days

5.8 37m cc, 37m cs and 39m Turntable Ladders Integrated Course

Course Aims:

The course is designed to provide qualification training in the operation of 37m cc, 37m cs and 39m Turntable Ladders to ensure proper and effective use of the appliances. It covers a range of topics, including regular inspections, fault-finding and rectification.

Course Contents:

- General Introduction
- Turret mechanism and Ladder Assembly
- Control Station
- 4. Safety Devices
- 5. Siting, Control Techniques and Siting Factors
- 6. Operation of Ladders and Rescue Cages; Driving of Turntable Ladders
- Specifications of 37m cc, 37m cs and 39m Turntable Ladders;
 Principal Dimension and Data
- Manoeuvring and Operating Instructions
- 9. Servicing and Maintenance Routines
- Examination
- Evaluations and Debriefing

Course Duration: 18 days

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5.9 37m cc Turntable Ladder and 42m Aerial Ladder Platform / 56m Turntable Ladder Integrated Course

Course Aims:

The course is designed to provide qualification training in the operation of 37m cc Turntable Ladder and 42 m Aerial Ladder Platform / 56m Turntable Ladder to ensure proper and effective use of the appliances. It covers a range of topics, including regular inspections, fault-finding and rectification.

Course Contents:

- General Introduction
- Turret Mechanism and Aerial Ladder Platform Assembly
- Control Station
- Safety Devices
- Siting, Control Techniques and Siting Factors
- Operation of Ladders, Rescue Cages; Driving of Aerial Ladder Platforms
- Specifications of 37m cc Turntable Ladders and 42m Aerial Ladder Platforms / 56m Turntable Ladders; Principal Dimension and Data
- Manoeuvring and Operating Instructions
- Servicing and Maintenance Routines
- 10. Examination
- **Evaluations and Debriefing**

Course Duration: 15 days

5.10 37m cc, 52m cc and 55m cs/56m Turntable **Ladders Integrated Course**

Course Aims:

The course is designed to provide qualification training in the operation of 37m cc, 52m cc and 55m cs / 56m Turntable Ladders to ensure proper and effective use of the appliances. It covers a range of topics, including regular inspections, fault-finding and rectification.

Course Contents:

- General Introduction
- Turret Mechanism and Ladder Assembly
- Control Station
- Safety Devices
- Siting, Control Techniques and Siting Factors
- Operation of Ladders, Rescue Cages; Driving of Turntable Ladders
- Specifications of 37m cc, 52m cc and 55m cs/56m Turntable Ladders; Principal Dimension and Data
- Manoeuvring and Operating Instructions
- Servicing and Maintenance Routines
- 10. Examination
- **Evaluations and Debriefing**

Course Duration: 18 days

6. SPECIALIZED TRAINING PROGRAMMES

6.1	Airport Firefighting Training Programmes	P.28
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6.1.1 Airport Firefighter Course

Course Aims:

The course is designed to provide participants with the fundamentals of aerodrome rescue and firefighting (ARFF).

Course Contents:

- Brief History of and Introduction to the Hong Kong International Airport and the Airport Fire Contingent
- 2. Aviation Fuel Refuelling Facilities and Fire Extinguishing Agents
- 3. Hydrant and Water Supplies
- 4. Appliances and Equipment
- 5. Command Boats, Speed Boats and other Associated Equipment
- 6. Fire Training Simulator
- 7. Operation Tactics and Theories
- Mobilising Instructions
- 9. Incident Command System
- 10. Communications System and Facilities
- 11. Sea Rescue Plan
- 12. Strategies of Firefighting and Rescue on Land
- 13. Case Study on Major Aircraft Accidents
- 14. Table Top Exercises
- Familiarisation Visits

Course Duration: 10 days





6.1.2 Airport Fire Officer Course

Course Aims:

The course is designed to provide in-depth training for airport firefighters, particularly the managerial staff. It covers a wide range of topics, including theories, principles and advanced skills of ARFF to cope with airport emergencies, as well as command and strategic management of ARFF services.

Course Contents:

- Licensing of Aerodrome
- 2. Airport Emergency Planning
- 3. Resource Management
- 4. Incident Command
- 5. Scene Management Post Incident Issues
- 6. Management of Training Programmes
- 7. Human Factors
- 8. Radioactive Materials
- Onventional, Chemical, Biological, Radiological and Nuclear (CCBRN) Incidents
- 10. Transport of Dangerous Goods by Air
- 11. Emergency Decontamination Procedures

Course Duration: 5 days





6.2.1 Basic Ambulance Aid Training Course

Course Aims:

The course is designed to equip participants with the basic ambulance aid knowledge and skills, and provide them with training in the use of ambulance equipment.

Course Contents:

- Airway Management
- 2. Cardiopulmonary Resuscitation (CPR)
- Automated External Defibrillation
- Patient Assessment Model
- Soft Tissue Injuries
- 6. Fracture Management
- 7. Epilepsy Trauma
- 8. Shock

Course Duration: 5 days

6.2.2 Advanced Ambulance Aid Training at First Responder Level for Firefighters

Course Aims:

The course is designed to equip participants with the advanced ambulance aid knowledge and skills and provide them with training in the use of ambulance equipment to ensure the efficient discharge of their duties as First Responders.

Course Contents:

- Airway Management
- Cardiopulmonary Resuscitation (CPR)
- Automated External Defibrillation
- 4. Patient Assessment Model
- Vital Signs Monitoring Equipment
- Management of Spinal Injuries
- Fracture Management
- 8. Medical Emergencies
- Soft Tissue Injuries
- 10. Trauma
- 11. Shock
- Handling of Infectious Patients
- Documentation
- 14. Triage and Disaster Management

Course Duration: 6 days

6.2.3 First Responder Supervisory Course

Course Aims:

The course is designed to equip participants with the advanced ambulance aid knowledge and skills and provide them with training in the use of ambulance equipment to ensure the efficient discharge of supervisory duties.

Course Contents:

- Airway Management
- 2. Cardiopulmonary Resuscitation (CPR)
- 3. Automated External Defibrillation
- 4. Management of Spinal Injuries
- Fracture Management
- 6. Trauma
- 7. Maternity
- 8. Medical Emergencies
- Soft Tissue Injuries
- Definition of Obviously Dead Patients
- Patient Assessment Model
- 12. Vital Signs Monitoring Equipment
- 13. Handling of Infectious Patients
- 14. Documentation
- 15. Triage and Disaster Management

Course Duration: 3 days

6.2.4 Recertification Course for Firefighters at First Responder Level

Course Aims:

The course is designed to refresh and update the ambulance aid knowledge and skills of firefighters at first responder level, and revalidate their qualifications as First Responders.

Course Contents:

- Airway Management
- Cardiopulmonary Resuscitation (CPR)
- Automated External Defibrillation
- Patient Assessment Model
- Vital Signs Monitoring Equipment

Course Duration: 1 day

6.2.5 EMA II Core Skill Workshop

Course Aims:

The workshop is designed to equip participants with the basic EMA II knowledge and skills. It is a prerequisite course for EMA II Training Course.

Course Contents:

- 1. Drug Administration
- 2. Intramuscular Injection
- 3. Intravenous Initiation
- Intravenous Maintenance
- Subcutaneous Injection
- Patient Assessment Model
- Monitoring of Vital Signs
- Sager Splints
- 9. Spinal Rolls
- 10. Anatomy and Physiology
- 11. Fluid and Electrolyte
- 12. Airway Management
- 13. Breathing Management
- Chest Assessment
- 15. Burn Management
- 16. Fracture Management
- Pain Management
- 18. Wound Management
- Spinal Management
- The Use of Glucometers
- 21. Documentation, Records and Reports
- 22. Protocol and Skill Review
- 23. Basic Life Support
- 24. Automated External Defibrillation Protocol

Course Duration: 10 days (plus 4-week self-study)

6.2.6 EMA II Training Course

Course Aims:

The course is designed to equip participants with the essential skills to become an EMA Supervisor.

Course Contents:

- Abdominal Disorders
- 2. Alcoholism
- 3. Allergies / Anaphylaxis (Basic Anaphylaxis Protocol)
- 4. Cardiovascular Emergencies (Cardiac Chest Pain Protocol)
- 5. Communicable Diseases
- Continuing Medical Education
- 7. Diabetic Emergencies (Glycemia Protocol)
- 8. Disaster Management
- 9. Disturbances of Behaviour
- 10. Documentation
- Drowning
- 12. Drug Abuse and Overdose (Suspected Narcotic Overdose Protocol)
- 13. Electrocardio-graphic Interpretation
- 14. Environmental Emergencies
- Geriatrics
- 16. Injuries to Chest and Abdomen
- 17. Injuries to Head, Neck and Spine
- Injuries to Lower Extremities
- Injuries to Upper Extremities
- 20. Intravenous Initiation Skills
- 21. Paramedic Service Quality Assurance System
- Kinematics of Trauma
- 23. Neurological Disorders (Paediatric and Adult Convulsion Protocol)
- 24. Resuscitation of Newborn Babies
- 25. Obstetrics
- 26. Paediatric Emergencies
- 27. Pain Management
- 28. Pharmacology
- 29. Poisons (Activated Charcoal Protocol)
- Respiratory Emergencies (Respiratory Protocol)
- 31. Shock
- Stress Management
- Trauma Diversion
- 34. Unconscious Patients (Hypovolemia Protocol)
- Unstable Trauma Patients
- 36. AED Recertification (Automated External Defibrillation Protocol)

Course Duration: 21 weeks

(including the EMA II Core Skill Workshop, 1-week hospital attachment and 1-week ambulance attachment)

6.2.7 EMA II Recertification Course

Course Aims:

The course is designed to refresh and reassess participants' knowledge and skills as EMA Supervisors.

Course Contents:

- EMA Protocol Revision
 - 1.1 Respiratory Protocol
 - 1.2 Venturi Protocol
 - 1.3 Cardiac Chest Pain Protocol
 - 1.4 Hypovolemia Protocol
 - 1.5 Glycemia Protocol
 - 1.6 Suspected Nacrotic Overdose Protocol
 - 1.7 Activated Charcoal Protocol
 - 1.8 Child Convulsion Protocol
 - 1.9 Adult Convulsion Protocol
 - 1.10 Basic Anaphylaxis Protocol
 - 1.11 Suspected Excited Delirium Syndrome Protocol
- 2 Trauma Management Revision
 - 2.1 Stable Trauma
 - 2.2 Unstable Trauma
 - 2.3 Pain Management
 - 2.4 Use of Tranexamic Acid
- 3 Basic Life Support Revision
- 4 Patient Assessment Model Revision
- 5 Anatomy and Pathophysiology of Emergencies Revision
- 6 Reassessment on Automated External Defibrillation Protocol
- 7 EMA Skill Reassessment
 - 7.1 Reassessment on Intravenous Therapy
 - 7.2 Reassessment on Subcutaneous Injection
 - 7.3 Reassessment on Intramuscular Injection
 - 7.4 Reassessment on Sager Splint
 - 7.5 Reassessment on Spinal Roll
 - 7.6 Reassessment on 3-way Stopcock
 - 7.7 Reassessment on Laryngeal Mask Airway (LMA) Supreme
 - 7.8 Reassessment on Haemostatic Arterial Tourniquet
 - 7.9 Reassessment on Haemostatic Dressing

Course Duration: 10 days

6.2.8 Continuing Medical Education Course

Course Aims:

The course is designed to update participants on the latest paramedic development; to equip them with the knowledge and skills to perform new protocols / administer new drug / utilise new equipment; and to reassess their skills in the use of the LMA-Supreme.

Course Contents:

May vary from time to time (Based on the latest paramedic development)

Course Duration: 1 day

6.2.9 Advanced Airway Management Training Course

Course Aims:

The course is designed to equip participants with the advanced skills in the management of critical patients (unconscious / cardiac arrest) with the use of equipment.

Course Contents:

- Lecture on the Anatomy of Upper Airway and Upper Airway Diseases
- 2. Lecture and Practical Session on the Use of Combitube
- 3. Application of LMA-Supreme and Combitube on Critical Patients

Course Duration: 3 days

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6.2.10 Advanced Protocol Training Course

Course Aims:

The course is designed to equip participants with the knowledge and skills to manage anaphylaxis patients with the use of advanced drug, and provide them with training in the management of cardiac arrest patients.

Course Contents:

- Lecture and Practical Session on the Use of Adrenaline (by Jext 300) on Anaphylaxis
 Patients
- Lecture and Practical Session on the Use of Direct Laryngoscope on Patients with Foreign Body Airway Obstruction

Course Duration: 2 days

6.2.11 Application of Adrenaline in Cardiac Arrest Patient Training Course

Course Aims:

The course is designed to provide participants with training in the management of cardiac arrest patients with the use of adrenaline.

Course Contents:

Administration of Adrenaline via Intravenous or Intraosseous Route on Cardiac Arrest Patients

Course Duration: 1 day

6.2.12 Pre-hospital Ultrasound Training Course

Course Aims:

The course is designed to enhance the pre-hospital care for trauma patients.

Course Contents:

- Anatomy of Internal Organs
- 2. Lecture on Ultrasound Knobology and Physics
- 3. Focused Assessment with Sonography for Trauma in the Pre-hospital Setting

Course Duration: 2-week self-learning, 1-day workshop and 1-day hospital attachment

6.2.13 **AED Instructor Training Course**

Course Aims:

The course is designed to refresh participants' knowledge of the circulatory system, CPR, airway obstruction management and the use of AEDs, and equip them with the teaching and assessment skills essential for the efficient discharge of their duties as AED instructors.

Course Contents:

- American Heart Association Guidelines
- Chain of Survival
- The Circulatory System
- 4. CPR Knowledge and Skills
- Introduction to Left Ventricular Assist Devices
- 6. Methods of Instructions
- 7. Presentation on AED Protocol
- Trial Assessment on the Use of AED
- 9. Electrocardio-graphic Revision

Course Duration: 2 days (1-day lecture and 1-day assessment)

6.2.14 Special Rescue Squad (Amb) Train-the-Trainer Course

Course Aims:

The course is designed to equip participants with the knowledge and skills to deliver the Special Rescue Squad (Amb) Training Course.

Course Contents:

- Introduction to SRS, HART and USAR Operations
- Risk Assessments
- Basic Swift Water Rescue Techniques
- 4. Basic Mountain Rescue Techniques
- 5. Road Traffic Accident Rescue Techniques
- 6. Occupational Safety and Health at Scene

Course Duration: 5 days

6.2.15 Special Rescue Squad (Amb) Training Course

Course Aims:

The course is designed to enhance the operational safety and efficiency of special rescue operations.

Course Contents:

- 1. Introduction to SRS, HART and USAR Operations
- Risk Assessments
- 3. Basic Swift Water Rescue Techniques
- 4. Basic Mountain Rescue Techniques
- 5. Road Traffic Accident Rescue Techniques
- Occupational Safety and Health at Scene

Course Duration: 5 days

6.2.16 Special Rescue Squad (Amb) Revalidation Course

Course Aims:

The course is designed to enhance the operational safety and efficiency of special rescue operations.

Course Contents:

- 1. Introduction to SRS, HART and USAR Operations
- 2. Risk Assessments
- 3. Basic Swift Water Rescue Techniques
- Basic Mountain Rescue Techniques
- Road Traffic Accident Rescue Techniques
- 6. Occupational Safety and Health at Scene

Course Duration: 1.5 days

6.2.17 Non-Commissioned Officer (Amb) Command Course

Course Aims:

The course is designed to foster ethical and professional values among non-commissioned officers (NCOs); to develop their understanding of relevant policies; and to equip them with the leadership skills essential for the efficient discharge of their duties.

Course Contents:

- 1. NCO Behaviour and Attitude
- Customer Services
- 3. Talks on Integrity, Ethics and Anti-corruption
- Supervisory Management
- Occupational Health and Safety
- 6. Methods of Instruction
- Negotiation Training
- 8. Documentation
- Orders and Instructions
- 10. Complaints against Ambulance Personnel
- Disciplinary Offences
- 12. Major Incidents
- Operational Command and Control
- 14. Communication Procedures in Operational Incidents

Course Duration: 12 days

6.2.18 Leadership Course for Ambulancemen with EMA II Qualifications

Course Aims:

The course is designed to foster ethical and professional values among ambulancemen with EMA II qualifications; to develop their understanding of relevant policies; and to equip them with the leadership skills essential for the efficient discharge of their duties.

Course Contents:

- 1. Vision, Mission, Values
- Emotional Intelligence
- Customer Services
- Complaints against Ambulance Personnel
- 5. Triage Procedures
- 6. The Role of Ambulance Incident Officers
- 7. Leadership Training
- Team Building Exercises

Course Duration: 1 day

6.2.19 Ambulance Command Instructor Qualifying Course

Ambulance Services Training Programmes

Course Aims:

The course is designed to equip participants with the basic instructional knowledge, techniques, leadership and management skills essential for the efficient discharge of their duties as assistant instructors.

Course Contents:

- Psychology of Learning
- 2. **Training Objectives**
- Preparation and Planning of Instructions 3.
- 4 Preparation of Training Materials
- 5. The Use of Training Aid
- 6. Lecture Delivery Techniques
- 7. Discussion Leading Techniques
- 8. Confirmation of Training Effectiveness
- 9. Squad Drill Instructional Techniques
- 10. Training Administration
- 11. Discipline in Training School
- 12. **Effective Communications**
- 13. Impromptu Talks
- 14. Interaction Management

Course Duration: 20 days

6.2.20 Rapid Response Vehicle (RRV) Riders **Training Course**

Course Aims:

The course is designed to equip RRV riders with the knowledge, skills and professional values essential for the efficient discharge of their duties.

Course Contents:

- Introduction to the RRV Policy 1.
- 2. Duties and Responsibilities of an RRV Rider
- 3. Introduction to Clinical Support Officers (CSO)
- 4. Roles and Responsibilities of a CSO
- 5. The Use of the Paramedic Services Quality Assurance System
- 6. Field Audit Reports
- Roles of RRV riders in Operational Incidents

Course Duration: 3 days (1-day lecture and 2-day on-car attachment)

6.3.1 1-day CFBT Course

Course Aims:

The course is designed to provide participants with an understanding of compartment fire behaviour theories, and to equip them with compartment firefighting techniques to ensure safe and effective operations against compartment fires in different scenarios.

Course Contents:

- 1. Compartment Fire Behaviour Theories
- Branch Techniques and Door Entry Procedures
- 3. Gas Cooling and Methods of Fire Attack
- 4. The Use of Thermal Imaging Cameras
- 5. Hose Management

Course Duration: 1 day









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6.3.2 Compartment Fire Attacker (CFA) Course

Course Aims:

The course is designed for a dedicated group of non-commissioned officers, providing them with advanced knowledge of compartment firefighting and enhancing their tactical leadership skills in leading frontline firefighting crews to tackle compartment fires and carry out rescue operations.

Course Contents:

- 1. Combustion Theories
- Pyrolysis, Flashover, Backdraught, Extreme Fire Behaviour, Compartment Fire Behaviour and Fire Analysis
- 3. Gas Cooling and Methods of Fire Attack
- 4. Door Entry Procedures
- Defensive / Offensive Firefighting, Dynamic Risk Assessment and Overall Tactics when working with the Search and Rescue Team
- 6. Occupational Safety and Health
- 7. Safety Measures in CFBT and Risk Assessments
- Firefighting Techniques and Control of Fires
- 9. Ventilation and Smoke Management

Course Duration: 10 days







6.3.3 CFBT Induction Course

Course Aims:

The course is designed to provide basic training for new recruits in compartment fire behaviour, and equip them with the knowledge and skills to tackle compartment fires and carry out rescue operations in a safe and effective manner.

Course Contents:

- 1. Compartment Fire Behaviour Theories
- 2. Branch Techniques and Door Entry Procedures
- Gas Cooling and Methods of Fire Attack
- 4. Basic Firefighting Strategies and Tactics
- 5. Basic Ventilation and Risk Assessments

Course Duration: 4 days



6.3.4 CFBT Supervisory Course

Course Aims:

The course is designed to provide training for station officers to enhance their leadership skills and knowledge of compartment firefighting and ventilation strategies.

Course Contents:

- Compartment Fire Behaviour Theories
- 2. Understanding Fire Grounds and Fire Ground Assessments
- 3. Contemporary Firefighting Tactics and Strategies
- Occupational Safety and Health in Fire Grounds and Heat Stress Management
- Risk Management and Dynamic Risk Assessments
- 6. Ventilation Strategies
- 7. Incident Command and Control

Course Duration: 5 days



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6.3.5 CFA Refresher Course

Course Aims:

This is a refresher course for qualified CFAs. It aims to update participants on the latest knowledge and skills relating to compartment fire behaviour and firefighting strategies.

Course Contents:

- 1. Worldwide Firefighting Researches
- 2. Firefighting Strategies
- Gas Cooling and Methods of Fire Attack
- 4. Door Entry Procedures
- 5. Hose Management
- The Use of Thermal Imaging Cameras

Course Duration: 1 day



6.3.6 CFBT Instructor Course

Course Aims:

The course is designed to provide qualification training for fire officers responsible for the delivery of CFBT to operational firefighters. Upon completion of the course, participants will become qualified CFBT instructors capable of delivering a range of CFBT courses.

Course Contents:

- Compartment Fire Behaviour Theories
- 2. Understanding Fire Grounds and Fire Ground Assessments
- 3. Branch Design and Branch Techniques
- 4. Door Entry Procedure
- Hose Management
- Principles and Design of TIC
- 7. Occupational Safety and Health in Fire Grounds
- 8. Heat Stress Management
- 9. Ventilation Strategies
- Instructional technique
- 11. Case Study

Course Duration: 15 days



6.4.1 Diving Rescue

6.4.1.1 Self-contained Underwater Breathing Apparatus (SCUBA) Rescue Diver Training (RDT) Course

Course Aims:

The course is designed to train participants with a good swimming ability to become SCUBA Rescue Divers, such that they can carry out underwater search and rescue duties at a maximum depth of 25m. Upon completion of the course, participants will have acquired the knowledge of diving physiology, diving physics, diving maladies, the underwater environment, the use of diving equipment, the use of dive tables as well as relevant diving procedures.

Course Contents:

- Introduction to the Diving Unit and Relevant General Orders of the Hong Kong Fire Services Department
- 2. Diving Safety Rules and Precautions
- 3. Construction and Maintenance of Diving Equipment
- 4. The Use of SCUBA and Underwater Diving Skills
- 5. Diving Control
- 6. The Use and Application of Dive Tables
- 7. Underwater Searching Methods
- 8. Diving Physics
- 9. Diving Physiology
- 10. Decompression Illness/Sickness and Diving Maladies
- 11. Shore Dive, Boat Dive, Reservoir Dive and Night Dive
- 12. Diving in Contaminated Water and Decontamination Procedures
- 13. Decompression Procedures
- 14. Introduction to Air Compressors and Charging of SCUBA Tanks
- 15. Skin Diving Techniques and the Use of Masks, Snorkels and Fins
- 16. Assembly and Preparation of SCUBA
- 17. Basic Underwater Diving Skills
- 18. Dry Dive to 10m and 30m
- The Use of Lifeline and Application of Line Signal
- Procedures for Deployment of Rescue Divers
- Different Diving Operations, such as Shore Dive, Boat Dive, Beach Dive and Night Dive
- 22. Various Underwater Search Patterns
- 23. Introduction to Full Face Mask Diving and Underwater Communication Equipment
- Introduction to Dry Suits

Course Duration: 20 days



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6.4.1 Diving Rescue

6.4.1.2 Advanced Rescue Diver (ARD) Training Course

Course Aims:

The course is designed to provide enhanced training for experienced SCUBA Rescue Divers, such that they can carry out underwater search and rescue duties at a maximum depth of 50m. Upon completion of the course, participants will have acquired the knowledge of the use of advanced diving equipment, including the surface supply diving equipment (SSDE), diving helmets, underwater break-in tools and dry suits. They will also be able to plan and carry out diving and decompression procedures by using the dive table.

Course Contents:

- Introduction to the Diving Unit and Relevant General Orders of the Hong Kong Fire Services Department
- Decompression Illness/Sickness and Diving Maladies
- Diving Safety Rules and Precautions
- 4. Assembly and Testing of SSDE, including Bail-out bottles, Diving Panels and Umbilicals
- The Use of SSDE, including Diving Panels and Umbilicals; Potential Problems Associated with the Use of SSDE
- 6. Diving Control; Monitoring of Divers' Descend and Ascend Rates
- 7. The Use and Application of Dive Tables
- Underwater Searching Methods
- 9. Assembly and Testing of Diving Helmets
- 10. The Use and Testing of Dry Suits
- 11. Shore Dive, Boat Dive and Night Dive
- Diving in Contaminated Water and Decontamination Procedures
- 13. In-water Decompression Procedures
- Assembly, Connection and Testing of SSDE
- 15. Dry Dive to 30m and 50m
- Underwater Diving Operations with the Use of SSDE
- 17. Underwater Diving Operations with the Use of Diving Helmets
- 18. Assembly, Connection and Testing of Underwater Break-in Tools
- 19. Underwater Break-in Operations with the Use of SSDE and Diving Helmets
- 20. Assembly and Testing of Dry Suits and Diving with Dry Suits
- Different Diving Operations, including Shore Dive, Boat Dive, Beach Dive and Night Dive, with the Use of SSDE
- 22. Deployment of Rescue Divers under Different Sea Conditions

Course Duration: 20 days

6.4.1.3 Diving Supervisor Course (DSC)

Course Aims:

The course is designed to enrich the diving-related academic knowledge of experienced ARDs, and to enhance their supervisory capabilities in diving training and operations. Upon completion of the course, participants will be well equipped for carrying out command and control duties in diving operations. They will also understand the importance of diving safety, operational precautions as well as the procedures for handling different situations.

Course Contents:

- Relevant Fire Services Ordinances and General Orders of the Hong Kong Fire Services
 Department
- 2. Diving Safety Rules and Precautions
- 3. Duties and Responsibilities of Diving Supervisors
- 4. Principles of Team Management
- 5. Diving Sickness and Decompression
- Search Techniques
- 7. Supervision Practice
- 8. Construction, Assembly and Testing of Existing Diving Equipment
- Different Diving Operations, including Penetration and Diving in Contaminated Water, with the Use of SSDE
- Shore Dive, Boat Dive, Beach Dive and Night Dive, etc. under Different Underwater Search Patterns with the Use of SSDE, Diving Helmets and Dry Suits, etc.
- 11. Emergency and Accident Handling Procedures and Actions to be Taken by Supervisors
- 12. Search Patterns and Rescue Diver Deployment Procedures under Different Situations

Course Duration: 10 days

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6.4.1 Diving Rescue

6.4.1.4 Compression Chamber Operator (CCO) Training Course

Course Aims:

The course is designed to train participants with basic diving knowledge to become competent Compression Chamber Operators. Upon completion of the course, participants will have acquired the knowledge of diving physiology, diving physics, diving maladies as well as the use of different kinds of compression chambers, the use of diving treatment tables and relevant chamber procedures. They will also understand the limitations and potential hazards in chamber operations.

Course Contents:

- Roles of the Labour Department, the Electrical and Mechanical Services Department, the Hospital Authority and the Fire Services Department in the Event of Chamber Incidents
- 2. Roles of the Chamber Officer, the Chamber Supervisor and the Chamber Operator
- Structures and Operation of the Compression Chamber in Ngong Shuen Chau, the Deck Decompression Chamber, the Transportable Recompression Chamber, the Emergency Evacuation Hyperbaric Stretcher (EEHS) and the Diving Simulator
- Handling and Operation of Air Compressors; the Use of Medical Oxygen in Compression Chambers
- Handling and Operation of Compression Chambers
- 6. Diving Physics, Diving Physiology, Decompression Illness / Sickness and Diving Maladies
- 7. Preparation, Use and Maintenance of Chamber Facilities
- 8. Chamber Safety and Emergency Drills
- Application of Recompression Therapy
- 10. Introduction to Diver Medic
- 11. Application of Air / Oxygen Treatment Tables
- 12. Dry Dive up to 50m

Course Duration: 15 days

6.4.1.5 Compression Chamber Supervisor (CCS) Course

Course Aims:

The course is designed to enrich experienced CCOs academic knowledge of compression chamber operations; to enhance their capabilities in supervising hyperbaric oxygen therapy for Decompression Illness / Sickness; and to increase their competence in monitoring surface decompression procedures for diving operations. Upon completion of the course, participants will be well equipped for carrying out command and control duties in chamber operations. They will also understand the importance of chamber safety, operational precautions as well as relevant handling procedures.

Course Contents:

- Roles of the Labour Department, the Electrical and Mechanical Services Department, the Hospital Authority and the Fire Services Department in the Event of Chamber Incidents
- 2. Roles of the Chamber Officer, the Chamber Supervisor and the Chamber Operator
- 3. Duties and Responsibilities of the Chamber Supervisor
- 4. Principles of Team Management
- Diving Sickness and Decompression
- Emergency and Accident Handling Procedures
- Structures and Operation of the Compression Chamber in Ngong Shuen Chau, the Deck Decompression Chamber, the Transportable Recompression Chamber and the Emergency Evacuation Hyperbaric Stretcher (EEHS).
- 8. Administration of Hyperbaric Oxygen Therapy
- 9. Acute and Chronic Oxygen Poisoning
- Chamber Safety, Emergency Procedures and Actions to be Taken by the Chamber Supervisor
- 11. Application of Recompression Therapy
- 12. Introduction to Diver Medic

Course Duration: 20 days

6.4.2.1 Basic Life-saving Training Course

Course Aims:

The course is designed to provide Service members with foundation training on life-saving, which will cover basic aquatic rescue knowledge and techniques as well as the skill in making judgements. Upon completion of the course, participants will have attained a good level of physical fitness.

Course Contents:

- Brief History of Life-saving in Hong Kong
- 2. Basic First Aid Knowledge and Techniques
- Cardiopulmonary Resuscitation (CPR), Expired Air Resuscitation (EAR) and Recovery Position
- 4. Rescue Techniques and Theories; the Use of Rescue Equipment
- 5. EAR for Adults, Children and Infants
- 6. CPR for Adults, Children and Infants
- 1-person and 2-person CPR
- 8. Swimming Tests
- 9. Underwater Swimming
- 10. Different Water Entry and Exit Techniques
- Land-based Rescue Techniques with the Use of Different Rescue Equipment, including Throw Bags
- Indirect Towing Rescue Techniques with the Use of Different Rescue Equipment, including Rescue Tubes
- 13. Direct Towing Rescue Techniques
- Techniques for Approaching Casualties, including Self-defense and Self-escape Techniques
- 15. How to Perform EAR in Water and on Land; Vomit Handling
- 16. The Use of Automated External Defibrillator (AED)

Course Duration: 10 days

6.4.2.2 Life-saving (Aquatic First Aid) Training Course

Course Aims:

The course is designed to equip participants with the knowledge of aquatic first aid. Upon completion of the course, participants will be able to use rescue equipment correctly for saving drowning people.

Course Contents:

- Basic First Aid Techniques
- 2. Aquatic First Aid Techniques
- Spinal Structure and Fracture
- 4. First Aid Techniques for Managing Injury and Emergency
- 5. Casualty Assessments and Airway Management for Suspected Spinal Injuries
- 6. Techniques for Secure Gripping of Head and Neck
- 7. EAR for Adults, Children and Infants
- 8. CPR for Adults, Children and Infants
- 9. 1-person and 2-person CPR
- The Use of Oxygen Regulator Systems, Cervical Collars, Pocket Masks, Bag Valve Masks, Manual Suction Units, the Oropharyngeal Airway and Sam Splints
- The Use of Floating Spine Boards for Securing and Carrying Drowning Casualties in Shallow and Deep Water

Course Duration: 3.5 days



6.4.2.3 Life-saving (Pool Lifeguard) Training Course

Course Aims:

The course is designed to equip participants with the ability to protect life and promote safety at swimming pools. The certificate awarded upon completion of the course is a basic requirement for being a lifeguard at public swimming pools.

Course Contents:

- Roles, Duties and Responsibilities of Pool Lifeguards; Monitoring Techniques and Safety Management Techniques
- 2. Water Safety, Preventive Measures and Operation Procedures
- 3. Swimmers' Behaviours; Recognising Drowning Swimmers; Aquatic Rescue Theories
- 4. Rescue Skills, Rescue Management and the Use of Rescue Equipment
- 5. Daily Operation and Emergency Operation Plan
- 6. Basic First Aid Techniques
- Aquatic First Aid Techniques
- 8. Water Quality Management
- 9. Community Relations Handling
- First Aid Techniques for Injuries and Emergency Situations including Bleeding and Fracture
- 11. EAR for Adults, Children and Infants
- 12. CPR for Adults, Children and Infants
- 13. 1-person and 2-person CPR
- 14. The Use of Oxygen Regulator Systems, Cervical Collars, Pocket Masks, Bag Valve Masks, Manual Suction Units, the Oropharyngeal Airway and Sam Splints
- The Use of Floating Spine Boards for Securing and Carrying Drowning Casualties in Shallow and Deep Water
- 16. Swimming Tests
- 17. The Use of Throw Bags for Rescue
- 18. The Use of Rescue Tubes for Rescue
- Possible Strategies for Water Rescue and Dealing with Emergencies
- 20. Identifying and Solving Potential Problems by Putting Plans into Place
- 21. Devising, Practising, Reviewing and Modifying Emergency Management Plans

Course Duration: 3.5 days

6.4.2.4 Aquatic Self Rescue Training (ASRT) Course

Course Aims:

The course is designed to provide participants with the knowledge of the safe methods of water entry from height. The Heat Escape Lessening Posture (HELP) will also be introduced. Besides, participants will learn the survival skills for immersion in water with a full firefighting kit, and the use of improvised floatation aids.

Course Contents:

- The HELP
- In-water Heat Retention
- 3. Introduction to Flotation with the Use of Floating Aids
- Swimming Tests
- 5. Elevated Entry with Life Jackets
- 6. Practising Solo Heat Conservation Strategies with the Use of Life Jackets
- 7. Full Firefighting Kit Survival Skills
- 8. Practising Self-extrication Wearing Heavy Gear
- Improvised Floatation Aids

Course Duration: 0.5 day



6.4.2.5 Swift Water Rescue — Basic Training Course

Course Aims:

The course is designed to provide participants with the knowledge of using life jackets and survival skills in swift water. Upon completion of the course, participants will know to recover a capsized kayak to the upright position on their own. They will also be capable of performing rescue duties, including water surface rescue, in swift water with the use of different rescue aids.

Course Contents:

- Introduction to Different Water Environments
- Safety Rules in Water
- 3. Formation of a Rescue Team while Moving in Swift Water
- 4. Introduction to Different Rescue Aids for Swift Water Rescue
- Swimming Tests
- 6. The Use of Life Jackets, Hand Rescue Aids, Rescue Tubes and Throw Lines, etc.
- Safe Water Entry
- 8. How to Recover a Capsized Kayak to the Upright Position on One's Own
- 9. Safe Use of Kayak (involving three participants)
- Self-withdrawal in Swift Water
- 11. Moving and Wading in Swift Water
- 12. Water Surface Rescue in Swift Water with the Use of Throw Lines

Course Duration: 1 day



6.4.2.6 Swift Water Rescue — Technician Training Course

Course Aims:

The course is designed to provide participants responsible for responding to water rescue incidents with the knowledge of the moving water environment. Upon completion of the course, participants will be able to identify relevant hazards; to perform self-rescue in moving water and wade rescue in shallow moving water; and to assist the Swift Water Rescue Technician in technical rescue incidents.

Course Contents:

- Introduction to the Dynamics and Hazards of Water
- 2. Safety Rules for Water Rescue
- Formation of a Rescue Team while Moving in Swift Water
- 4. Introduction to Different Rescue Aids for Swift Water Rescue
- 5. The Use of Rope Equipment, Rescue Tubes and Throw Lines, etc.
- 6. Safe Water Entry
- 7. Channel Crossing Methods
- 8. Line-crossing Methods
- Flat Water Boat Handling
- Self-withdrawal in Swift Water
- Moving and Wading in Swift Water
- 12. Water Surface Rescue in Swift Water with the Use of Throw Lines

Course Duration: 3 days



6.4.2.7 Swift Water Rescue — Advanced Technician Training Course

Diving and Aquatic Rescue Training Programmes

Course Aims:

The course is designed to provide enhanced training for experienced Swift Water Rescue — Technician such that they can carry out swift water and flooding rescue with frequent practice in water and application of skills relevant to real-life incident situations.

Course Contents:

- Introduction to Hydrology
- Introduction to Technical Rescue Equipment
- Hazard Identification and Risk Assessments
- 4. Dealing with rescue from vehicles in water
- 5. Handling vehicle behavior and stabilization in water
- 6. Casualty extrication from vehicle in water
- 7. Introduction to Rope Systems
- 8. Personal and Team Equipment
- 9. Swimming in Moving Water
- 10. Search Operations
- 11. Management and Organisation of Water Incidents
- 12. Formation of a Rescue Team while Moving in Swift Water
- 13. Moving Water Boat Handling
- Channel Crossing Methods
- Line-crossing Methods

Course Duration: 5 days



6.5.1 Basic Fire Investigation Training Course

Course Aims:

The course is designed to provide fire personnel with basic training in fire investigation. Lectures on theories are encompassed in a view to enhancing participants' understanding of the complex fire scenes and the scope of fire investigation. Participants will be equipped with the requisite skills to conduct fire investigations. During the course, visits to the test laboratory and practical training sessions at the simulated training facilities for fire investigation will be arranged.

Course Contents:

- Administering and Planning a Fire Investigation
- 2. Legislation and Statement-taking
- 3. Basic Methodology and Sources of Information
- 4. Fire Patterns and Related Human Behaviour
- 5. Electrical Fire, Vehicle Fire and Explosion
- 6. Record and Physical Evidence
- 7. Origin and Cause Determination
- Management of Major Investigations

(Pre-course learning - Fire Investigation Web-based Training)



Course Duration: 5 days

6.5.2 Advanced Fire Investigation Training Course

Course Aims:

The course is designed to provide fire investigators with advanced training in fire investigation. Participants will be equipped with the requisite knowledge, skills and abilities to serve as a professional fire investigator. Topics outlined in *NFPA Standard 921, Guide for Fire and Explosion Investigations* will be covered, which include determination of the point of origin, identification of burn patterns, evidence collection and analysis, interviewing techniques, and court procedures and testifying. The fire investigation skills and knowledge of the participants will be assessed through written examination, practical examination in simulated training facilities and presentation on investigation reports. Their expert witness skills will also be examined. During the course, visits to the Government Laboratory will be arranged.

Course Contents:

- 1. Legal Aspect of Fire / Arson Detection and Investigation Techniques
- 2. Fire Scene Search and Fire Behaviour
- Recognising and Preserving Evidence
- 4. Origin and Cause Determination; Plan Drawing / Sketching
- 5. Arson Motives and Incendiary Devices
- 6. Electrical Fire, Vehicle Fire and Explosion
- 7. Language of Fire
- 8. Investigation Techniques and Fire Scene Safety
- 9. Origin and Cause Determination
- 10. Visits to the Government Laboratory

Course Duration: 5 days



6.6 Fire Protection Training Programmes



6.7

6.6.1 Non-Commissioned Officer (NCO) Command cum Fire Protection Course

Course Aims:

The course is designed to equip participants with the knowledge and skills necessary for the effective performance of their supervisory duties, to strengthen their professional expertise and capabilities in commanding incidents and to enhance their competence in discharging fire investigation and fire protection duties.

Course Contents:

- Roles of NCO and Supervisory Management
- 2. Operational Command and Control
- 3. Fire Protection
- Fire Investigation

Course Duration: 12 days

6.6.2 Fire Protection Course for Officers (Part I — 8-day Elementary Course)

Course Aims:

The course is designed to equip officers in the Fire Stream with the knowledge and skills necessary for carrying out their fire protection duties in the Fire Safety Command and the Licensing and Certification Command.

Course Contents:

- Complaint Handling and Prosecution Procedures
- Control of Dangerous Goods
- 3. Fire Engineering
- 4. Fire Service Installations

Course Duration: 8 days

6.7.1 1-day HazMat (Awareness) Training Course

Course Aims:

The course is designed to provide participants with an understanding of HazMat and the associated risks. They will also be equipped with the knowledge and skills to identify hazardous substances in emergencies; to recognise the needs for additional resources; to make appropriate calls for assistance; and to give appropriate notifications to the community. In addition, participants will be introduced to the *U.S. Department of Transportation Emergency Response Guidebook*.

Course Contents:

- 1. A Walkthrough of the Hong Kong Fire Services Department HazMat Team
- 2. Chemical and Physical Properties
- 3. Recognition and Identification
- 4. Collection and Interpretation of Hazard and Response Information
- 5. Initial Actions at a HazMat Scene
- 6. Exposure and Response
- Available Resources

Course Duration: 1 day





6.7.2 10-day HazMat (Technician) Training Course

Course Aims:

The course is designed to train first responders to respond to HazMat / weapons of mass destruction (WMD) incidents and to identify and properly mitigate the related risks. The course is based on NFPA 472: Standard for Competence of Responders to HazMat / WMD Incidents.

Course Contents:

- 1. A Walkthrough of the Hong Kong Fire Services Department HazMat Team
- Response Components
- Toxicology
- 4. Collection and Interpretation of Hazard and Response Information
- Chemical and Physical Properties
- 6. Terrorist and Other Criminal Activities
- 7. Personal Protective Equipment
- 8. Rescue
- Recognition and Identification
- 10. Container Behaviour
- 11. Decontamination
- Control Functions
- Incident Analysis
- 14. Exposure Guidelines
- 15. Monitoring
- 16. Sampling
- 17. Incident Management System and Departmental Guidelines
- 18. Radiological Emergencies

Course Duration: 10 days





6.8.1 Basic Marine Firefighting Training Course

Course Aims:

The course is designed to equip participants with basic knowledge of marine firefighting. It covers a range of topics, including:

- 1. Functions of Fireboats;
- 2. Introduction to the Common Types of Ships and Boats in Hong Kong;
- 3. Introduction to Special Firefighting and Rescue Equipment on Fireboats; and
- 4. Introduction to Fire Behaviour on Ships/Boats.

Course Contents:

- Organisational Structure of Fireboat Stations
- 2. Deployment Strategies
- 3. Types of Fireboats and Their Functions
- 4. Common Types of Ships and Boats in Hong Kong
- 5. Lifesaving, Firefighting and Rescue Equipment on Fireboats
- 5. Fire Behaviour on Ships / Boats

Course Duration: 0.5 day

6.8 Marine Firefighting Training Programmes

6.9

6.8.2 Tactical Ship Firefighting Course

Course Aims:

The course is designed to equip participants with basic knowledge of the relevant Hong Kong legislation, the role of the Hong Kong Fire Services Department in ship fires, the availability of other resources for attending maritime incidents, and the safety measures to be taken when boarding a ship. In addition, lectures on the general arrangement plans, basic ship construction, and the types of fire service installations and equipment (FSIs) and emergency escape routes on ships, as well as maritime firefighting techniques are encompassed. Participants will also learn how to use lifesaving, firefighting and rescue equipment on ships, and how to prepare standard maritime messages.

Course Contents:

- 1. Laws of Hong Kong (Cap. 95, Cap. 313 and Cap. 548)
- 2. Liaison with Other Rescue Units and Shipboard Firefighting Organisations
- Visits to the Hong Kong Maritime Rescue Coordination Centre (MRCC) and the Vessel Traffic Centre (VTC)
- 4. Potential Hazards and Risks on Ships
- Reading the General Arrangement Plans to Identify the Locations of Firefighting Appliances, FSIs and Emergency Escape Routes on Ships
- 6. Effective Use of Firefighting Media and Equipment and Relevant Techniques
- 7. Casualty Evacuation Methods
- 8. Basic Ship Construction and Standard Messages for Maritime Incidents
- 9. CO₂ Pod and its Operational Procedures
- 10. Tactics for Search and Rescue (SAR) Operations

Course Duration: 5 days

6.9.1 Senior Officers Development Programme

Course Aims:

The programme is designed to groom senior officers for leadership positions in the rapidly changing social environment, and to strengthen their professional expertise and capabilities in commanding incidents.

Course Contents:

- 1. Case Study in Incident Management Workshop
- 2. Leading-your-command Workshop
- 3. Leadership Experience Sharing Seminars
- 4. Public Management Workshops
- 5. Public Speaking Workshop
- 6. District Council Meeting Simulation Workshop
- 7. District Management and Community Relations Seminar
- 8. Meeting-the-media Simulation Workshop
- 9. Workshop on Public Policy-making and Management in Hong Kong
- 10. Law Seminars

Course Duration: 12 days



6.9.2 Subordinate Officers Development Programme

Course Aims:

The programme is designed to equip officers with the knowledge and skills necessary for the effective performance of their supervisory duties, and to strengthen their professional expertise and capabilities in commanding incidents.

Course Contents:

- 1. Case Study in Incident Management Workshop
- 2. Leading-your-division Workshop
- 3. Crisis Negotiation Workshop
- Chemical, Biological, Radiological and Nuclear (CBRN) incidents and terrorist attacks:
 Visit to the Explosive Ordnance Disposal Bureau
- 5. Leadership Experience Sharing Seminars
- 6. Leading Teams for Change and Quality Enhancement Workshop
- 7. Organisational Alignment Workshop: Dialogue Experience Silence
- 8. Building a Harmonious Workplace Workshop
- 9. Managing Substandard Performance and Misconduct Seminar
- 10. Complaint Handling Seminar
- 11. Occupational Safety and Health Seminar
- 12. Presentation Skills Workshop
- 13. District Council Meeting Simulation Workshop
- District Management and Community Relations Seminar
- 15. Meeting-the-media Simulation Workshop
- 16. Law Seminars

Course Duration: 12 days



6.9.3 Management Induction Course for Junior Officers

Course Aims:

The course is designed to equip junior officers with the knowledge and skills necessary for the effective performance of their supervisory duties, and to strengthen their professional expertise and capabilities in commanding incidents.

Course Contents:

- 1. Principles of Supervision
- 2. Modern Management
- 3. Communication and Motivation
- 4. Team Building and Group Dynamics
- 5. Performance Management

Course Duration: 5 days



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6.10.1 Cable Car Rescue Training Course

Course Aims:

The course is designed to equip participants with the knowledge and skills to perform cable car rescue operations at Ngong Ping 360 and Ocean Park with the use of appropriate equipment, and to heighten their safety awareness.

Course Contents:

- Selection of Equipment for Cable Car Rescue
- 2. Standardised Rope Rescue Techniques
- Cable Car Rescue Strategies
- 4. Work and Rescue Safety at Height
- 5. Risk Management and Control
- 6. Equipment Standards and Management
- 7. Servicing and Maintenance of Equipment
- 8. Assembly of Personal Equipment
- 9. Basic Rope Access Manoeuvres
- 10. Basic Snatch Rescue Techniques

Course Duration: 5 days







6.10.2 High Angle Rescue Team (HART) Initial Training Course

Course Aims:

The course is designed to equip HART members with the knowledge and skills to perform HAR operations with the use of appropriate equipment; to supervise other firefighters in the carrying out HAR operations; and to heighten their safety awareness.

Course Contents:

- 1. Selection of Equipment
- 2. Standardised Rope Access and Rescue Techniques
- 3. Work and Rescue Safety at Height
- 4. Risk Management and Control
- Communications and Equipment Management
- 6. Equipment Standards and Certification
- 7. Servicing and Maintenance of Equipment
- Assembly of Personal Equipment
- 9. Rope Access Manoeuvres
- 10. Aid Climbe
- 11. Snatch Rescue Techniques
- 12. Application of Rescue Techniques to Actual Rescue Operations
- 13. The Use of Power Ascenders
- 14. Rescue Operation Teamwork and Site Management
- 15. Advanced Rescue Techniques
- 16. Comprehensive Knowledge of the Pulley System and Its Application
- 17. Rigging Principles and rescue Methods
- 18. Casualty Management
- Scenario-based Rescue Training

Course Duration: 25 days





6.10.3 HART Revalidation Training Course

Course Aims:

The course is designed to revalidate the operational and supervisory skills, as well as the safety awareness of HART members in performing high angle rescue operations with the use of appropriate equipment.

Course Contents:

- Selection of Equipment
- Standardised Rope Access and Rescue Techniques
- Work and Rescue Safety at Height
- 4. Risk Management and Control
- Communications and Equipment Management
- 6. Equipment Standards and Certification
- 7. Serving and Maintenance of Equipment
- Assembly of Personal Equipment
- 9. Rope Access Manoeuvres
- 10. Aid Climb
- Snatch Rescue Techniques
- 12. Application of Rescue Techniques to Actual Work and Rescue Environment
- 13. The Use of Power Ascenders
- 14. Rescue Operation Teamwork and Site Management
- 15. Advanced Rescue Techniques
- 16. Comprehensive Knowledge of the Pulley System and Its Application
- 17. Rigging Principles and Methods
- Casualty Management
- Scenario-based Rescue Training

Course Duration: 5 days





6.10.4 Mountain Search and Rescue Team (MSRT) Initial Training Course

Course Aims:

The course is designed to provide initial training for MSRT members and equip them with the knowledge and skills to perform search and rescue operations in the mountainous terrains of Hong Kong.

Course Contents:

- Major Functions of the MSRT
- 2. Coordination System, Maps, Compasses and Navigation
- 3. GPS / Mobile Apps for Rescuers
- Rope-related Skills
- Manoeuvring in Different Terrains
- 6. Survival Basics for Rescuers
- Rescuer Ready Packs and Personal Equipment
- 8. Operation Analysis
- 9. Missing/Lost Person Behaviour
- 10. Searching Basics
- 11. Operations with Helicopters

Course Duration: 15 days



6.10.5 Special Rescue Squad (SRS) Initial Training Course

Course Aims:

The course is designed to provide initial training for SRS members to enhance their operational safety and efficiency.

Course Contents:

- Introduction to SRS and Urban Search and Rescue (USAR) Operations
- 2. Risk Assessments
- Swift Water Rescue Techniques
- Advanced Rope Rescue
- 5. Advanced Road Traffic Accident Rescue
- Occupational Safety and Health at Scene

Course Duration: 20 days



6.10.6 Urban Search and Rescue (USAR) Initial Training Course

Course Aims:

The course is designed to enhance operational safety and efficiency of USAR operations.

Course Contents:

- Introduction to USAR Operations
- 2. USAR Personal Protective Equipment
- 3. Risk Assessments
- Types of Collapse
- Surface Search and Rescue
- The Use of USAR Equipment

Course Duration: 5 days



6.10.7 Basic Mountain Rescue Competency Training / Revalidation Course

Course Aims:

The course is designed to enhance operational safety and efficiency of mountain rescue operations.

Course Contents:

- 1. Introduction to Basic Mountain Rescue Operations
- Safety at Height
- 3. Basic Mountain Search Techniques
- 4. Basic Mountain Rescue Techniques
- Risk Assessments

Course Duration: 1 day



6.10.8 HAR Competency Training / Revalidation Course

Course Aims:

The course is designed to enhance operational safety and efficiency of HAR operations.

Course Contents:

- Introduction to HAR Operations
- Safety at Height
- HAR Techniques
- Risk Assessments

Course Duration: 1 day



6.10.9 Road Traffic Accident (RTA) Rescue Competency Training / Revalidation Course

Course Aims:

The course is designed to enhance operational safety and efficiency of RTA operations.

Course Contents:

- Introduction to RTA Rescue Operations
- 2. 6 Phases of a RTA Rescue Operation
- 3. Basic Road RTA Techniques
- Risk Assessments

Course Duration: 1 day



6.10.10 SRS (Fire) Revalidation Course

Course Aims:

The course is designed to enhance operational safety and efficiency of the SRS.

Course Contents:

- Introduction to SRS and USAR operations
- 2. Risk Assessments
- Swift Water Rescue Techniques
- 4. Advanced Rope Rescue
- Advanced Road Traffic Accident Rescue
- 6. Occupational Safety and Health at Scene

Course Duration: 4 days



7 Training Programmes for Local Organisations

7.1	Basic Firefighting Training Course	P.73
7.2	Advanced Firefighting and Rescue Training Course	P.73
7.3	Firefighting Training Course for Practitioners in Oil / Chemical Industries	P.73
7.4	Advanced Firefighting Training Course for Practitioners in Oil / Chemical Industries	P.73
7.5	Fire Safety Training Course for Frontline Staff of Petrol Filling Stations (PFS)	P.74
7.6	"Train-the-trainer" Course for Karaoke Establishment Employees	P.74
7.7	Public Access Defibrillator Training Course	P.74
7.8	Community CPR Training Course	P.74



7.1 Basic Firefighting Training Course

Course Aims:

The course is designed to provide participants with an understanding of the basic theory of combustion and the extinguishing methodology. It also covers an introduction to fire safety legislation.

Course Duration: 2 days



7.2 Advanced Firefighting and Rescue Training Course

Course Aims:

The course is designed to equip participants with the advanced firefighting skills and rescue techniques to handle various incidents (e.g. traffic accidents) prior to the arrival of fire personnel.

Course Duration: 2 days

7.3 Firefighting Training Course for Practitioners in Oil / Chemical Industries

Course Aims:

The course is designed to provide participants with an understanding of the basic principles of firefighting, the use of firefighting equipment, and the basic principles and the use of various kinds of foam in firefighting. Participants will also learn how to use different types of foam making equipment for firefighting purposes.

Course Duration: 2 days

7.4 Advanced Firefighting Training Course for Practitioners in Oil / Chemical Industries

Course Aims:

The course is designed to provide participants with an understanding of fire behaviour and basic fire dynamics, and acquaint them with the properties of various extinguishing agents, boil over and slope over hazards and Boiling Liquid Expanding Vapour Explosions (BLEVE). The course also covers a wide range of topics, including the properties of different types of foam, the general rules of foam application, fire leadership, and the basic knowledge and skills to perform self-rescue in hot, smoky, dark and humid environments.

Course Duration: 2 days

7.5 Fire Safety Training Course for Frontline Staff of Petrol Filling Stations (PFS)

Course Aims:

The course is designed to provide PFS frontline staff with an understanding of the basic principles of firefighting, the potential risks, the fire safety and fire service installations in PFS and the fuel unloading procedures with relevant contingency plans.

Course Duration: 1 day

7.6 "Train-the-trainer" Course for Karaoke Establishment Employees

Course Aims:

The course is designed to provide staff of karaoke establishments with an understanding of the basic theory of combustion, the basic principles of firefighting, the fire safety and fire services installations in karaoke establishments and the instructional techniques to provide training for their colleagues.

Course Duration: 1 day

7.7 Public Access Defibrillator Training Course

Course Aims:

The course is designed to equip participants with the basic knowledge of the circulatory system, cardiopulmonary resuscitation (CPR), airway obstruction management and the use of Automated External Defibrillators (AED).

Course Duration: 1 day

7.8 Community CPR Training Course

Course Aims:

The course is designed to equip participants with the basic knowledge of the circulatory system, cardiopulmonary resuscitation (CPR) and airway obstruction management.

Course Duration: 0.5 day

8. TRAINING PROGRAMMES FOR INTERNATIONAL ORGANISATIONS

8.1	Ambulance Aid Training	P.76
8.2	Diving Training	P.79
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8.5	Hazardous Materials (HazMat) Training	P.89
8.6	Technical Rescue Training	P.91



8.1 AMBULANCE AID TRAINING

- 8.1.1 Basic Ambulance Aid Training Course
- 8.1.2 Advanced Ambulance Aid Training Course

8.1.1 Basic Ambulance Aid Training Course

The course is designed to equip participants with the requisite knowledge and skills to carry out immediate lifesaving procedures with the use of basic ambulance equipment. The course covers lectures on basic patient care, practical skill stations and realistic simulation training. Upon completion of the course, participants will be able to perform patient assessment, provide basic airway management, perform cardiopulmonary resuscitation (CPR), use automated external defibrillators (AED), and provide basic trauma care.

Course Duration: 5 days









8.1.2 Advanced Ambulance Aid Training Course

The course is designed to equip participants with the knowledge and skills to sustain life, prevent further injuries and provide care for the sick and injured prior to the arrival of ambulance personnel. The course covers lectures on advanced patient care, practical skill stations, realistic simulation training (involving the handover of a patient) and the handling of multiple casualty incidents. Upon completion of the course, participants will be able to perform resuscitation, treat patients with traumatic injuries (including soft tissue, fracture and spinal injuries), and provide care for patients with medical emergency. They will also be able to monitor patients' condition and prepare documentation for handover purposes.

Course Duration: 6 days









8.2 DIVING TRAINING

8.2.1 SCUBA Rescue Diver Training Course



8.2.1 SCUBA Rescue Diver Training Course

The course is designed to give participants a solid understanding of diving physiology, diving physics, decompression illness, the use of diving equipment, diving tables and the related emergency procedures, underwater diving skills, risk management, underwater communication, search and rescue techniques, diving equipment maintenance, the use of air compressors and the charging of SCUBA tanks. The course comprises theoretical lectures and practical training, enabling participants to practise their newly acquired knowledge and skills in a safe and controllable environment. Participants who pass the course-end-examination will become a Rescue Diver capable of carrying out underwater works as well as search and rescue operations safely and efficiently at water depths of not more than 25 meters.

Course Duration: 20 days







8.3 FIRE INVESTIGATION TRAINING

- 8.3.1 Basic Fire Investigation Training Course
- 8.3.2 Advanced Fire Investigation Training Course



8.3.1 Basic Fire Investigation Training Course

The course is designed to provide participants with basic training in fire investigation. Lectures on theories are encompassed to enhance participants' understanding of the complex fire scenes and the scope of fire investigation. In addition to visits to the Government Laboratory, practical training sessions at the simulated training facilities will be held, such that participants can sharpen their fire investigation skills in safe but challenging simulated scenarios.

Course Duration: 5 days









8.3.2 Advanced Fire Investigation Training Course

The course is designed to provide participants with advanced training in fire investigation by equipping them with the requisite knowledge, skills and abilities to serve as a professional fire investigator. The course covers a range of topics outlined in *NFPA Standard 921*, *Guide for Fire and Explosion Investigations*, including determination of the point of origin, identification of burn patterns, evidence collection and analysis, interviewing techniques, and court procedures and testifying. The fire investigation skills and knowledge of the participants will be assessed through written examination, fire investigation practical examination in simulated training facilities and presentation on investigation reports. Their expert witness skills will also be examined. During the course, participants can practise their newly acquired knowledge and skills in a safe training environment at the Fire and Ambulance Services Academy.

Course Duration: 5 days









8.4 FIREFIGHTING TRAINING

- 8.4.1 Firefighting Course
- 8.4.2 Compartment Fire Behaviour Training (CFBT) Course
- 8.4.3 High-rise Building Firefighting Course
- 8.4.4 Airport Fire Officer Course



8.4.1 Firefighting Course

The course is designed for firefighting crews of government agencies and commercial entities. Lectures and practical sessions will be encompassed in the course. Participants will be trained on the principles of combustion, principles of extinction and classification and construction of fire extinguishers, fire hoses and branches. The course also covers behaviours of smoke in fires, actions in case of fire, basic fire protection, application of firefighting equipment, and practical firemanship. A highlight of the course is targeted training in firefighting and rescue operations in densely populated high-rise buildings and high risk premises.

Course Duration: 3 days









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8.4.2 CFBT Course

The course is designed to provide state-of-the-art training in compartment fire behaviour for firefighters. It will not only help them to understand the complex fire environment by providing a sound theoretical basis, but enable them to perform swiftly in firefighting operations with their improved nozzle techniques and hose management skills. Live fire training offers them opportunities to put their skills into practice and identify areas for improvement. During the course, participants will be able to exercise professional judgement (based on theories) and act upon professional judgement (based on practical skills) in a safe and consistent environment.

Course Duration: 5 days









8.4.3 High-rise Building Firefighting Course

The course is designed to impart knowledge on operational strategies and tactics for tackling high-rise fires. It covers situation appraisal, entry control procedures of breathing apparatus teams, strategies of search and rescue, firefighting techniques, etc. The Incident Command System will also be introduced. Participants will learn about the unique challenges that firefighters face in high-rise fires. In-depth lectures on fire service installations and equipment for high-rise buildings and methods of their operation will be delivered. Practical drills with simulated flashovers will be held with the use of a Live Fire Trainer System. The system can simulate high temperature, severe fire, heavily smoke-logged and high water vapor environments that are typical in building fire scenarios, allowing participants to practise their skills in completely safe and controlled circumstances.

Course Duration: 5 days









8.4.4 Airport Fire Officer Course

The course is designed to provide in-depth training on the theories and principles in aerodrome rescue and firefighting for airport firefighters, management staff in particular. The course equips participants with advanced knowledge and skills in rescue and firefighting, such that they will be able to respond to emergencies in airports efficiently and effectively. They will also learn how to command and strategically manage an airport rescue and firefighting service. The course encompasses extensive theoretical lectures as well as on-site visits to the Hong Kong International Airport.

Course Duration: 5 days









8.5 Hazardous Materials (HazMat) TRAINING

8.5.1 Hazardous Materials (HazMat) (Technician) Training Course



8.5.1 HazMat (Technician) Training Course

The course is designed in accordance with the NFPA 472: Standard for Competence of Responders to HazMat / WMD Incidents. Upon completion of the course, participants will have the requisite skills to respond to HazMat / WMD incidents, and to identify and properly mitigate the related risks.

The course covers initial isolation of the affected area, proper identification of the product, notifications to be made, mitigation levels and procedures, and termination of the incident. Moreover, it provides training on how to work in all levels of personal protective equipment, to deploy various types of decontamination procedures, to operate specialised monitoring equipment, and to properly apply a multitude of offensive and defensive product control techniques.

Course Duration: 10 days









8.6 TECHNICAL RESCUE TRAINING

8.6.1 Advanced High Angle Rescue (HAR) Training Course

8.6.2 Road Traffic Accident (RTA) Rescue Training Course

8.6.3 Urban Search and Rescue (USAR) Training Course



8.6.1 Advanced HAR Training Course

The course is designed to equip participants with rope rescue skills and heighten their safety awareness in operations. Participants will acquire the requisite techniques to perform personal rope rescue and team rescue by applying industrial rope access techniques to technical rescue operations. The course also covers practical training in tower crane rescue, gondola rescue, cable car rescue, etc. This course is suitable for work-at-height professionals and members of rope rescue teams.

Course Duration: 10 days







8.6.2 RTA Rescue Training Course

This course is designed to equip participants with the techniques and tactics to carry out RTA rescue operations. The simulated road tunnel and highways in the FASA can provide a realistic simulation of large-scale RTA involving heavy vehicles, double-decker buses, private vehicles or oil tankers. With this facility, firefighters and paramedics can practise rescue techniques on extrication, vehicle stabilisation and mass casualty handling. Upon completion of the course, trainees will have acquired the requisite knowledge and skills for RTA rescue.

Course Duration: 5 days









8.6.3 **USAR Training Course**

This course is designed to enhance participants' understanding of the operational guidelines for USAR. The USAR Training Ground in the Fire and Ambulance Services Academy, which simulates building collapse scenarios, provides training on search and rescue operations under adverse circumstances such as landslides and building collapse incidents. An underground concrete conduit is also provided to enable participants to conduct rescue and casualty handling training in a realistic but safe environment. Upon completion of the course, participants will have acquired the requisite knowledge and skills for USAR.

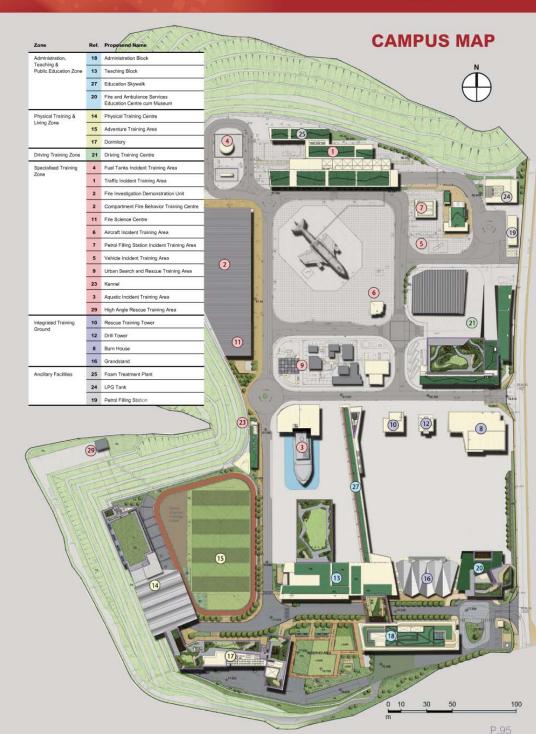
Course Duration: 5 days











10.

CONTACT INFORMATION

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Office hours: Mon-Friday 8:30 am to 5:45 pm

(Closed on Saturday, Sunday and Public Holidays)



APPLICATION DETAILS

For enquiry / application / customization course, please contact us via e-mail fsd_training@hkfsd.gov.hk
Application must be made 2 months before the commencement of the course.
HKFSD reserves the right to amend the contents without piror notice.





How to get here:

1. Take the Airport Express to interchange to MTR Tseung Kwan O Line.



2. Get off at Hang Hau Station.





3. Take Bus No.298E [Tseung Kwan O Industrial Estate (Circular)] and get off at Pak Shing Kok Bus Stop; or Take Bus No.298E [Special Departure] and get off at Fire And Ambulance Services Academy Bus Stop.

Details of MTR Train Services and KMB Bus Service are available at:

http://www.mtr.com.hk/en/customer/tourist/

http://www.kmb.com.hk/en/





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