

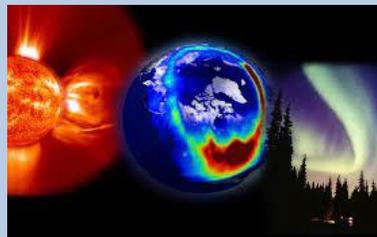


Italian Air Force-Met Service Courses

1. General Meteorology and Aeronautical Meteorology
2. Meteorological Technician
3. Basic and Advanced Space Weather



1. A course to operate as aeronautical forecaster and as general forecaster both in the operational sector, development of meteorological methods and applications, and modeling. Provides the qualification of "Meteorologist" compliant to WMO document n° 1083. The course is open to Italian and foreign civilians and military operators and forecasters.
2. Course to operate as meteorological technician, enabling operators as meteorological observer, and meteorological assistant for air navigation. Provides the qualification of "Meteorological Technician" compliant to WMO document n°1083. The course is open to Italian and foreign civilians and military operators.
3. Course to learn the basic elements for understanding phenomena connected to "Space Weather" (SWx) and the interaction of solar wind with the magnetosphere and the Earth's atmosphere. The course prepares for the analysis of SWx phenomena and data, predicting their impacts on critical infrastructures in orbit and on Earth. Participants are personnel already qualified as "Meteorologist" compliant to WMO document n° 1083.



EDUCATION & TRAINING IN METEOROLOGY AND CLIMATOLOGY COP28-DUBAI, EXPO CITY ITALY PAVILION December, 9th 2023



ETEMPS



Italian RTC managed by CNR-IBE International Advanced School in Agricultural Meteorology



The course provides innovative knowledge and skills on the most advanced technologies and tools for agrometeorological analysis and monitoring for sustainable agricultural development in climate change environment.

Participants are Researchers, technicians from meteorological services and other professionals in these sectors. The course lasts one week for some 30 to 40 hours of theoretical lessons, interactive laboratories and visits. It takes place at the CNR facilities and affiliated Universities, or at the students' home Countries. There are also "ad hoc" courses upon request from Italian Institutions and international Organizations that provide professional knowledge on innovative topics in the agricultural field such as: precision agriculture, sustainable use of water resources, application for the optimization of natural resources and of ecosystem services; use of technical devices and instrumentation.

The WMO-RTC issues a certificate of participation. Where applicable and following a test, the students also receive a statement for completing specific modules, certified in compliance to WMO document n° 1209 on competency frameworks which is essential to perform specific functions. Exploiting the collaboration with WMO, the WMO-RTC issues "micro-credentials" (badges) linked to the specific KPIs (Key Performance Indicators) envisaged in WMO document n° 1209, which proves the knowledge and skills for a distinctive competence.



Sant'Anna School of Advanced Studies
Course on "Weather Forecasting and Climate Change: Ethical and Implications for Society"



The course provides students with a new approach on the ethics of climate change through a triple perspective: individual, global and intergenerational. The objective is pursued from a legislative point of view, analyzing climate mitigation and adaptation policies in the light of different criteria such as the historical responsibility, the global asymmetries of economic power and adaptive capacity, and the role of justice towards future generations. The course develops with an interdisciplinary approach in the subjects of philosophy, morality, politics, sociology and economics. The main goals are:

- understanding climate ethics and the physical and ethical aspects of climate change;
- understanding the concept of "carbon budget", its functioning and possible use, in order to become familiar with the critical issues related to climate change;
- analysis of mitigation policies, including legislation and the role of justice towards future generations.
- exploitation of the interdisciplinary skills by enhancing the cross-cutting approach to issues of ethics and climate, through philosophy, sociology, political science, natural sciences and economics.



Universities of L'Aquila and Roma "La Sapienza" Master's Degree Course in Atmospheric Science and Technology for Meteorology & Climate



Master's degree in Physics based on an international inter-university programme, proposed by the University of L'Aquila (Department of Physical and Chemical Sciences DSFC) and "La Sapienza" University of Rome (Department of Information, Electronics and Telecommunications Engineering (DIET), Department of Physics (DF) and Department of Civil, Environmental and Engineering Construction (DICEA).

The Certificate issued after successful completion of the course complies with WMO document n° 1083 "Guide to the implementation and standards of education and training in meteorology and hydrology", and compliant with Basic Instruction Package for Meteorologists (BIP-M). The objectives are to provide professional, solid, and specific skills in atmospheric science from a physical and engineering perspective. The course trains for the following professionals: meteorologist, climatologist, forecaster, atmospheric scientist, remote sensing scientist and environmental physicist. The course lasts two years, carried out partly at the University of L'Aquila and partly at La Sapienza University in Rome.



Center of Excellence Telesensing of Environment and Model Prediction of Severe events CETEMPS

CETEMPS uses numerical and theoretical models, as well as analysis of observed data to study atmospheric phenomena and their effects on climate and territory and carries out research in the following sectors:

- atmospheric dynamics at mesoscale and local scale;
- planetary boundary layer;
- regional and local scale climate;
- atmospheric pollution;
- radar meteorology and atmospheric Lidar.

CETEMPS manages the prestigious international school ISSAOS (International Summer School on Atmospheric and Oceanic Sciences) dedicated to all disciplines related to the study of the atmosphere and carries out teaching activities in collaboration with the University of L'Aquila and other universities as part of courses specialization, seminars, master's degrees and research doctorates.



The "EUMETSAT Satellite Application Facility on Support to Operational Hydrology and Water Management (H SAF)" – Training Program

H SAF provides products derived from existing and future satellites with sufficient temporal and spatial resolution to meet the needs of operational hydrology, through the estimation of the main hydrological variables: precipitation, soil moisture, snow parameters and provides more than 20 operational products with different spatial coverages and time frequencies. Recent case studies have focused on drought conditions in Europe, intense flooding in Nigeria and South Africa, and major heavy rainfall events over the Mediterranean area and North Africa.

The training program is an essential part of the EUMETSAT H SAF consortium. It focuses on the exploitation of different products and operational applications to meet the evolving users' needs, also for research purposes. The program is consistent with EUMETSAT training catalogue.