

# Activities of environmental education and training

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# ENVIRONMENTAL EDUCATION AND TRAINING UNIT

## Main activities

The Unit designs and carries out **education and training activities**, including post-graduate training, dealing with environmental e sustainable themes, to spread sustainable culture based on scientific data and to promote a responsible approach to environmental problems.



The screenshot displays the website of the Istituto Superiore per la Protezione e la Ricerca Ambientale (ISPRA). The header includes the ISPRA logo and the text 'Istituto Superiore per la Protezione e la Ricerca Ambientale'. A search bar is located in the top right corner. The main navigation menu includes 'Home', 'Istituto', 'Attività', 'Servizi', 'Dati e Indicatori', 'News', 'Eventi ISPRA', 'Sala stampa', and 'URP'. The page content is titled 'Educazione e formazione ambientale' and features a sidebar with links to 'Educazione e formazione ambientale', 'Corsi di formazione ambientale', 'Tirocini formativi', 'Percorsi per le competenze trasversali e per l'orientamento (PCTO)', and 'Educazione ambientale e alla sostenibilità'. The main content area includes a sub-header 'Educazione e formazione ambientale', a small image of people in a field, and a list of activities: 'L'ISPRA promuove e realizza programmi di educazione e formazione su materie ambientali a livello nazionale ed internazionale, attraverso le seguenti attività: Progetti e iniziative di educazione ambientale. Progettazione, organizzazione ed erogazione di corsi di formazione ambientale sia in aula che a distanza, anche a supporto di progetti formativi nazionali o internazionali. Tirocini curriculari ed extra-curriculari, alternanza scuola-lavoro. Coordinamento del Gruppo di lavoro interagenzie per la Formazione Permanente.'

# ENVIRONMENTAL EDUCATION AND TRAINING UNIT

## Main activities

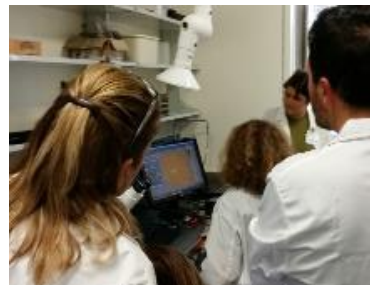
The initiatives are addressed to **different targets** and are also developed with other Research Institutions, Universities and Schools.



**Environmental education initiatives** for schools, and other target groups



**Specialistic training courses** for environmental technicians of SNPA, Public Administration and other Research Institutes



**Internship** for University students and **School-work alternation programs** for School students

# ENVIRONMENTAL EDUCATION INITIATIVES

Through the Program of EES initiatives addressed to schools, we want to:

contribute to the creation and spread of an **ecological oriented culture** and of a **responsible citizenship**

provide a link between technical and scientific knowledges, which are the core-business of our Institute, and sustainability education tools and methodologies, to achieve an **interdisciplinary, active and participatory learning**

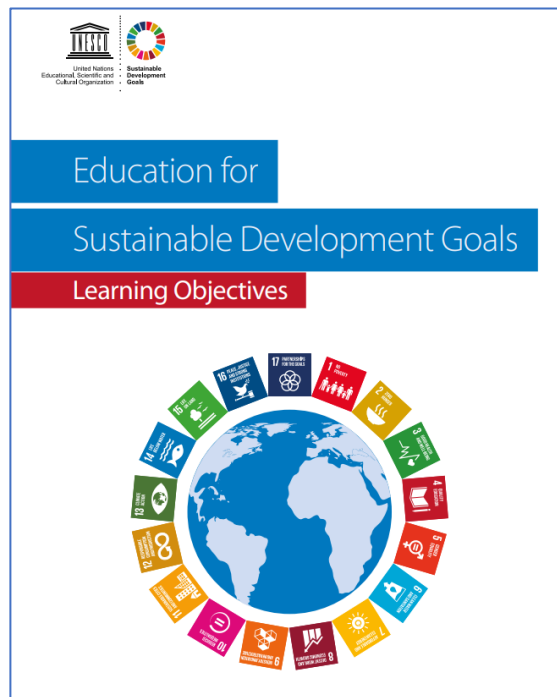
The main institutional references for these activities are:

- **target 4.7 of 2030 Agenda** > Education to sustainable development (2015)
- the **Italian National Strategy for Sustainable Development** (2017)
- the **Guidelines for Environmental Education** (Ministry of environment, 2015) and the teaching **Guidelines for Civic Education** (Ministry of education, 2020)



# ENVIRONMENTAL EDUCATION INITIATIVES

## Theoretical and methodological references for EES



UNESCO, 2017



EU Commission, 2018



European Commission (JRC), 2022



# ENVIRONMENTAL EDUCATION INITIATIVES

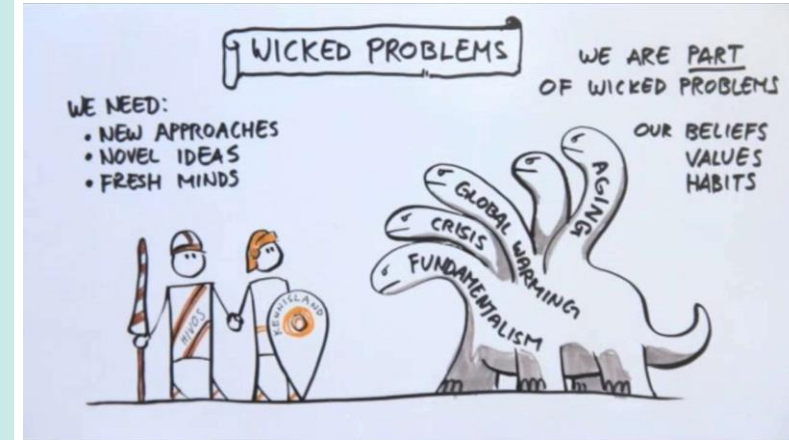
Education is a key to achieve sustainability, because:

helps people to face the **challenge of complexity and uncertainty** that characterize our times, by providing not only knowledges, but also values and interdisciplinary competences, or “**citizenship competences**”

environmental education is functional to sustainability if it is intended as a **transformative education**, or education to change, and not just as a transmissive education.

In summary, we can say that a «quality education»:

- promotes a **critical, reflective and creative learning**
- it is **oriented to learner** and to the learning process
- it is **based on experience and problems** rather than themes
- it is **aimed to provide citizenship' competences** (knowledge, skills and attitudes that promote ways to think, plan and act with empathy, responsibility, and care for our planet).



# ENVIRONMENTAL EDUCATION INITIATIVES

## ISPRA Program of EES initiatives:

promotes, for each yearschool, a number of educational projects on different themes, addressed to schools of every level

each initiative includes both classroom activities, with games, scientific laboratories, group and outdoor activities and didactical visits, led by the ISPRA researchers and technologists, mainly **carried out in face-to-face** modality, and they are of course free for schools.

In the current schoolyear, **18 face-to-face initiatives** have been launched, that are currently taking place in **50 schools and over 200 classes**, in the Municipalities of Rome, Venezia, Chioggia, Ozzano dell'Emilia, Livorno, Palermo.

A fair number of the initiatives deals with **marine ecosystem and biodiversity themes**, such as **Posidonia oceanica**, the Mediterranean sea life, aquaculture, marine-coastal ecosystem, and impacts of human activities.

Also a **multimedia project** has been implemented, named **"Passeggiando nell'ambiente" (Walking through the environment)**, based on the publication:

[https://www.isprambiente.gov.it/en/publications/luxury-publications/walking-through-the-environment?set\\_language=en](https://www.isprambiente.gov.it/en/publications/luxury-publications/walking-through-the-environment?set_language=en)



# ENVIRONMENTAL EDUCATION INITIATIVES

## The training course: “Environmental Education for Sustainability: competences learned, competences acted” (2020 / 2021)

set up in the framework of an Agreement with the former Ministry of Environment, and in cooperation with the Regional Agencies of the **National System for the Protection of Environment (SNPA)**

addressed to environmental educators engaged in Regional Centres for EE and in the Regional Agencies, with the aim of improving environmental education and sustainability competences, focusing on a **transformative and interdisciplinary model**.

The course was carried out with a first part in **e-learning a-synchronous training Units** and a second part with **online synchronous laboratories**.

In 2021 the training course was replied also for ISPRA researchers and technologists involved in environmental activities for schools.

Thinking Holistically	Envisioning Change	Achieving Transformation
<b>Integration:</b>		
<b>Systems</b> The educator helps learners to develop an understanding of the world as an interconnected whole and to look for connections across our social and natural environment and consider the consequences of actions.	<b>Futures</b> The educator helps learners to explore alternative possibilities for the future and to use these to consider how behaviours might need to change.	<b>Participation</b> The educator helps learners to contribute to changes that will support sustainable development.
<b>Involvement:</b>		
<b>Attentiveness</b> The educator helps learners to understand fundamentally unsustainable aspects of our society and the way it is developing and increases their awareness of the urgent need for change.	<b>Empathy</b> The educator helps learners to respond to their feelings and emotions and those of others as well as developing an emotional connection to the natural world.	<b>Values</b> The educator develops an awareness among learners of how beliefs and values underpin actions and how values need to be negotiated and reconciled.
<b>Practice:</b>		
<b>Transdisciplinarity</b> The educator helps learners to act collaboratively both within and outside of their own discipline, role, perspectives and values.	<b>Creativity</b> The educator encourages creative thinking and flexibility within their learners.	<b>Action</b> The educator helps the learners to take action in a proactive and considered manner.
<b>Reflexivity:</b>		
<b>Criticality</b> The educator helps learners to evaluate critically the relevance and reliability of assertions, sources, models and theories.	<b>Responsibility</b> The educator helps learners to reflect on their own actions, act transparently and to accept personal responsibility for their work.	<b>Decisiveness</b> The educator helps the learners to act in a cautious and timely manner even in situations of uncertainty.



# ENVIRONMENTAL TRAINING COURSES

Through training activities, we want:

develop **updating skills** in the field of environmental protection

create a system of **shared and advanced knowledge** on environmental legislation and on the most innovative methodologies and techniques for environmental protection

The courses are mainly addressed to **researchers and technicians of the SNPA**, of the **Ministry of Environment** and other **Public Administrations**.

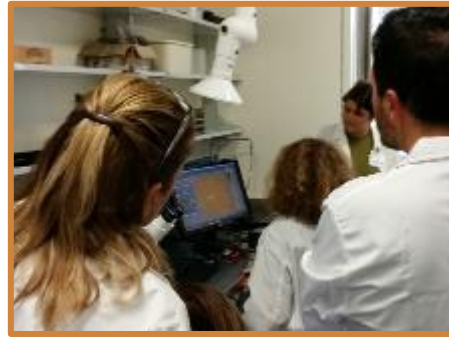
We also collaborate in the courses promoted by the **Police and Armed forces** for their personnel with environmental protection tasks, by **providing specialist teaching**.



# ENVIRONMENTAL TRAINING COURSES

To develop training courses, we adopt different methodologies:

## Face to face training



## Synchronous distance learning

**Misura delle piogge (innescanti e no)**

- Un campione di eventi di pioggia innescanti ha permesso di definire una soglia pluviometrica critica per l'accadimento di colate detritiche.
- Questa soglia viene superata da numerosi eventi non innescanti.
- Problemi nel confrontare le due popolazioni di eventi di precipitazione.
- Implicazioni per i sistemi di allertamento...
- Utilizzo del radar meteo?

Torrente Moscardo (Udine) - dati 1990-2019  
Marchi L. et al. (2021)  
<https://doi.org/10.5194/nhess-21-87-2021>

Corso di Alta Formazione per il monitoraggio delle frane 4

VIDEO (1)  
Vittorio Corradi

CHAT

Tutti

Trigila Alessandro ISPR: grazie a David e Patrick per la bella presentazione

Patrick Thuézas - Servizio geologico Vall e d'Aosta: Grazie Alessandro

Chiappetta Francesco: sì sì. Grz

Carlo Masciello: Buongiorno, Carlo Masciello presente

Domenico Davide: Buongiorno Tutte e Tutti

ASCA ENRICO: c'è un bruiso di fondo

Chiappetta Francesco: grz

ASCA ENRICO: ok, a dopo

Ceggiano Tiziana: ok

adafno calcolatore sta digitando...

## Asynchronous distance learning

Modalità di campionamento biologico in ambito certificazione CITES

Home / I miei corsi / CITES

ISPR  
Istituto Superiore per la Protezione e la Ricerca Ambientale

Systema Nazionale per la Protezione dell'Ambiente

Strumenti didattici

- Programma del corso
- Questionario di ingresso  
Completato Visualizza Completato Invia le risposte
- Presentazione dei docenti
- Documenti di riferimento
- Storie di Alternanza Scuola Lavoro

Presentazione del corso

- Presentazione del Corso  
Completato Visualizza  
Claudia Greco - ISPR

# ENVIRONMENTAL TRAINING COURSES

Since 2015

More than 120 courses  
have been promoted

More than 10.500  
trainees

More than 3.100  
hours of training

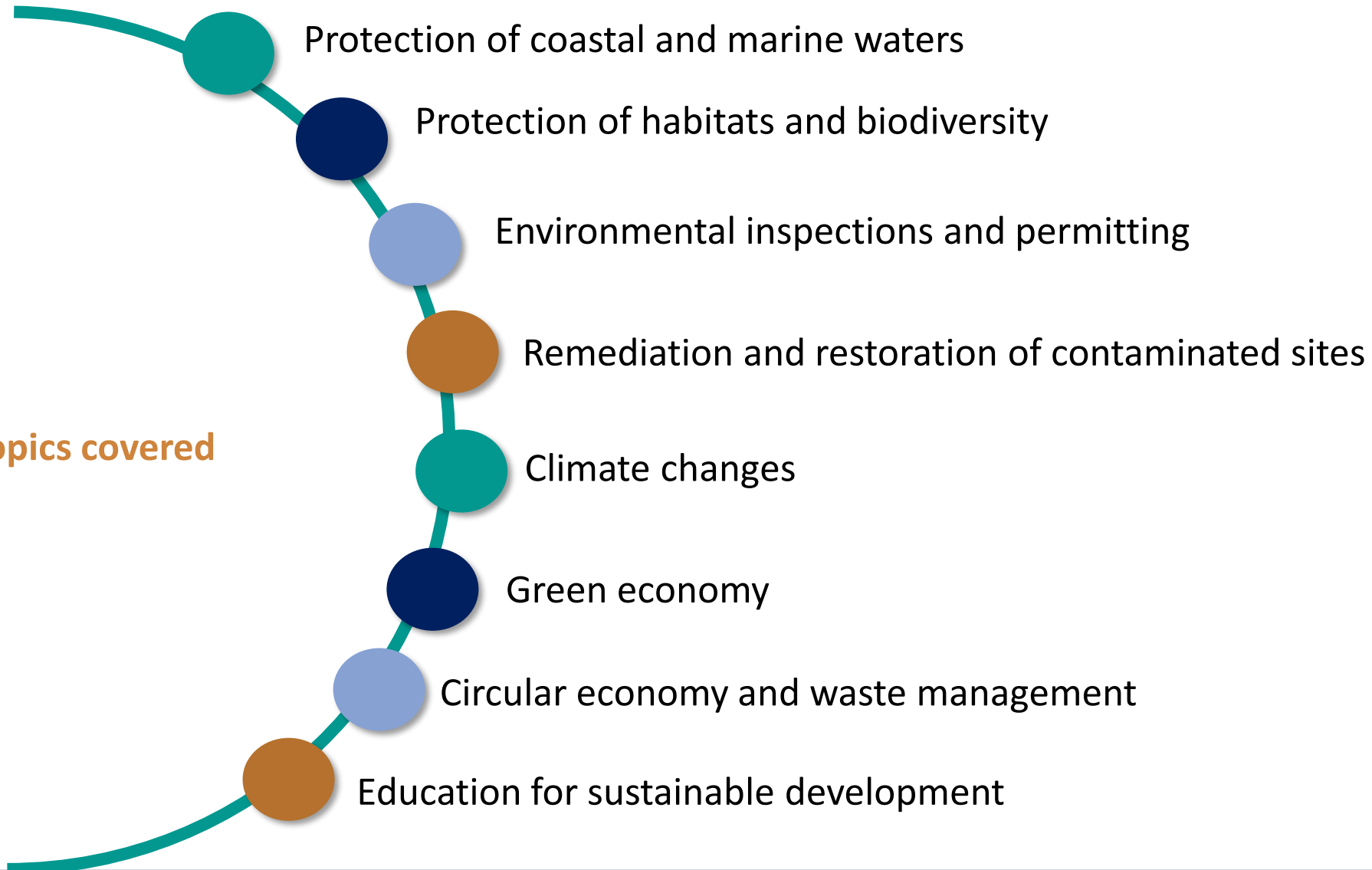
For each training course a certificate of attendance is provided to each student

Since 2008 the environmental training courses have been certified according to UNI EN ISO 9001 Standards.



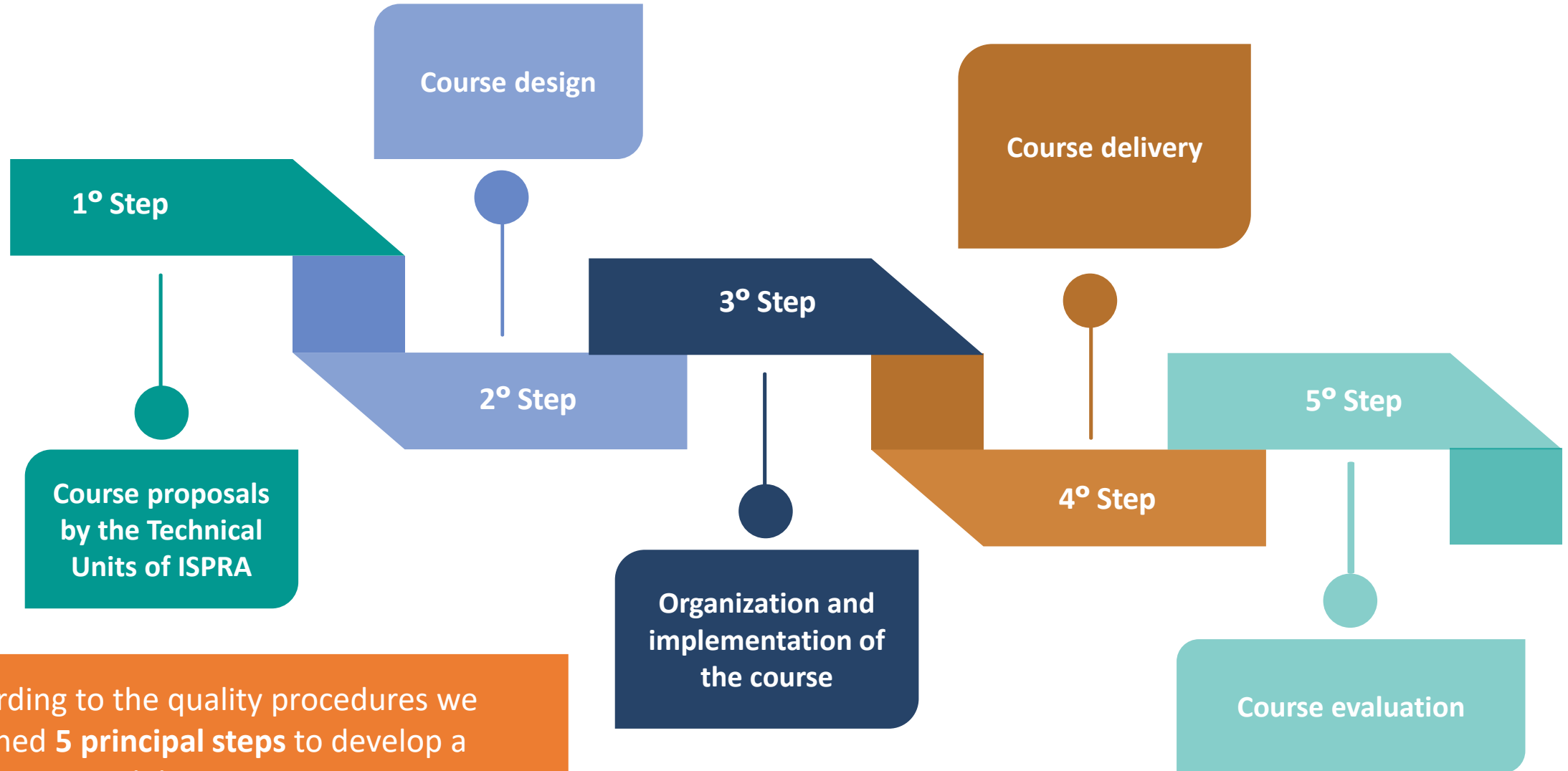
# ENVIRONMENTAL TRAINING COURSES

## Main topics covered



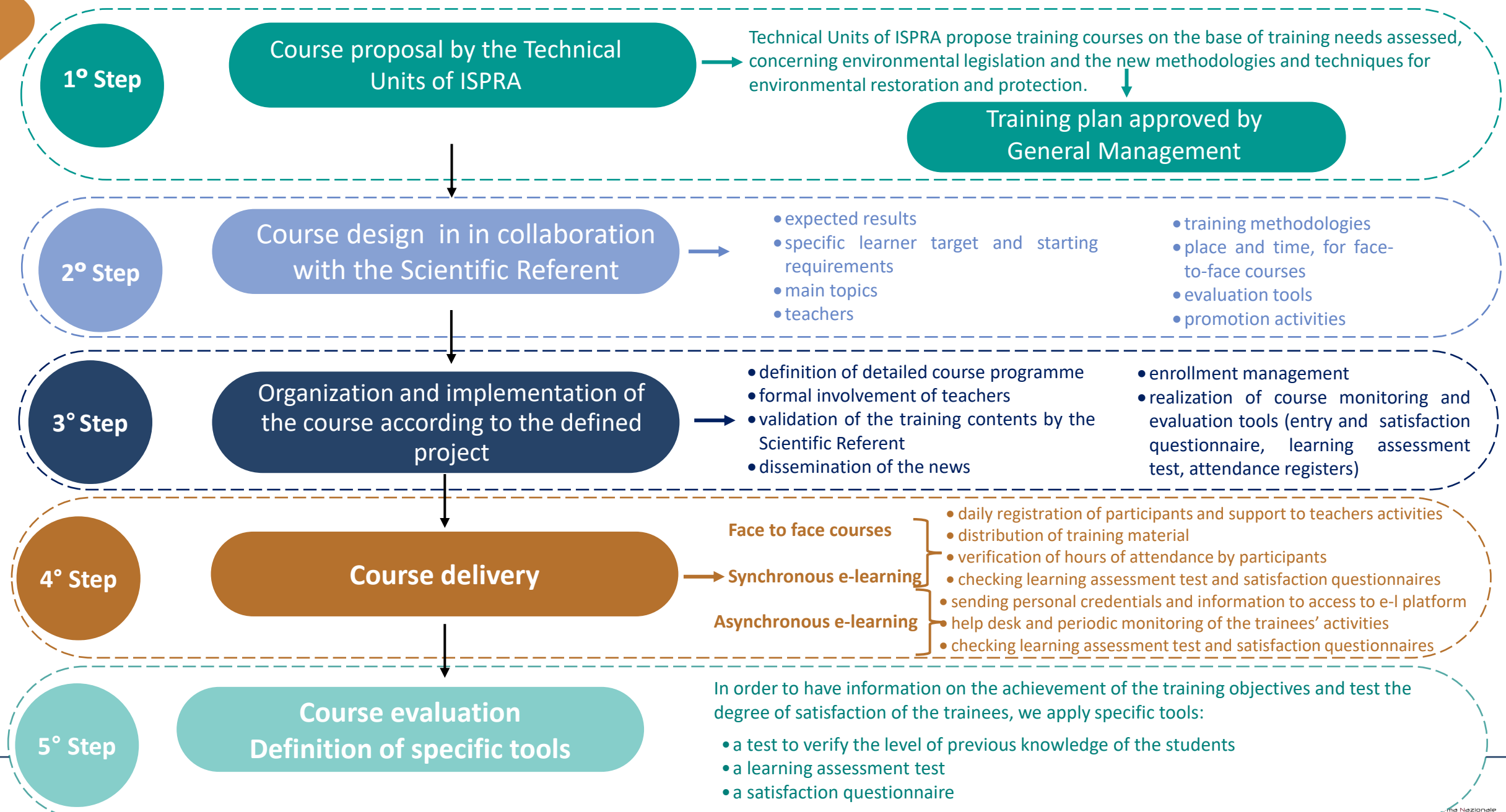


# ENVIRONMENTAL TRAINING COURSES



According to the quality procedures we defined 5 principal steps to develop a training courses

# ENVIRONMENTAL TRAINING COURSES



# ENVIRONMENTAL TRAINING COURSES

## Distance Learning

Distance learning has become the most widely used method of delivering training courses, especially after the covid 19 pandemic.

The main benefits of the distance learning are:

- reduction of travel costs for teachers and trainees
- possibility of a better balance, both for teachers and trainees, between training, work and personal time
- possibility to have a larger number of participants

Also, in the asynchronous distance learning:

- e-learning resources can be accessed by learners anytime and anywhere
- monitoring of training progress is easier both for tutors and learners
- it is possible to track each training activity performed by learners
- it is possible to activate unlimited number of course editions without adjunctive costs
- It is possible to enroll an high number of learners

# SCHOOL-WORK ALTERNATION PROGRAMS (PCTO)

Since 2017, ISPRA hosts high school students in **alternating school-work activities**.

School-work alternation is an innovative teaching method, which through practical experience helps students to consolidate the knowledge acquired at school and to test their aptitudes in a work environment, to enrich their training and to direct their future professional choice.



The training activities are developed on the basis of a **training project developed by the school in collaboration with ISPRA, within the framework of a formal agreement**

**In 2022, 390 students have been involved in school-work alternation projects.**



# Thank you!

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<https://www.isprambiente.gov.it/it/attivita/formeducambiente>

[www.isprambiente.gov.it/it](http://www.isprambiente.gov.it/it)