



Analysis and
Management of the
Environment
Università di Bologna
EIT Master Label Climate-KIC

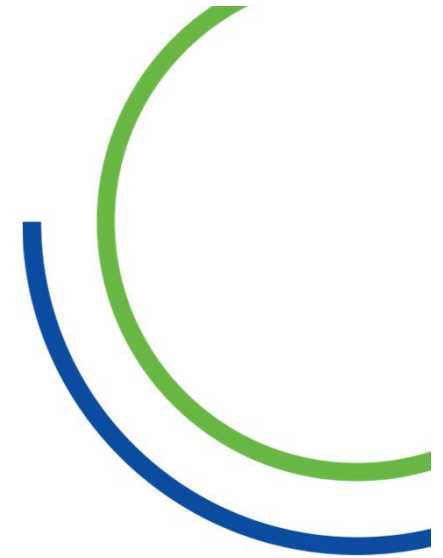


Climate-KIC is supported by the
EIT, a body of the European Union

A cura di Università di Bologna e Climate-KIC Italy

Di cosa parliamo oggi?

1. Il Programma EIT Master Label
2. Analysis and Management of the Environment - Label UNIBO a Ravenna
3. I moduli add-on di Climate-KIC
4. Ammissione e selezione
5. Contatti



La cornice: Il programma EIT Master Label

EIT Master Label

- Programma europeo di accreditamento per corsi di **laurea specialistica**
- **Curriculum innovativo** rivolto a un gruppo selezionato di studenti
- Integrazione di **format Climate-KIC** nel corso tradizionale

I curricula EIT Label:

- In linea con i **risultati di apprendimento** attesi definiti dall'EIT (Overarching Learning Outcomes)
- Sviluppo di **competenze** di innovazione e imprenditoriali
- Integrare l'apprendimento **teorico e pratico** (learning-by-doing)
- Prevedere periodi di **mobilità** all'estero e/o in azienda
- Mettere gli studenti in contatto con **l'innovazione e l'eccellenza** locali e internazionali

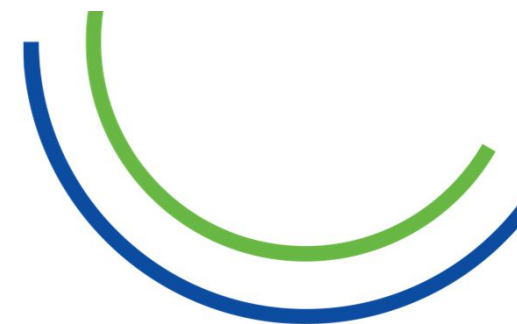
EIT Master Label programme aims to educate the **talents of tomorrow**, who will not only create new start-ups but also contribute to innovation in existing companies, and in society and thereby **become a source of growth**.



Climate-KIC

<https://eit.europa.eu/activities/education/eit-label>

EIT Overarching Learning outcomes (OLOs)



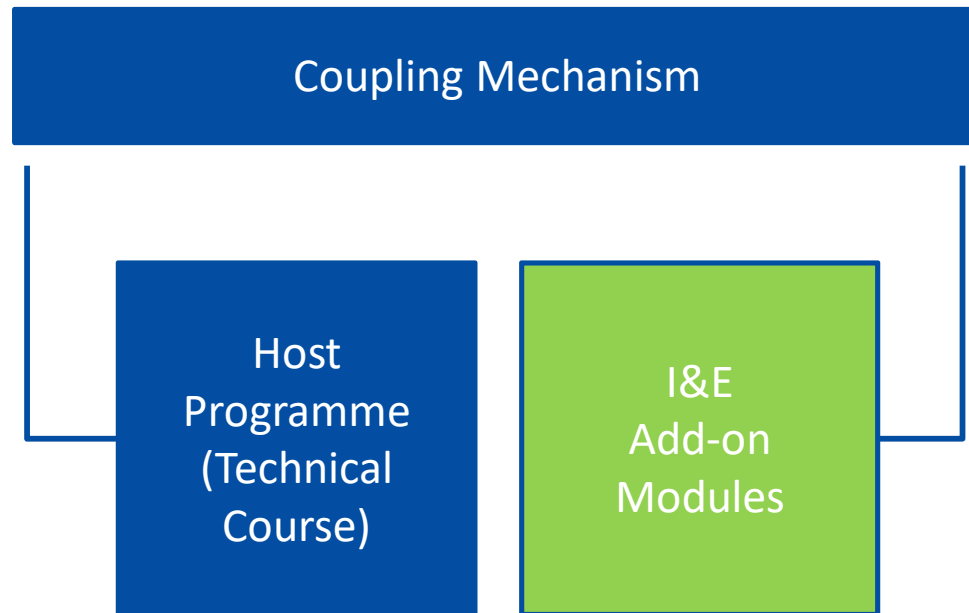
1. Capacità di valutare l’impatto di progettazioni e decisioni dal punto di vista scientifico, etico/sociale e intergenerazionale, promuovendo l’approccio focalizzato sull’identificazione di soluzioni efficaci
2. Capacità di tradurre l’innovazione in business
3. Capacità creativa, in grado di esplorare opportunità e generare nuove idee
4. Capacità di usare le conoscenze, idee e tecnologie per creare nuovi prodotti, servizi, politiche, modelli di business e occupazione
5. Capacità di usare metodi di ricerca, processi e tecniche più avanzati per lo sviluppo di nuove opportunità di crescita, e applicarle in modo interdisciplinare
6. Capacità di trasformare esperienze pratiche in temi di ricerca
7. Capacità decisionale e leadership nell’ambito di attività di gruppo per la creazione di valore basata sulla combinazione di formazione superiore, ricerca e impresa



Climate-KIC

<https://eit.europa.eu/activities/education/eit-label>

Il programma EIT Master Label di Climate-KIC



1. Participate in Climate-KIC **Journey**, a 5-week climate innovation summer school.
2. Participate in at least 5 **SPARK! Lectures**, a series of inspirational lectures.
3. Spend 30 ECTS of their master programme outside of their university for **Mobility**, e.g. by doing an exchange semester or 3-6-month internship or thesis research.
4. Attend **complementary courses** in innovation or entrepreneurship worth a minimum of 12 ECTS.
5. Write their **Master thesis** on a topic related to climate change and entrepreneurship.



Climate-KIC

<https://learning.climate-kic.org/master-label-programme>

EIT Master Label attivi di Climate-KIC

Masters programmes in Italy

University of Bologna

- MSc ICT for Climate
- MSc Environmental Assessment and Management

Masters programmes in the Nordics

Danish Technical University

- MSc Engineering, Chemical and Biochemical Engineering
- MSc Engineering in Biotechnology
- MSc Engineering, Physics and Nanotechnology
- MSc Engineering, Aquatic Science and Technology
- MSc Engineering in Wind Energy
- MSc Engineering in Sustainable Energy
- MSc Environmental Engineering
- MSc Design and Innovation

University of Copenhagen

- MSc Climate Change

Aalto University

- MSc Creative Sustainability (business school)
- MSc Fibre and Polymer Engineering

Masters programmes in France

Université Pierre-et-Marie-Curie

- MSc Universe, Environment, Ecology



<https://learning.climate-kic.org/master-label-programme/locations-and-masters-programmes>

Masters programmes in the Netherlands

Delft Technical University

- MSc Industrial Ecology (IE)
- MSc Strategic Product Design (SPD)
- MSc Sustainable Energy Technology (SET)
- MSc Construction Management and Engineering (CME)
- MSc Architecture, Urbanism and Building sciences

Utrecht University

- MSc Energy Science
- MSc Science & Business Management
- MSc Innovation Sciences
- MSc Sustainable Development
- MSc Sustainable Business & Innovation

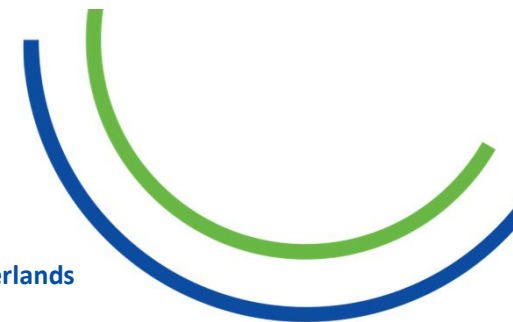
Wageningen University

- MSc Biotechnology (MBT)
- MSc Climate Studies (MCL)
- MSc Environmental Sciences (MES)
- MSc International Land and Water Management (MIL)
- MSc Urban Environmental Management (MUE)

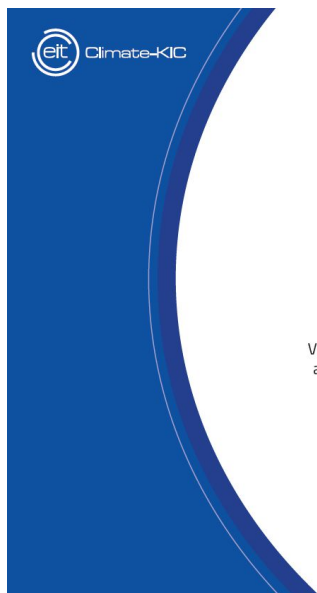
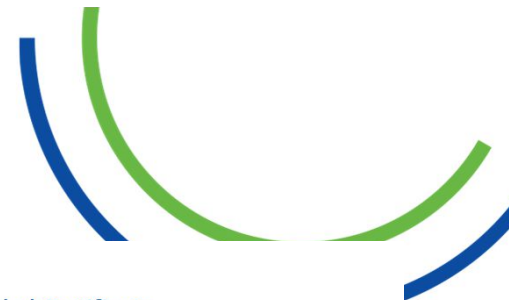
Masters programmes in Switzerland

ETH Zürich

- MSc Management, Technology and Economics
- MSc Environmental Engineering
- MSc Integrated Building Systems
- MSc Energy Science and Technology
- MSc Mechanical Engineering
- MSc Micro and Nanosystems
- MSc Process Engineering
- MSc Robotics, Systems and Control



Certificazione e community EIT Climate-KIC



Climate-KIC and the European Institute of Innovation and Technology

award this certificate to:

Master Label Certificate

Validating core knowledge in climate change innovation, mitigation and adaptation within the Climate Knowledge and Innovation Community.

Kirsten Dunlop
Chief Executive
Officer Climate-KIC

E. Mohamed

Ebrahim Mohamed
Director of Education
Climate-KIC



Climate-KIC Master Label Certificate

Name:

Date:

Programme:

University:

Climate-KIC EIT Master Label Programme

Master students have successfully validated the following Climate-KIC EIT Master components:

- 1. Strong background in specialist domain:** Pursued a Master programme approved by Climate-KIC and the EIT.
- 2. Professional EU network:** Climate-KIC summer school, The Journey, 6 ECTS.
- 3. European real-life experience mobility:** 3-6 months geographical or sectoral mobility.
- 4. Additional skills:** SPARK! lectures and transferable skills courses in entrepreneurship/policy/climate

change courses, minimum 6 ECTS.
5. Climate Innovation: 6 ECTS of the final thesis submission completed in the complementary field of study.

non-academic institutions are also contributors of the teaching programme.

Learning outcomes

Climate-KIC EIT Master Graduates have gained an understanding of climate change mitigation and adaptation in the European context. They have also acquired skills and competencies in: Creativity, Innovation, Entrepreneurship, Research, Transformational Leadership and Making Value Judgments. Learning outcomes are assessed through group work, project work, presentations, and final thesis.

Contributors to the teaching programme

The European partners that lead the Climate-KIC EIT Master programme are: TU Berlin - Germany; Universiteit Utrecht, TU Delft, Wageningen University - The Netherlands; Imperial College London, University of Reading - UK; AgroParisTech, UPMC, UVSQ, Ecole Polytechnique - France; Chalmers University, DTU - Denmark; ETH Zurich - Switzerland. A large number of Climate-KIC businesses and other

Climate-KIC is the EU's largest public-private partnership addressing climate change through innovation to build a zero carbon economy.

Climate-KIC is supported by the European Institute of Innovation and Technology (EIT), a body of the European Union.

www.climate-kic.org

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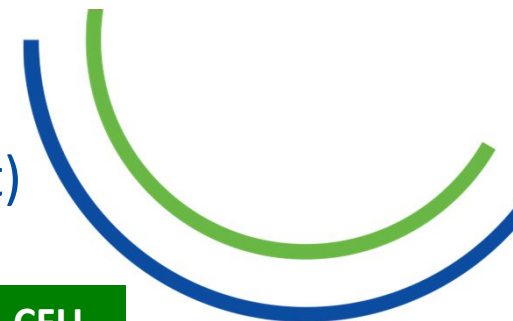
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<http://ckaa.eu/>

EIT Master Label di UNIBO a Ravenna:
EAM (Analysis and Management of the Environment)
Analisi e Gestione dell'Ambiente

EIT Master Label di UNIBO a Ravenna: EAM (Analysis and Management of the Environment)



I Anno	CFU
Analisi statistica multivariata	6
Legislazione ambientale	6
Laboratorio interdisciplinare The Journey*	6
Analisi chimica della qualità ambientale	6
Fisiologia applicata all'ambiente	6
Metodi ecologici per l'analisi e la gestione dell'ambiente	6
Idrologia ambientale	6
Principi di gestione del territorio	6
Corso opzionale	6
Corso a libera scelta Business Plan*	6
Spark lectures*	

I SEMESTRE



*Moduli add-on del percorso Climate-KIC. Tutte le attività didattiche, tranne quelle relative al percorso Climate-KIC sono svolte in italiano

EIT Master Label di UNIBO a Ravenna: EAM (Analysis and Management of the Environment)



Il Anno	percorso tradizionale	CFU
	Sistemi di gestione ambientale, di politica ed economia ambientale	6
	Prevenzione e controllo dell'impatto ambientale	6
	Corso opzionale	6
	corso a libera scelta	6
	Attività propedeutica alla prova finale	18
	o Attività propedeutica alla prova finale all'Estero	18
	Prova finale LM	18

Il Anno	percorso Climate-KIC	CFU
	Sistemi di gestione ambientale, di politica ed economia ambientale	6
	Prevenzione e controllo dell'impatto ambientale	6
	Corso opzionale	6
	Hot Topics in climate and environment SPARK LECTURES	6
	Internship abroad	15
	Internship inland	15
	Prova finale LM	6



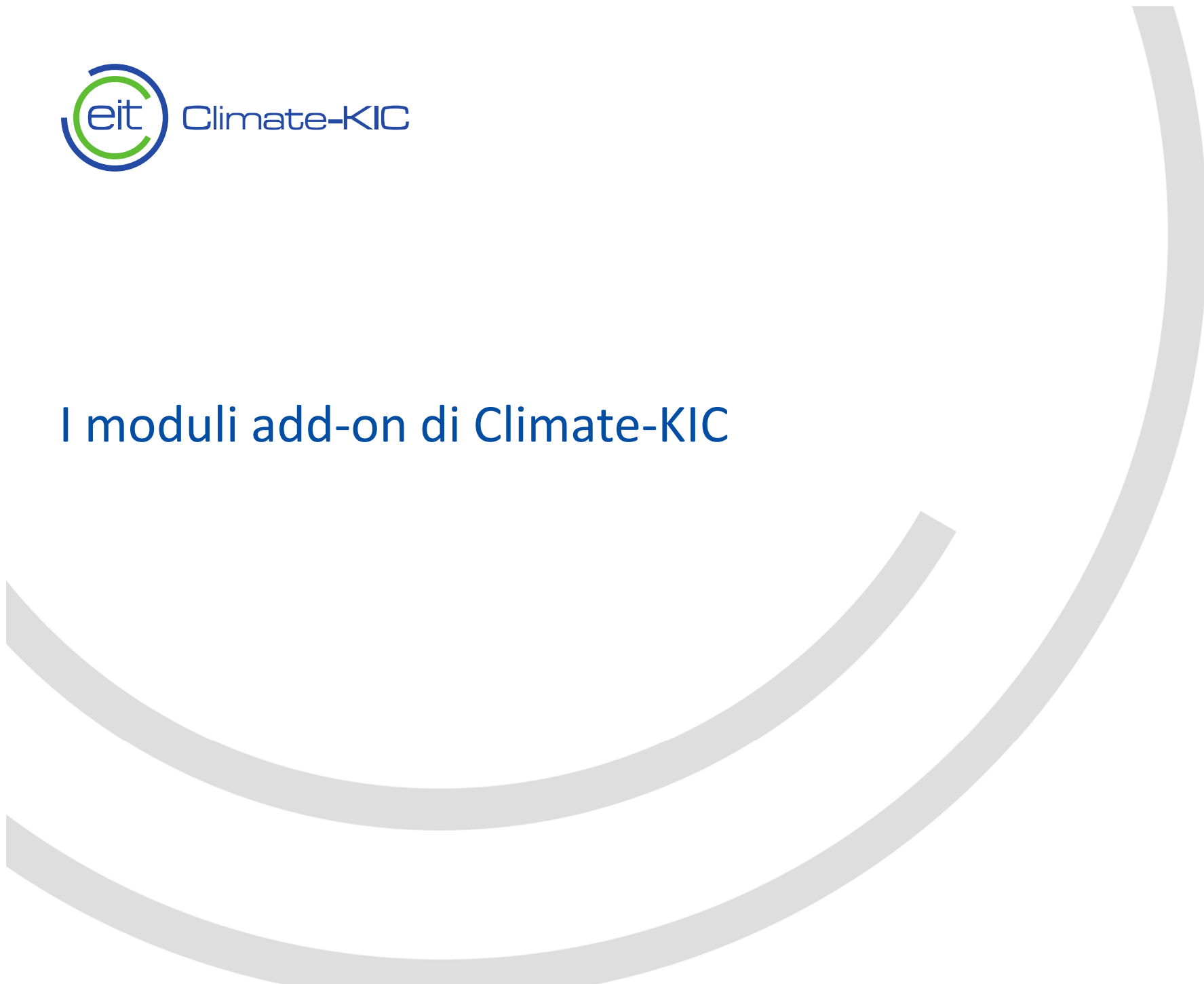
EIT Master Label di UNIBO a Ravenna: EAM (Analysis and Management of the Environment)



Corsi opzionali	CFU
Botanica ambientale	6
Caratterizzazione geochimica di materiali contaminati	6
Geofisica dei rischi ambientali	6
Pedologia e gestione del suolo	6
Processi di trasporto e dispersione degli inquinanti in atmosfera	6

I SEMESTRE

I moduli add-on di Climate-KIC



Add-on/ Business Plan

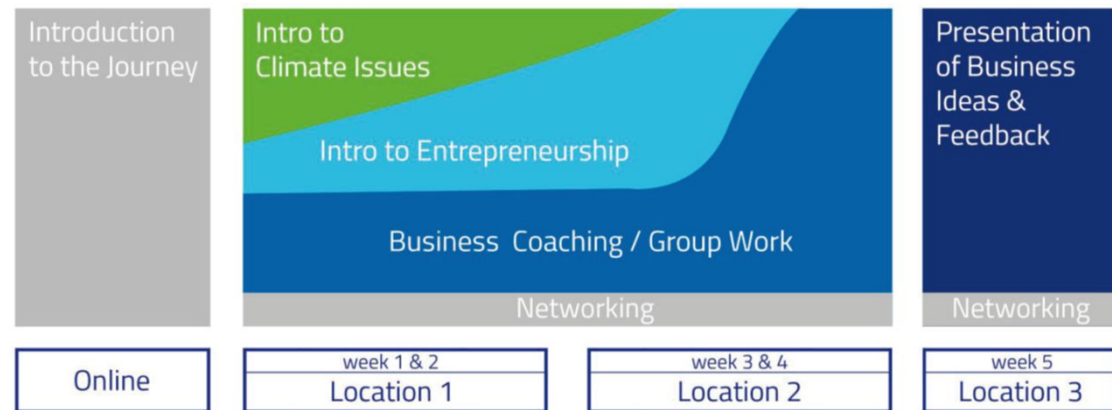
Questo corso mira, nella sua prima fase, a fornire le basi per comprendere la terminologia e le dinamiche economiche e, successivamente, a promuovere la diffusione della cultura di impresa e a trasmettere conoscenze utili in ordine ai fattori che condizionano lo sviluppo dell'imprenditorialità e delle imprese. Particolare attenzione verrà fornita alla definizione del business model ed alla predisposizione del business plan quali strumenti riferiti alle scelte di business aziendali e frutto di decisioni strategiche. I principali temi che verranno sviluppati saranno:

- Business Idea
- Vision and Mission
- Business Model development (business model canvas)
- Piano economico/finanziario

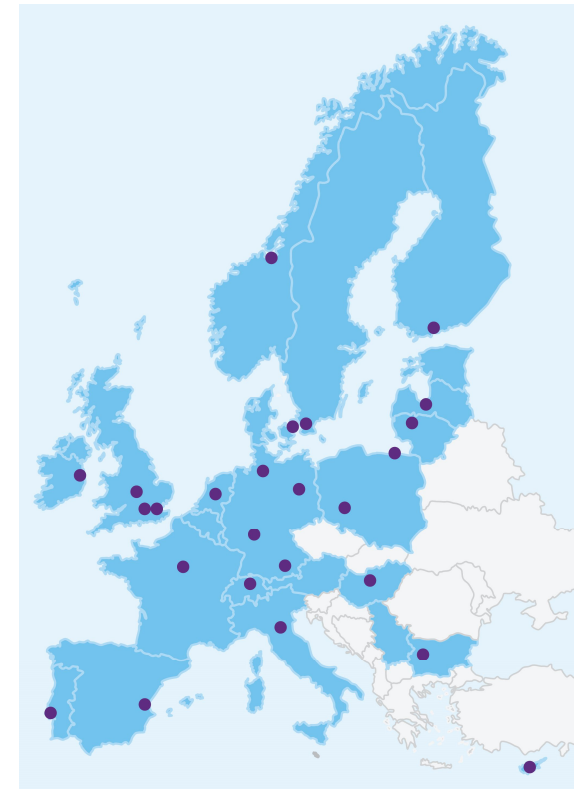
Add-on/ Journey Summer School



- The world's largest climate innovation & entrepreneurship summer school, bringing together top students and professionals from all over the world
- Tools, inspiration, coaching and hands-on-experience to develop and deliver innovative business solutions to climate change challenges
- Interactive inputs on entrepreneurship and climate challenges: site visits, workshops, expert sessions, networking events & pitch competition
- 5-weeks full-time intensive residential school
- In 3 Climate-KIC locations across Europe



Cosa si impara al Journey?



Add-on/ Spark! Lectures

The aim of Spark! Lectures is for students to get to know the community, their fellow Master Label students and to enhance their understanding of climate change challenges and climate innovation.

Spark! Lectures can be

- Lectures from visiting professors and industry specialists
- Workshops
- Conferences
- Site visits and
- ... many more planned and organized by the Host university



Add-on/ Mobility



- The student acquires **real knowledge and understanding of the way of thinking/life in another country, and/or another sector**, and that the student proves their capability to adapt to a different environment.
- Mobility can be:
 - **Studying a semester in a foreign country** with an accredited foreign University (semester 1, 2, 3 or 4 of the Master).
 - An **internship** or the writing of a **master's thesis** (implying field work) within a company or a public body.
- This activity is especially important to plan from the beginning of the studies to make sure that the students can fit in into their study plan.



Ammissione e Selezione



EIT Master Label - Application form

Personal Information

NORDIC & SWISS APPLICATIONS ARE NOW CLOSED

* First Name

* Last Name

* Birthdate (MM/DD/YYYY)

* Gender

* Nationality

* Phone

* Email

University and course information

Institution Name

--select an item--

* Master's programme

--select an item--

Student ID number (if applicable)

* Starting date of master's programme

Expected graduation date (MM/DD/YYYY)

Tentative subject of your graduation

Your level of proficiency in English

Motivation & Expectations

Please explain your motivations for applying to the EIT Climate-KIC Master Label programme (max. 200 words).

Please indicate your relevant professional qualifications, including entrepreneurial activities (max. 200 words).

Please describe your experience and involvement in the field (max. 200 words).

Please list your relevant extra-curricular activities and show how they relate to the programme (max. 200 words).

Please provide us with any other details deemed relevant (max. 200 words).

Documents Upload

* Master application Confirmation Form

Add File...

* CV Upload

Add File...

* Copy of Bachelor or recent degree

Add File...

* Proof of Master's registration

Add File...

* Photo

Add File...

* Copy of your passport

Add File...

Any other documentation

Add File...

* Captcha

7h86xGW

SEND



EIT Climate-KIC Master label Data validation form

Academic year 2017/2018

In order to process your application, please print, sign and scan this form and upload it using the link at the bottom of the application form.

You must also upload the following documents (mandatory):

- Curriculum Vitae
- Copies of your previous degrees with your transcript in English
- Proof of university registration at the Master's level
- A recent digital photograph of yourself
- A copy of your passport

I hereby confirm that all information provided in this form and the attachments is true and correct at the time of the application.

Name:

Date:

Signature:

Data Protection

By signing this form I give Climate-KIC permission to give my personal details (name, date and place of birth, civil status, nationality, address) to the Immigration authorities to obtain the necessary visas.

Please note: Deadlines vary depending on your country of origin. Should you require assistance, please contact the EIT Climate-KIC Master Label Programme.

- ✓ Curriculum vitae in English
- ✓ Transcript of your most recent degree in English
- ✓ Proof of university registration at the Master's level (Italian)
- ✓ A recent photograph of yourself
- ✓ A copy of your ID/passport



EIT Climate-KIC

<https://learning.climate-kic.org/master-label-programme/apply-now>

Motivations & Expectations

- Le vostre motivazioni devono essere in linea con i vostri obiettivi, e i vostri obiettivi in linea con i risultati attesi del programma EIT Master Label - dimostrate di aver compreso il programma e i suoi obiettivi:
 - *Voglio capire come applicare le conoscenze apprese durante il corso di studi ai contesti reali*
 - *Ho un'idea e vorrei acquisire gli strumenti per capire se può trasformarsi in un'impresa*
- Mettete in evidenza le vostre esperienze lavorative (es. tirocini, stage, organizzazione di eventi, partecipazione a convegni, ecc.) ed eventuali esperienze imprenditoriali / interessi e capacità imprenditive e partecipative.
 - *Ho fatto il cassiere del supermercato e ho capito l'importanza della relazione con il cliente ma anche gestire bene il denaro affidatomi*
- Esplicitate esperienze connesse al tema cambiamenti climatici, sia nell'ambito del percorso di studio sia in attività professionali e/o extracurricolari (es. appartenenza associazioni, iniziative locali, ecc.)
 - *Sono volontario dell'associazione ambientale X e mi sono occupato di ...*
- Le esperienze extracurricolari sono molto importanti per capire la vostra capacità di relazione/comunicazione, di lavorare e gestire dinamiche in gruppo, di prendere decisioni, gestire situazioni di stress / fuori dalla zona di comfort
 - *Sono parte di una squadra sportiva ...*
 - *Ho fatto esperienza all'estero ...*

An image of a tilted application form titled "Motivation & Expectations". The form contains several sections with instructions: "Please explain your motivations for applying to the EIT Climate-KIC Master Label Programme and what you hope to achieve by joining this programme (max. 250 words).", "Please indicate your relevant professional qualifications. We are particularly interested in your entrepreneurial activities (max. 200 words).", "Please describe your experience and involvement in the field of Climate Change (max. 200 words).", "Please list your relevant extra-curricular activities and shortly explain their relevance for this programme (max. 200 words).", and "Please provide us with any other details deemed relevant (max. ...)".

È opportuno dimostrare capacità di attivazione e dinamismo, non fate semplici liste di quello che avete fatto ma create sempre una **narrazione di quello che avete imparato** attraverso quelle esperienze.

Non sminuitevi: **tutte le esperienze possono essere importanti** e arricchire il vostro bagaglio di competenze. Basta evidenziarle nel modo giusto, senza barare 😊

Attenzione al numero massimo di parole che potete usare!
Preparate il testo prima, controllate il contenuto e la forma, fatelo leggere a qualcun altro. Solo dopo inseritelo nel form

La selezione



- Comitato di valutazione di Climate-KIC
- Criteri formali (documentazione) e qualitativi (Motivation and Expectations)
- Step 1: Valutazione domanda scritta

Written application (threshold: 60%)											To invite for interview (yes/no)	
Jury members (one central / one local)	Motivation to attend CLIMATE-KIC programme 30%			Entrepreneurship example or study, self-stated, 20%		Climate Change field, Self stated interest and formal field of study 20%		Extracurricular activities 30%		Sub score for written application		Comments
	Quality of the application	motivation	Weight: 30%	Score	Weight: 20%	Score	Weight: 20%	Score	Weight: 30%		in %	
			0.0		0.0		0.0		0.0	0.0		
			0.0		0.0		0.0		0.0	0.0		

- Step 2: Intervista

Interview (threshold: 70%)														
Jury members (2 people at least)	Presentation and coherence with the written application		Motivation to attend		Entrepreneurship mindset		Climate change relevance		Case study		Team spirit and possible contribution to Climate-KIC Community		English skills	in %
	Score	Weight: 10%	Score	Weight: 25%	Score	Weight: 25%	Score	Weight: 15%	Score	Weight: 15%	Score	Weight: 10%	Yes/No	
		0.0		0.0		0.0		0.0		0.0		0.0		0.0
		0.0		0.0		0.0		0.0		0.0		0.0		0.0

Scadenze



- Step 1: immatricolarsi al corso di laurea magistrale entro il **28 dicembre 2017**
- Step 2: presentare domanda per l'EIT Master Label attraverso il portale Climate-KIC entro il **10 gennaio 2018**
- Step 3: i risultati della selezione saranno resi noti entro il **15 febbraio 2018**

A chi rivolgersi



Il team e le persone di contatto (a Ravenna)



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Responsabile Corso EAM-Ravenna



climate-kic.org



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Temi

SUSTAINABLE PRODUCTION SYSTEMS



Sostiene progetti di innovazione nell'ambito della **bio-raffineria** e **economia circolare**, **produzione di nuovi materiali**, produzione di carburanti **bio-based** o **CO₂-based**, creazione di filiere produttive zero carbon, ri-progettazione di sistemi produttivi basati sulla massima efficienza dell'uso delle risorse



SUSTAINABLE LAND USE



Processi innovativi finalizzati a conservare **l'ecosistema forestale e agrario**, in particolare le funzioni di assorbitore di CO₂ e le caratteristiche di resilienza, sostenendo contemporaneamente la nascita di **filiere agricole, alimentari e forestali che associano la conservazione di queste funzioni al profitto economico**

URBAN TRANSITIONS



Si occupa di **sistemi urbani** (energia, acqua, rifiuti, pianificazione, edificato, mobilità) a **scala di edificio, quartiere, città**. Persegue un'innovazione di sistema che coinvolge tutti gli attori interessati, ricerca, impresa, stakeholder pubblici e singoli cittadini



DECISION METRICS & FINANCE



Promuove la messa a punto di **nuovi sistemi e strumenti di misura, monitoraggio, modellazione e forecasting** al servizio del decisore pubblico (policy maker) e privato (corporate) e la creazione di **nuovi strumenti finanziari** a sostegno della climate innovation