

## Program Team

The program team consists of internationally renowned academics and researchers including prominent scientist from the Cyprus Department of Meteorology.

### PROGRAM COORDINATOR

Prof Euripides Stephanou

### INSTRUCTORS

Prof Johannes Lelieveld

Prof Silas Michaelides

Prof Nikolaos Mihalopoulos

Prof Jean Sciare

Prof Mihalīs Vrekoussis

Assoc Prof George Biskos

Assoc Prof Adriana Bruggeman

Assoc Prof Panos Hadjinicolaou

Asst Prof Theodoros Christoudias

Dr Demetris Charalambous

Dr Filippos Tymvios

### ASSISTANT INSTRUCTORS

Dr Jonilda Kushta

Dr George Zittis

## Why study at the Cyprus Institute Graduate School?

### EXCEPTIONAL FACULTY

Cyl's intensive research focus is complemented by Cyprus's unique geographic position, which in turn, provides access to an area abundant with environmental challenges and research opportunities. English is the program's official language of communication thus enabling it to attract renowned scholars and scientists from all over the world.

### STATE-OF-THE-ART FACILITIES

Cyl has attracted an impressive number of European projects and other competitive grants, many of which are unique to Cyprus, and in some cases, the MENA region. Our students have access to these facilities throughout the duration of their graduate research.

### LOW FACULTY-STUDENT RATIO

Cyl Graduate School's modus operandi is to maintain a small cohort of hand-picked students, which provides of a low faculty-

student ratio. This allows for a high degree of individual focus in research, personal guidance, mentoring and career coaching resulting in successful placement.

### MULTICULTURAL ENVIRONMENT

The School values the strengths that a multicultural environment provides so it has made it a priority to promote diversity, hence: 33% of our students and 70% of our faculty are international.

### RESEARCH ASSISTANTSHIPS

Cyl is a champion in attracting research projects from competitive calls; in the first three years of Horizon 2020, Cyl attracted three times more funding than the Cyprus average and six times more funding than the European average (per researcher). As a result, many of our students are offered assistantships immersing them in research from the early stages in their career as well as offering them valuable experience in project management.

Collaborations with:



UNIVERSITY OF CRETE

## THE CYPRUS INSTITUTE GRADUATE SCHOOL

# MSc/MPhil in Environmental Sciences



### ADMISSION REQUIREMENTS

A BACHELOR'S DEGREE from a recognized accredited academic institution, with a strong background in natural sciences, mathematics or engineering.

### PROOF OF ENGLISH LANGUAGE PROFICIENCY

(check our website for requirements and waiver conditions)

### SCHOLARSHIPS

Scholarships will be available to exceptional applicants. Refer to our website for eligibility conditions.

### APPLICATION DEADLINE FOR 2018-2019

Application deadline: March 1

Late application deadline: June 1

Program begins: September 2018

### CONTACT

Office of Graduate Studies

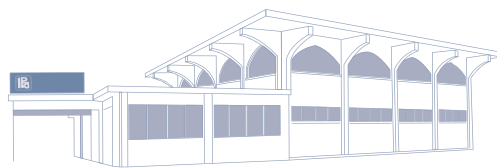
The Cyprus Institute

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The Cyprus Institute Graduate School reserves the right to make any changes to the program.

Accredited by



THE CYPRUS AGENCY OF QUALITY ASSURANCE AND ACCREDITATION IN HIGHER EDUCATION

## Why Environmental Sciences?

Our environment is being challenged in numerous ways including pollution, global warming, overpopulation, natural resource depletion. The Environmental Sciences program involves two specialization tracks each dealing with important aspects of the field and aiming to shed light on and address the aforementioned challenges.

**The Atmospheric Sciences Track** addresses the basic physical processes involved in maintaining the global circulation of the atmosphere and the surface climate; weather and climate models to understand the governing physical principles and their use for climate and weather prediction purposes; the principles of atmospheric chemistry and biology; the factors controlling air quality and the techniques used for air pollution control; the major air pollution sources and methods for measurement, data collection and analysis of atmospheric samples.

**The Meteorology Track** addresses subjects in Meteorology and Climatology with the aim to equip students with the weather and climate knowledge and skills necessary in weather forecasting, agrometeorology, hydrometeorology, biometeorology, aviation meteorology, renewable energy resources, marine meteorology, climate change and its impacts assessment etc. Moreover, students complete a Basic Instruction Package as required by the World Meteorological Organization, including Physical Meteorology, Dynamic Meteorology, Synoptic and Mesoscale Meteorology and Climatology.

## Career Prospects

### Atmospheric Sciences Track

Graduates will be equipped to pursue careers in:

- Environmental Consulting Agencies
- Environmental Monitoring Divisions of public and private institutions
- Research Institutions and Universities

### Meteorology Track

Graduates may pursue a professional career in:

- National Meteorological Services\*
- Meteorological consulting, software or instrumentation companies
- Media
- Private Forecasting companies
- Research Institutions and Universities

Graduates of our Master's program in Environmental Sciences may continue on to our PhD program in Energy, Environment and Atmospheric Sciences, which offers generous financial support options.

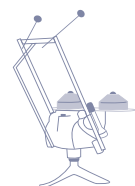
\* The World Meteorological Organization (WMO) has recently upgraded the qualification requirements for professionals working in the Meteorological Services of its member countries. Professional staff are encouraged to undergo an officially recognized level course of Meteorology that will include a Basic Instruction Package as is determined by the WMO.

The Meteorology Track syllabus covers all topics required for professionals employed in national departments of meteorology as prescribed by the WMO.

## Research Infrastructure

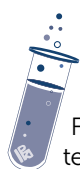
### CYPRUS ATMOSPHERIC OBSERVATORY

This facility provides high quality, long-term observations of key atmospheric pollutants relevant to air quality and climate change.



### UNMANNED SYSTEMS RESEARCH LABORATORY (USRL)

The USRL at Cyl offers on-site facilities and related infrastructure for research, development, and testing of technologies related to UAV's (Unmanned Aerial Vehicles).

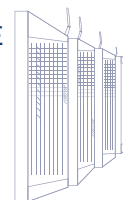


### FACILITY FOR CHEMICAL ANALYSES (FCA)

FCA gathers the latest trace analytical techniques for environmental samples (atmospheric aerosols & gases, rainwater etc.) and provides a large range of quality controlled chemical analyses relevant for air and water quality.

### CY-TERA HIGH PERFORMANCE COMPUTING FACILITY

One of the most powerful supercomputers in the region is accessible for Climate Modeling.



## Degree Options

The program offers two degree options: the MSc caters to students interested in pursuing a more professional focus, while the MSc/MPhil is intended for students that want to pursue a research career thus offering a more enhanced research component.

### MSc in Environmental Sciences

The MSc is a 90 ECTS, 14-month program organized in three terms. During the first two terms, students take courses. During the third and final term, students work on a research project which is assessed through a report and a viva.

### MSc/MPhil in Environmental Sciences

The MSc/MPhil is a 120 ECTS, 18-month program organized in four terms. During the first two terms, students take courses. During the third and fourth terms, students work on an extensive research project which is assessed through a Master's thesis and a viva.

## PROGRAM STRUCTURE

	MSc (ECTS)	MSc/MPhil (ECTS)
Courses	60	60
Research project	30	60
<b>Total</b>	<b>90</b>	<b>120</b>

Regardless of degree option, during each of the first two terms students must take 1 Mandatory, 1 Track Mandatory and 1 Elective Course

## COURSES

Mandatory Courses		ECTS
ES 401	Fundamentals of Atmospheric Physics and Meteorology	10
ES 402	Climatology	10
Track Mandatory Courses		
ES 406	Atmospheric Chemistry and Biology (AST)	10
ES 407	Atmospheric Measurement Techniques (AST)	10
ES 408	Dynamic Meteorology (MT)	10
ES 409	Synoptic Meteorology (MT)	10
Elective Courses		
ES 416	Hydrology and the Atmosphere-Water Cycle	10
ES 418	Aerosol Physics and Chemistry	10
ES 419	Climate Change: Concepts and Perspectives	10

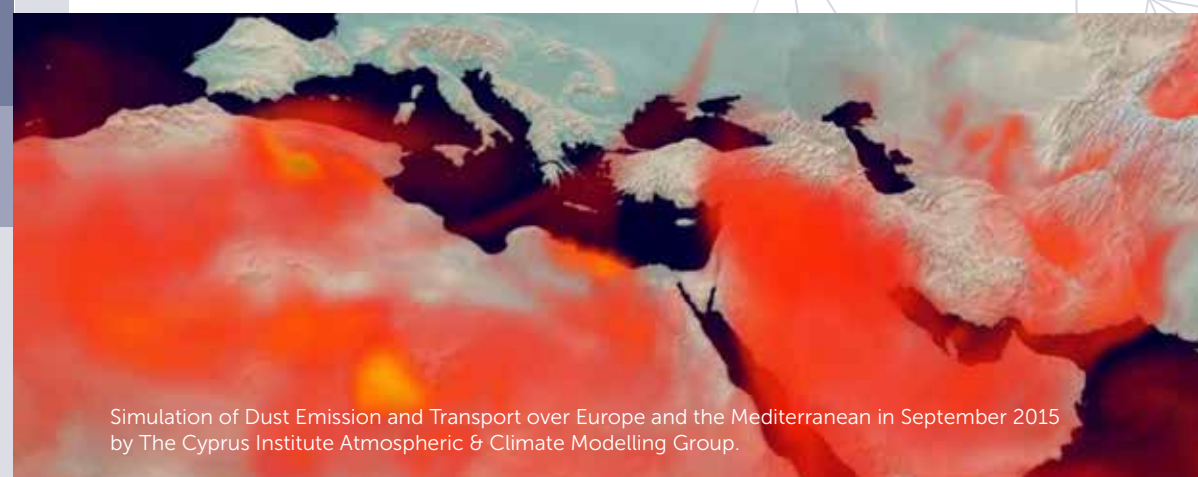
AST: Atmospheric Sciences Track

MT: Meteorology Track

Track option selection is defined by the selection of track mandatory courses at the beginning of the program

The language of instruction and communication of The Cyprus Institute (Cyl) is English.

Students who continue on to PhD studies at Cyl may have certain courses and research requirements waived.



Simulation of Dust Emission and Transport over Europe and the Mediterranean in September 2015 by The Cyprus Institute Atmospheric & Climate Modelling Group.