

DEMOCRITUS UNIVERSITY OF THRACE  
POLYTECHNIC SCHOOL  
CIVIL ENGINEERING



ACADEMIC GUIDE  
POSTGRADUATE PROGRAM  
MANAGEMENT OF PREVENTION AND  
MANAGEMENT OF CRISIS AND  
DISASTERS: INNOVATIVE TECHNIQUES  
IN CIVIL PROTECTION  
2025 - 2026

XANTHI - 2025

DEMOCRITUS UNIVERSITY OF THRACE  
MASTER'S DEGREE PROGRAM ACADEMIC GUIDE  
PREVENTION AND MANAGEMENT OF CRISIS AND DISASTERS: INNOVATIVE  
TECHNIQUES IN CIVIL PROTECTION  
ACADEMIC YEAR 2025 - 2026

EDITOR:  
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## THRACE



Greek Thrace is a small part of the geographical area known in history as the "Greater Thrace". Incorporated into Greece in 1920, it is located on the northeastern mainland and adjoins eastward with Turkey and northward with Bulgaria, with which it is connected by road and rail.

The Greek Thrace constitutes, along with the An. Macedonia, special administrative region of the Greek state with the capital of Komotini. It consists of three prefectures (Xanthi, Rodopi and Evros) with the capitals of Xanthi, Komotini and Alexandroupolis, respectively. The prefecture of Evros also belongs to Samothrace, one of the most beautiful islands of the Aegean Sea.

In addition to agriculture and livestock farming, which were the traditional branches of the economy in the region, the development of the industry has been seen in the last few years.

The Commission's proposals are in line. Thrace, due to its key geographical location, has developed into a "gateway" of Europe to Turkey and the East, as well as an important transportation hub to and from the central Balkan region. These developments, combined with the development of the University in four cities of Thrace (Xanthi, Komotini, Alexandroupolis, Orestiada), result in the gradual development of the area and the rise of the living and spiritual level of its inhabitants.

In Greek Thrace are important archeological sites such as Abdera (home of Democritus from which the name of the University was derived), Maroneia, Mesembria, Samothrace etc. Also in Thrace belong to extremely important wetlands, such as the delta rivers Nestos and Evros and the lagoon of Vistonida, and one of the most important national parks in Greece where some of the most rare species of birds of prey in Europe, the forest of Dadia, live.



## XANTHI

Built amphitheatrically at the foot of the Rhodope mountain range, Xanthi is located in Thrace (Northern Greece), the crossroads of the Black Sea and the Aegean, Europe and Asia. The Kosythos River divides the city into the western part, where the old and modern part of the city are located, and on the eastern side, the

“Samakov district” which can be proud of a rich natural environment. Both parties still maintain their traditional atmosphere, charming the visitors with their courtesy and their greatness. The narrow cobbled streets of the old town are decorated with gorgeous mansions, whose architecture is a wonderful blend of local and Ottoman architecture, and of Greek neoclassical architecture. Along with the Byzantine churches and picturesque squares, the old town of Xanthi could be said to be an open museum, the glory of which remains intact over time. The modern part of the city is located in a beautiful square with the central clock and the renovated tobacco warehouses, such as the famous “P”, on Kapergon Street, which was named after the shape of the buildings of 1890.

her, which happens every Saturday.

Take a deeper taste of the rich history of the region through your visit to the Museum of Folk Art, Museum of Natural History, Municipal Art Gallery and Abdera archeological site. Numerous cultural events organized throughout the year offer one more important reason to visit Xanthi. Festivals Old

In September, where all events take place in the narrow cobblestone streets of the old town of Xanthi, the Youth Festival and the Music Festival of the Nestos River in summer, are especially popular among young people.



Text by Greek National Tourism Organization

[www.visitgreece.gr](http://www.visitgreece.gr)

## XANTHI COASTLINE

All over the southern part of N. Xanthi stretches beautiful beaches, open to the Thracian Sea, which are delimited west by the Nestos Delta and east by the lagoons of the complex of Vistonida: Beaches and spaces well organized and equipped are those of Erasmio, Mangana, Myrdatos, Abdera and Mandra, access from the city is fast and the road network is sufficient. These beaches stand out for their cleanliness, the shallow waters, vast beaches and picturesque coves that attract holidaymakers but also artisanal fishermen. These areas offer a sublime beauty in the winter months as well as many opportunities for bird watching.

## OLD CITY FESTIVAL

The second festive institution in Xanthi is the Old Town festival, which have been uninterrupted since 1991, take place with the advent of Autumn. Most of these events take place in the traditional preserved settlement of Xanthi, the so-called "Old Town", in the alleys of which the hangars of the cultural and carnival clubs are erected to offer food and drink. The club's haunts are revealed, while festivals similar to those of Carnival are held in the same place.

## CARNIVAL OF XANTHI

The longest-lived institution is that of the Blonde Carnival - Thracian Folklore Holidays started in 1966. Born in an era of urbanization and industrialization - a time critical to economic issues and identity issues - it has erased a fifty-year course, passed various phases of development and mutation reaching our days. The Carnival Blonde has to show a series of events around music, dance and theater, exhibitions with visual or other content, lectures, book presentations and film screenings. During these two weeks of events in the city of Xanthi very important position occupies another form of social performance, the feast, which is encountered in many different places and forms. The institution closes with the carnival parade and the custom of burning the Tzaros effigy.





## THE YOUTH CELEBRATIONS

The third festive institution, the Youth Celebrations, took place in late Spring, started in the same year as the Old Town Celebrations and, as the title reveals, it is focused on the student youth of the city. These celebrations enable students to become protagonists both on the stage and the audience. Thus the inhabitants of the city know the events of the urban area either through a process of creation - production or through a participation procedure - consumption.

## HADJIDAKIS FESTIVAL

This is the Hadjidakis Festival "Xanthi: Cities of Musical School Dreams" which was inaugurated in 2014, in honor of the great Greek Composer who was born and raised in Xanthi. The festival offers the opportunity to Music Schools from all over Greece to be presented at the Municipal Amphitheater of the city, but also in selected squares in various parts of the city.





# THE DEMOCRITUS UNIVERSITY OF THRACE



## HISTORICAL BACKGROUND

The Democritus University of Thrace was founded in July 1973 under Legislative Decree No. 87 of July 27, 1973, and began operating in the academic year 1974-1975. It was named after the ancient Greek philosopher Democritus, born in Abdera, Thrace. The university administration is based in Komotini, the capital of the Eastern Macedonia and Thrace administrative region. DUTH plays a significant role in enhancing the national and cultural identity of the Thrace region and contributes to the high quality of higher education in Greece. With its excellent teaching and research, it has secured a place among the best Greek universities. As a public institution, DUTH is fully autonomous and is supervised and funded by the Ministry of Education and Religious Affairs.

The university currently comprises ten schools with 28 departments across six cities in Thrace. It has approximately 42,000 students. The departments, listed by city and year of establishment, are as follows:

### Xanthi

1. Department of Civil Engineering (1974)
2. Department of Electrical and Computer Engineering (1975)
3. Department of Environmental Engineering (1995)
4. Department of Architecture (1999)
5. Department of Production and Management Engineering (2000)

### Komotini

1. Department of Law (1974)
2. Department of Physical Education and Sport Science (1984)
3. Department of History and Ethnology (1991)
4. Department of Social Policy (1994)
5. Department of Greek Philology (1995)
6. Department of Social Work (1996)
7. Department of Economics (1999)
8. Department of Language, Literature, and Culture of Black Sea Countries (2000)
9. Department of Political Science (2009)

### Alexandroupoli

1. Department of Medicine (1985)
2. Department of Primary Education (1986)
3. Department of Early Childhood Education (1987)
4. Department of Molecular Biology and Genetics (2000)

### Kavala

1. Department of Informatics (2019)
2. Department of Physics (2019)
3. Department of Chemistry (2019)
4. Department of Management Science and Technology (2019)
5. Department of Accounting and Finance (2019)

### Drama

1. Department of Agricultural Biotechnology and Oenology (2019)

### Orestiada

1. Department of Forestry and Natural Environment Management (1999)
2. Department of Agricultural Development (1999)

### Didymoteicho

1. Department of Nursing (2007)
1. Department of Psychology (2023)

## ADMINISTRATION OF D.U.Th.

The administration of the Board of Directors shall be exercised by the Council of the Foundation, the Rector and the Senate. The Senate consists of the Rector, the Deans of the Faculties, the Heads of the Departments. The manner of determining the representation of the Presidents shall be determined by a decision of the Rector. Also a representative of the undergraduate students, a representative of the postgraduate students and a representative of the doctoral candidates, where they exist, are elected for an annual term without the possibility of re-election. It shall also include a representative of each category of staff, with a two-year term, without possibility of re-election, elected by a single ballot by universal suffrage of the members of the relevant category of staff and participating, with the right to vote, when matters relating to matters concerning the relevant category of staff are discussed. The exact composition and the number of members of the Senate with the right to vote, as well as the conditions and any matter relating to the implementation of the above, shall be laid down in the Agency and the Rules of Procedure of the Board respectively. The Senate meetings are attended without the right to vote by the rector's deputies and the Secretary of the Foundation. The Rector's Authorities of the Democritus University of Thrace are the following:

### **Rector :**

F. Maris

Professor, Department of Civil Engineering

### **Vice-Rector for Finance, Planning and Development:**

C. Chalioris

Professor, Department of Civil Engineering

### **Vice-Rector for Academic Affairs, Student Affairs, and Lifelong Learning:**

M. Grigoriou

Professor, Department of Molecular Biology and Genetics

### **Vice-Rector for Research and Innovation:**

G. Broufas

Professor, Department of Rural Development

### **Vice-Rector for Administrative Affairs:**

V. Gourgoulis

Professor, Department of Physical Education Science and Sports



On the page Democritus of the University of Thrace:

<http://www.duth.gr>

## ADMINISTRATION OF THE SCHOOL OF ENGINEERING

The governing bodies of the Polytechnic School are the General Assembly, the Quaestura and the Dean. The General Assembly consists of the General Assemblies of the Departments while the Dean, the Presidents of the Faculty of the and a representative of the students of each Department participate in the College.

The Quaestor is elected for three years by an electoral body composed of the total of electoral bodies that elect the Presidents of the Departments which belong to the School.

For the academic year 2022-2023  
the administration of the Polytechnic School is:

Dean :

A. Gasteratos

Professor, Department of Production  
Engineering and Management

Deputy Secretary: T.  
Spanidou

This page is a Technical School Jewel:  
<http://www.eng.duth.gr>

## LIBRARY OF THE SCHOOL OF ENGINEERING

The Library has 75,000 volumes and 2000 titles of magazines, with the current subscriptions being mostly electronic. The loan is based on the Senate Rules of Operation of the Central Library approved by the Senate.

The library is accessible from the internet.

On its websites interested parties can search the books of both the School of Engineering and all other Faculties and Departments of the University as well as all the academic libraries of the country that have corresponding network services.

The library over the HealLink network can be accessed on 5,000 magazine titles. Instructions on how to search the information are provided by the library staff. Also students can be informed about and from the respective pages of the library on the Internet.

### Library Hours:

Monday - Friday: 07.00 - 14.30

### Hours of Reading Room: Monday -

Sunday: 07.00 - 24.00

### Library page:

<http://www.lib.duth.gr>

## STUDENT CARE

Responsible: E. Kravaritou

### Feeding

To the students of the Polytechnic School free feeding under conditions. Information on the categories of students who are entitled to free food and the required supporting documents and the dates of submission are provided by the office Student Care Xanthi.

### Housing

The Student House (FC) has a large number of rooms that are distributed and are located in the same area of the University Campus. It also has a restaurant with the capacity to serve 1,000 people.

Criteria for admission to VAT is the financial situation in proportion to the number of members of the student's family and others appointed by the Senate of the IPOC. the rules of operation of VAT.

Applications with the relevant supporting documents are submitted for the new-entrants within the period of time that the enrollments in the respective Schools last. No application shall be admissible beyond this period.



### Health Care

The students of the University are provided with medical, hospital and pharmaceutical care (N.E.S. 327/1983 (FEK 117/7-9-83(a)). Medical care is provided by the city doctors who are affiliated with the State.

Health, medical and hospital care are entitled to undergraduate and postgraduate students of S.A., nationals and foreigners. After the period, provided for as a minimum duration of undergraduate studies of a course increased by two (2) years, the benefits provided for students, such as Health and Hospital Care, Performance Grants and Scholarships for Aid Loans, Free Food, Accommodation and Supply of Textbooks or Other Aids, Mobility Facilitation etc., are not granted. (Art. 9 par. Point 10 of Annex I. 2083/92).

## ADVISORY AND ACCESSIBILITY STRUCTURE (CONT.)

The Advisory and Accessibility Structure (AAS) of the Democritus University of Thrace was established with the number 40/51/12.12.2017 Decision of the Senate. It started operating in 2018 and during the initial phase of its operation it is funded by the NSRF 2014-2020, through the Act "Support of Social Care Interventions of Students NT".

Purpose of the AAS it is the promotion of constructive learning, academic success and the socialization of the students of the ICP, with peculiarities and disabilities.

The aim of the AAS is:

- Equal access to educational activities of students with special needs and disabilities, through the adaptation of the educational environment, the utilization of supporting IT technologies and the provision of services facilitating access to spaces and knowledge.
- Personal development and improvement of the social life of students with peculiarities and disabilities, inside and outside the education spaces.

In particular, actions are being developed in the AAS to address problems related to the following issues:

- Studies: learning difficulties, difficulties in studying and understanding, difficulties in decision-making, inability to concentrate, testing anxiety, incompatibilities of educational spaces, means and materials due to disability.



- Academic life: difficulties in adjusting to the educational environment, difficulties in organizing and managing time, negative attitude towards the subject studies.
- Social life: difficulties in friendly and family relationships, isolation, low self-esteem, difficulties in acceptance and integration in social environment.
- Other problems: psychosomatic disorders, emotional problems, addictions.

The Central Bureau of the AAS it is based in Komotini and Branches in the cities of Xanthi, Alexandroupolis and Orestiada.

It is scientifically supervised by members of the Board. on a related subject of its work and consists of the Counseling and Psychosocial Support and the Accessibility Department.

Communication:

Call center: 25310-39050, -39163 E-mail:  
dosyp@duth.gr

Website of the Board:

<https://dosyp.duth.gr>





### Department of Counseling and Psychosocial Support

The Department staffed of Psychiatrist, psychologists and social workers.

#### Services

- Individual counseling for students who have difficulties with studies (learning difficulties, difficulties in studying and understanding, inability to concentrate, stress tests) or with other issues of a psychological and social nature.
- Periodic assessment of the psychosocial needs of students.
- Group counseling.
- Networking of students with health services and social services of the region .
- In case of need to address.

#### Workshops / Seminars

Organization of seminars and workshops with an experiential and interactive character aimed at the empowerment and personal development of students

#### Volunteerism

Organize a network of volunteers with the aim of creating socialization and voluntary activities in the wider community.

### Accessibility Pane

The Department is staffed by Electrical Engineers and Computer Engineers.

#### Please contact your doctor or pharmacist

- Adapting the education environment by utilizing digital accessibility tools;
- Designing accessible library and internet workstations.
- Create a digital environment for counseling, psychosocial support and accessibility actions.
- Convert educational materials and projects to an accessible format.
- Personalization of assistive technology by applicant student and training in the use of assistive technologies and software.

#### Accessibility Services to Buildings and Infrastructure of AAS

- Study on the accessibility of buildings and other infrastructure.
- Evaluate amendments to improve accessibility of IFRS buildings and provide knowhow to other entities.

#### Teaching Assistance Software

Offered free software and assistive technology applications.

#### Volunteerism

The Accessibility Department collaborates with volunteers on actions to convert educational materials into accessible format.

## STUDENT PASS

Students submit their application for the pass electronically through the website: <https://submit-paso.minedu.gov.gr> using Article 10 personal the codes electronic access on the portal of the School of Engineering: <https://unistudent.duth.gr/>.

Thereafter, and after the application is approved by the relevant Secretariat, each student may receive his Bulletin from the specific point of delivery chosen at the time of the application. The delivery points have been identified as certain commercial stores as they have been identified by the project contractor.

The final cost of receiving the Bulletin, after the relevant competition, is 2.56 euro (incl. VAT).

The new pass is a credit card type, meets all the modern specifications, with built-in photo of the beneficiary, a special security hologram and its elements in Latin characters (for use on the outside).

The beneficiaries of the new special ticket are :

(1) Students of the first course of study provided that they have not exceeded the  $n+2$  years of study (where  $n$  is the duration provided for in the indicative program of studies).

(2) Students of the second course of study for as many years as they study, in accordance with the indicative program.

(3) Students of the third course, for 4 years from the date of their enrollment.

Please note that students who have exceeded the 29th year are not entitled to a pass

(29) year of their age, on the day of submission of the application or have been admitted with qualifying examinations. Furthermore, the discontinuation of student status for any reason automatically entails termination of the right to hold the pass, which in this case is returned to the secretariat of the Department concerned.

Each Secretariat is connected to the Central Information System through a dedicated online application from which to monitor students' applications.

First-year students, until 30 September, can make use of public transport, with the corresponding discounts, by showing the certificate of registration in the Department, issued by the Secretariats and their police identity, until they receive their official Bulletin.



## TRANSPORT

The students are served (for their move to the Campus where the rooms of the Student Dorm are located, the Student Club restaurant and the new buildings of the Department), by means of transport chosen by the University, as well as by emergency routes University - Student Club during lunch hours starting from the bridge of the Samakov district.

## CULTURAL EVENTS

Students have at their disposal a number of Cultural Events of the Municipality of Xanthi, as mentioned above. Also the two student clubs "Bridge" and "Inmates of the Student Center of Xanthi" organize cultural events of photography, cinema etc.

## MILITARY CONSCRIPTION

Students who have not fulfilled their military obligations are entitled to deferment of conscription for the completion of their studies.

The postponement shall be granted for a period equal to that resulting from the accounting aggregation of the year of granting the postponement and the study years plus two.

Further information can be obtained from the local recruitment offices.



## COMPUTE CENTER - NETWORK MANAGEMENT CENTER

Director: N. Kasapidis

Personal: N. Grigoriadis

I. Plevridis

P. Hatzopoulos

The Computational Center of IFRS it began operating in 1976 with the installation of the first UNIVAC 90/30 computer system and was basically used by the Polytechnic School. Today the Computational Center - Network Management Center of MESS is an institutionalized body, operating by organization, approved by Senate decision, and serves the entire University that is spread throughout Thrace, with DUTHnet, it has a plethora of computers, and all modern applications such as email, high-speed Internet access and more.

By decision of the Senate (21/01/18, September 2014) from September 2014 a new Commission with the title of 'Communications and Networks Committee' of IFRIC which replaces the previous Computational Center and Network Management Committees, and Telecommunications Committee that are being abolished.

Y.K. Website - N.A. :

<http://www.noc.duth.gr>



## OFFICE FOR INTERCONNECTION BETWEEN STUDIES AND CAREER

Head: D. Tsitsis

The Liaison Office of the Democritus University of Thrace was established as part of the Operational Program of Education and Initial Vocational Training (EPAE). Through this newly established institution, the Liaison Office is an information center for students and graduates of our University, aspiring to become a link between the University and the Production Community, so that it can help its students and graduates to reach the professional rehabilitation phase smoothly. The special feature of the office lies in the fact that due to the diaspora of the University in more cities, there are currently three different branches in the cities of Xanthi, Komotini and Alexandroupolis.

Study Liaison Office website and

In the course of a career:

<https://dasta.duth.gr>

*The absence of staff/students from room/lab photographs is due to privacy reasons*

## ERASMUS

### Coordinator for the Department of Civil

**Engineering:** A. Samaras, Associate Professor

The Erasmus+ program is the main education and training program in the EU, focusing on student and staff mobility and cooperation between higher education institutions. Erasmus+ supports the creation and establishment of the European Charter of Higher Education, thus increasing innovation, growth and employment.

Through the program, the students are offered the following possibilities:

1) Student exchanges for course monitoring at European universities with mutual recognition of educational programs by sending and hosting universities. This is done with the implementation of the provisions of the European Credit Transfer and Accumulation System (European Credit Transfer and Accumulation System ECTS) and a similar system at the host university. Under the Bilateral Agreements that the University has concluded with foreign institutions, the students of the Civil Engineering Department of the IPOA. may go to study at one of these Institutions for a period which may not be less than 3 months or more than one year. The conditions for participation are detailed at the website, <http://erasmus.duth.gr/node/4>.

2) Practical traineeships lasting 2 to 4 months, in bodies such as Business, Non-Governmental Organizations, Research Centers, Educational Institutions, diplomatic missions etc from students from all courses (pre-graduate - postgraduate - candidates)

and recent graduates of the Board of Directors. Q. I. in European countries (<http://erasmus.duth.gr/node/16>). In both cases, the Erasmus+ program provides participants with a scholarship to cover the additional costs they will face, exemption from foreign tuition fees and recognition of the period of studies they are undergoing at the foreign University or organization. The International Relations Office of the Board of Directors has the general and financial management of the Erasmus+ Program for the outgoing and incoming mobility of students for studies and placements, teachers for teaching and staff for training.

For the Department of Civil Engineering, Academic Coordination is the Erasmus Committee of the Department, which is composed of 3 members of the faculty. The Committee shall define in advance the procedure for the selection of students to be included in mobility, publish calls for expression of interest and select students on the basis of criteria. The Erasmus+ Committee of the Department has drawn up a roadmap to assist outgoing students on the actions before and after their movement with a view to making the most useful use of the time of study at the host institution or organization and to recognizing their progress.

For studies abroad the Department of Civil Engineering IPOTH has concluded the following active Cooperation Agreements with universities (by country):

Germany: [Ruhr-Universität Bochum](#)

[Technische Universität Dortmund](#)

Spain: [Universidad de Granada](#)

Italy: [Università degli Studi della Tuscia](#)  
[Politecnico di Bari](#)



Cyprus: [Cyprus University of Technology](#)

Hungary: [Buda pest i Műs zaki és  
Gazdaságtudományi Egyetem](#)

Romania: [Technical University of Cluj-Napoca](#)

Turkey: [Kırklareli Üniversitesi](#)

For the traineeship, the Commission is recommended to

Students will be able to contact the host institutions where the practical training will take place and to obtain a Letter of Acceptance and Working Program, in which the detailed program of the traineeship will be described in detail, as well as the tasks of the trainee which should be relevant to the subject of the study. The letter will be submitted together with the other necessary supporting documents in the application file. The Department of Civil Engineering supports and encourages mobility through the Erasmus+ because it considers that:

- It contributes to the interaction and familiarization of students of the department with the culture and culture of other Countries.
- It offers outgoing students the opportunity to familiarize themselves with educational systems in other Countries and the working environment in them.
- It offers the further learning of foreign languages and technical terminology.
- Creates a framework for new academic and professional possibilities
- It contributes to the further academic constitution of students.

More information can be found in the relevant regulation posted on the website of the Department ([link](#)) .

## IAESTE

Head: T. Papadopoulos,  
Op. Professor of Electrical  
Engineering and Computer  
Engineering.

I.A.E.S.T.E. (International Association for the Exchange of Students for Technical Experience) is an international organization, for the purpose of exchanging students of applied disciplines (Technical University, Economics Universities, etc.) between the countries - members of the organization, for practical exercise related to the subject of their studies, outside the limits of their country.

In our country he is represented by the I.A.E.S.T.E National Council. Greece and in cities with Universities involved by the Local Committees. The Technical School of Xanthi has been established and operates the Local I.A.E.S.T.E Committee. Xanthi. The aim of this Committee is to find each year a number of reception places for foreign students in Greek companies. These posts ensure the possibility of sending students of the Xanthi Polytechnic School to countries abroad for internships, which is considered so essential for engineering studies, that many of the departments of the Polytechnic School of Xanthi have included it in their curriculum.

Web page IAESTE Xanthi:  
<https://iaeste.duth.gr>

# THE DEPARTMENT OF CIVIL ENGINEERING



## ADMINISTRATION OF THE DEPARTMENT

The governing bodies of the Department are the President, the General Assembly of the Department, the Directors of the Sectors and the General Assemblies of the Sectors of the Department. The powers of these bodies are defined by the legislation in force.

The General Assembly of the Department consists of the Professors of the Department, one (1) representative per category of the members of EPE, EPE, ETEP, ETEP, one (1) representative of the undergraduate and postgraduate students of the Department.

The President of the Department is elected for a two-year term by a body of electors comprising the Professors of the Department.

The directors of the Sectors are elected every year.

### Head:

L. Iliadis, Professor

### Vice Head:

C. Akratos, Professor

### Head of Secretariat:

P. Tsobanaki

### Student Affairs - Undergraduate Program:

S. Ioakeimidou.

### Postgraduate Studies:

O. Havra

### Office of Protocol and Processing:

O. Havra



## STRUCTURE OF THE CIVIL ENGINEERING DEPARTMENT

Today the Department of Civil Engineering consists of the following Fields:

- Sector of Construction Science
- Sector of Transport and Communications
- Sector Hydraulic Works
- Sector of Geotechnical Engineering
- Sector of Mathematics, Programming and General Lessons

The Domains are subdivided into Laboratories as follows:

### ♦ Sector of Construction Science

- Laboratory of Static and Dynamics of Construction
- Laboratory of Reinforced Concrete and Earthquake Structures
- Laboratory of Metal Construction
- Laboratory of Technical Engineering
- Laboratory of Building Design
- Laboratory of Construction Materials

### ♦ Sector of Transport Projects and Communication

- i. Laboratory of Road and Road Safety
- ii. Laboratory of Transport Technique and Design-Organization of the Site

### ♦ Sector of Hydraulics works

- i. Laboratory of Hydraulic Engineering and Environment
- ii. Laboratory of Hydrology and Hydraulics Works
- iii. Laboratory of Coastal and Port Works

### ♦ Sector of Geotechnical Engineering

- i. Laboratory of Soil Engineering and Foundations
- ii. Laboratory of Technical Geology and Groundwater Research

### Sector of Mathematics, Programming and General Lessons

- i. Laboratory of Organization and Planning
- ii. Laboratory of Mathematics and Informatics in Science of Civil Engineering
- iii. Laboratory of Geodesy

# PREVENTION AND MANAGEMENT OF CRISIS AND DISASTERS: INNOVATIVE TECHNIQUES IN CIVIL PROTECTION

## THE PROGRAM

The Postgraduate Program "Crisis & Disaster Prevention and Management: Innovative Techniques in Civil Protection" aims at postgraduate education through interdisciplinary approaches and practical training in issues critical to civil protection. The goal of the P.M.S. is to provide students with the necessary knowledge and skills for the design, management and implementation of crisis and disaster prevention and response strategies. Educational activities include the analysis of real scenarios, the application of innovative techniques, as well as the study of best practices for the management of natural and man-made hazards. The program focuses on connecting theory and practice, promoting cooperation between different scientific fields, with the ultimate goal of creating specialized executives who will effectively respond to the challenges of the modern era in the field of civil protection.

## CATEGORIES OF GRADUATES ADMITTED

Graduates of the Faculties and Departments of Forestry & Natural Environment, Climate Resilience and Natural Environment, Geology, Physics, Chemistry, Mathematics, Biology, etc., Schools of Engineering (Civil Engineers, Environmental Engineers, Mechanical Engineers, Electrical Engineers, etc.), as well as Departments dealing with Natural Resources Management, Environmental Policy and Environmental Protection. In addition, graduates of Departments of Sociology, Political Science, Public Administration, and International Relations are accepted, such as Graduates of Military and Police Schools, Fire Academies and other Civil Protection bodies, or Departments of a related subject of domestic universities, or recognized equivalent institutions abroad.

## DURATION OF STUDY

The duration for the award of the Master degree is set at three (3) semesters.

## ECTS

The total number of credit units (ECTS) required to acquire the Master Degree is 90.

The award of the Master Degree requires the successful examination in the prescribed courses and the successful evaluation of the Diploma Thesis and Internship

The teaching of each course lasts one academic semester and corresponds to six (6) ECTS. Lively teaching methods, systems and web applications of synchronized e-learning, intensive courses and any other method deemed appropriate may be used for the smooth functioning of the education process. 100% of courses may be conducted remotely, as provided by n. 4485/2017. The distance learning of lectures is provided to facilitate postgraduate students, who either do not have the financial opportunity to be in Xanthi during the whole period of study, or work. The distance learning courses are possible as the Department of Civil Engineering has three certified rooms for teleconferencing - tele-training as well as licenses for the use of appropriate software (MS Teams, Big Blue Button (synergia)).

Attendance at courses is compulsory. Each graduate student must attend and successfully examine in ten (10) courses in total. Postgraduate students are required to prepare a Postgraduate Thesis, which corresponds to twenty (20) ECTS, and Internship, which corresponds to fifteen (15) ECTS.

## TEACHING LANGUAGE

The courses are taught in Greek.

## STAFF

For the implementation of the Master Program 18 Faculty members are participating in the courses teaching. Six of them are active Faculty members of the Hydraulic Works Sector, 3 other active members of the Civil Engineering Department, 1 Faculty member from the Department of Environmental Engineering. In detail, the Professors are:

### HYDRAULIC ENGINEERING SECTOR

1. PROFESSOR KAGALOU I.
2. PROFESSOR MARIS F.
3. PROFESSOR AKRATOS C.
4. PROFESSOR ILIADIS L.
5. PROFESSOR DOKAS I.
6. PROFESSOR KLIMIS N.
7. ASSISTANT PROFESSOR ASTERIOU P.
6. ASSISTANT PROFESSOR ROVITHIS E.

### DEPARTMENT OF FORESTRY AND NATURAL ENVIRONMENT

1. PROFESSOR EMMANOULOUDIS D.
2. ASS. PROFESSOR XOFIS P.

### OTHER DEPARTMENTS OF DEMOCRITUS UNIVERSITY OF THRACE

1. PROFESSOR PASCHALIDOU A.
2. PROFESSOR ARAMPATZIS G.
3. PROFESSOR GALATSIDAS S.
4. ASS. PROFESSOR PAPAIOANNOU G.
5. ASS. PROFESSOR KARAMPATZAKIS D.
6. ASS. PROFESSOR MAKRIS I.
7. ASS. PROFESSOR SIAKAS G.
8. ASS. PROFESSOR CHALARIS M.

### EXTERNAL ASSOCIATES

1. ALEXOPOULOS E.
2. EFSTATHIOU I.
3. KOLYDAS T.
4. KRAVARI K.
5. MARGARIS V.
6. MPALOMENOS K.
7. SAMOURKASISOU E.
8. SCHISMENOS S.
9. TZEFERIS P.
10. IFANTIS K.



## DIPLOMA SUPPLEMENT

The Master Program “PREVENTION AND MANAGEMENT OF CRISIS AND DISASTERS: INNOVATIVE TECHNIQUES IN CIVIL PROTECTION” grants to the graduate students/students of the Diploma Supplement in the Greek and English language.

The Diploma Supplement follows the model developed by the European Commission, the Council of Europe and UNESCO/CEPES. The aim of the Annex is to provide sufficient independent data to improve the international "transparency" and fair academic and professional recognition of qualifications (diplomas, degrees, certificates, etc.).

It was designed to give a description of the nature, level, background, content and status of the studies, which were successfully completed by the person named in the original of the title to which this annex is attached.

## PLAGIARISM

The students and students of the Department assume the responsibility not to fall for the offense of plagiarism. If plagiarism is established, disciplinary proceedings shall be instituted as provided for in the Foundation Regulation.

The work is also subject to electronic control plagiarism by the teacher/teacher.

Any work submitted, undergraduate or postgraduate or doctoral, is accompanied by the following affidavit, which is attached to the final text before the contents page of the work:

“I confirm that I am the author of this work and that I have stated or referred to it, explicitly and specifically, all sources from which I have used data, ideas, suggestions or words, whether they are transposed precisely (in original or translated) or paraphrased. I also certify that this work was prepared by me personally especially for the specific research or the specific course/seminar/curriculum”.

In the event that IFRIC member is found has committed plagiarism, is referred by the President of the Department to the Ethics Committee of the Foundation.

The Department of Civil Engineering adopts the draft of the MO.DI.P. A guide against plagiarism, available at the following hyperlink, is IFRIC:  
<https://civil.duth.gr/undergraduate/>

## 2020-2021 ACADEMIC CALENDAR

### WINTER SEMESTER

#### Duration Of Instruction

From 27-10-2025 to 23-12-2025 and  
From 07-01-2026 to 13-02-2026

#### Examination Period

From 16-02-2026 to 27-02-2026

#### Holidays

28-10-2025 (National Anniversary)  
17-11-2025 (Polytechnic Anniversary)  
06-01-2026 (Epiphany Day)

#### Christmas and New Year's Holidays

From 23-12-2025  
to 06-01-2026

#### Local Holidays

04-10-2025 (Liberation of the city of Xanthi)

### SPRING SEMESTER

#### Duration Of Instruction

From 02-03-2026 to 03-04-2026 and  
from 20-04-2026 to 12-06-2026

#### Examination Period

From 15-06-2026 to 26-06-2026

#### Holidays

From Friday 20-02-2026  
to Clean Monday 23-02-2026 Saturday  
25-03-2026 (National Anniversary)  
01-05-2026 (May Day)  
Monday 01-06-2026 (Holy Spirit Day)

#### Easter Holidays

From M. Monday 06-04-2026  
to Friday 17-04-2026

Repeat Examination Period for the two semesters From Tuesday 01-09-2026 to Wednesday 30-09-2026

#### Summer Vacation

From Wednesday 01-07-2023 to Monday 31-08-2023



# CURRICULUM

## 1<sup>st</sup> Semester

		ECTS	HOURS
1	Basic Principles of Civil Protection and Disaster Management	6	3
2	Natural and Technological Risks in the era of Climate Crisis	6	3
3	Risk and Vulnerability Analysis and Assessment	6	3
4	Leadership and Decision Making	6	3
5.1	Homeland Security – counterterrorism and Cybersecurity	6	3
5.2	Geotechnical hazards: understanding – hazard assessment – prevention and protection measures	6	3
Total		30	15

## 2<sup>nd</sup> Semester

		ECTS	HOURS
6	Financial Management, Recovery & Government Assistance in Crises and Disasters	6	3
7	Crisis Communication Management & Dealing with the Media and Public Opinion in Crisis and Natural Disaster Situations	6	3
8	Recovery Projects and Technical Interventions After Natural Disasters	6	3
9	New Technologies & Training Techniques in Risk and Disaster Management - Intelligent Decision Support Systems	6	3
10.1	Humanitarian Engineering and Resilient Society	6	3
10.2	Homeland Security – Migration and Humanitarian crisis	6	3
10.3	Forecasting and Management of Hydrometeorological Disasters	6	3
Total		30	15

### 3<sup>rd</sup> Semester

Thesis	20
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Internship	10
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Total ECTS: 90

## COURSES DESCRIPTION

### 1<sup>st</sup> Semester

#### 1 Basic Principles of Civil Protection and Disaster Management

<u>Teachers:</u> Emmanouloudis D.	Professor
Efstathiou I.	
Ifantis K.	
Chalaris M.	Ass. Professor

The course offers a comprehensive introduction to the principles of civil protection and disaster management, covering the structures and systems involved in crisis management. It also provides theoretical and practical training in the various phases of disaster management: prevention, preparedness, response and recovery. Students will understand the role of state, non-state and international organizations and will become familiar with international standards and strategies for disaster management.

#### 2 Natural and Technological Risks in the era of Climate Crisis

<u>Teachers:</u> Pashalidou A.	Professor
Xofis P.	Asc. Professor
Papaioannou G.	Ass. Professor
Kolydas T.	

The course focuses on natural and technological hazards, as well as disasters caused by anthropogenic factors. It analyzes the effects of climate change on intensity.

Course Objectives:

- Understanding natural, technological and anthropogenic hazards and disasters.
- Analysis of the interaction between climate change and hazards.
- Development of skills in assessing vulnerability and disaster consequences.



### 3 Risk and Vulnerability Analysis and Assessment

Teachers:      Dokas I.                              Professor  
                         Margaris V.  
                         Sarmourkasidou E.

The course focuses on the identification and assessment of risks that threaten populations, infrastructure and environmental systems, as well as on the mitigation and reduction measures that can be implemented to protect these systems. Students will acquire skills in identifying risks, assessing vulnerabilities and developing mitigation strategies to increase resilience.

Course Objectives:

- Understanding risk assessment methods and tools.
- Developing skills in identifying and analyzing vulnerabilities at various levels.
- Familiarity with risk mitigation strategies and reducing risk for communities, infrastructure and the environment.
- Applying risk assessment models to real-world scenarios and incidents.

### 4 Leadership and Decision Making

Teachers:      Mpalomenos K.

The course focuses on the study of fundamental concepts, theories and practices related to leadership and the decision-making process, especially in conditions of crisis and uncertainty.

Course Objectives:

- Understanding Basic Concepts
- Developing Critical Thinking
- Cultivating Leadership Skills
- Familiarity with Crisis Management
- Strengthening Ethics and Responsibility

## 5.1 Homeland Security – counterterrorism and Cybersecurity

Teachers: Tzeferis P.

The course examines fundamental principles, strategies and practices related to the protection of public order, citizens and critical infrastructure within a state. It focuses on understanding contemporary security challenges, such as the response of State agencies to organised crime, terrorism, natural and man-made disasters, as well as crisis management. At the same time, it analyses the legal framework for the operation of the relevant institutions and law enforcement agencies, their collaborations at national and international level, as well as the importance of prevention and operational preparedness. The course places particular emphasis on the use of technological tools and innovative methods to enhance security and protect democratic values and citizens' rights.

Course Objectives:

- Understanding the Concept of Internal Security
- Risk and Threat Analysis
- Introduction to the Legal and Institutional Framework of Institutional Functions (Judicial Authorities, Law Enforcement Agencies)
- Security Strategies and Policies
- Innovative Methods and Technological Tools for Citizen Protection

## 5.2 Geotechnical hazards: understanding – hazard assessment – prevention and protection measures

<u>Teachers:</u>	Klmis N.	Professor
	Asteriou P.	Ass. Professor
	Rovithis E.	Ass. Professor

The course offers an initial introduction to the risks associated with soil failures and major soil deformations. The main geotechnical risks are then described, with emphasis on: earthquakes and associated or induced phenomena, landslides of soil and rocky slopes, rock falls, major soil movements (soil subsidence, movements of natural and artificial slopes), etc. The main causes of these risks, the failure mechanisms, and the basic characteristics with which they appear are presented. Methods of immediate and long-term prevention are recommended, as well as temporary or permanent countermeasures. Finally, the importance of appropriate education and information of the public, the most appropriate means of communication, and the empowerment of local communities are emphasized.

Course objectives:

- Understanding and perception of basic geotechnical hazards and the causes that cause them
- Assessment/Identification of susceptible areas and their risk
- Information on methods of immediate and long-term precaution
- Creating awareness of the coexistence of local communities with geohazards through appropriate education and prevention measures.
- Guidance on good practices regarding communication methods during the occurrence of phenomena and information on the most appropriate ways of empowering the local community and the possibilities of rapid recovery

## 6 Financial Management, Recovery & Government Assistance in Crises and Disasters

Teachers: Arampatzis G. Professor  
Galatsidas S. Professor  
Makris L. Ass. Professor

The course focuses on economic disaster management, infrastructure restoration, and community recovery after natural and man-made disasters. It includes the analysis of the economic impact of crises, insurance and compensation programs, as well as the financing and implementation of rehabilitation and reconstruction measures. At the same time, it explores the importance of state assistance and support for vulnerable populations.

### Course Objectives:

- Analysis of the economic consequences of disasters at the national and local levels.
- Understanding the sources of financing and resources for the rehabilitation of affected areas.
- Developing strategies for infrastructure restoration and community recovery.
- Familiarity with state assistance, insurance, and compensation programs.
- Understanding of policies to support vulnerable populations during the recovery period.

## 7 Crisis Communication Management & Dealing with the Media and Public Opinion in Crisis and Natural Disaster Situations

Teachers: Efstathiou I.  
Mpalomenos K. Ass. Professor  
Siakas G.

This course examines the management of psychological stress, communication and decision-making in crisis situations. It focuses on leadership skills, media communication strategies and psychological support for professionals and communities affected by disasters. At the same time, it analyzes the social and psychological impacts of crises and emphasizes the importance of caring for vulnerable groups.

### Course Objectives:

- Understand the basic principles of communication during crises.
- Develop leadership and decision-making skills in high-pressure situations.
- Apply psychological support strategies for disaster victims and frontline professionals.
- Analyze the social impacts of disasters and the inclusion of vulnerable groups in crisis management planning.

## 8 Recovery Projects and Technical Interventions After Natural Disasters

<u>Teachers:</u>	Klimis N.	Professor
	Maris F.	Professor
	Papaioannou G.	Ass. Professor

This course focuses on the techniques and strategies applied to the restoration of infrastructure and societies after natural disasters, such as earthquakes, floods, fires, etc. Students will gain knowledge about best practices for the restoration of buildings, infrastructure, supporting systems and the natural environment. In addition, the social and economic impacts of disasters and strategies for rebuilding more resilient societies will be examined.

### Course Objectives:

- Understanding the impacts of natural disasters on infrastructure and societies.
- Analysis of the different types of damage caused by disasters.
- Familiarity with damage assessment techniques and restoration methods.
- Design and implementation of restoration projects.
- Integrate principles of sustainability and resilience into restoration projects.

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## 9 New Technologies & Training Techniques in Risk and Disaster Management - Intelligent Decision Support Systems

<u>Teachers:</u>	Iliadis L.	Professor
	Karampatzakis D.	Ass. Professor
	Kravari K.	

This course explores the role of new technologies and innovative educational methods in enhancing preparedness and response to emergencies and natural disasters. Students will gain knowledge about the latest developments in information and communication technology, virtual reality, augmented reality and artificial intelligence, machine learning and big data analytics, as well as how these technologies can be leveraged to provide more effective education in civil protection.

### Course Objectives:

- Understanding the challenges facing civil protection education.
- Familiarity with new technologies and their applications in education.
- Development of skills in designing and implementing innovative educational programs.
- Evaluation of the effectiveness of new educational methods.

## 10.1 Humanitarian Engineering and Resilient Society

Teacher: Schismenos S.

The course focuses on the theoretical and practical understanding of the parameters that contribute to the creation and maintenance of societies capable of responding to, adapting to, and recovering from crises and disasters. It examines the connection between social cohesion, economic sustainability, and institutional infrastructure with resilience, emphasizing preventive actions and strategies that enhance the ability of societies to face future challenges, with the help of solutions offered through Engineering Science technologies.

Course Objectives:

- Understanding the Concept of Resilience
- Developing adaptation techniques and focusing Engineering Sciences on the protection of societies
- Developing Human-Centered Tools, Techniques, and Methodologies
- Strengthening Management Skills
- Focusing on Inclusion
- Promoting Innovation and Sustainability

## 10.2 Homeland Security – Migration and Humanitarian crisis

Teachers: Alexopoulos I.  
Vlachadi M.

This course provides the postgraduate student with an in-depth understanding of the phenomena of migration, refugee flows and asylum, examining their social, political, economic and humanitarian dimensions. Through an interdisciplinary approach, the causes and consequences of contemporary migration and refugee movements are analyzed, as well as the management and response policies at the global, European and national levels. Particular emphasis is placed on the study of the institutional and legal framework governing migration, asylum and the protection of human rights, as well as the challenges arising from the implementation of these policies in the modern era.

Course Objectives:

- Deepening the Analysis of Risks and Threats
- Strengthening Political and Operational Cooperation
- Analysis of the Legal and Institutional Framework of Migration Flows
- Use of Technology and Information Systems
- Protection of Critical Infrastructures
- Cross-Border Threats, Impacts and International Cooperation. Selection of Law Enforcement Methods

### 10.3 Forecasting and Management of Hydrometeorological Disasters

<u>Teachers:</u>	Akratos C.	Professor
	Kagkalou I.	Professor
	Maris F.	Professor
	Papaioannou G.	Ass. Professor

This course provides the postgraduate student with an in-depth understanding of the phenomena of hydrometeorological disasters. Through an interdisciplinary approach, the phenomena of floods and droughts are analyzed. Particular emphasis is given to the study of strategies for preventing and dealing with hydrometeorological disasters.

#### Course Objectives:

- Understanding basic problems of hydrometeorological disaster management.
- Addressing the dynamics of flood risk in a changing climate
- Assessing the extent of flood risk and the vulnerability of the area and assessing the response capacity
- Developing comprehensive strategies for managing hydrometeorological disasters in a changing climate
- Developing preparedness and response plans for effective flood risk reduction
- Integrating flood recovery programs into hydrometeorological disaster management strategies
- Addressing emergency issues in hydrometeorological disaster risk management.









## LEARNING OUTCOMES

The Program aims to highlight, support and in-depth training of graduates for the design, management and implementation of strategies for the prevention and response to crises and disasters.

In particular, the program focuses on the connection of theory and practice, promoting cooperation between different scientific fields, with the ultimate goal of creating specialized executives who will effectively respond to the challenges of the modern era in the field of civil protection. More specifically, after completing their studies, postgraduate students will be able to:

- Identify and assess critical risks and threats:
- Apply interdisciplinary approaches to crisis management:
- Use innovative techniques and tools in civil protection:
- Develop leadership and collaboration skills:
- Communicate effectively in critical conditions:
- Promote the sustainability and resilience of society.

## USEFUL HYPERLINKS

Master program 'PREVENTION AND MANAGEMENT OF CRISIS AND DISASTERS: INNOVATIVE TECHNIQUES IN CIVIL PROTECTION' <https://pms.civil.duth.gr/>

Regulation of the Academic Adviser in the Department of Civil Engineering  
<https://civil.duth.gr/undergraduate/>

Traineeship Regulation  
<https://civil.duth.gr/undergraduate/>

Mobility Regulation Erasmus <https://civil.duth.gr/undergraduate/>

Master's Program Regulation "Hydraulic Engineering and Environment"  
<https://civil.duth.gr/postgraduate/hydraulic-engineering-and-environment>

Regulation of the Postgraduate Studies Program "Applied Mathematics"  
<http://mapmath.civil.duth.gr/>

Regulations (old and new) of Doctoral Thesis Preparation  
<https://civil.duth.gr/>

Post-Doctoral Program Regulation  
<https://civil.duth.gr/>

Guide Against Plagiarism  
<https://civil.duth.gr/undergraduate/>