



Aristotle University of Thessaloniki: Education and Research

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University of Nis



www.swarm.ni.ac.rs

**Strengthening of master curricula in water resources
management for the Western Balkans HEIs and stakeholders**

Project number: 597888-EPP-1-2018-1-RS-EPPKA2-CBHE-JP



ΑΡΙΣΤΟΤΕΛΕΙΟ
ΠΑΝΕΠΙΣΤΗΜΙΟ
ΘΕΣΣΑΛΟΝΙΚΗΣ

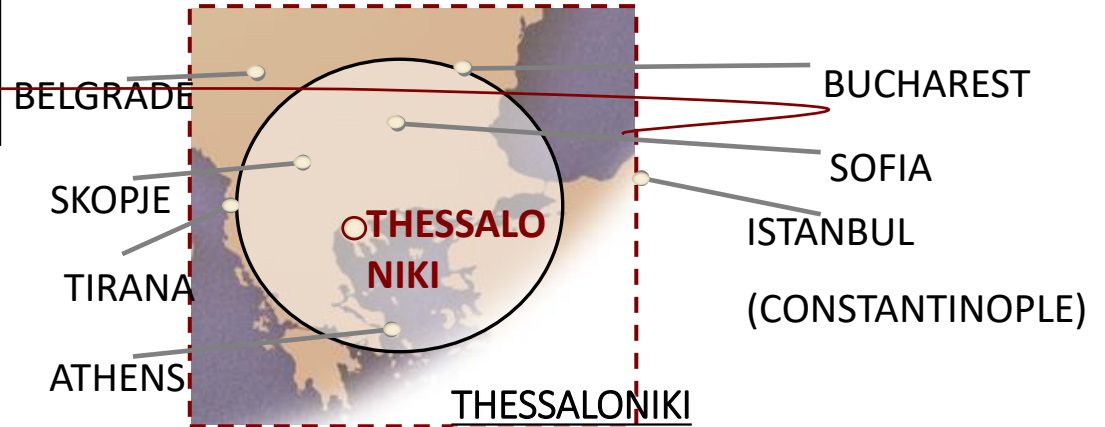
Aristotle University of Thessaloniki



The oldest E.U. member
state in S.E Europe

THE REGION

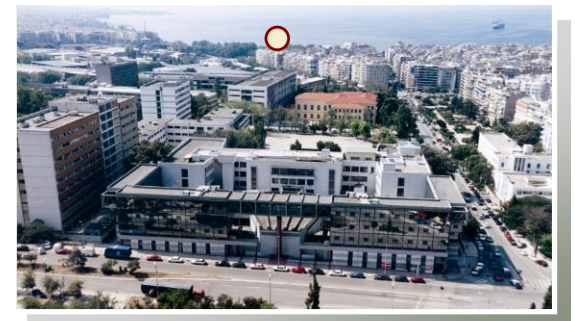
2 continents
7 countries
7 capitals



The city is a center among centers of
decision making

ARISTOTLE UNIVERSITY

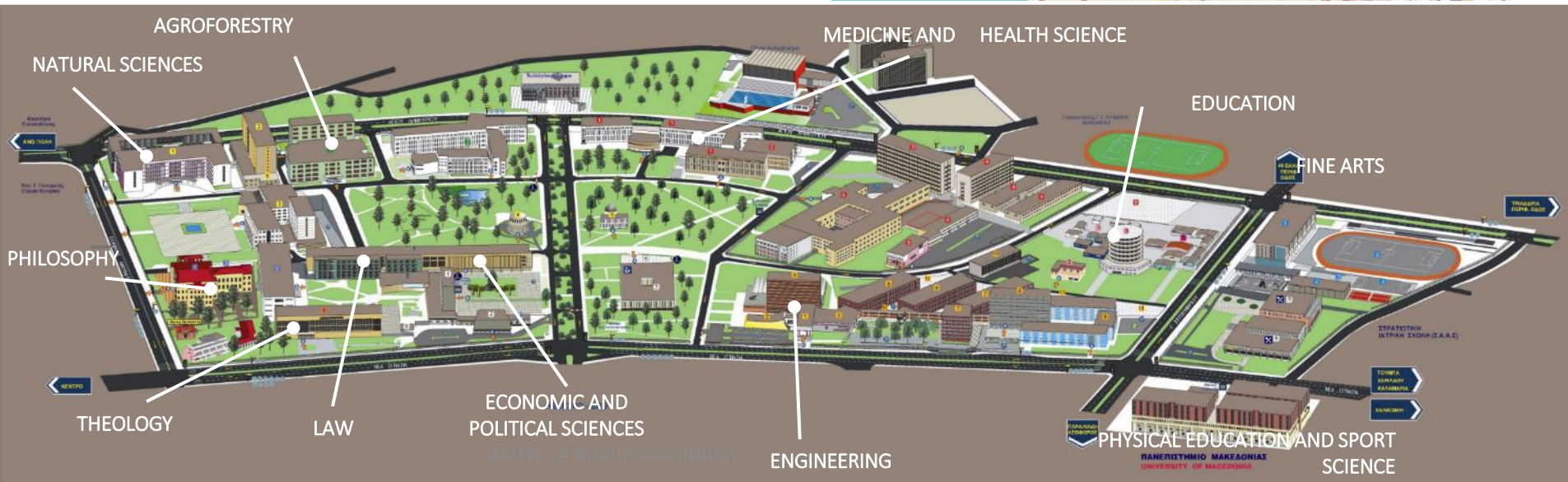
The **largest** University of the
country dominates the city



A University at the heart of the city

The largest
university in
SE Europe

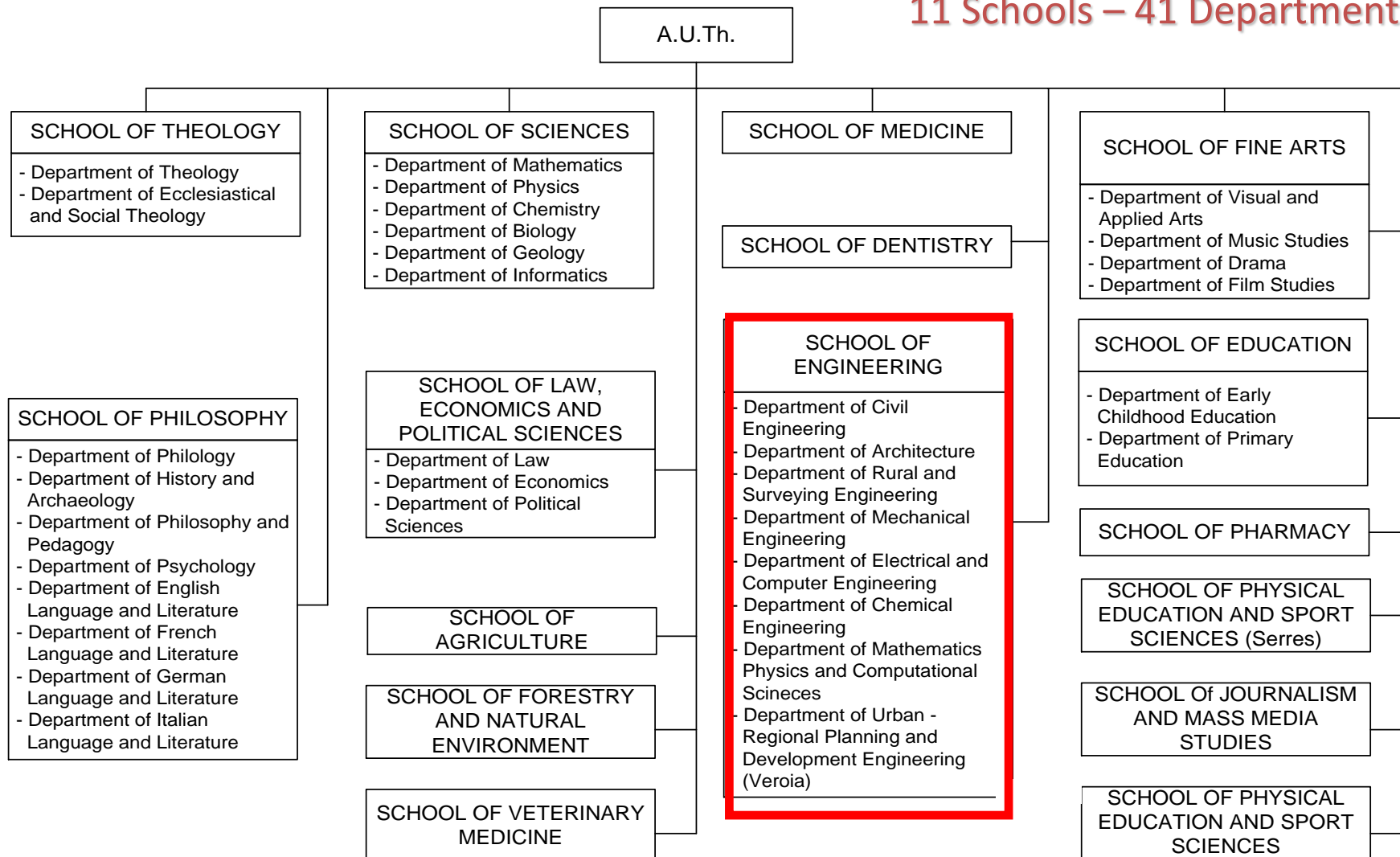
73.798 students
1.940 professors
978 staff
11 Faculties
41 Schools



AUTH - A Brief Presentation

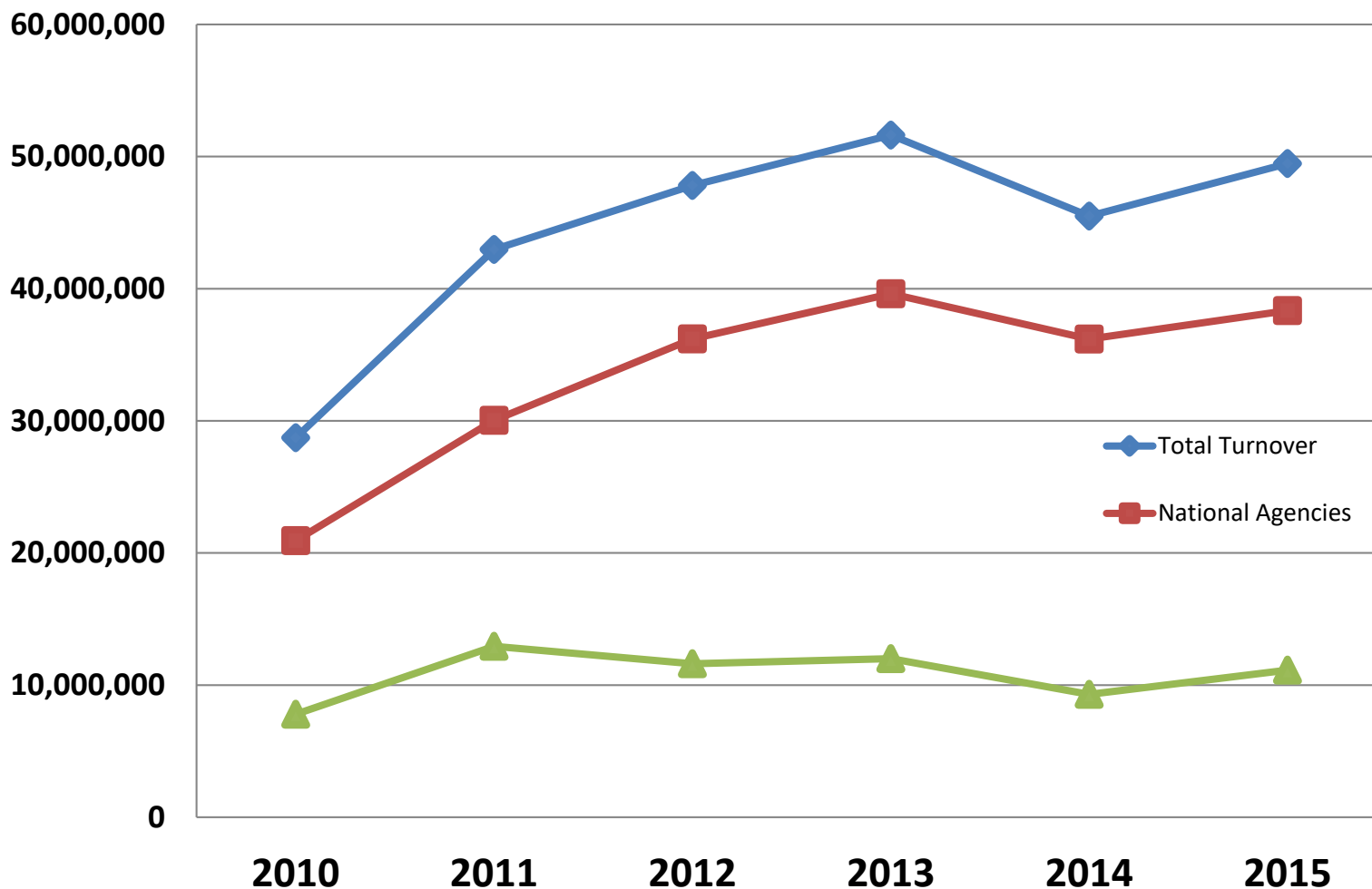
Structure of AUTh-Schools and Departments

11 Schools – 41 Departments



Research Funding

Total Turnover 2010 - 2015



ΑΡΙΣΤΟΤΕΛΕΙΟ
ΠΑΝΕΠΙΣΤΗΜΙΟ
ΘΕΣΣΑΛΟΝΙΚΗΣ

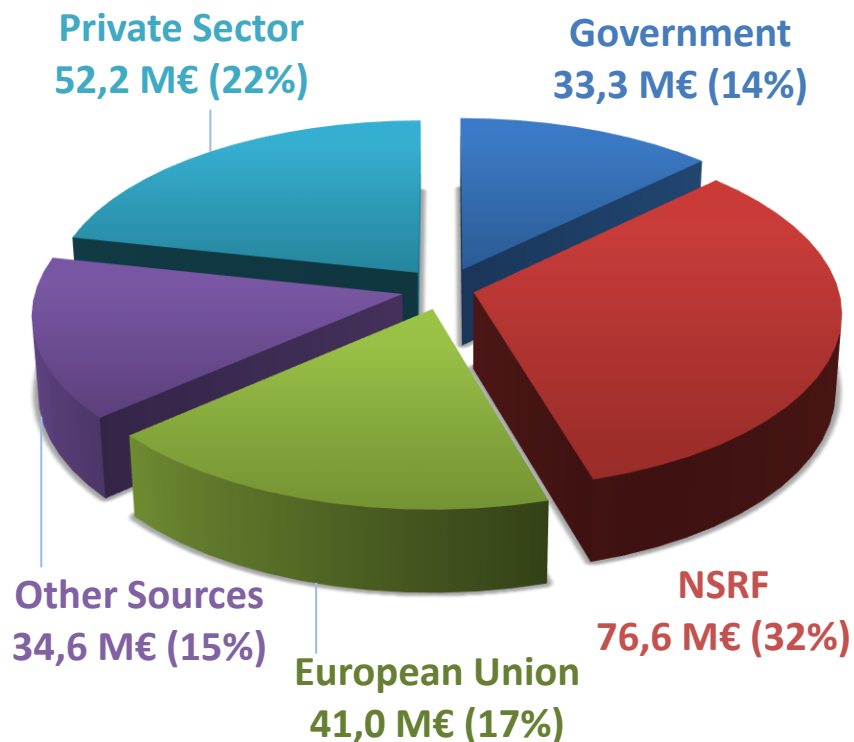




ΑΡΙΣΤΟΤΕΛΕΙΟ
ΠΑΝΕΠΙΣΤΗΜΙΟ
ΘΕΣΣΑΛΟΝΙΚΗΣ

The largest Research Institution in Greece

2010 – 2015
Overall Subsidy 238 M€



Current Research Projects

- 2,149 active R&D projects
- 750 international collaborations
- 1,305 academic & research personnel
- 3,183 external partners
- 35.3 M€ total budget





ΑΡΙΣΤΟΤΕΛΕΙΟ CITY
ΠΑΝΕΠΙΣΤΗΜΙΟ
ΘΕΣΣΑΛΟΝΙΚΗΣ
UNIVERSITY OF INSTITUTIONS

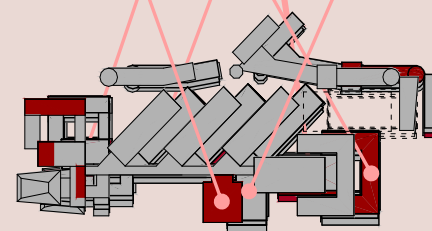
- ▣ HUMAN POTENTIAL
- ▣ INFRASTRUCTURE
- ▣ ORGANIZATION
- ▣ STUDIES
- ▣ RESEARCH
- ▣ SOCIETY

▣ **THE DEPARTMENTS**

- **Civil Engineering**
- **Architecture**
- **Rural and Surveying Engineering**
- **Mechanical Engineering**
- **Electrical and Computer Engineering**
- **Chemical Engineering**
- **Spatial Planning and Development**

FACULTY DEPARTMENTS

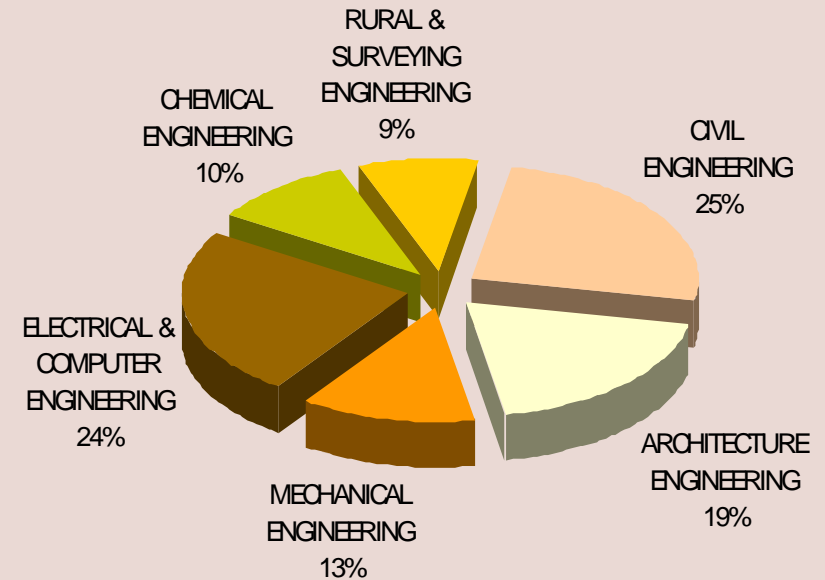
- CIVIL ENGINEERING
- ARCHITECTURE
- RURAL AND SURVEYING ENGINEERING
- MECHANICAL ENGINEERING
- ELECTRICAL AND COMPUTER ENGINEERING
- CHEMICAL ENGINEERING
- SPATIAL PLANNING AND DEVELOPMENT





- THE COYNTRY - THE CITY
- THE UNIVERSITY
- HISTORY - INSTITUTIONS
- HUMAN POTENTIAL **□ HUMAN POTENTIAL**
- INFRASTRUCTURE
- ORGANIZATION
- STUDIES
- RESEARCH
- SOCIETY

10285
undergraduate
students

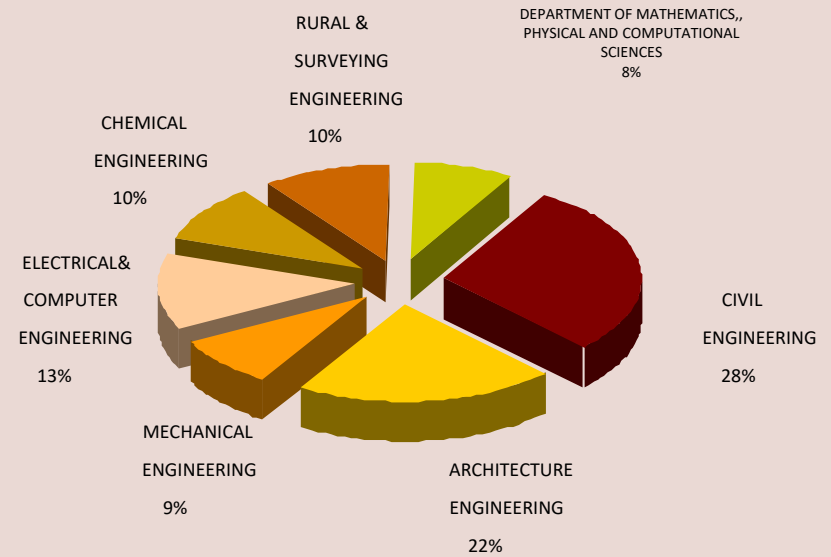


Students admitted during



- THE COYNTRY - THE CITY
 - THE UNIVERSITY
 - HISTORY - INSTITUTIONS
 - HUMAN POTENTIAL
 - INFRASTRUCTURE
 - ORGANIZATION
 - STUDIES
 - RESEARCH
 - SOCIETY
- HUMAN POTENTIAL**

285 Faculty members
98 Teaching and Research Staff
53 Administrative staff



Distribution of faculty members per dept



- ▣ THE COUNTRY - THE CITY
- ▣ THE UNIVERSITY
- ▣ HISTORY - INSTITUTIONS
- ▣ HUMAN POTENTIAL
- ▣ INFRASTRUCTURE
- ▣ ORGANIZATION
- ▣ STUDIES
- ▣ RESEARCH
- ▣ SOCIETY

INFRASTRUCTURE

▣ **ORGANIZATION**

▣ **DIVISIONS**

Structural Engineering

Hydraulics and
Environmental Engineering

Geotechnical Engineering

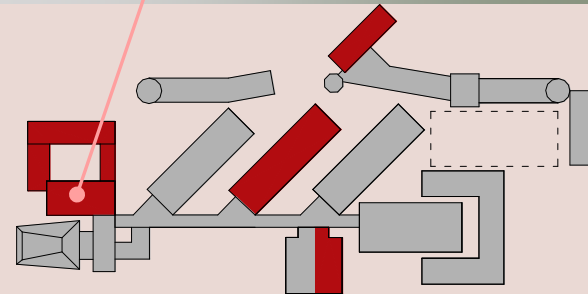
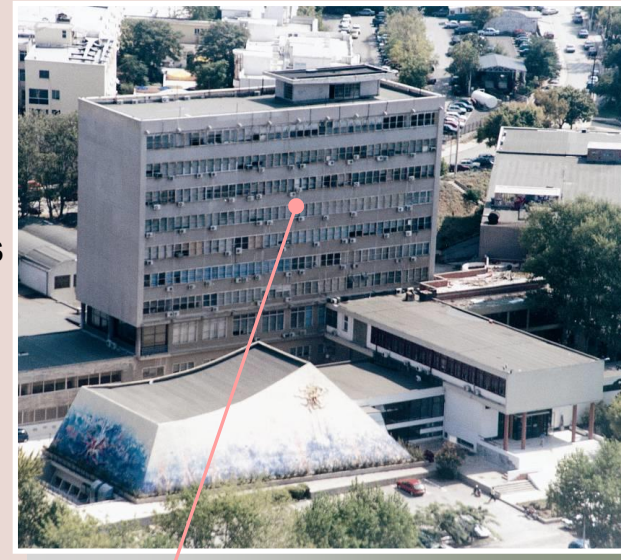
Transport and Project
Management

**DEPARTMENT
OF CIVIL
ENGINEERING**

- 2.000 students
- 70 faculty members
- 24 teaching assistants
- 19 administrative staff
- 4 divisions
- 18 laboratories

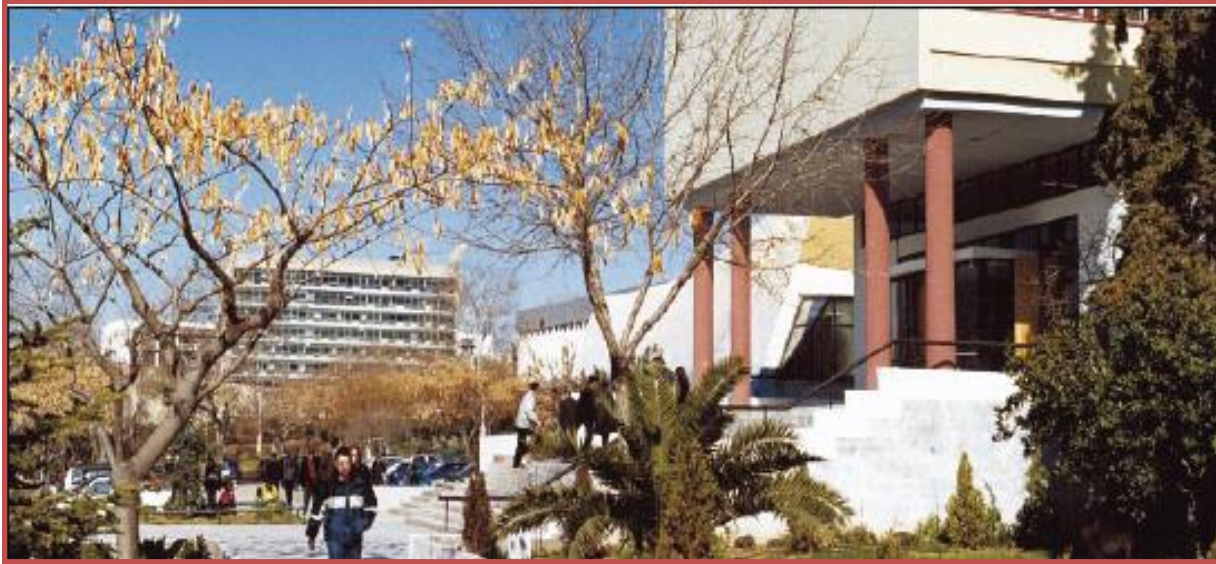
▣ **UNDER AND POST
GRADUATE PROGRAMS**

- Diploma in Civil Engineering
- Four postgraduate Programs
- PhD



Additionally, the Department participates in three interdepartmental postgraduate programs

Department of Civil Engineering (CE Dept)



AUTH CE Dept:

- *Oldest department* of the Engineering School (1955, 62 years of life)
- *Mission - Educational philosophy: Creation of qualified civil engineers, capable to apply their full professional readiness in all the subjects that are related to the practice of their skills and knowledge (5-year Undergraduate program, 4 MSc programs, 1 PhD program)*
- *AUTH CE Dept possesses one of the highest positions (6th) among the AUTH's departments in terms of research funding ($\approx 10 \cdot 10^6 \text{€}$ during 2010-2014)*

AUTH CE Dept includes *four* Divisions (70 faculty members):

- ▶ Division (Group) of Structural Engineering
- ▶ Division of Hydraulics & Environmental Engineering
- ▶ Division of Geotechnical Engineering
- ▶ Division of Transport and Construction Management

<http://www.civil.auth.gr/index.php?lang=en>



Division (Group) of Structural Eng.

Professors: 25

LABORATORIES 8

1. Structural Analysis & Dynamics of Structures
2. Building Construction & Building Physics
3. Mechanics of materials
4. Metal Structures
5. Reinforced Concrete and Masonry Structures
6. Experimental Strength of Materials and Structures
7. Engineering Mechanics
8. Building Materials



Στατική μηχανική και
αντισεισμική τεχνολογία



Στατική και δυναμική των
κατασκευών



Division of Hydraulics and Environmental Eng.

Professors: 14

LABORATORIES 4

1. **Hydraulics and Hydraulic Works**
2. **Environmental Engineering and Planning**
3. **Water Resources Engineering and Management**
4. **Maritime Engineering and Maritime Works**



Υδροηλεκτρικά έργα



Δίκτυα ύδρευσης και αποχέτευσης



DIVISION OF Geotechnical Eng.

Professors: 21

LABORATORIES 4

1. [Geodesy and Geomatics](#)
2. [Soil Mechanics, Foundations and Geotechnical Earthquake Engineering](#)
3. [Engineering Geology](#)
4. [Photogrammetry - Remote Sensing](#)





DIVISION of Transport and Project management Professors: 17

LABORATORIES 4

1. Planning and Project Management.
2. [Highway Engineering](#)
3. [Transport Engineering](#)
4. [Urban and Regional Planning and Development](#)

Κατασκευή, συντήρηση, αξιολόγηση και διαχείριση οδών, αεροδρομίων και σιδηροδρομικών έργων



Laboratory of Hydraulics and Hydraulics Works- Research Projects



Integrated flood risk analysis and management methodologies
www.floodsite.eu



Strategic management of beach protection for sustainable development of Mediterranean coastal zone
www.beachmed.eu



Innovative technologies for safer European coastlines in a changing climate
www.theseusproject.eu



Safety and sustainability in civil engineering

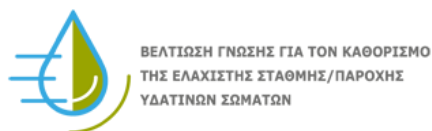
Laboratory of Hydraulics and Hydraulics Works- Research Projects



Estimating the effects of climate change on sea level and wave climate of the Greek seas, coastal vulnerability and safety of coastal and marine structures <http://www.thalis-ccseawavs.web.auth.gr/>



A real time monitoring and leakage detection and reduction system in water distribution networks



Improving the knowledge in determining the minimum water level and flow of water bodies <http://eordaia-nestos.gr/en/>



Integrated Quantitative Assessment of Climate Change Impacts on Mediterranean Coastal Water Resources and Socio-Economic Vulnerability Mapping



Educational Programmes/Projects



Trans-regional environmental awareness for sustainable usage of water resources (TREASURE-WATER) (Erasmus+) <http://treasure-water.eu/>

The project aims to strengthen the cooperation between the Russian Federation and Kazakhstan in terms of water resources management.



Regional PhD School based on Innovative HydroPlatform in Water and Environment to Enhance MAGhreb Inter-Research Centres (MAGIC) (Erasmus+) <http://www.emi.ac.ma/magic/pages/about.html>

Development of new course program for a new regional PhD programme in the existing Maghreb research centres to deal with water management and environmental protection



Water related Advanced Training and Education for Regional needs in Maghreb

AUTh Research Team



Panagiotis Prinós, PhD, full professor of Hydraulic Engineering. Diploma of Civil Engineering from the University of Patras-Greece, M.Sc in Hydraulics, Hydrology and Coastal Dynamics from Strathclyde University-U.K, Ph.D from University of Ottawa-Canada. Research interests in basic fluid mechanics and hydraulics, Author of numerous research papers and participation in several National and European projects.



Elpida Kolokytha, PhD, Associate professor. Diploma in Civil Engineering, AUTh-Greece, PhD on Sustainable Water Resources Management and Engineering, AUTh-Greece. Research experience, together with coordination skills, in the field of environmental policy, integrated water resources management, social and economic aspects of water resources, national.



Haris Skoulikaris, PhD, MSc, Research Associate. Joint PhD in water resources management AUTh-Greece and the Ecole des Mines de Paris - Paris Tech, France. Secretary General of the UNESCO Chair and Network INWEB (International Network of Water and Environment Centres for the Balkans). Research associate in more than 20 national and international research projects related on water resources management.