



**TECHNICAL
UNIVERSITY
of CRETE**

Technical University of Crete

<http://www.tuc.gr>

Public & International Relations Department

intoffice@isc.tuc.gr

2015 COPYRIGHT TECHNICAL UNIVERSITY OF CRETE

Location: Chania, Crete, GREECE



The CAMPUS: Region Akrotiri

Facts & Figures

- State university, established in 1977
- 5-year undergraduate program leading to a Diploma of Engineering
- Graduate study programs leading to Master of Science and Ph.D. Degrees

- Students: 4,783
- Postgraduate students: 805
- Doctoral students: 301

- Professors: 125
- Schools: 5

- Degree Programs: 5
- Doctoral Programs: 5
- Research Institutes: 1

(Figures as per 2014-2015)



University's Profile

- One of Greece's Higher Education Institutions that places emphasis both on education and research.
- 57 laboratories with excellent equipment, high technology infrastructure and brilliant staff members.
- 125 faculty staff members with international academic careers.

The mission of TUC is to:

- develop modern engineering specialties
- place emphasis on research in fields of advanced technology
- establish close cooperation with the industry and other production organizations in Greece and abroad.



Schools & Academic Structure

- School of Production Engineering & Management (1984)
- School of Mineral Resources Engineering (1986)
- School of Electronic & Computer Engineering (1990)
- School of Environmental Engineering (1997)
- School of Architectural Engineering (2004)

Objectives

- 5 year Engineering Diploma
- M.Sc. & Ph.D. Graduate programs
- Basic & Applied Research

Academics - Degrees offered

(1) Diploma of Engineering

- 5-year undergraduate program leading to a Diploma of Engineering
- Total duration of ten semesters
- Nine semesters are allocated for coursework
- Final semester for Diploma Thesis

(2) M.Sc. and M.Eng.

- All Schools offer postgraduate programs.
- The duration of postgraduate studies at the Master's level is two semesters (minimum).
- Overall grade point average of 7,5 as well as very good knowledge of English.
- Scholarships/research assistantships are offered.

(3) Doctoral degree

- Are awarded by each School upon the completion of a Ph.D. dissertation and a successful open defense.



School of Production Engineering & Management



Divisions

- Science Division
- Production Systems
- Decision Sciences
- Management and Administration

Graduate Program - fields

- Engineering management
- Production systems
- Operations Research
- Applied mathematics

School of Mineral Resources Engineering



Divisions

- Mineral Exploitation and Positioning
- Mineral Exploitation
- Mineral Technology

Graduate Programs

(1) Geotechnology and the Environment

- Exploration & Positioning in the Management of the Geo-environment
- Exploitation of Mineral Resources and Geotechnical Construction
- Exploitation of Industrial Minerals, Materials, and Energy Resources

(2)



**petroleum engineering
MSc course**

<http://www.mred.tuc.gr>



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The Admission of 2015-2016 academic year is now open!

School of Electronic & Computer Engineering



Divisions

- Computer Science and Engineering
- Electronics
- Control Systems
- Telecommunications

Graduate Program

Electronic and Computer Engineering



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<http://www.ece.tuc.gr>

School of Environmental Engineering



Divisions

- Environmental Hydraulics & Geoenvironmental Engineering
- Environmental Management
- Environmental Process Design & Analysis

Graduate Programme

Environmental Engineering

- Water Resources and Climate Change
- Water and Waste Treatment
- Environmental Management, Sustainable Energy and Climate Change



School of Architectural Engineering



Divisions

- History and Theory of Architecture & Fine Arts
- Architectural Design & Restoration of Monuments
- Urban Planning
- Architectural Technology

Graduate Programme

MSc in
Space, Design and Built Environment

Research, Educational & Development Programs

- **More than 180 active programs**
- **Funding :**
 - European Union, the General Secretariat for Research and Technology, the Ministry of Education, the Ministry of Labor, the Prefecture of Crete, various Local Government Authorities, Private Companies.
- **Key Research Areas:**
 - Information science, telecommunications, telecommunication networks and computer communications, electronics and optoelectronics, voice, image and - video processing, speech and telecommunications systems, robotics and automation
 - production and management systems, traffic monitoring systems, high risk investments
 - extraction of mineral resources, mining technology, exploration & positioning
 - protection of water resources, coastal engineering, environmental structures-natural disasters, sustainable energy and climatic change, environmental sciences
 - restoration and protection of monuments.

Research Clusters in TUC

- Water Resources and Agricultural Development
- Smart Energy
- Oil Pollution
- Protection, Conservation and Restoration
- Imaging and Diagnostic Technologies and Services
- Digital Multimedia, Web and Mobile Services



Telecommunication Systems Research Institute

- Independent Research Institute established by the Greek Ministry of Education in 1995.
- Operates within the framework of TUC.
- Financially self-sustained entity mainly funded by external research contracts and grants.
- It provides technical support, space, research infrastructure and access to cooperating faculty members and highly qualified R&D engineers with experience in project planning, execution and management.

Main objective

To promote postgraduate education, research and development in the areas of Telecommunications and Telecommunication Systems.

Research & Development interests

Digital Communication Systems, Communication Networks and Computer Networks, Broadband Networks, Wireless Communication Networks, Signal Processing for Physical Layer Communications, Speech and Language Processing and Automated Services over Communication Networks.



<http://www.tsi.gr/?lang=en>



**TECHNICAL
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In the spotlight

QS World Ranking 2014

The Technical University of Crete is among
the 400 top Universities
by Faculty 2014 in Engineering & Technology

By Subject category
the School of Environmental Engineering
is ranked among the places 251-300
for the Environmental Sciences

The rankings highlight the world's top universities, based on
academic reputation, employer reputation and research impact



TUC Eco Racing Team

- **Develops** zero emission urban vehicles since 2007.
- **The first vehicle was built in 2008** and until 2015 four more one-seated urban concept vehicles followed.
- **The vehicles are constructed** entirely at Technical University of Crete labs.
- TUC Eco Racing Team (TUCer) participated for the 8th consecutive year at the International **Shell Eco Marathon 2015**, in Rotterdam, the Netherlands, in the Urban Concept – Hydrogen category.
- TUCer Team finished in the **4th place**. Taking part in the **Urban Concept-Hydrogen category**, TUCer Team presented a new low-weight vehicle using an innovative gear box and a new energy-control management system.

Energy consumption: 193 km/m³ H₂.



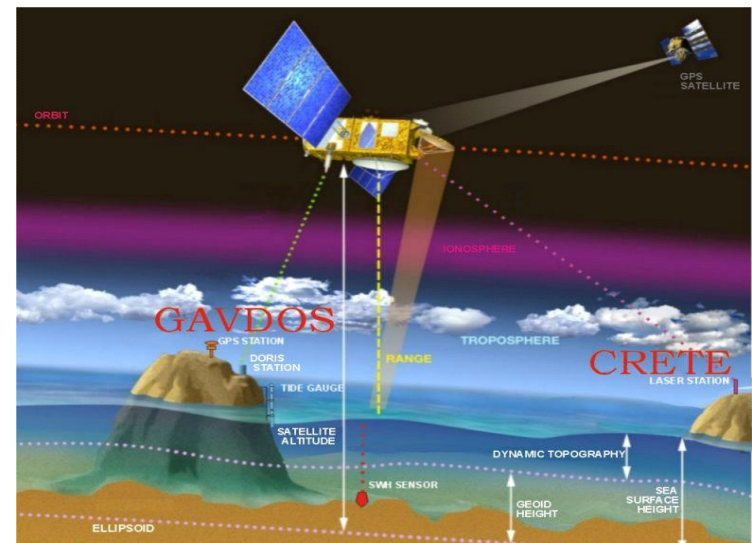
*Intelligent Systems & Robotics
Laboratory, School of Production
Eng. & Management, TUC
More info: <http://www.tucer.tuc.gr/>*

Satellite Station of TUC

- It is the third satellite station at international level, following the ones in California and Corsica, in altimeter satellite calibration.
- It is funded by the European Committee, the Technical University of Crete, the Space Agency of the United States, the Space Research Centre of France and the Space Research Centre of Austria.

The data collected by the station is used to:

- monitor weather changes on Earth
- monitor the absolute changes in sea conditions (wave height, wind velocities etc)
- underpin pollution in Eastern Mediterranean
- monitor the geodynamic and tectonic micro-displacements of Crete





KILL SPILL



- Removing leaks is hard...
- Waiting for microorganisms in the sea to remove them takes too long.
- What if the bacteria could eat faster?

That's the goal of the
European Research
Project FP7-KBBE:

KILL*SPILL

*Coordinator: Professor Nicolas Kalogerakis
School of Environmental Engineering, TUC*

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Human Brain Project



The School of Electronic & Computer Engineering of the TUC and the Software Technology & Network Applications Laboratory are partners in the Human Brain Project (2013-2023), one of the 2 EU FET Flagship Initiatives in the Future & Emerging Technologies sector in the European Union in the «Europe 2020» development strategy of the European Union for the decade 2010-2020.

Research Areas: Neuroscience, Medicine and future Computing Technology.

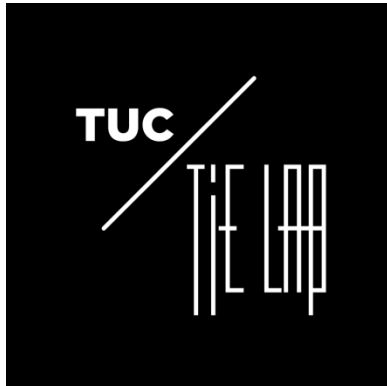


Professor Minos Garofalakis
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<http://www.humanbrainproject.eu>

Many Happy re-Turns Project

Many Happy re-Turns PROJECT is the Silver Winner at the International Design Awards IDA-14



Products Designs Category

Many Happy re-Turns is a leading project of the Educational Playscapes research direction at the Transformable Intelligent Environments Lab in the Technical University of Crete.



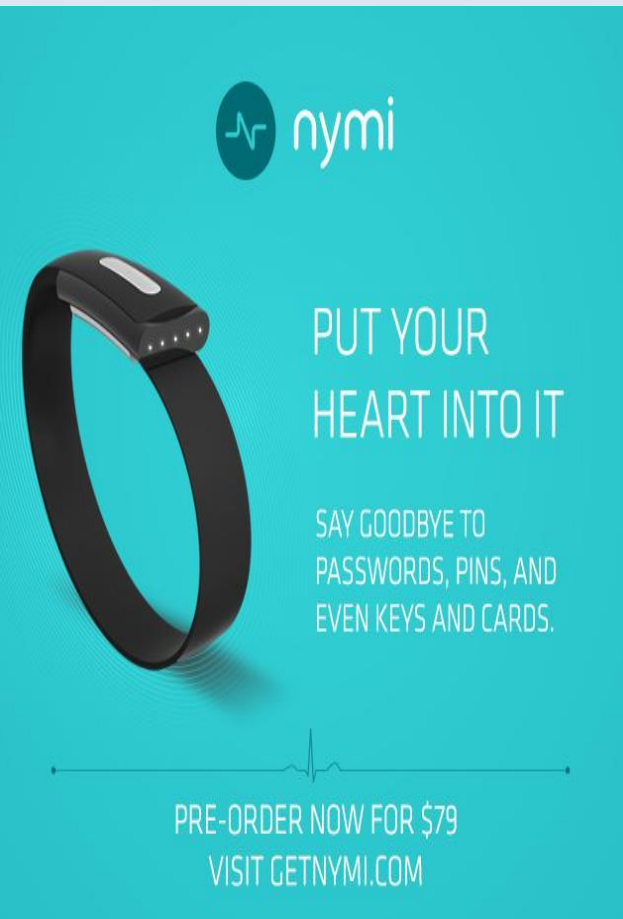
Konstantinos Alketas Oungrinis (Assistant Professor)
Marianthi Liapi (Research Associate), Elli Gkologkina (graduate)
Architectural Engineering School, TUC

Many Happy re-Turns



<http://www.tielabtuc.com/>

TUC student creates the wristband NYMI which is based on a unique cardiac signature



nymi

PUT YOUR HEART INTO IT

SAY GOODBYE TO PASSWORDS, PINS, AND EVEN KEYS AND CARDS.

PRE-ORDER NOW FOR \$79
VISIT GETNYMI.COM

Dr.Foteini AGRAFIOTI

- Graduated the Electronic & Computer Eng. School
- Is now **Post Doctoral Fellow** at the Dept. of Electrical & Computer Engineering, University of Toronto
- Co founder and CTO of [Bionym](#), the manufacturer of [Nymi](#). Nymi is a wristband that knows who is wearing it based on a unique cardiac signature!

