



UNIVERSITY
of the AEGEAN

SCHOOL OF ENGINEERING
DEPARTMENT OF PRODUCT
AND SYSTEMS DESIGN ENGINEERING

**Department
of
Product and Systems Design Engineering**

<http://www.syros.aegean.gr/>

Undergraduate Program Guide

2019-2020

Ermoupolis, Syros

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1 University of the Aegean

1.1 About



ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΙΓΑΙΟΥ

The University of the Aegean (UAegean) was founded in 1984 aiming to introduce new approaches in higher education in Greece and worldwide and to promote regional development. Situated in 6 picturesque islands in the Aegean Archipelago, the UAegean offers a unique natural, cultural and human environment for modern studies in the ancient cradle of knowledge.

From its earliest days, the UAegean challenged the prevailing limitations of the academic endeavor in Greece, both in terms of educational approach and in terms of organizational structure. These challenges were soon transformed into advantages which have culminated in academic achievements and the rapid development of the institution.

In less than thirty years, the UAegean has evolved into an international research –oriented University offering 18 undergraduate (BA or BSc) and 40 postgraduate (MA or MSc) programmes in modern interdisciplinary thematic areas such as environment, communication systems, cultural informatics, product design, food and nutritional sciences, education design and Mediterranean studies. In addition, the UAegean has established joined international postgraduate programs (i.e. in Biodiversity, Environmental Policy and Management, European Integration) as well as joined PhD degree programmes in a wide range of thematic areas.

The early and full incorporation of Information and Communication Technologies in all aspects of academic and administrative operations and the important research outputs in specific fields of excellence and innovation have transformed this unique network of “academic ports of studies and research” into a dynamic and competitive institution at national and international level and a strong social and economic stakeholder in the region.

The UAegean has created a strong international academic and research profile, having been an active member of the European Universities Association (EUA), a founding partner of the Crema network, member of the EMUNI Senate, partner in many academic and research networks and participant in more than 210 bilateral and LLP Erasmus academic agreements.

The UAegean has received consistently excellent feedback in evaluations that have taken place at national, European and international level, as a result of the study programmes offered by the institution and its competitive research programs.

1.2 Schools and Departments

The University of the Aegean (UAegean) consists of five Schools and sixteen Departments that offer 17 undergraduate (BA or BSc) and 28 postgraduate (MA or MSc) programmes in modern interdisciplinary thematic areas:

- SCHOOL OF ENGINEERING
 - Department of Information and Communication Systems Engineering (located in Samos)
 - Department of Financial and Management Engineering (located in Chios)
 - Department of Product and Systems Design Engineering (located in Syros)
- SCHOOL OF SOCIAL SCIENCES (based in Mytilene, LESVOS)

- Department of Social Anthropology and History
- Department of Geography
- Department of Sociology
- Department of Cultural Technology and Communication
- SCHOOL OF THE ENVIRONMENT (based in Mytilene, LESVOS)
 - Department of Environment
 - Department of Marine Sciences
 - Department of Food Science and Nutrition (based in Myrina, Lemnos)
- SCHOOL OF BUSINESS (based in Chios, CHIOS)
 - Department of Business Administration
 - Department of Shipping, Trade and Transport
- SCHOOL OF ENGINEERING
 - Department of Information and Communication Systems Engineering (located in Samos)
 - Department of Financial and Management Engineering (located in Chios)
 - Department of Product and Systems Design Engineering (located in Syros)
- SCHOOL OF SCIENCES (based in Karlovasi, SAMOS)
 - Department of Mathematics
 - Department of Statistics and Actuarial-Financial Mathematics
- SCHOOL OF HUMANITIES (based in Rhodes, RHODES)
 - Department of Primary Education
 - Department of Pre-school Education and Educational Design
 - Department of Mediterranean Studies

1.3 University Unit of Syros (based in Ermoupolis, Syros)



In September 2000, the Department of Product & Systems Design Engineering was founded in Syros as natural consequence of the general policy of the University of the Aegean to expand in every important area of the Archipelago (i.e. the Aegean Sea). As all the Departments of University are, so is this Department is supported by the widest / biggest academic network in Greece : the AEGAIO-NET (or AEGEAN-NET). The modern, well-organised library offers access to the collections and acquisitions of all University Units of the Institution and all modern sources of knowledge.

The Department is housed in the building of the former 1 st High School of the city of Ermoupolis , which was donated to the University by the Municipality of Ermoupolis .

The city of Ermoupolis , capital of Cyclades , is a city with particular architectural physiognomy and of great importance for the Modern Greek neoclassical history of architecture. Important commercial and shipping centre of free Hellenism, Ermoupolis knew very big economic booming in the 19 th century, while the rest of Greece was under the Ottoman subjugation. Its wealth made Ermoupolis well-renown to Europe and attracted a lot of Greek and European architects, mainly German and Italian, who formed its impressive neoclassical image.

Syros is the most populated island of Cyclades , with roughly 20,000 inhabitants. It has a central place in Cyclades , with 84 square kilometers in extent. The island has intense relief, with a lot of elevations and small valleys, and its coasts have enough safe bights. Apart from the highly populated and built-up areas of both Ermoupolis and the picturesque medieval Ano Syros, there are lots of scattered settlements in the eastern coast of the island. It was on the island of Syros that one of the greatest civilizations of the world was born in the 3 rd millennium B.C.: the Cycladic Civilization, which was named “Civilization KEROS-SYROS” by the experts.

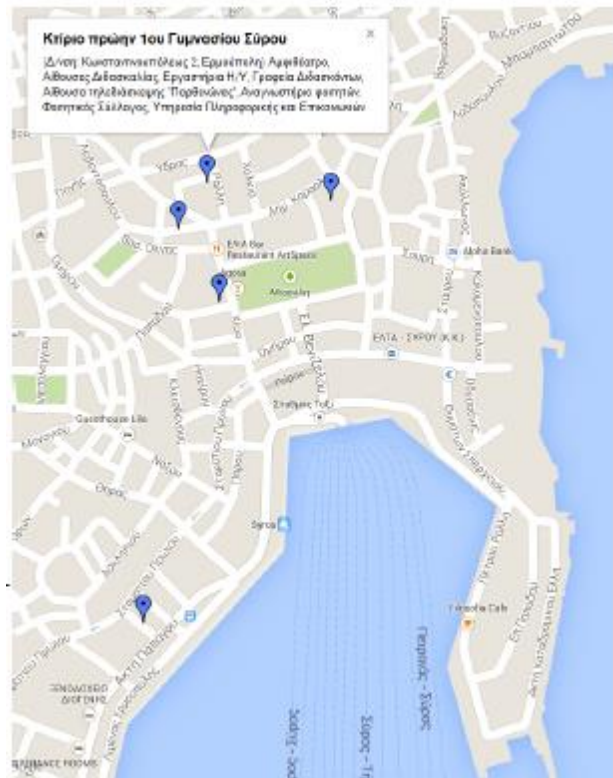
The island is connected with Piraeus by boat daily, while it is linked with all the rest of Cycladic islands very frequently. Furthermore, it is connected with Thessaloniki, the Dodecanese, Crete, Rhodes, Samos, Mytilene and other destinations by ship, whereas it is linked with Athens and other Aegean islands by air.

1.3.1 Map of Departmental Buildings

The map depicts the departmental building infrastructure:

1. Former High School of Syros – “1st Gymnasio Building”

- 1.1. Building A - Ground Floor:
 - 1.1.1. Machine Room (A.0.1, ground floor)
 - 1.1.2. Information and Communication Service (A.0.2, ground floor)
 - 1.1.3. Computer Labs Εργαστήρια Η/Υ (A.0.3, A.0.4, ground floor)
 - 1.1.4. Postgraduate student teaching rooms (A.0.5, ground floor)
 - 1.1.5. Interactive Design Laboratory
- 1.2. Building A - 1st Floor:
 - 1.2.1. Office of Head of Department (A.1.3, 1st Floor)
 - 1.2.2. Offices of Faculty (1st Floor)
 - 1.2.3. Teleconference lecture room ("Parthenon" A.1.5, 1st Floor)
 - 1.2.4. Lecture room/meeting room (A.1.6, 1st Floor)



1.3. Building B

Amphitheatre (B.0.2, ground floor).

- 1.3.1. Student Reading Room (B.1.1, 1st floor)
- 1.3.2. Lecture rooms (B.1.2, B.1.3, 1st floor)
- 1.3.3. Office (Building maintenance) (B.1.4, 1st floor)

2. "Panagoulis" lecture room.

2.1. Lecture Room: "Panagoulis (P.1.1) of the Cultural Centre (Pnevmatiko Kentro) of the municipality of Syros-Ermoupolis

3. Building known as the former Cyclades Chamber of Commerce (“proin Epimelitiriou Kykladon”) (1 Konstantinopoleus St., opposite the former Gymnasium building)

- 3.1. Regional Directorate Office
- 3.2. Registrar and Postgraduate Administration
- 3.3. Administrative, Economic and Technical Services

4. Former Casino of Syros (junction of Sifnou, Serifou and Stamatiou Proiou sts)
 - 4.1. Lecture Rooms and Studio (I.0.1)
 - 4.2. Integrated Industrial Design Laboratory (I.1.1)
 - 4.3. Design-Colour Laboratory(I.1.2)
 - 4.4. Teaching Staff Offices (I.1.3)
 - 4.5. Teaching Staff Offices and lecture room/teleconference room (I.1.4)
5. Kornilaki Building (98 Iroon Polytechniou st. , opposite the Athletic Centre Dimitrios Vikelas)
 - 5.1. Library and Reading Rooms
6. Student club – restaurant (43 Chiou st., at Miaouli square)

2 Department of Product and Systems Design Engineering.

2.1 Identity & Vision

The Department of Product and Systems Design Engineering was founded in 2000, when it began its academic function. It belongs to the Polytechnic School of the University of the Aegean, based in Syros.



It is the only department of Design Engineering in Greece and collaborates with many major schools of European design in various contexts: summer schools, student exchanges (Erasmus), research, etc. thus demonstrating significant activity in the field of Design in Greece and internationally.

Today, the department numbers more than 900 undergraduate and postgraduate students, as well as 15 PhD candidates. Some 700 design engineers have graduated from the department's undergraduate and postgraduate courses.

Its focus is on the integrated design of modern and emerging products, systems and services following the new approaches in the interdisciplinary area of design, creatively combining knowledge and methodologies from a wide range of sciences, recognizing the anthropocentric character of Design as well as the role of the arts within it, and placing a significant emphasis on the use of new technologies.

The Department aspires to consolidate and further strengthen its position in the Greek and international academic environment, as well as to increase its attractiveness -in conditions of international economic and social crisis- reinforcing its educational mission through the continuous incorporation of the most up-to-date knowledge into the curriculum and the provision of student care through the securing of food and housing infrastructures.

It is an important lever for local and regional development, through:

- Offering opportunities for high level studies at undergraduate, postgraduate and doctoral level
- Creation of highly-skilled graduates for job coverage in Greece and abroad
- A multitude of collaborations and a wide-ranging contribution to the qualitative upgrading of offered products and services at local, national and international level.

In order to achieve its vision, the Department of Product Design Engineering invests in the quality of its academic constitution and in the responsibility of its scientific and administrative staff and builds on its tradition of innovation, multidisciplinary and its social role

2.2 What does a Design Engineer do

The Design Engineer, having the merit of an interdisciplinary view of design, can interfere creatively in all phases of the "life cycle" of a product, system or service, starting from the necessity its existence, to its form, the manufacture of prototypes, and up to the design of its actual realisation (Robinson et al. 2005).



The spread of the information society, globalisation and the new needs and requirements that emerge from them, create new industries and services resulting in the birth of new forms of systems, products and services. The Design Engineer is able to contribute to the identification, conception, and creation of products, systems and services that are appropriate in terms of form, content, function, and value for human action.

Especially in Greece, the need for design designers and engineers is greater especially in areas such as services (physical or digital), corporate identity, industrial products, new technologies, user experience and combinations of these. This is also evident from the high absorption of the department's graduates in the labour market in Greece and abroad.

Examples of emerging, original and innovative products, systems and services designed by students and graduates of design engineering can be seen in indicative examples from course projects, final year undergraduate and postgraduate theses, as well as samples of work from portfolios of students and alumni, not to mention their award-winning designs in international and national competitions.

2.3 Activities

In the following sections, you will find information of activities of the faculty as well as the students of the department.

2.3.1 Summer Schools

Our Department also runs Summer Schools on certain sub-disciplines of product, system and service design. Our Summer Schools offer university graduate professionals a great opportunity for further training during the summer. Foreign students are also admitted to some of them, while professors and lecturers from overseas universities are also invited to teach. In this case, lectures are delivered in English. For more information visit: <https://summer-schools.aegean.gr/>

2.3.2 International Mobility (Erasmus)

Our Department participates in the ERASMUS+ mobility programme, in collaboration with the ERASMUS Office of the University of the Aegean, which issues calls for expression of interest and is in charge of the implementation of the approved actions. The international mobility programme offers our students the opportunity to carry out part of their studies or even do their internship in other EU countries, including some non-EU countries with which there is an inter-institutional agreement. Moreover, faculty and administrative staff can also participate in short-term teaching or training programmes.

Given our students' high demand for Erasmus places, especially for Erasmus internship, there has been increased allocation of Erasmus internship places to our Department. Thus, the number of our students who are selected for internship has almost doubled to 21 in 2018 from 11 in 2017. What's more, this six-month internship abroad offers a springboard for professional development to a significant number of our students who eventually build up a career in the host country.

Erasmus internship can be performed even after graduation provided students have applied for it during the course of their studies.

What's more, unlike studies where an inter-institutional mobility agreement is required, internship allows flexibility in selecting any enterprise in the EU. New inter-institutional agreements are also possible, yet this can be a time-consuming process so it is suggested that students select Institutions that have already signed an agreement with our University (for more information please refer to the Erasmus website of the University of the Aegean).

Similarly, our Department hosts faculty and students from universities with which there is a mobility agreement and offers incoming ERASMUS students a number of courses, the lectures of which are delivered in English.

Along with the incoming students, all DPSDE students can attend the lectures and workshops offered by visiting professors within the mobility agreement framework. In most cases, lectures are delivered in English.

Through the ERASMUS Program various initiatives are developed in collaboration with other European Universities, for example the Susede Summer School (Sustainable Service Design) where students from our Department along with students from four other European universities (Koeln School of Design, Lancaster University, Politecnico di Milano, Delft University) participated.

Considering that the educational process and development is undoubtedly enriched through mobility programmes and initiatives, our Department encourages the participation of our students and staff in any such actions.

2.3.3 Distinctions - Awards

The faculty, students and graduates of the department are involved and have often been awarded in national and international actions related to design. Particular importance is given to participation in competitions and exhibitions focusing on design and / or art. Graduates of the department have received international design awards such as the Red Dot Design Award and the European Design Award. There is a reference of most of these distinctions and awards on the department's facebook page.

3 Research

3.1 Interactive Systems Design Laboratory

3.1.1 Mission Statement

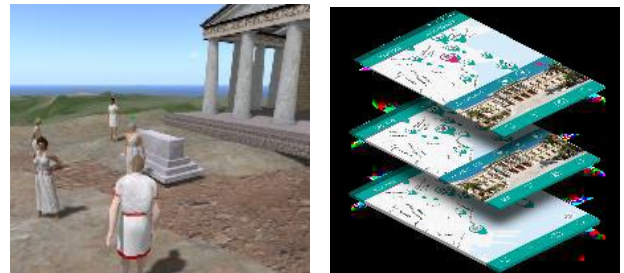
The Interactive Systems Design Lab (ISD) of the Department of Product and Systems Design Engineering (DPSD) is active in the fields of:

- Human-Computer Interaction
- Virtual reality
- Virtual worlds
- Information Systems
- Ubiquitous computing
- Natural User Interfaces
- Physical Computing
- Animation
- Digital Art



The mission of the workshop is both educational and research oriented. The objectives of the laboratory are:

- Carrying out relevant undergraduate courses of the DPSDE and of the postgraduate studies program through demonstration and use of examples of interaction, applications, technologies and tools of design-development-evaluation.
- Supervision of final diploma theses of the department and of the postgraduate studies programme
- Undertaking talks, seminars and workshops.
- Organising and participating in summer schools and programs of remote education and lifelong learning.
- Supervision of doctoral research
- Support of research projects of the DPSD, funded and non-funded. Representation and participation of the Department in National and International collaborative research and development programme.
- Support of collaborations of the department/laboratory with other research groups, sectors and laboratories, such as such as student exchanges, hospitality and support of scientists, visiting professors, etc.



The services offered by the laboratory are:

- Carrying out of national and international research projects
- Support of doctoral, postgraduate and of final year (undergraduate) diploma theses.
- Undertaking of consulting or development projects and studies
- Organisation of seminars/workshops/conferences/Summer schools
- Laboratory support for undergraduate and postgraduate courses
- Presentation of research results in scientific conferences, journals, etc.

- Cooperation with other research centres and universities both in Greece and abroad.

3.1.2 Research Areas

- Natural interaction (physical interaction) with the PC and new examples of interaction with non-traditional interfaces, such as multi-tactile interfaces (large screens and handheld telephones-multi touch interfaces), kinesthetic interaction, gaze interaction etc.
- Virtual and augmented reality and immersive virtual environments with emphasis on applications and usability studies.
- Evaluation of user experience, with emphasis on usability, accessibility, collaborative work and field studies
- Multi-user virtual environments and virtual worlds with emphasis on their utilisation in the design (e.g. products, interiors), collaborative learning, reconstitution of archaeological sites, games.
- Games, gamification and edutainment.
- Pervasive and ubiquitous computing.
- Physical computing and manufacture of micro prototypes for use in new portable and diffuse computing frameworks.
- Big data and AI (artificial intelligence) with emphasis on cloud computing systems, management of geographic data or data identification of users and objects.



3.1.3 Members

- Damianos Gavalas (Professor)
- Spyros Vosinakis (Associate Professor)
- Dimitris Zisis (Associate Professor)
- Panayiotis Koutsabasis (Associate Professor)
- Thomas Spyrou (Assistant Professor)
- Jenny Darzentas (Assistant Professor)
- Panagiotis Kyriakoulakos (Assistant Professor)
- Modestos Stavrakis (Lecturer)
- John Darzentas (Emeritus Professor)
- Charalambos Alifieris (Teaching & Technical Staff)
- Ioannis Xenakis (Adjunct Lecturer)
- Pavlos Chatzigrigoriou (Postdoctoral Researcher)
- Panayiotis Vogiatzidakis (Doctoral Candidate)
- Anna Gardeli (Doctoral Candidate)
- Vasiliki Nikolakopoulou (Doctoral Candidate)
- Elena Dzardanova (Doctoral Candidate)

3.1.4 Facilities & Equipment

The lab is situated in rooms A.0.6 and A.0.7 of the old Gymnasium building. Equipment includes:

- A dedicated and purpose-built Data Centre to serve the IT needs of the department. In detail, our data centre provides an environment for the deployment and control of virtual machines as well as storing

file systems and other services offered to staff and students (web servers, databases, VR systems, educational software etc.).

- Eye-tracking equipment (Eye tracker -Dikablis Ergoneers), can be used for:
 - The design of applications with eye-gaze interaction, which can be especially helpful to people with disabilities or to offer an immersive experience in public spaces like museums etc.
 - Conducting user experience evaluations where eye-tracking can be an invaluable piece of information.
- Neural Impulse Actuator - Emotiv EPOC, for:
 - Research applications in human computer interaction where systems can be “thought-controlled”, for example in navigating a virtual world or for controlling the motion of a wheelchair.
 - Evaluation of casual and affective user response during HCI.
- Tablets (Microsoft, Samsung, Apple) to be used for the design, development and evaluation of a wide range of multi touch applications, the design of new gestures, and conducting research and development in the areas of mobile augmented reality applications, navigation, museum apps, remote working, accessibility, geo location etc.
- Interactive Multitouch Table
- Auto-stereoscopic 3D monitor which allows multiple users to watch virtual reality educational or cultural content without the need of additional equipment.
- VR headset, magnetic 3D sensors and data gloves which can all be used in conjunction to offer full user immersion for research or educational purposes.
- Fully equipped recording studio.
- Various video cameras.
- Conventional as well as 3D printers and scanners.
- Specialised software such as user-experience evaluators (Morae Manager, Morae Observer, Morae Recorder) or 3D design (Unity 3D Pro).

3.1.5 Research and Development Projects

- Mouseion Topos (Ερευνώ-Δημιουργώ-Καινοτομώ, 2018-2021)
- TouristHub (Ερευνώ-Δημιουργώ-Καινοτομώ, 2018-2020)
- SocialPARK (ΓΓΕΤ, 2018-2020)
- Exploiting Oceans of Data for Maritime Applications – BigDataOcean (H2020 ICT-14-2016-2017)
- SELIS – towards a Shared European Logistics Intelligent Information Space (H2020 MG-6.3-2015)
- SMARTBUY - Enhanced Buying Experiences in Smart Cities (H2020-ICT-2015/687960)
- HoPE - Holistic Personal public Eco-mobility (CIP7-621133, 2014-2017)
- MOVESMART - Renewable Mobility Services in Smart Cities (FP7-609026, 2013-2016)
- eCOMPASS - eco-Friendly Urban Multi-Modal Route Planning Services for Mobile Users (FP7-288094, 2011-2014)
- BenToWeb - Benchmarking Tools and Methods for the Web, IST, 2005-2007.
- Network of Excellence - IDCnet “Inclusive Design Curriculum network”, IST, 2002-2004.
- IRIS - Incorporating Requirements of People with Special Needs or Impairments to Internet-based Systems and Services, 2000-2003.

3.1.6 Selected Publications

1. Vosinakis, S. and Koutsabasis, P. (2018) Evaluation of Visual Feedback Techniques for Virtual Grasping with Bare Hands using Leap Motion and Oculus Rift, Virtual Reality, Springer.

2. Koutsabasis, P. and Vosinakis, S. (2018) Kinesthetic Interactions in Museums: Conveying Cultural Heritage by Making Use of Ancient Tools and (re-) Constructing Artworks, Virtual Reality, Springer.
3. S. Vosinakis, G. Anastassakis, and P. Koutsabasis, (2018) "Teaching and learning logic programming in virtual worlds using interactive microworld representations", British Journal of Educational Technology.
4. Gavalas, D., Kasapakis, V., Konstantopoulos, C., Pantziou, G., & Vathis, N. (2017). Scenic route planning for tourists. Personal and Ubiquitous Computing, 21(1), 137-155.
5. Galatis, P., Gavalas, D., Kasapakis, V., Pantziou, G., & Zaroliagis, C. (2016, November). Mobile Augmented Reality Guides in Cultural Heritage. In Proceedings of the 8th EAI International Conference on Mobile Computing, Applications and Services (pp. 11-19). ICST (Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering).
7. Zisis D., Xidias E., Lekkas D., A cloud based architecture capable of perceiving and predicting multiple vessel behaviour, Applied Soft Computing, Volume 35, October 2015, Pages 652-661,
8. A. Dasios, D. Gavalas, G. Pantziou and C. Konstantopoulos, "Hands-on Experiences in Deploying Cost-Effective Ambient-Assisted Living Systems", Sensors, Special Issue on "Sensors and Smart Cities", MDPI, 15, pp. 14487-14512, 2015.
9. Patsoule, E., & Koutsabasis, P. (2014). Redesigning websites for older adults: a case study. Behaviour & Information Technology, 33(6), 561-573.
10. Zisis, D., & Lekkas, D. (2012). Addressing cloud computing security issues. Future Generation computer systems, 28(3), 583-592.
11. Koutsabasis, P., Vosinakis, S., Malisova, K., & Paparounas, N. (2012). On the value of virtual worlds for collaborative design. Design Studies, 33(4), 357-390.
12. Vosinakis, S., & Koutsabasis, P. (2012). Problem-based learning for design and engineering activities in virtual worlds. Presence: Teleoperators and Virtual Environments, 21(3), 338-358.
13. Koutsabasis, P., & Vosinakis, S. (2012). Rethinking HCI education for design: problem-based learning and virtual worlds at an HCI design studio. International Journal of Human-Computer Interaction, 28(8), 485-499.

3.2 Integrated Industrial Design Laboratory

3.2.1 Mission Statement

The aim of the "Integrated Industrial Design" workshop-INDEL is to support academic and research activities related to the phases of design, engineering, optimisation and construction of an industrial product. In this context, research conducted within the framework of the INDEL Laboratory focuses on issues related to product life-cycle up to the production stage. More specifically, the laboratory is active in different research areas that complement the image of a complete detailed design, from conceptual and preliminary design, 3D parametric modeling, selection materials, mechanical analysis and optimisation, up to the design for production and the creation of natural prototypes.

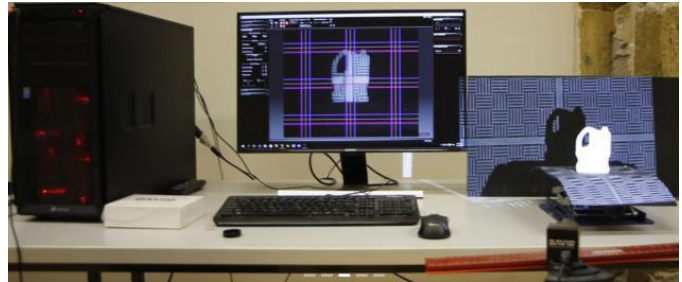


As for the educational part, the laboratory covers a large number of subjects and courses related to the 2nd direction of the Department (Designing with Computers). Through the INDEL laboratory, the students of the department are familiar with modern tools and technologies that they will encounter in their later career. The laboratory supports undergraduate and postgraduate diploma theses.

At the same time, the laboratory supports graduates, researchers and professionals active in the field of design or in other contexts where the design of an industrial product is required, via activities such as seminars, conferences, summer schools, consultative or developmental projects and studies.

The objectives and services of the INDEL laboratory can be broken down as follows:

- Coverage of educational needs at the undergraduate and postgraduate level of the relevant department in subjects that fall within the purview of the laboratory.
- Conducting basic and applied research.
- Cooperation with research institutions, academic institutions, organizations and institutions of both national and international.
- Organization of educational programs, lifelong learning programmes, seminars, summer schools and exhibitions.
- Organization of scientific lectures, workshops, seminars, symposiums, conferences and other scientific events.
- Participation in international and national research and development projects.
- Provision of product design services and advisory support to institutions and individuals, technical reports and proposals for evaluation and improvement.



3.2.2 Research Areas

The research of the laboratory concerns modern subjects from the scientific areas: Computer-Aided Design, Computer Graphics, Parametric design and geometric modeling (Geometric Modeling), Computer-Aided Engineering analysis, Materials Engineering, Ergonomics Computer-Aided Sketch Design (sketch) Design of mechatronics and robotic systems, Motion Design, Reverse engineering, Rapid prototyping.

3.2.3 Staff - Lab Members

- Filippas Azariadis (Professor - Head of Dept.)
- Paraskevas Papanikos (Associate Professor)
- Vassilis Moulitanitis (Assistant Professor)
- Ilias Xidias (Assistant Professor)
- Vassilis Papakostopoulos (Assistant Professor)
- Nikolaos Zacharopoulos (Lecturer)
- Sofia Kyratzi (Lecturer)
- Nikolaos Politopoulos (Teaching & Technical Staff)
- Konstantinos Bailas (Teaching & Technical Staff)
- Eugene Scourboutis (Adjunct Lecturer)
- Sergios Fotiadis (Adjunct Lecturer)
- Zoe Koutkalaki (Doctoral Candidate)

3.2.4 Facilities & Equipment

The laboratory equipment includes modern machines and software that can be categorized as follows:

- Rapid prototyping Systems (3D printers): Stratasys Prodigy Plus, Stratasys Dimension Machine, Blueprinter M2, Zortrax inspire, Markforged mark 2.

- Reverse engineering Systems (3D Scanners): 3D Laser Scanner SLS 2, Creaform Handyscan 3D Portable 3D Scanning Machine
- Tensile machines: Shimadzu (100KN), Yuelian YL102 (5KN)
- Microscopes: ZEISS Scope A 1-1000 x optical metalgraphic microscope, ZEISS STEMI 200-C-Stereo-microscope.
- CNC Cutting Table system: Roland MDX-40A
- Laser-cutter and engraver desktop system: Universal Laser Systems
- Traditional machining equipment: lathe, cutting machines, welding machines, mould manufacturing machine, etc.
- Design and Analysis software: Creo Parametric, Creo Simulate, MIMICS, Geomagic Studio, CES EduPack, AutoCAD, 3D Studio Max, Inventor.
- Technology for prototyping (CNC).

3.2.5 Research & Development Projects

- 2018-2021: Design and Innovation Capacity Building in India / DESINNO, Erasmus+ Capacity Building, Grant agreement 598404-EPP-1-2018-1-IN-EPPKA2-CBHE-JP - ENV2.
- 2019-2022: SciLED-Footwear in the 21st century: New skills for the design of drastically improved comfort, sustainable, fashion-oriented and scientifically-led footwear products, Erasmus+ Knowledge Alliance, PROJECT NUMBER – 601137-EPP-1-2018-1-RO-EPPKA2-KA.
- 2018-2021: Design and development of a Reconfigurable Metamorphic Manipulator System (OVIDIOUS), 1st announcement of research projects ELIDEK for the reinforcement of postdoctoral researchers/three, funded by the General Secretariat for Research and Technology (GSRT) and the Hellenic Foundation for Research and Innovation (HFRI) (Code: 1184).
- 2018-2021: Development of an innovative integrated system for assessing the potential biochemical production of methane (BMP) from different sources of biomass (Green. BMP), Operational Program Competitiveness, Entrepreneurship and Innovation, under the call RESEARCH – CREATE – INNOVATE, co-funded by the European Union and the General Secretariat for Research and Technology (GSRT) (project code:T1EDK-03148)
- 2018: Integrated industrial design of the Prometheus 5 energy production system, funding SWISS SA.
- 2018: Design and production of a functional prototype for electric car, financing BLUE RAYS.
- 2014-2015: Design of lubricant packaging, financing CYCLON S.A.
- 2012-2015: Research Program “Excellence”: Development of cost-effective and accurate computer-aided design and engineering (CAD/CAE) tools for the determination and optimization of footwear comfort parameters (OPT-SHOES). Website (<http://optshoes.syros.aegean.gr/>)
- 2012-2015: Research program ARCHIMIDIS III: Experimental and theoretical investigation of mechanical properties degradation of the aeronautical Aluminum alloy 2024 due to corrosion (TEI Piraeus Coordinator).
- 2012: Improvement of the skeleton of a clean space ceiling, no. Coupon: 12140565-05-000288 in the context of the action "Innovation vouchers for small and medium enterprises – Vouchers for SMEs".
- 2011: Geometric modeling and photorealistic depiction of a model of an ancient Pentikontoros galley, private funding.
- 2011: Development of lighting for pools controlled by remote control, No. Coupon: 79104403-05-000016 in the context of the action "Innovation vouchers for small and medium enterprises – Vouchers for SMEs".
- 2010: Monitoring of structural health of fibre-reinforced glass fibers using implanted carbon nanotube fibres, John S. Latsis Public Benefit Foundation (NTUA coordinator).

- 2009-2012: SMILIES: Small Mediterranean Insular Light Industries Enhancement and Support, 1G-MED08-454.
- 2008: Electronic Services for the support of traditional folk art, private financing.
- 2007-2009: Parametric CAD system for the reconstruction of traditional jewels, private financing
- 2004-2008: Modern garment design system in two-or three-dimensions, private financing.
- 2003-2008: Virtual Environment of furniture presentation, private funding.

3.2.6 Selected Publications (last 6 years)

1. Xidias E., Azariadis P., Energy Efficient Motion Design and Task Scheduling for an Autonomous Vehicle. Proceedings of the Design Society: International Conference on Engineering Design, 2019, 1(1), 2853-2862. <https://doi.org/10.1017/dsi.2019.292>
2. Moulianitis V.C., Xidias E., Azariadis P. (2019) Optimal Task Placement in a Metamorphic Manipulator Workspace in the Presence of Obstacles. In: Aspragathos N., Koustoumpardis P., Moulianitis V. (eds) Advances in Service and Industrial Robotics. RAAD 2018. Mechanisms and Machine Science, vol 67. Springer, Cham, https://doi.org/10.1007/978-3-030-00232-9_38
3. Koutkalaki X., Azariadis Ph., Papanikos P., Parametric finite element analysis for the evaluation of the effect of osteoporosis on the mechanical behavior of foot, International Conference of the Polish Society of Biomechanics - Biomechanics 2018, Zielona Góra, Sept. 5-7, 2018.
4. Bailas K., Papanikos P. (2018) A New Methodology of Constructing Products Using Additive Manufacturing Technology: Case Study of a Push Button. In: Chiabert P., Bouras A., Noël F., Ríos J. (eds) Product Lifecycle Management to Support Industry 4.0. PLM 2018. IFIP Advances in Information and Communication Technology, vol 540. Springer, Cham, https://doi.org/10.1007/978-3-030-01614-2_64
5. Agathos A., Azariadis Ph., 3D Reconstruction of Skeletal Mesh Models and Human Foot Biomechanical Model Generation Using Semantic Parametric-Based Deformation, International Journal of Computers and Applications, 2018, <https://doi.org/10.1080/1206212X.2018.1443316>.
6. Koutkalaki X., Azariadis Ph., Papanikos P., Parametric finite element analysis for the evaluation of the effect of osteoporosis on the mechanical behavior of foot, International Conference of the Polish Society of Biomechanics - Biomechanics 2018, Zielona Góra, Sept. 5-7, 2018.
7. Dimeas, Fotios, Vassilis C. Moulianitis, and Nikos Aspragathos. "Manipulator performance constraints in human-robot cooperation." Robotics and Computer-Integrated Manufacturing 50 (2018): 222-233.
8. Moulianitis, V. C., G-AD Zachiotis, and N. A. Aspragathos. "A new index based on mechatronics abilities for the conceptual design evaluation." Mechatronics 49 (2018): 67-76.
9. Portouli, E., Nathanael, D., Gkikas, K., Papakostopoulos, V., & Amditis, A. (2018). Naturalistic observation of interactions between car drivers and pedestrians in high density urban settings. In Proceedings of the 20th Congress of the International Ergonomics Association - IEA 2018: Creativity in Practice, Florence, Italy. Springer (in press).
10. Papakostopoulos, V., Nathanael, D., & Marmaras, N. (2018). Ergonomics for impartiality and efficiency in the law-courts of ancient Athens. In Proceedings of the 20th Congress of International Ergonomics Association - IEA 2018: Creativity in Practice, Florence, Italy. Springer (in press).
11. Syrimpeis, Vasileios, Vassilis Moulianitis, Nikos A. Aspragathos, and Elias Panagiotopoulos. "A Knowledge Based System for the Selection of Muscles for Gait Phase Detection using EMGs." International Journal of Healthcare Information Systems and Informatics (IJHISI) 12, no. 2 (2017): 18-45.
12. Papakostopoulos, V., Marmaras, N., & Nathanael, D. (2017). The "field of safe travel" revisited: interpreting driving behaviour performance through a holistic approach. Transport Reviews, 37(6), 695-714.

13. Zissis D., Lekkas D., Azariadis Ph., Papanikos P., Xidias E., Collaborative CAD/CAE as a Cloud Service, *International Journal of Systems Science*, 2017, 4(2), 339-355, <http://dx.doi.org/10.1080/23302674.2016.1186237>.
14. Azariadis Ph., On using density maps for the calculation of ship routes, *Evolving Systems*, 2017, 8(2), 135-145, <http://dx.doi.org/10.1007/s12530-016-9155-7>.
15. Papagiannis P., Azariadis Ph., Papanikos P., Evaluation and optimization of footwear comfort parameters using finite element analysis and a discrete optimization algorithm, 17th World Textile Conference AUTEX 2017, 29–31 May 2017, Corfu, Greece, IOP Conf. Ser.: Mater. Sci. Eng. 254(2017) 162010, <http://dx.doi.org/10.1088/1757-899X/254/16/162010>.
16. Xidias E., Azariadis Ph., Computing Collision-Free Motions for a Team of Robots Using Formation and Non-Holonomic Constraints, *Robotics and Autonomous Systems*, 82 (2016) 15–23, <http://dx.doi.org/10.1016/j.robot.2016.04.008>.
17. Xidias E., Azariadis Ph., Aspragathos N., Mission design of mobile manipulators in cluttered environments for service applications, *International Journal of Robotics Applications and Technologies*, 2016, 4(1), 1-18, <http://dx.doi.org/10.4018/IJRAT.2016010101>.
18. Moulianitis, Vassilis C., Nikos A. Aspragathos, and Charalampos Valsamos. "Suboptimal Anatomy of Metamorphic Manipulators Based on the High Rotational Dexterity." In *Advances in Reconfigurable Mechanisms and Robots II*, pp. 509-519. Springer, Cham, 2016.
19. Moulianitis, Vassilis C., Aris I. Synodinos, Charalampos D. Valsamos, and Nikos A. Aspragathos. "Task-Based Optimal Design of Metamorphic Service Manipulators." *Journal of Mechanisms and Robotics* 8, no. 6 (2016): 061011.
20. Koutkalaki Z., Papagiannis P., Azariadis P., Papanikos P., Kyratzi S., Zissis D., Lekkas D., Xidias E., Towards a foot bio-model for performing finite element analysis for footwear design optimization using a Cloud infrastructure, *Computer-Aided Design and Applications (Taylor & Francis)*, 2015, 1-12, <http://dx.doi.org/10.1080/16864360.2015.1014728>.
21. Papagiannis P., Koutkalaki Z., Azariadis P., Papanikos P., Definition and Evaluation of Plantar Mechanical Comfort for the Support of Footwear Design, *Computer-Aided Design and Applications (Taylor & Francis)*, Special Issue: Technologies for Human Centric Free-form Products, 2015, <http://dx.doi.org/10.1080/16864360.2015.1084189>.
22. Xidias E., Aspragathos N., Azariadis P., Mission design of a team of service robots, in *Handbook of Research on Robotics and Mechatronics*, IGI Global, 2015, <http://dx.doi.org/10.4018/978-1-4666-7387-8.ch023>.
23. Koutkalaki Z., Papagiannis P., Azariadis P., Papanikos P., Finite element evaluation of the mechanical behaviour of a detailed foot/footwear model, 6th International Conference on Mechanics and Materials in Design, P.Delgada/Azores/Portugal, 26-30 July 2015.
24. Xidias E., Azariadis P., Motion Planning and Scheduling with Stochastic Demands, The 24th International Conference on Robotics in Alpe-Adria-Danube Region, RAAD 2015, Bucharest, Romania, May 27-29, 2015 (Published at *Advances in Intelligent Systems and Computing*, Springer, http://dx.doi.org/10.1007/978-3-319-21290-6_43).
25. Koutkalaki Z., Azariadis P., Papanikos P., Parametric Study of the Effect of Sole's Materials on Plantar Pressure Distribution Using a Finite Element Foot-Footwear Model, The 3rd International Leather Engineering Congress, May 21-22, 2015 Izmir, Turkey.
26. Papakostopoulos, V., Nathanael, D., Portouli, E., & Marmaras, N. (2015). The effects of changes in the traffic scene during overtaking. *Accident Analysis and Prevention*, 79, 126-132.
27. Xidias E., Koutkalaki Z., Papagiannis P., Papanikos P., Azariadis P., Foot Plantar Pressure Estimation using Artificial Neural Networks, 12th International Conference on Product Lifecycle Management, Doha (Qatar), Oct. 19-21, 2015 (Published at *Product Lifecycle Management in the Era of Internet of*

- Things, Volume 467 of the series IFIP Advances in Information and Communication Technology, Springer, http://dx.doi.org/10.1007/978-3-319-33111-9_3.
28. Kyratzi S., Azariadis P., Geometric Definition of the Hidden Part of a Line Drawing in a Sketch-to-Solid Methodology, Computer-Aided Design and Applications (Taylor & Francis), 2014, 1–11, <http://dx.doi.org/10.1080/16864360.2014.981466>.
 29. Papagiannis P., Koutkalaki Z., Azariadis P., Footwear Plantar Mechanical Comfort: Physical Measures and Modern Approaches to Their Approximation, The 5th International Conference on Advanced Materials and Systems, October 23rd–25th, 2014, Bucharest, Romania.
 30. Portouli, E., & Papakostopoulos, V. (2014). Adaptive warning strategies from multiple systems: A simulator study of drivers with different reaction times. In M. Kurosu (Ed.), Lecture Notes in Computer Science: Vol. 8512. Human-Computer Interaction: Applications and Services (pp. 485-493). Switzerland: Springer.
 31. Azariadis P., Kyratzi S., Sapidis S., A hybrid-optimization method for assessing the realizability of wireframe sketches, 3D Research (Springer), 2013, 4(1), 1–11, [http://dx.doi.org/10.1007/3DRes.01\(2013\)3](http://dx.doi.org/10.1007/3DRes.01(2013)3).
 32. Xidias E., Azariadis P., Fleet Sizing of Autonomous Vehicles with Kinodynamic Constraints, Proceedings of the RAAD 2013 22nd International Workshop on Robotics in Alpe-Adria-Danube Region, pp 64-71, September 11-13, 2013, Portorož, Slovenia.

3.3 Complex Systems & Service Design Laboratory

3.3.1 Mission statement

Complexity is a general feature that governs design systems in their role of designed systems as well as that of systems that design. The investigation of the emergence and development of various forms of complex organisations is fundamental for an understanding of the design process in general, and the design of complex services and systems in particular.

Therefore, the general purpose of the research laboratory is to support research and academic activities linked to the analysis and design of interventions in complex systems and the design of services at all levels of organisational complexity.



The laboratory focuses on the whole range of the more general areas of system complexity and related theoretical examples, in particular the problematic design areas, and more specifically, in holistic, and using systemic 'language' organisational approaches of conception, investigation, understanding, analysis, and design of complex and autonomous systems and services as they relate to various phenomena and problems in the following fields of knowledge:

- Complexity of Interactive Organisations
- Complexity of Design Processes
- Theories and Methodologies of Design
- Systemic Theory and Self-organisation
- Service Design

- Social Innovation Design
- Design for All
- Information Design
- Design for Sustainability
- Building and Managing Brands
- Organisational Theory
- Marketing
- Consumer Behaviour



The objectives and services of the CSSD laboratory can be broken down as follows:

- Teaching related courses of the departmental undergraduate and postgraduate programmes (master's level).
- Supervision of the undergraduate diploma thesis and of master's theses
- Supervision of doctoral research
- Conducting and participating in summer schools and programs of remote education and lifelong learning.
- The writing of educational aids, and the creation and provision of teaching and pedagogical material of high quality
- Conducting basic and applied research.
- Dissemination of research results through publications in international journals and conferences.
- Organisation and participation in speeches, seminars and workshops.

The services offered by the laboratory are:

- Support for research projects of the department, both funded and unfunded
- Representation and participation of the department in national and international collaborative research and development programmes.
- Design of the services provided by the Department
- The promotion of innovation and the implementation of projects aimed at strengthening national and local competitiveness through a thorough analysis of the existing situation and the design of new/innovative services aiming at new/innovative jobs.
- Support of the collaborations of the department/laboratory with other research groups, sectors and laboratories, such as student exchanges, hospitality and support of scientists, guest professors, etc.
- Participation in international networks for the study of complex bio-cognitive systems, service design, systemic approaches to design, and organizational design.

3.3.2 Research Areas

- Complexity, Self-Organisation and Autonomy, Organisational Analysis and Theoretical Underpinnings of Complex Interactive (Bio-Cognitive) Systems.
- Embodied Cognition and Interaction, Emotional and Aesthetic Interaction, Creativity In DESIGN
- Design Theory and Methodology, Autonomy and Design
- Naturalistic Ontologies and Epistemologies Of Complex Systems and Organizations
- Design of Organizations, Design of Socio-Technical and Artificial Systems and Environments, Design of Autonomous Systems
- Service Design, Social Innovation Design, Design for Circular Economy,
- Entrepreneurship and Design for the Sharing Economy
- Design for Sustainability, and inclusion of Tacit knowledge and Traces

- Collaborative, Participatory and Open Design, Design for UX, Speculative approaches and Design Fiction as research methods for Service design in Transformation design
- Design of Accessible Services, Products and Systems, and the production of International, European and Greek standards(ISO, CEN/CENELEC, ELOT), especially those related to services and their design, and that are concerned with accessibility for a wide range of consumers, including the most vulnerable.
- Information Design, especially for the better understanding and communication of service offerings
- Entrepreneurship, Marketing, Building and Managing of Brands, Definition of Brand Elements and Visual Brand Identity,
- Making and Craft and its place in Design
- Street Art

3.3.3 Research Lab Members

- Argyris Arnellos (Associate Professor)
- Irini Rigopoulou (Associate Professor)
- Thomas Spyrou (Assistant Professor)
- Jenny Darzentas (Assistant Professor)
- Vassilis Papakostopoulos (Assistant Professor)
- Modestos Stavrakis (Lecturer)
- John Darzentas (Emeritus Professor)
- Charalambos Alifieris (Teaching & Technical Staff)
- Damianos Papadopoulos (Teaching & Technical Staff)
- Spyros Bofylatos (Adjunct Lecturer)
- Ioannis Xenakis (Adjunct Lecturer)
- Vasiliki Nikolakopoulou (Doctoral Candidate)
- Paris Xyntarianos (PhD Candidate)

3.3.4 Infrastructure

The laboratory is housed temporarily in the main building (1st Gymnasium) and will acquire its own special space in the academic year 2020-21 when it will be transferred to the former Elysee building. The building is located on the coastal road of Ermoupolis and is currently being renovated in order to be able to host research and educational work of groups and individuals.

3.3.5 Equipment

- Desktop 3D Scanner (on order).
- Digital recording tools (photographic and video cameras)
- Scanners, printers, peripheral computer equipment (on order)
- Tools to facilitate collaboration (e.g. interactive whiteboards, table tops, etc.)
- Low-fidelity (Lo-fi) prototyping tools

3.3.6 Affiliated Collaborations and Networks

- IAS Research Group for Life, Mind, and Society - University of the Basque Country, Spain - <http://www.ias-research.net/>
- Konrad Lorentz Institute for Evolution and Cognition Research – An Institute for the Advanced Study of Natural Complex Systems, Klosterneuburg (Vienna), Austria - <https://kli.ac.at/>

- Systems Biology and Bioinformatics, University of Rostock, Germany - <https://www.sbi.uni-rostock.de/>
- EPÆG <http://www.epaeg.de/>
- Human Evolution and Cognition Research Group (EVOCOG) <https://evocog.org/>
- Vienna CogSciHub <https://cognitivescience.univie.ac.at/>
- Visual Perception and Aesthetics Lab <https://palmerlab.berkeley.edu/index.html>
- Desis (Design for social innovation and sustainability) <https://www.desisnetwork.org/>
- Transition design network (<https://transitiondesign.net/about-transition-design/>)
- Systemic Design Association <https://systemic-design.net/sdrn/>
- Service Design Network <https://www.service-design-network.org/>

3.3.7 Projects (a selection)

- RE-LINK (Relinking the weak link. Building resilient digital households through interdisciplinary and multilevel exploration and intervention), funded by the Norwegian Research Council 2019-2023 Project code: 288663
- MOOC Accessibility Partnership MOOCAP (<https://moocap.gpii.eu/>) Horizon2020 ERASMUS+ programme (2014-1-DE01-KA203-000679 (2014-1017).
- Susede 2014 - Emerging Theories, Methodologies and Applications in the area of Design: Sustainability & Service Design". "University of the Aegean in collaboration with Lancaster University, Delft University of Technology, Koln International School of Design and Politecnico di Milano <http://susede2014.pns.aegean.gr>
- Susede 2013 - Sustainable Service Design" 2013 Erasmus I.P. 2013 <https://susede2014.pns.aegean.gr/111-summer-schools/susede2014-en/1414-sponsors>
- Summer School: Simplifying Complex Information: the design of understandable, accessible and meaningful information. Information Design Summer School 2013 in collaboration with Simplification Centre and the International Institute for Information Design (Sept 30th- Oct 4th 2016), Syros <http://infodesign2013.pns.aegean.gr/>
- SuSeDe 2012 - Sustainability and Service Design <https://susede2014.pns.aegean.gr/111-summer-schools/susede2014-en/1414-sponsors>
- BenToWeb - Benchmarking Tools and Methods for the Web, IST, 2005-2007.
- NEΩPION II: European Network to Support Employment and Adaptability in Shipbuilding Industry – Promoting the competitiveness and the safeguarding of labour force of shipyards. ΝΗΣΙΩΤΙΚΗ ΣΥΜΠΟΛΙΤΕΙΑ – ΙΣΟΤΙΜΗ ΠΡΟΣΒΑΣΗ, EQUAL, EU. 2002-2005
- Network of Excellence - IDCnet "Inclusive Design Curriculum network", IST, 2002-2004.
- IRIS - Incorporating Requirements of People with Special Needs or Impairments to Internet-based Systems and Services, 2000-2003.
- GUARDIANS: Gateway for User Access to Remote Distributed Information and Network

3.4 Drawing and Colour Studio

3.4.1 Mission Statement

The aim of the studio is to familiarise undergraduate and postgraduate students with contemporary artistic research combined with research on technologies, directed and adapted to the wider area of art, its applications and culture.

More specifically, the studio's mission is to implement and consolidate modern approaches to art forms as well as to develop specialised creative skills with traditional and digital media.

The Drawing and Colour Studio serves the educational and research needs in the following fields:

- Drawing
- Colour synthesis
- Printed Art
- Three-dimensional constructions
- Video - Animation
- Installation art
- Photo
- History of Art and Design



Through its activities the studio aims to familiarise students with visual perception and aesthetics, as well as the development of the students' imaginative skills, to create original ideas and aesthetically acceptable proposals. It also aims at cultivating knowledge of historical and aesthetic developments in the field of Art and Design.

3.4.2 Lab Members

- Florentia Oikonomidou (Assistant Professor)
- Panagiotis Kyriakoulakos (Assistant Professor)
- Irene Leontakianakou (Lecturer)
- Charalambos Alifieris (Teaching & Technical Staff)
- Angela Brisnovali (Teaching & Technical Staff)
- Elsa Charalambous (Teaching & Technical Staff)

3.4.3 Research and Activities

Moreover, the drawing and colour studio emphasizes artistic research concerning the design and production of works of fine and applied arts with traditional or modern means. The results are scientific papers, in journals and conferences that result from research activities both funded or unfunded in the field of art and culture history, as well as artistic activities such as:



- Exhibition in galleries and art rooms
- Individual presentations of artistic work in international, European or national competitions (Biennale, Triennale etc), events organised of museums, artistic centres (Kunsthallen), artistic institutes, galleries, public and private collections
- Individual presentations or participation in international, European or national art festivals, artistic symposiums/artistic workshops, permanent collections (public or private).
- Artistic participation in exhibitions of historical evaluations of contemporary Greek art, as curators of thematic exhibitions, tributes etc.,
- Artistic research projects.
- Artistic participation in group exhibitions, festivals, independent art groups, galleries etc.

The laboratory supports undergraduate and postgraduate work. It also organises workshops and offers its services in educational programmes. It also aims at interdepartmental and inter-institutional collaborations with schools-universities in Greece and abroad.

3.4.4 Equipment

- Easels, workbenches, stools, chairs, storage cabinet for materials
- Large format Design Cases
- 25 graphics workstations, with specialised performance
- 25 monitors 24"/hyper-sensitive tablets digital Wacom design
- 2 Colour Archival visual printing machines
- 1 laser printer for polymeric lithography
- 1 A3 Printer
- 1 Engraving Press
- 2 Image scanners A3 +
- Regional photo Genres
- 2 High-resolution projectors



4 Faculty and Staff

4.1 Faculty

4.1.1 Professors and Lecturers

Filippos Azariadis (Professor - Head of Dept.)

Dr. Philip Azariadis is a Professor with the Department of Product & Systems Design Engineering at the University of the Aegean. He holds a Mathematics degree from the Department of Mathematics (1994) and a Ph.D. from the Department of Mechanical Engineering & Aeronautics (1999) of the University of Patras. He has served at various faculty positions at the Department of Product & Systems Design Engineering since 2002. Between May 2001 and June 2005, he worked as an R&D coordinator at ELKEDE – Technology & Design Centre, while between July 2005 and December 2010, he was an external collaborator at the above institute focusing on European R&D projects. During 2011-2012 and 2014 he has served as a Tutor at the Hellenic Open University.

His research activities are focused in the areas of Product Design (Computer-Aided Design, 3D Modeling for engineers), Reverse Engineering, Motion Design, Routing/Scheduling and Computer Graphics. His research work has found industrial applications in the footwear, garment and jewelry industries and has been published in leading scientific journals and conferences like Computer-Aided Design, Computers in Industry, The Visual Computer, Robotics and Autonomous Systems, Computing, Eurographics Conference, CAD Conference.

He has been involved as a researcher or scientific coordinator in numerous European or National R&D projects and served as a reviewer in 37 international journals, in more than 135 international conferences and in several international and national founding organisations. He has been member of the international programme committee of more than 100 international conferences, and he is member of the editorial board of 3 international journals.

Currently, Dr. Azariadis, is Head of the Department of Product & Systems Design Engineering, Director of the M.Sc. Program “Integrated Product Design and Innovation” and Head of the “Integrated Industrial Design Lab” at the University of the Aegean.

Damianos Gavalas (Professor)

D. Gavalas is currently employed as Associate Professor in the Department of Product and Systems Design Engineering in the University of the Aegean, Greece, and Adjunct Professor in Hellenic Open University.

Over the past few years he has conducted research in the fields of mobile/pervasive/distributed computing, augmented/virtual reality, wireless adhoc networks, optimizations algorithms, transportation systems, web technologies, mobile code, network and systems management, e/m-commerce.

He has co-authored over 150 publications on the above subjects, published in international journals, book chapters and conference proceedings, which have received over 3200 citations (h-index: 27, i10-index: 57). He has also co-authored three books (written in the Greek language) covering the thematic areas of wireless networks, distributed systems and mobile technologies, respectively.

He has extensive teaching experience in both undergraduate and postgraduate level, in courses related to web design and development, web-based multimedia, hypermedia technologies, computer networks, electronic commerce, databases fundamentals, distributed systems, mobile & pervasive computing and wireless

networking.

He has supervised three completed PhD dissertations and dozens of final year and MSc projects.

He serves as editorial board member of Journal of Network and Computer Applications (Elsevier), Personal and Ubiquitous Computing (Springer), Information Technology & Tourism (Springer) and Sensors (MDPI). He has also served as TPC member in several (> 90) leading conferences and guest-editor in highly ranked journals in the fields of mobile and wireless communications. He has co-chaired MobiSensor (2010-2012) and ISUT (2017-2018) international workshops.

He has acted as external reviewer for research proposals submitted to H2020 FET OPEN, Research Promotion Foundation (Cyprus), Greek General Secretariat for Research and Technology (GSRT), etc. He has participated as a coordinator and/or key researcher in several research and development projects funded by Greek national and European funding bodies, including TouristHub and SocialPARK (GSRT), SMARTBUY (H2020-ICT-2015/687960), HoPE (EC/CIP7/621133), MOVESMART (EC/FP7/609026), eCOMPASS (EC/FP7/288094), VESPER (EC/IST-1999-10825), OPTIMIST (EC/IST-1999-12501).

Argyris Arnellos (Associate Professor)

Spyros Vosinakis (Associate Professor)

Spyros Vosinakis is an Assistant Professor at the Department of Product and Systems Design Engineering, University of the Aegean, Greece with subject 'Virtual Reality'. He holds a BSc in Informatics from the University of Piraeus, Greece, an MSc in Computer Graphics and Virtual Environments from the University of Hull, UK and a PhD in Informatics from the University of Piraeus, Greece with subject 'Intelligent Agents in Virtual Environments'. His research interests include interactive 3D environments, virtual and augmented reality, serious games, educational technology, and digital heritage. He has published one book, 77 scientific papers in journals, conference proceedings and book chapters, and his published work has received over 680 citations. He has participated as a researcher in 11 funded R&D projects (three as a scientific coordinator), and he has over 15 years of experience as a lead developer of interactive systems and 3D applications for companies and research projects.

Dimitris Zisis (Associate Professor)

Dimitris Zisis is an Associate Professor at the University of the Aegean. His research interests and areas of expertise include several aspects of architecting and developing complex Information Systems (IS), including distributed and cloud based big data deployments.

His published scientific work includes more than 70 publications (scientific journals, books and conferences included), which have received more than 2200 citations to date. He is a member of the editorial boards of Future Generation Computer Systems (FGCS) published by Elsevier, the International Journal of Internet of Things and Cyber-Assurance published by Inderscience and PC member for numerous conferences including CLOUDCOM, GECON, SerCO and others.

He is an IEEE Senior Member and a member of the IEEE Computer Society, IEEE Oceanic Engineering and the IEEE Intelligent Transportation Systems Societies and the Young Researchers Committee of the World Federation on Soft Computing. His professional experience includes senior consulting and researcher positions in a number of private and public institutions.

Panayiotis Koutsabasis (Associate Professor)

Panayiotis Koutsabasis is an associate professor of Human-Computer Interaction (HCI) at the Department of Product & Systems Design Engineering, University of the Aegean, Greece. He holds a Ph.D. in Human-

Computer Interaction from the University of the Aegean, M.Sc. and B.Sc. in Information Systems from the Athens University of Economics and Business.

Panayiotis has been teaching HCI and several other related courses (Advanced User Interfaces, CSCW, Design for All, Mobile HCI, Interaction Design studio, etc.) for over 15 years and he has supervised over 70 diplomae and M.Sc. theses in those subjects.

His research interests are wide-ranging, including HCI and design, user experience and evaluation studies of HCI, HCI and education, Natural User Interfaces (NUIs) (especially kinaesthetic and gaze interaction), Virtual Worlds and Virtual Reality, in domains of application like education, cultural heritage, cooperation, and design support. He has conducted various studies about aspects of the user experience in HCI, concerning usability, accessibility and collaborative work in interactive technologies like the web, mobile devices, and virtual worlds, with various user groups including people with special needs and older adults.

He has worked as a technical coordinator and researcher in more than 20 European and national collaborative R&D projects.

He has co-authored almost 70 papers in scientific journals, conferences and book chapters and 2 books on HCI (in Greek).

He is member of ACM Greek SIGCHI and a tactical reviewer in a many scientific journals and conferences.

Paraskevas Papanikos (Associate Professor)

Paraskevas Papanikos is Associate Professor at the Department of Product and Systems Design Engineering of the University of the Aegean. He holds a Diploma in Mechanical Engineering from the National Technical University of Athens (1989) and a Master's and Ph.D. in Applied Mechanics from the University of Toronto (1992 and 1997). His research interests include structural analysis and simulation using finite elements, strength and fatigue of metals and composite materials, analytical and experimental fracture mechanics and mechanical behavior of nanostructures.

He has taught Engineering Mechanics and Structural Analysis courses in undergraduate and postgraduate studies for 14 years and has supervised more than 100 undergraduate and postgraduate theses. He has participated in more than 20 research projects in Europe and North America and is the author of more than 60 articles in scientific journals and international conferences. His research work has received more than 1,600 citations.

Irini Rigopoulou (Associate Professor)

She started her career as a Marketing Executive. She worked in Greek and multi-national companies for around 14 years.

Her love for knowledge transfer and her multifaceted experience with young people directed her towards an academic career. For the past overall 16 years she has been teaching in the Athens University of Economics and Business, while also cooperating with the Hellenic Open University for 10 years, and Cyprus Open University for 2 years, and writing various articles in highly regarded scientific reviews and educational manuals. Since October 2016 serves Athens University of Economics and Business as a Visiting Professor by teaching at PostGrad programs and supervising thesis or participating in other projects.

At the same time (and until now), she has been working as a Company Consultant & Seminar instructor / facilitator on issues of Branding & Marketing Strategic Management under the sustainability perspective which is strongly appreciated by Irini.

This course, in combination with her faith in people and their potential, direct her towards Psychology and, very recently, towards Coaching. She is currently a Certified Coach by the University of Cambridge, UK.

She considers it essential to offer her knowledge and personal interest in developmental processes oriented towards personal potential, especially for young people. Her approach is related to her conviction that "potential exists within ourselves"; therefore, each one's authenticity and uniqueness constitute the foundation stone for building our Self-Strategy. In her lectures as well seminars, she selects Hands-On & Action Learning methodologies, which increase their effectiveness.

For several years shares her opinions with marketing practitioners through her column Marketeyising on the Marketing Week review and recently on the natura nrg, holistic magazine.

Florentia Oikonomidou (Assistant Professor)

Thomas Spyrou (Assistant Professor)

Jenny Darzentas (Assistant Professor)

Panagiotis Kyriakoulakos (Assistant Professor)

Dr P. Kyriakoulakos is Assistant Professor in Computer Animation at the Department of Product and Systems Design Engineering of the University of the Aegean. Prior to that, he served as Lecturer in Computer Animation (2010-2018) at the same Department.

He holds a Diploma in Electrical Engineering from the Aristotle University of Thessaloniki, a Master's Degree (DEA) "Cinema, Television, Audiovisuel" from the Universities Paris 1 and Paris 10, and a Ph.D. (Doctorat) in Sciences of Art from the University of Paris 10. For his studies in Paris, P. Kyriakoulakos received a 3-year Grant from Onassis Foundation.

He has extensive experience in Teaching and Digital Production activities both in Greece and France since 1987, including Expertise for the MEDIA Programme of the European Union (Development and Training Proposals Evaluations). He served as Adjunct Lecturer at the UFR d'Arts Plastiques et Sciences de l'Art of Paris 1 University - Pantheon/Sorbonne (1987-1992) and at the Department of Product and Systems Design Engineering (2000-2010). P. Kyriakoulakos received the Award of SCAM (societe civile des auteurs multimedia) in 1991 as Editor-in-Chief of the video-magazine La Vague, Arts en Video, published in Paris.

As Managing Director of Post Reality (1994-2006) and New Media Director for PLD Production (2006-2010), as well as a stockholder of Fantasia Audiovisual Ltd (1996-2012), he produced several audiovisual, computer animation and multimedia works, including the first Greek 30 min long computer animated TV special Alexandra Meets the Space Toons (2003) for the Public Broadcaster ERT, and launched the pilot version of the Video-on-Demand Platform Homeweb (2010).

Member of the Interactive Systems Design Laboratory of the Faculty since its foundation year 2000, Dr Kyriakoulakos participated in several Research Programmes, including the internationally awarded ARCHEOGUIDE (2000-2002) and HIST3D (2011-2015). His Research Interests include topics on the Creative Process in Computer Animation and Digital Media and on the impact of the Techniques on the Aesthetics of Animation and Interactive works. He is the Scientific Coordinator of the International Conference and Summer School on Extended Arts (XARTS) since 2013.

Dr Kyriakoulakos received the Grant of Excellence Research in Paris 2013 from the City of Paris to conduct research in ENSADLab, IRCAV-Paris 3 University, INHA and Inatheque in Paris, in the context of HIST3D Research framework. Dr Kyriakoulakos received the title of Chevalier des Palmes Academiques by the French Ministry of Education (2014) for his commitment to the French-Greek Cooperation in the Sectors of Education and Culture.

Vassilis Moulianitis (Assistant Professor)

V.C. Moulianitis is a graduate of the Mechanical Engineer and Aeronautics Dept of the University of Patras (1996). He has completed doctoral studies (2004) at the same university in the field of mechatronics design.

Since 2018, he is serving as Assistant Professor of the Department of Product and Systems Engineering of the University of the Aegean (Design of mechatronic product and systems).

His research activity extends to the areas of mechatronic design robotics, focused in kinematics and robotic arm optimization. He has published more than 65 papers on the above topics in international scientific journals, book chapters and international and national scientific conferences.

His published work has attracted more than 100 citations (h-index: 6). He has a rich teaching experience - at undergraduate and postgraduate level - teaching courses on mechatronics, mechanisms design and analysis, vehicle design, design for manufacturing and more. He has also been a member of the Scientific Committee of the program of many scientific conferences in the field of robotics.

Ilias Xidias (Assistant Professor)

Vassilis Papakostopoulos (Assistant Professor)

Vassilis Papakostopoulos is an Assistant Professor at the Department of Product and Systems Design Engineering, of the University of the Aegean, in the subject area of "Ergonomics". He holds a PhD in the field of Cognitive Psychology from the Panteion University in Athens (2008), an MSc in Ergonomics from the Loughborough University in England (1998) and a bachelor's degree in Psychology from the University of Crete (1996). During the years 2004-2007, he worked as a research associate at the Hellenic Institute of Transport of the Centre for Research & Technology Hellas. He has extensive research experience in field studies and human activity analysis with emphasis on the design of driver assistance systems and on the interaction between robotic vehicles and other road users.

He has published 20 papers on these issues in international scientific journals, book chapters and international conference proceedings. He has been participating as an experienced researcher in the following EU-funded research projects: interACT (EC/H2020-ART-2016-2017/H2020-ART-2016-Two-Stages/723395), ASK-IT (EC/IST-2003-511298), PReVENT (EC/FP6-507075), AIDE (EC/IST-1-507674-IP), SENSATION (EC/IST-507231), AGILE (EC/QLRT-2001-00118). He has a rich teaching experience at undergraduate and postgraduate levels, teaching courses on ergonomic work analysis, phenomenological analysis and user-centered design of products and systems. As of 2008 he has been the national representative of the Hellenic Ergonomics Society at the Centre for Registration of European Ergonomists (CREE)

Nikolaos Zacharopoulos (Lecturer)

Sofia Kyratzi (Lecturer)

Sofia Kyratzi is a lecturer (2014) of Geometric Modeling and Computer Aided Design at the Department of Product and Systems Design Engineering of the University of the Aegean. She received her PhD (2007) degree in Computer Graphics and Geometric Modeling from the Department of Product and Systems Design Engineering of the University of the Aegean. She also holds an MSc (2002) in Medical Informatics and a BSc (2000) in Mathematics from Aristotle University of Thessaloniki.

She participates in many courses of the department that are related to Computer Aided Design and parametric 3D modeling, Computer Graphics, Engineering Drawing and Detail Design. From 2002 she has been involved in many research projects of the Department of Product and Systems Design Engineering. Her research interests include geometric and solid modeling, computer graphics, computer aided sketching, image understanding, computer mathematics, and computer vision.

Irene Leontakianakou (Lecturer)

Irene Leontakianakou is a Lecturer at the Department of Product and Systems Design Engineering of the University of the Aegean, in the subject area of "History of Art". She holds a PhD (2000), a MA (DEA) (1995) and a bachelor's degree (Maîtrise) (1994) in the field of History of Art from the Sorbonne University (Paris I,

Panthéon-Sorbonne I), Paris, France, where she studied with a scholarship granted by the Alexander S. Onasis Public Benefit Foundation. She also holds a bachelor's degree in Conservation of works of Arts (Technological Educational Institute, Athens, Greece).

In 2008, she received a grant from the Center of Hellenic Studies at Princeton University for working as a Visiting Research Fellow. Between 2005 and 2017, she was an adjunct lecturer in the Hellenic Open University, in the undergraduate program «European Civilisation» (2007-2017) and the postgraduate program «Graphics & Multimedia» (2005-2007). Between 2001 and 2009, she taught several courses in Art history and theory, as well as in Art conservation theory, in the Graphic Design Dpt. and the Conservation of Antiquities & Works of Arts Dpt. of the Faculty of Graphic Arts & Design, Technological Educational Institute in Athens. Between 2000 and 2013 she worked as an Art historian-Curator of exhibitions at the Hellenic Ministry of Culture, at the Directorate of Conservation of Ancient & Modern Monuments (2000-2002) and at the Dpt. of Exhibitions and Museum Research, Directorate of Museums (2003-2013).

Her research interests focuses on the appropriation of western elements in the Eastern Mediterranean religious painting (13th-18th c.). She also works on different issues of iconography and style that denote the interaction between the East and the Latin West in religious painting during the Late Medieval Era and later (16th, 17th c.). Moreover, she focuses on the analysis of particular works of art or cultural phenomena -such as the gradual abandonment of the “byzantine tradition” in the Ionian Islands in the late 17th c.- which reflect ideological and identity issues within the framework of multicultural societies.

Among her recent research interests is the artistic and curatorial perspective of the ‘Garden’. She has a rich teaching experience at undergraduate and postgraduate levels, teaching courses on diachronic surveys and particular periods of history of art and design, theory of art, as well as art conservation theory. Within the undergraduate program of Product and Systems Design Engineering Dpt., the art history and design history courses offer the theoretical background to some studios, such as Studio I, II (Color & Drawing) and Studio V, VI (Product Design), in a number of selected topics, i.e. civilization of Ancient Egypt, China-Japan, Ancient Greece and The Garden. During 2015-16, she coordinated, in collaboration with the Museum of Cycladic Art, Athens, an educative project entitled ‘Antiquity as a source of inspiration’. Several studios and courses of the Product and Systems Design Engineering Dpt. have worked on this same project. She has successfully accomplished the supervision of final thesis of undergraduate students.

Modestos Stavrakis (Lecturer)

Modestos Stavrakis is a faculty member (Lecturer in Interaction Design) in the Department of Products and Systems Design Engineering at the University of the Aegean. He holds a PhD in Design from the same university, an MSc in Computer Aided Graphical Technology Applications and a BA(first class honours) in Creative Visualisation from the University of Teesside (UK).

His research has led to the co-authoring of journals, conference publications and book chapters in the areas of Interaction Design and User Experience, HCI, computer aided collaborative design, web information systems, computer assistive technologies, virtual reality, digital media design, digital arts and distance/e-learning.

He has an extensive teaching experience in undergraduate and postgraduate level in interaction design, interactive systems design, product design (ideation and concept design), multimedia, 3d modelling and computer animation. He supervised a number of undergraduate and postgraduate final year theses and is member of the supervisory committee in two doctoral level students.

He is a reviewer and scientific committee in several conferences and journals in the areas of interaction design, multimedia and cultural heritage. He participated as a experienced researcher and scientific coordinator in several research and development projects that have been funded from national and international sources.

These include: IST ENORASI Virtual Environments for the Training of Visually Impaired (IST-2000-25231), IST REGNET Cultural Heritage in Regional Networks (IST-2000-26231), IST ASPIS An Authentication and Protection Innovative Software System for DVDROM and Internet (IST-1999-12554), IST SHOPLAB, The ShopLab Network for Test and Design of Hybrid Shop Environments based on Multimodal Interface Technologies (IST-2000-28143), IST GUARDIANS Gateway to User Access of Remote and Distributed Information and Network Services (IST 1999-2075,) IST IRIS Incorporating the Requirements of People with Special Needs or Impairments to Internet-based systems and Services (IST-2000-26211), IST BenToWeb Benchmarking Tools and Methods for the Web (IST-2-004275).

4.1.2 Emeriti Professors

John Darzentas (Emeritus Professor)

Nicolas Hadjisavvas (Emeritus Professor)

N. Hadjisavvas holds a BSc in Physics from the National Academy of Sciences (1976). He obtained DEA (1981) and Doctorat d 'Etat (1981) from Reims University, France. He served as a lecturer at the NTUA from 1986 to 1989 and then at the University of the Aegean as an associate professor (1989-1995) and as a professor (1995-2013). He has published more than 60 articles in Science Citation Index journals. He is on the editorial board of four journals of the Science Citation Index. He has been an invited professor at 23 universities abroad. He has been a guest speaker at over 20 overseas conferences, one of which was dedicated to his sixty-fifth birthday

4.1.3 Adjunct Lecturers

Costas Bissas

Costas Bissas co-tutors product design Studios III, V & VI at the Department of Product and Systems Design Engineering. He holds an MA in Industrial Design from Central Saint Martin's College of Art & Design, University of the Arts London and is a graduate of the Department of Mechanical Engineering and Aeronautics, University of Patras, Greece.

A design consultant based in Greece, his research interests lie between design, technology, wellbeing and culture, focusing on the use of design as a creative tool for the development of innovative products and services.

He has collaborated with companies and cultural organizations such as DeBalie Centre for Culture & Politics in Amsterdam, FutureEverything in Liverpool, the Barbican Centre in London, the SENSEable city Laboratory of MIT in Boston and the Onassis Cultural Centre in Athens. He organizes workshops to develop creative thinking for children and adults alike and designs products for local batch production. He runs the Service Design and User Research consultation offered by Found.ation and often organizes Hebocon Athens tournaments, the robot-sumo competitions for the technically ungifted, where the winner might not always be the best!

His work has been acclaimed by the European Innovative Games Award, the Greek Graphic Design & Communication Awards, Mikser Festival of Creativity & Innovation and Athens Startup Weekend Sustainability.

Although he has lived 2.5 years next to the Loch Ness, he never managed to locate the monster.

Spyros Kizis

Spyros Kizis is born in Athens in 1986. He earned his diploma in Product and Systems Design Engineering from the University of the Aegean - DPSD in 2011. He holds an MA in Product Design from the University of Edinburgh - Edinburgh College of Art. His work has been awarded and exhibited multiple times and together with Yannis and Costandis Kizis, they run the architecture and design firm KIZI STUDIO in the centre of Athens.

Spyros Bofylatos

Dr. Spyros Bofylatos holds a doctorate in theory of Design from the Department of Products and System Design Engineering of the University of the Aegean. His research sprawls around design for sustainability, craft, service design and social innovation. His work is based on creating meaningful dialogue between the theoretical framework and the sociotechnical propositional artifacts that embody different research questions. At the very core of this process is the notion that we live in transitional times and fostering the discourse that leads to networks of artifacts that embody alternative systems of values is necessary to move away from today's unsustainable society.

Ioannis Xenakis

Dr. Ioannis Xenakis is a research fellow of the Interactive Systems Design Laboratory of the Department of Product and Systems Design Engineering (DPSD) - University of the Aegean, which specializes in Interactive Media fields including Human-Computer Interaction of Information Systems, in Complex Systems and in Audiovisual Arts.

Since 2007 he is a Lecturer under contract 407/1980. He teaches in Design Studios for Product and Interactive Systems in Undergraduate and Postgraduate Studies in the Department of Product and Systems Design Engineering (DPSD) - University of the Aegean. He has many years of working experience in the art & design industry while he is performing artistic work as a visual artist. He has two undergraduate degrees in Art & Design and has completed postgraduate (2007) and doctoral studies (2013) at the University of the Aegean in the scientific areas of cognitive psychology such as perception and emotions with application in design and aesthetics. He has published seven peer-reviewed scientific papers and one book chapter in edited scientific collections in the form of a book. He has co-edited one Special Issue in a peer-reviewed Q1 journal.

Five of his papers have been published in Q1 (highest value) journals in the areas of Philosophical and Theoretical Psychology, Design Theory, History and Philosophy of Science. One of his papers has been published in Q2 (second highest value) journal in the area of Philosophical and Theoretical Psychology. Seven of his papers have been published in journals with Impact Factor from 1.340 to 2.560. He has seven entries in peer-reviewed International Conferences. His Google Scholar metrics mention 137 Citations, with h-index 5, and i10-index 4 (Google Scholar May 2018). He has one paper nominated by The Design Research Society and Elsevier for the Design Studies Award and awarded for being Highly Cited Research according to Scopus. He has two papers which are still among the most cited papers according to Scopus. Three papers are among the most downloaded papers. One of his papers has reached 10.368 views, more views than 94% of all Frontiers publications articles and 1.248 downloads, more than 84% of all Frontiers publications.

He has been at the Editorial Board of 3 peer-reviewed journals and have been invited as Guest Editor in 2 peer-reviewed journals He has been continuously served as a referee for 4 peer-reviewed journals. He has co-organized 2 international and 1 national conference. He is also an artist. He has presented his artwork in twelve exhibitions, which five of them are personal shows.

Ioannis-Iakovos Paradisis

Christina Skouloudi

Eugene Scourboutis

4.1.4 Teaching and Technical Staff

Avra Karaphilis

Avra Karaphilis is an American College of Greece graduate (Pierce College) and holds a B.A. in English Language & Literature from the University of Athens and a Master of Education in Educational Psychology from the University of Bristol [UK].

As of 2001 she has been teaching English for Special and for Academic Purposes (ESP / EAP) at the Department of Product and Systems Design Engineering, of the University of the Aegean, where she was elected as a Faculty Member for Special Courses (E.E.P.) in 2006. Along with this, she has been working as an oral examiner for the Cambridge language certificates (FCE, CAE, CPE) since 2000, as well as for the equivalent certificates of the State Exam (KPG) since 2005. During the years 1993-1998 she ran her own School of Foreign Languages in Athens, where she was also the Director of Studies. During the same period and until 2000 she also offered ESP courses (i.e. professional English) to company executives and employees (e.g. Carrefour Hellas etc.)

She has rich teaching experience, both at exam certificate levels (B1 & 2, C1 & 2) and in professional English and terminology in a range of fields, as well as experience in organizing and designing foreign language courses. Additionally, she has been a member of evaluation committees for students' theses at the National Centre for Public Administration & Local Government. During her studies she worked voluntarily for the Athens College Forensics Club preparing students for English language international competitions.

Nikolaos Politopoulos

Nikolaos Politopoulos is currently employed as Specialized Technical and Laboratory Staff with discipline in Product Design and prototyping with contemporary and traditional media in the Department of Product and Systems Design Engineering – University of the Aegean. He is a graduate of the department of Fine Arts and Art Sciences (2008), University of Ioannina. He holds a Master's degree (2009) in Fine Arts – Pathway Painting, from Winchester School Of Arts, University of Southampton as well as an MSc (2016) from the Department of Product and Systems Design Engineering, University of the Aegean with dissertation title "Study and Design of Alternative Front Suspension Systems for Motorcycles". He has also received vocational training as a Motorcycle Technician (2014). He has professional experience in the private sector as an Industrial Designer in the fields of Medical Design, Metalworking – Sheet Metal Design and Large Format 3D Printing. He has also worked as a freelancer Concept Artist – Illustrator with teaching experience and portfolio which contains distinguished Artworks as well as published Illustrations.

Charalambos Alifieris

George Zamblakos

Konstantinos Bailas

Angela Brisnovali

Damianos Papadopoulos

AREA OF PROFESSIONAL ACTIVITY

1. Designing products and systems.

Analysis, Brief, Idea pool, idea development, concept, form optimization, construction, model.

3D-CAD software, Pro / Engineer, Rapid-prototyping.

Completion and completion of completed projects from the initial phase of Brief to their full presentation.

Organization and guidance of partners and learners as well as coordination of work groups.

New orientations and reorganization of the office according to market and technology requirements.

Market research and detection.

Organized network of collaborations with advertising agencies, multimedia and e-designs (internet), business consultants and constructors.

2. Design strategies: consulting and brand development, Branding by Design.

- Budgeting, detailed pricing and services, negotiating with clients in the context of organized marketing and branding.

Elsa Charalambous

4.2 Administrative Staff

Niki Arkitsaiou (Regional Department of Administrative Affairs)

Eleni Gournelou (Deputy Head of the Regional Directorate of Syros)

Toula Dafna (Dep. Head of Secretariat DPSDE - Undergraduate Secretariat)

Kyriakos Zervoudakis (Deputy Head of Regional Department of Informatics & Communications)

Apostolos Kailis (Regional Department of Financial Affairs)

Konstantinos Kalimeris (Graduate Program Secretariat)

Paraskevi Kontou (Central Library Service, Librarian)

Panayiotis Konstantinidis (Technical Service)

Despoina Magagkou (Head - Syros Regional Department of Financial Affairs)

George Pyrounakis (Regional Department of Informatics & Communications)

Maria Roussou (Deputy Registrar of the School of Engineering)

5 Curriculum Structure

The structure of the curriculum is the following:

- Course Modules Classification
- Streams of Study
- Studio Courses
- Internship
- Diploma Thesis

5.1 Course Modules Classification & Description

The curriculum includes the following module types:

5.1.1 Preparatory

Foundation modules. Students may be exempt from these according to the results of a placement test administered in the beginning of the semester. For the students who are not exempted, preparatory modules comprise an obligatory requirement for obtaining their Diploma.

5.1.2 Compulsory

Basic modules to be taken by all students as an essential requirement to obtain their Diploma.

5.1.3 Stream Compulsory Modules

Students must take and be successfully examined in 9 Stream Compulsory modules out of which 1 should be “Studio 7 x”, 4 should comprise modules of the same Stream and, out of the remaining 4 modules, students should select 2 from each of the other two Streams.

5.1.4 Optional Modules

In addition to the compulsory modules, students select as many optional modules as they need to complete the required ECTS for their Diploma.

5.1.5 Tutorials

They comprise part of a module, offering, where necessary, extra practice to students. They are not compulsory, nor are they considered in the average Diploma mark calculation.

5.2 Core Modules

These modules are common for all three streams, offer foundational background knowledge and comprise an essential prerequisite for a design engineer of products and/or systems. Hence, they are fundamental to the programme. For this reason, they are offered during the first three academic years.

5.2.1 Streams of Study

In the course of their study, students can select one of the following scientific streams to gain more specialised knowledge:

1. Design of Interactive Systems

2. Computer-Aided Design
3. Service Design

These streams do not constitute vertical specializations, but rather concern specified scientific backgrounds which further support and empower the scientific profile of the Department, thus offering students a more comprehensive and multifaceted scientific background which covers the whole spectrum of Design.

Each of these streams comprises a number of Stream Compulsory Modules, in conjunction with a number of Elective Modules and a small number of modules from the other two streams of study, so that the students can acquire a more spherical knowledge. (It should be noted that the students' orientation selection is not recorded in the awarded Diploma.)

Given the structure of the curriculum, our students become aware of the co-existence and inter-relation of all the disciplines involved in Design. For instance, a product like a shoe or a cell phone projected on a computer screen is a result accomplished through the contribution of a range of disciplines such as psychology, marketing, design management, etc.

5.2.2 Studio Courses

These courses offer students specialization in applied skills and also familiarise them with the theoretical, methodological and technological tools required in contemporary design of products and systems.

The first set of Studio modules offers students up-to-date knowledge on Drawing, Color and Synthesis. Students are encouraged to employ their creativity to produce original ideas, expressing themselves in aesthetically acceptable ways. These modules aim at familiarizing students with visual perception and aesthetics.

The second set of Studio courses focuses on applied skills in product design.

The third set of Studio courses offers students more specialized applied skills, including detail "product" design, in an effort to approximate the end-user experience. A high degree of familiarisation with all design aspects and skills is required.

5.2.3 Internship

Great importance is placed on the students' internship scheme. Our Department collaborates on a systematic basis with a network of more than 500 private and public organizations and enterprises which accept our students for internship. Internship period lasts for up to three months in real working conditions.

Internship is a compulsory module, while students are also given the opportunity to take a continuing internship course as an elective module. These modules are offered in the 4th year of studies so that the students can draw on this experience to select modules for the last part of their studies, as well as to decide on a topic for their Diploma thesis.

Our Department is among the first of the E.U. university departments to have adopted an internship scheme. Along with this, it has successfully incorporated the Erasmus Placement internship schemes, covering all the positions allotted by our Institution.

5.2.4 Diploma thesis

Final year students are required to prepare a thesis in order to obtain their Diploma in Design Engineering. The Diploma thesis expresses the culmination of our students' studies and it aims at offering our students the opportunity to use the interdisciplinary knowledge they have acquired so as to pursue a research project on a

general or specific topic and prove their ability to identify a problem, analyse and process its constituent parts towards a satisfactory solution.

Students pursue their thesis during the 10th semester, when normally they do not have to attend any courses. The thesis covers 30 ECTS.

The Thesis Regulation covers all issues related to its preparation, submission and assessment and is complementary to the Department's Studies Bulletin. The students who are about to submit a thesis topic are strongly advised to carefully consult the Regulation.

5.3 Courses offered in English

Fall Semester Courses								
Course Code	Course Title	Semester	ECTS	Hours per week	Study Cycle	Language of Instruction	Tutoring offered	Language(s) of Tutoring
2453	Studio 0 – Freehand & Expressive Drawing	1	2	3	Undergraduate	Greek & English	Yes	Greek & English
1306	Studio 1 – Drawing & Color I	1	4	6	Undergraduate	Greek & English	Yes	Greek & English
6203	Service Design	5	6	4	Undergraduate	Greek & English	Yes	Greek & English
3304	English for Specific Purposes	7	2	3	Undergraduate	English	Yes	English
7354	Advanced Materials	7	4	3	Undergraduate	Greek & English	Yes	Greek & English
8902	Internships	8	8	1h meeting per week, 1 month internship in design companies	Undergraduate	Greek & English	Yes	Greek & English
7654	Complexity of Interactive Organizations	9	4	3	Undergraduate	Greek & English	Yes	Greek & English
9854	Digital Games and Playful Learning	9	5	3	Undergraduate	Greek & English	Yes	Greek & English
10250	Systems Thinking in Design	9	4	3	Undergraduate	Greek & English	Yes	Greek & English
Total ECTS:			39					

Spring Semester Courses								
Course Code	Course Title	Semester	ECTS	Hours per week	Study Cycle	Language of Instruction	Tutoring offered	Language(s) of Tutoring
2305	Studio 2 - Drawing & Color II	2	6	8	Undergraduate	Greek & English	Yes	Greek & English
2354	English Terminology	2	2	3	Undergraduate	English	Yes	English
7257	Organisational Theory	4	6	4	Undergraduate	Greek & English	Yes	Greek & English
4153	Interaction Design	6	6	3	Undergraduate	Greek & English	Yes	Greek & English
4011	English for Academic Purposes I	8	2	2	Undergraduate	English	Yes	English
7154	Design for All	8	5	4	Undergraduate	Greek & English	Yes	Greek & English
7554	Digital Storytelling	8	5	4	Undergraduate	Greek & English	Yes	Greek & English
8056	Design and Programming of Mobile Applications	8	5	4	Undergraduate	Greek & English	Yes	Greek & English
8205	Animation	8	4	3	Undergraduate	Greek & English	Yes	Greek & English
8802	Information Design	8	5	4	Undergraduate	Greek & English	Yes	Greek & English
8902	Internships	8	8	1h meeting per week, 1 month internship in design companies	Undergraduate	Greek & English	Yes	Greek & English
9254	Presentation Media, Materials & Techniques	8	4	3	Undergraduate	Greek & English	Yes	Greek & English
9554	Virtual Reality	8	5	4	Undergraduate	Greek & English	Yes	Greek & English
10200	English for Academic Purposes II	10	2	2	Undergraduate	English	Yes	English
Total ECTS:			65					

6 Contacts

6.1 Syros Regional Department

	Phone	Email
Switchboard	22810 97000 Fax: 97009	
Regional Office	22810 97002 Fax: 97009	Syros_Regional_Dir@syros.aegean.gr
Administrative Service	22810 97003 Fax: 97009	dioikitiki@syros.aegean.gr
Student Welfare	22810 97080 Fax: 97089	merimna@syros.aegean.gr
Financial Service	22810 97020 Fax: 97029	oikonomiki@syros.aegean.gr
Careers Office	22810 97070 Fax: 97079	career@syros.aegean.gr
Liaison Office	22810 97070 Fax: 97079	liaison@syros.aegean.gr
PR and Publications	22810 97005 Fax: 97009	SyrosDDSD@aegean.gr
Library	22810 97030 Fax: 97039	lib-syros@aegean.gr
Information and communications service	22810 97166 Fax: 97049	ype@syros.aegean.gr
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6.2 Department of Product and Systems Design Engineering

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