

## DEPARTMENT OF INDUSTRIAL DESIGN AND PRODUCTION ENGINEERING SCHOOL OF ENGINEERING

# **STUDY GUIDE**

## Academic Year 2024-2025





UNIVERSITY OF WEST ATTICA

SCHOOL OF ENGINEERING

DEPARTMENT OF INDUSTRIAL DESIGN AND PRODUCTION ENGINEERING

# **Study Guide** Academic Year 2024-2025

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5<sup>TH</sup> EDITION (*updated*) December 2024 Department of Industrial Design & PRODUCTION ENGINEERING University Campus of Ancient Olive Grove 250 Thevon 250 & Petrou Ralli 12241, Egaleo, Athens, Greece Phone: 210 538 1219 1 726 - 727 | email: idpe@uniwa.gr



Editorial Team: Demetrios Cantzos, Professor Nikolaos Laskaris, Assistant Professor Eleni-Orsalia Sklavounou, Lecturer The Study Guide of the Department of Industrial Design and Production Engineering of the School of Engineering of the University of West Attica for the Academic Year 2024-2025 has been prepared in accordance with Article 32 of the Internal Regulations of the University of West Attica (Government Gazette B' 4621/21.10.2020) and has been approved by the Assembly of the Department of Industrial Design and Production Engineering.

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### **Message of the President of the Department**

Dear Readers,

The Department of Industrial Design and Production Engineering of the University of West Attica is one of the most modern and dynamic departments in the country and is distinguished for the breadth of the subjects it covers. It is supported by teaching and research staff and laboratory teaching staff with significant knowledge in modern science and an emphasis on interdisciplinarity, characterized by internationally recognized research work and major awards.



The vision of the Department follows the main policies set in Europe for the renewal of production structures and industry through the 4th Industrial Revolution with the ultimate goal of increasing productivity and production and maintaining environmental sustainability.

Our aim is to provide high quality education, promote excellence, innovation in research and a strong link to the labour market.

The administrative staff of the Department closely supports the students, guiding them along the path towards the completion of their studies. The excellent library, the modern computer laboratories and the general infrastructure of the Department and the University contribute to educational outcomes of high standards.

The internationalisation of the Department is an important priority. We place particular emphasis on active participation in educational programmes, university networks and international organisations, maintaining the belief that collaborative outreach as implemented through cooperation among Higher Education Institutions is essential for the strengthening of our objectives.

Our aim is for our graduates to be distinguished for their high scientific training and for their degrees to be recognized in the international labour market. Our Department contributes, through the collaborative ties it develops, to the advancement of scientific knowledge, the training of our youth, and in general to the improvement of our country's economy.

The new Program Curriculum is modern and comparable to the curricula of leading universities. In addition, our Department offers students the opportunity to study for one academic semester in universities of the European Union member countries, within the framework of the European student exchange programme Erasmus+, which subsidises the cost of living in these countries. A significant number of our students, through the same programme and international partnerships, can also move to countries outside Europe (Asia, Africa, America). In addition, our students have the opportunity for paid work in companies and organisations in Greece or abroad for 3 or 6 months within the framework of our University's internship programme. This program gives our students the opportunity to be directly immersed in real working conditions in companies and organizations.

In addition to public funding, our Department and our University in general seeks other sources of funding, such as european and international programmes, collaborations with public and private sector institutions, provision of scientific services to legal entities and individuals, sponsorships and donations, always in accordance with its mission and for the better achievement of its goals. The projects are carried out by the Special Account for Research Funds and employ young scientists under contract.

The Study Guide of the Department of Industrial Design and Production Engineering of the School of Engineering of the University of West Attica (UNIWA) is an important aid for students throughout their studies.

The Study Guide describes in detail the structure and the principles that govern the operation of UNIWA and the Department, focusing on the academic procedures followed, and provides general information about the Department, the Programme of Studies, the benefits to students, the educational functions of the Department, its staff and its Sectors, as well as the offered Master's, Doctoral and Postdoctoral Programmes. It also includes important department procedures and policies to enable students to organize their studies (e.g. registration, course and textbook declarations, etc.).

The Study Guide is updated every academic year and is posted on the Department's website.

The President of the Department

Dr. Georgios Priniotakis Professor

### **1. The University of West Attica**



The University of West Attica (UNIWA) was founded in March 2018 by Law 4521 (Government Gazette A' 38/02.03.2018). The establishment of the new university materialized through the merger process of the Technological Educational Institutions (TEIs) of Athens and Piraeus. In 2019, the National School of Public Health joined the newly established University.

UNIWA is a legal entity of public law, fully self-governing within the meaning of paragraph 5 of article 16 of the Constitution and article 1 paragraph 2, subparagraph a' of law 4485/2017, which is supervised by the Ministry of Education, Religious Affairs and Sports. The title of the University in its international relations is "UNIWA" (abbreviated UNIWA).

Aiming at producing new knowledge and fostering independent and critical thinking, UNIWA operates with high standards (educational - research) and meets to a large extent the particularly increased demands of a modern society for individuals with a solid scientific and technocratic background.

Today, UNIWA has a total of twenty-seven (27) departments, which are organized into six (6) faculties, covering a wide range of scientific fields: the School of Public Health, the School of Administrative, Economic and Social Sciences, the School of Food Sciences, the School of Health and Welfare Sciences, the School of Applied Arts and Culture and the School of Engineering. The faculties cover a wide range of modern scientific studies, including social, administrative and economic sciences, engineering sciences, health and welfare sciences, food sciences and art studies.

Campus	Campus	Campus
Egaleo Grove	Ancient Olive Grove	Athens
 Ag. Spyridonos, Egaleo 12243, Athens, Greece +30 210 538 5100	250 Thevon 250 & P. Ralli, Egaleo, 12241, Athens, Greece +30 210 538 1100	196 Alexandras Street, 11521, Athens, Greece +30 213 2010 100

UNIWA is currently the third largest in the country and the second largest in terms of student numbers in Attica. It has about 57,800 registered undergraduate students, 5,500 postgraduate students and 780 doctoral candidates, a number that is increasing. Its facilities are housed in three campuses within the Athens metropolitan area, the Egaleo Campus, the Ancient Olive Grove Campus and finally, the Athens Campus.

Its Professors are public servants within the meaning of par. 6 of Article 16 of the Constitution and enjoy academic freedom and independence in the exercise of their duties. The rest of its teaching staff also perform public service, under the conditions set by law. The combination of a high number of permanent, experienced and academically qualified personel and a modern infrastructure are elements that ensure the further academic development of the University, offering undergraduate studies for a 4-year degree (level 6) or 5-year engineering diploma, postgraduate studies (level 7), doctoral studies (level 8) and postdoctoral studies.

The University maintains permanent collaborations with other domestic and foreign educational and research institutions, aiming at the continuous improvement of the level of studies, while at the same time participating in many European Union programmes for international cooperation and dissemination of knowledge.

### **1.1 Mission and Vision of the University**

**The mission of** UNIWA is to provide excellent quality education in the subjects it treats, perform research of international impact while at the same time disseminate its results to society, and to promote the arts and culture.

**The vision of** UNIWA is to establish itself in our country, and internationally, as a first-choice, strong, modern, progressive university, with a public character and a recognizable and competitive role in the global arena.

### **1.2 Strategy Directions of the University**

The basic Strategic Directions of UNIWA comprise the strategic planning guidelines and are implemented through the achievement of specific objectives that have been set. To this end, performance indicators have been defined, the measurement and monitoring of which can lead to the achievement of the strategic objectives and thus to the fulfillment of the mission of the University through its effective strategic management.

The Strategic Directions of UNIWA are the following:

- Excellence in Education
- Promotion of Research
- Digital Transformation
- ✓ Improvement the Academic Environment
- Strengthening Accountability and Transparency
- Outreach Internationalisation
- ✓ Sustainability and Sustainable Resource Management
- Quality Assurance

Following the basic philosophy of both our mission and our vision, UNIWA focuses on the creation of added value with actions that relate to the following axes:

- the provision of education,
- the conduct of scientific research,
- the transfer of technical expertise,
- the production and dissemination of scientific knowledge,
- the cooperation between society, the labour market and the academic community.

### **1.3 Quality Policy**

UNIWA has developed and implements a Quality Assurance policy, which is part of its strategy, which was approved by the Quality Assurance Unit and the Senate.

The Quality Policy Statement is the basic document that sets the principles of the Internal Quality Assurance System (IQAS), providing impetus for the continuous improvement of the University and the achievement of the expectation to consolidate its position, in the national and international academic environment, as a pole of innovation and excellence.

More information about the quality policy of UNIWA is available on the website of UNIWA and in particular at the following link:

https://modip.uniwa.gr/diasfalisi-poiotitas/politiki-poiotitas/

### **1.4 Basic Regulations, Policies and Procedures of the UNIWA**

Within the framework of the operation of UNIWA, in addition to the general legislation for Higher Education Institutes, such as Law 5094/2024, Law 4957/2022, Law 4485/2017, Law 4009/2011, Law 4485/2017, etc., as amended, supplemented and in force, regulations, policies and procedures have been put into force and implemented which aim at the orderly and harmonious operation of the entire university community in matters related to its educational and administrative function:

- Internal Regulation of UNIWA (Government Gazette 4621/ issue B'/ 21-10-2020),
- ADMINISTRATIVE STRUCTURE OF UNIWA BASED ON THE NO. 68015/14-07-2023 (GOVERNMENT GAZETTE 4607/B'/18-07-2023) DECISION OF THE RECTORAL COUNCIL OF UNIWA,
- Regulation of the controlled access system at UNIWA (Government Gazette 935/issue B'/02/03/2021).

More information regarding the policies, regulations and procedures of UNIWA is available on the website of the Institution and in particular at the link:

https://www.uniwa.gr/to-panepistimio/politikes-kanonismoi-diadikasies/

In addition, each Department supplements its Curriculum with additional regulations on subjects such as the preparation of Thesis for undergraduate students, the organization of processes for the selection and preparation of Master's or Doctoral studies, etc.

### **1.5 Rectoral Authorities and Administrative Structure**

### **1.5.1 University Administrative Bodies**

The administrative bodies of UNIWA are the following:

- the Board of Directors,
- the Senate
- the Rector,
- the Vice Rectors,
- the Executive Director.

The composition / selection / election of the members of the above bodies, the member powers and the meetings framework are determined by the legislation in force (Law 4957/2022) and the Internal Regulation of UNIWA (Government Gazette 4621/ vol.B'/ 21-10-2020).

### **Board of Directors**

The Board of Directors (BoD) consists of eleven (11) members, of which six (6) are internal members elected in accordance with article 9 and five (5) are external members elected in accordance with article 10 of Law 4957/2022. The term of office of the Board members shall be four years.

The BoD has the powers described in the Internal Regulation of UNIWA, provided that they have not been assigned by law to other bodies of the University.

BOARD OF DIRECTORS
RECTOR
KALDIS PANAGIOTIS
INTERNAL MEMBERS
ALEXOPOULOU ATHENA GEORGIA
LAGIOU ARETI
PAPAGEORGIOU EFSTATHIA
SGOUROPOULOU CLIO
SPYRIDAKOS ATHANASIOS
EXTERNAL MEMBERS
DERDEMEZIS KONSTANTINOS
KORKIDIS VASSILIS
KRIARI ISMINI
MANIKAS ANDREAS
SYKIANAKIS GEORGIOS

### Senate

The Senate of UNIWA consists of:

- the Rector
- the Deans of the Schools
- the Presidents of the Departments
- one representative from each category of members of Special Education Staff, Laboratory Teaching Staff and Special Technical Laboratory Staff

 student representatives corresponding to ten percent (10%) of the total number of members of the first three categories.

The Vice Rectors, to whom a relevant area of responsibility is assigned, have the right to participate in the meetings of the Senate, without the right to vote. The Senate convenes even if the representatives of the last two categories have not been appointed.

### Rector

The Rector of the University is one (1) of the internal members of the BoD. The term of office of the Rector is four years. The Rector has the powers stated in the Internal Regulation of UNIWA.

### Vice Rectors

The Vice Rectors have a parallel term of office with that of the Rector. The position of the Vice Rector is incompatible with that of the internal member of the BoD. The Vice Rectors are nominated by the Rector and appointed by the BoD.

### **Executive Director**

The Executive Director heads the organizatinal units of the University, except for the Internal Audit Unit, coordinates and supervises their work, ensures the smooth and effective administrative and financial operation of the University, the implementation of its strategic plan and annual objectives and cooperates with the heads and other staff of the organisational units of the University in order to fulfil its mission.

The Rector and Vice Rectors (in order of their succession to replace the Rector) are the following:

### RECTOR

### Panagiotis Kaldis

Professor of the Department of Wine, Vine and Beverage Sciences, School of Food Sciences

### VICE RECTOR FOR INNOVATION RESEARCH & LIFELONG LEARNING

### **Petros Kalantonis**

Professor of the Department of Tourism Management, School of Administrative, Economics and Social Sciences

### VICE RECTOR FOR ADMINISTRATION & ADMINISTRATIVE AND FINANCIAL AFFAIRS

### Aristides Papagrigoriou

Associate Professor of the Department of Tourism Management, School of Administrative, Economics and Social Sciences

### VICE RECTOR FOR ACADEMIC AFFAIRS & QUALITY ASSURANCE

### **Stavros Kaminaris**

Professor of the Department of Electrical and Electronic Engineering, School of Engineering

### VICE RECTOR FOR INTERNATIONALISATION & EXTRACTION

### Theodoros Xanthos

Professor of the Department of Midwifery, School of Health and Care Sciences

### **1.5.2 Administrative Structure and Services**

The operation of UNIWA is ensured with the help of its administrative services, which consist of General Directorates, Directorates and Departments according to the following organizational chart which is available at the following link:

https://www.uniwa.gr/to-panepistimio/dioikisi/dioikitiki-domi/

### **1.6 Studies at UNIWA**

### **1.6.1 Schools and Departments**

Today, UNIWA has a total of twenty-seven (27) departments, which are organized into six (6) Schools, covering a wide range of scientific fields: the School of Public Health, the School of Administrative, Economic and Social Sciences, the School of Food Sciences, the School of Health and Welfare Sciences, the School of Applied Arts and Culture and the School of Engineering. The faculties cover a wide range of modern scientific studies, including social, administrative and economic sciences, engineering sciences, health and welfare sciences, food sciences and artistic studies.

More specifically, each School consists of the following Departments:

- School of Engineering:
  - Department of Electrical and Electronic Engineering
  - Department of Biomedical Engineering
  - Department of Industrial Design and Production Engineering
  - Department of Informatics and Computer Engineering
  - Department of Surveying and Geoinformatics Engineering
  - Department of Mechanical Engineering
  - Department of Naval Architecture
  - Department of Civil Engineering
- School of Administrative, Economic and Social Sciences:
  - Department of Archival, Library and Information Studies
  - Department of Business Administration
  - Department of Tourism Management
  - Department of Social Work
  - Department of Early Childhood Care and Education
  - Department of Accounting and Finance

### School of Applied Arts and Culture:

- Department of Graphic Design and Visual Communication
- Department of Interior Architecture
- Department of Conservation of Antiquities and Works of Art
- Department of Photography and Audiovisual Arts

### School of Health and Care Sciences:

- Department of Biomedical Sciences
- Department of Occupational Therapy
- Department of Midwifery

- Department of Nursing
- Department of Physiotherapy
- School of Food Sciences:
  - Department of Food Science and Technology
  - Department of Wine, Vine and Beverage Sciences
- School of Public Health:
  - Department of Public and Community Health
  - Department of Public Health Policies

### **1.6.2 Undergraduate Programmes**

UNIWA offers high quality undergraduate studies with 26 undergraduate programmes, with particular emphasis on both the interdisciplinary approach in research and the contemporary needs of the labour market.

Admission to the undergraduate programmes is managed by the Ministry of Education, Religious Affairs and Sports to which the respective applications for admission are submitted. The undergraduate programmes of UNIWA have been developed on the basis of the programmes of peer and internationally recognised departments abroad, the guidelines of the National Authority for Higher Education and the European Credit Transfer and Accumulation System (ECTS).

The University offers four (4) and five (5) year undergraduate degree programmes, which provide graduates with the opportunity to acquire specialised scientific knowledge, skills and competences.

In particular, the University's Undergraduate Programmes aims are:

- the provision of high quality education at both theoretical and applied levels,
- the continuous monitoring of new scientific developments,
- the acquisition of knowledge, skills and abilities by the graduates, which enable them to successfully attend postgraduate programmes at universities in Greece and abroad,
- ✓ the promotion of science in the fields of knowledge in which the members of the University's teaching and research staff are active,
- ✓ the exchange of ideas between academia, the labour market and society.

It is noted that according to article 33 of the Internal Regulation (Government Gazette 4621/v.B./21-10-2020) all courses of the University correspond to a specific number of credit units (ECTS), which represent the relative weight and workload of the various courses.

More information about the undergraduate studies of UNIWA is available on the website of UNIWA and in particular at the following link:

https://www.uniwa.gr/spoydes/proptychiakes/

#### **1.6.3 Postgraduate Programmes**

Eighty-two (82) postgraduate programmes (MSc, MBA) operate under UNIWA, which contribute to the deepening and specialization of knowledge and research in the subjects treated within and across the Departments of UNIWA. The establishment and operation of the postgraduate programmes offer the opportunity to both its graduates and graduates of other departments of higher education institutions of the country and abroad to proceed to

the second cycle of studies at the University. UNIWA encourages an interdisciplinary approach to knowledge and research and at the same time fosters national and international outreach through the operation of interdepartmental and interdisciplinary programmes and its participation in similar programmes of other institutions.

The postgraduate programmes of UNIWA enjoy the special care of the administration and, with the support of the staff from the partner institutions, are widely accepted by the labour market.

The postgraduate programmes of the academic departments award a Diploma in a corresponding scientific area and/or specialisation. The selection procedure of students to the programme, the duration of study, as well as other procedures of operation are regulated by the Regulations of Studies of the relevant department.

More information about the postgraduate studies of UNIWA is available on the website of UNIWA and in particular at the following link:

https://www.uniwa.gr/spoydes/metaptychiakes/

### **1.6.4 Doctoral Programmes**

One of the main research pillars of UNIWA is the organization of high quality doctoral studies (PhD). The aim of the offered PhD programmes is to train new scientists, capable of contributing to scientific progress, and to perform high quality scientific research.

Particular emphasis is placed on the publication - presentation of original scientific research in scientific journals and conferences. The PhD programmes provide doctoral candidates with a strong specialisation in the scientific fields of the University's departments.

The structure, organization and operation of the PhD programmes of UNIWA are governed by the applicable legislation, as well as by the provisions of the Regulations of Studies of the relevant department.

The University's PhD programmes lead to the award of a Doctoral Degree, which certifies the completion of independent original scientific research and the writing and support of a doctoral thesis, reflecting the substantial contribution of its holder to the development of scientific knowledge.

More information about the doctoral studies at UNIWA is available at the following link:

https://www.uniwa.gr/spoydes/didaktorikes/

### **1.6.5 Programmes Taught in a Foreign Language**

These programmes are taught in languages other than greek and are open to foreign citizens of countries inside or outside the European Union who are at least graduates of a high school or equivalent school established abroad, provided that they have attended the last two years of high school or equivalent school in a foreign country.

The main objective of the Department is to provide high quality curricula, which will enhance the intrnational outreach of the University and contribute to the improvement of the provided education. In particular, the establishment by the University of the Department of Foreign Studies aims to strengthen the international character and autonomy of UNIWA, as well as the wider promotion of Greece as an international attraction for foreign citizens who wish to study in the country. More information about the programmes taught in a foreign language is available on the website of UNIWA and in particular at the following link:

https://international-studies.uniwa.gr/

### **1.6.6 Lifelong Learning Programmes**

UNIWA, in order to respond to the increased needs for training, education and specialization that exist in Greek society and economy, places particular emphasis on the implementation of Lifelong Learning programs.

In the context of the above approach, the Centre for Continuing Education and Lifelong Learning (KEDIVIM) was established in July 2018 (Government Gazette 2880/19-07-2018). The Centre for Continuing Education and Lifelong Learning main objective is the design, organisation and implementation of a series of integrated programmes of continuing education, training and, in general, lifelong learning in all the fields of knowledge offered by the University.

Its scientific potential comes mainly from the academic research staff of the University, while, where necessary, specialised scientific collaborators are used through the Register of Trainers maintained by the University.

The implementation of the programmes takes place in modern and well-organised facilities, including a number of technologically equipped classrooms and laboratories. At the same time, a large number of programmes offer the possibility of distance learning.

Upon successful completion of the training programmes, participants are awarded a Certificate of Lifelong Education or Vocational Training (depending on the nature and duration of the programme), while programmes that have met the required specifications may be awarded ECTS (European Credit Transfer System) or ECVET (European Credit system for Vocational Education and Training) units.

KEDIVIM programmes are addressed to all age groups, high school graduates, students, graduates, young scientists, unemployed citizens who aim to successfully enter the labour market or to experienced staff who wish to acquire cutting-edge knowledge and skills in areas of their interest.

More information about the Lifelong Learning Programmes is available on the website of UNIWA and in particular at the following link:

https://kedivim.uniwa.gr/

### **1.7 Academic Calendar**

The Academic Year begins on 1 September and ends on 31 August of the following calendar year. The educational load of each Academic Year is divided into two semesters, the winter and the spring semesters. Each semester consists of 13 weeks of teaching. At the end of each semester there is a three-week examination period.

The Academic Calendar indicates the start and end dates:

- of the winter and spring semester courses,
- of the winter and spring semester examination periods, as well as the September re-examination,
- of the Christmas and Easter holidays.

The Academic Calendar also describes the official holidays of each semester. The Academic Calendar is announced before the beginning of each academic year, following a decision of the Senate of UNIWA. For the Academic Year 2024-2025 the Academic Calendar is as follows:

Fall Semester of the Academic Year 2024 - 2025				
Start of Courses:	30.09.202	24		
End of Courses:	10.01.202	25 (13 weeks)		
Cancelled Class Rescheduling:	13.01.202	25 - 17.01.2025 (1 week)		
Winter Semester Exams:	20.01.202	25 - 14.02.2025 (4 weeks)		
Spring Semester Academic Year 2024 - 202	25			
Start of Courses:	24.02.202	25		
End of Courses:	06.06.202	25 (13 weeks)		
Course Replacement: 09.06.2025 - 13.06.2025 (1 week)				
Spring Semester Exams:	16.06.202	25 - 11.07.2025 (4 weeks)		
September 2025 Repeat Examinations September 2025				
01.09.2025 - 26.09.2025				
Winter Semester Holidays		Spring Semester Holidays		
14.09.2024 / Feast of the Crucifix (Saint John the		03.03.2025 / Clean Monday		
Baptist)		25.03.2025 / 25th of March		
28.10.2024 / 28th of October		14.04.2025 -27.04.2025 Easter		
17.11.2024 / Anniversary of Polytechnic University		holidays		
23.12.2024 - 06.01.2025 / Christmas holid	01.10.2025 / Labour Day			
30.01.2025 / Feast of the Three Hierarchs		9.06.2025 / Holy Spirit		

Updated information on the Academic Calendar is available on the website of UNIWA and in particular at the following link:

https://www.uniwa.gr/epikairotita/akadimaiko-imerologio/

### 2. The School of Engineering

The School of Engineering of UNIWA offers high quality education in the scientific fields of its departments through undergraduate, postgraduate and doctoral programmes. It also cultivates basic and applied research through the research activities of its academic, technical and administrative staff, within the framework of a wide network of national and international collaborations and programmes involving the institutionalized research laboratories of the School and its departments.

The School of Engineering of UNIWA consists of the following departments:

- Department of Electrical and Electronic Engineering
- Department of Biomedical Engineering
- Department of Industrial Design and Production Engineering
- Department of Computer and Information Engineering
- Department of Surveying and Geoinformatics Engineering
- Department of Mechanical Engineering
- Department of Naval Engineering
- Department of Civil Engineering

The departments of the School of Engineering of UNIWA offer five (5) year undergraduate programs which provide their graduates with the opportunity to acquire specialized scientific knowledge, skills and abilities depending on the scientific fields each department serves. The undergraduate programmes of the School of Engineering have been developed on the basis of the programmes of internationally recognised peer departments abroad, the guidelines of the National Authority for Higher Education (NEA) and the European Credit Transfer and Accumulation System (ECTS).

The undergraduate urogrammes of the School of Engineering aim to:

- Provide high quality higher education at both theoretical and applied level.
- ✓ Continuously monitor new scientific and technological developments.
- Transfer knowledge, skills and abilities to the graduates and enable them to successfully attend postgraduate programs in universities in Greece and abroad.
- Promote research in the subjects in which the members of the faculty and staff of the departments are active.
- Create the appropriate environment for the exchange of ideas between academia, the labour market and society.

The departments of the School of Engineering also offer a number of postgraduate programmes (MSc) which they organise either independently or in collaboration with other Higher Education Institutions. The purpose of the MSc programmes is the further education of students and their specialisation in subjects related to the scientific subjects of the respective MSc. The procedure for the selection of students to the programmes, the duration of study, as well as other procedures of their operation are regulated by the Regulations of Studies of the relevant department.In addition, the School of Engineering, through its departments, offers doctoral programmes (PhD) which lead to the award of a Doctoral Degree. The structure, organization, operation and evaluation of the PhD programmes of

UNIWA are governed by the legislation in force, as well as by the provisions of the Regulations of Studies of the relevant department.

### 2.1 School Administrative Bodies

Each School coordinates the operation of the departments of which it consists. According to UNIWA Internal Regulation, the administrative bodies of the School are the following:

- the Deanship
- the Dean
- the Assembly of the School

The composition / selection / election of the members of the above bodies, the member powers, the meetings conditions and the topics scope are determined by the legislation in force and the Internal Regulation of UNIWA.

### Deanship

The Deanship of the Faculty consists of:

- the Dean of the Faculty,
- the presidents of the departments of the School,
- one (1) representative from each category of members of Special Teaching Staff, Laboratory Teaching Staff and Special Technical Laboratory Staff, provided that members of these categories of staff serve in the departments of the School, and,
- the student representatives of the departments of the School at a percentage of ten percent (10%) of the members of the first two categories.

### Dean

A Professor or Associate Professor of the relevant School, who is in full-time employment for a minimum period of one (1) year at the deadline for submission of nominations, is elected Dean. The term of office of the Dean is three (3) years.

### Assembly of the School

The School Assembly is formed similarly to the Department Assembly and exercises the same powers, albeit at the School level.

### DEAN OF THE SCHOOL OF ENGINEERING

### **Konstantinos Stergios**

Professor of the Department of Mechanical Engineering, Faculty of Engineering

e-mail: <u>stergiou@uniwa.gr</u>

Tel: 210 538 1298

### Secretariat of the School of Engineering of UNIWA

University Campus of Ancient Olive Grove,

250 Thevon and P. Ralli

12241, Egaleo,

Building B, Ground floor

e-mail: <u>feng@uniwa.gr</u> | Tel: 210 538 1712 - 210 538 1713 - 210 538 1213

### 3. The Department of Industrial Design and Production Engineering

### **3.1 General description**

**Industrial Design** is a scientific and professional field of creating and developing concepts and specifications that optimize the function, value and appearance of products and systems, for the mutual benefit of both the user/consumer and the production process. It stems from the Science of Design which is part of the broader science of Engineering. Teaching about product creation, how to design and manufacture these products with the specified properties, has traditionally been the responsibility of polytechnic schools. In addition, the field of industrial production and in particular industrial production engineering, is distinguished by its interdisciplinary nature, since it includes manufacturing technology, mechanical sciences, management science and optimization of complex processes, systems or organizations. It is concerned with the understanding and application of engineering processes to manufacturing and production methods.

**Industrial Production** as a field of engineering science usually includes three areas: Mechanical Engineering (which corresponds to production engineering), Industrial Engineering and Production Management. Industrial Engineering is concerned with the development, analysis, synthesis and improvement of integrated systems. It requires knowledge of mathematical, physical and social sciences as well as engineering design methods to determine, predict and evaluate information obtained from systems or processes that are already running or being developed. The above implies that areas such as economics, knowledge dissemination, information gathering, energy production and storage, and the study of materials are put into a collaborative mode.

Within this framework:

The aim of the **Department of Industrial Design and Production Engineering** of the School of Engineering of UNIWA is to provide high quality university educa-tion across all three levels of study, i.e. undergraduate, postgraduate and doctoral, both in the established and constantly evolving as well as in newer scientific-technological fields in the broader field of knowledge of the **Industrial Design and Production Engineering**.

This is achieved by implementing the following actions:

- Providing deep theoretical knowledge
- Incorporating cutting edge research and technology
- Emphasizing applied knowledge
- Adopting modern methods and tools in the educational process
- Meeting modern requirements for sustainable development
- Focusing on the economy and adaptability of production and implementing better management of existing systems/products
- Fostering respect for the protection and preservation of the natural environment

### **3.2 Historical Background of the Department**



The Department of Industrial Design and Production Engineering was founded and has been operating independently since 2018. The new department emerged, in accordance with Law 4521/2018, through the merger of two departments of the former TEI of Piraeus: the Department of Automation Engineering (founded in 1987) and the Department of Textile Engineering (founded in 1982).

Both departments aimed at creating high-quality technical engineers for the Greek Industry. The former Department of Automation Engineering focused mainly on industrial automation (industrial control, power electronics, robotics, CNC machine tools, industrial information systems, etc.), while the former Department of Textile Engineering focused on the design and production of textile products of high added value. These two departments were very specialized (only two Departments of Automation Engineering and one Department of Textile Engineering in the whole Greek territory), which ensured high rates of absorption of graduates in the Greek market. This continued to be the case despite the fact that the Greek Industry had drastically declined compared to the service sector such as tourism, shipping, etc.

### **3.3 Identity of the Department**

### 3.3.1 Scope of the Department

The Department of Industrial Design and Production Engineering belongs to the School of Engineering of UNIWA (Law 4521/2018) and offers a 5-year engineering degree programme in the fields of Industrial Design and Production Engineering.

The Department through its curriculum aims to provide graduates with the knowledge, skills and abilities that cover the range of the specialization of Industrial Design and Production Engineering, and the corresponding profession. The curriculum of the Department is designed to provide students with up-to-date, high-level and specialised knowledge and skills in the fields of Industrial Design and Production Engineering and its interdisciplinary fields of application. The Programme's graduates combine sound theoretical knowledge with significant laboratory application in cutting-edge technologies, so that they can keep abreast of the ever-evolving landscape in their field of science and in their professional field.

### 3.3.2 Vision of the Department

The vision of the Department of Industrial Design and Production Engineering of the School of Engineering of UNIWA is to offer a high level of education in the scientific fields of Industrial Design and Production Engineering, which will be able to provide graduates with a solid University in general and specialized theoretical knowledge and skills, along with significant experience in practical applications through systematic training in laboratory infrastructure at the undergraduate, postgraduate and research level. The level of studies provided, as implemented through the undergraduate Program of Studies and the offered Postgraduate Programs seeks to be at the forefront of international developments and not just to be directly competitive with programs of corresponding engineering departments in Greece and abroad. For this reason the education provided focuses on:

- The development and optimisation of digital technologies that support the pillars of the evolving Industry 4.0 revolution.
- Innovative methodologies for the promotion of technology sectors that offer comparative advantages to the greek economy.
- Designing methodologies and processes that promote sustainable production and living.

The Department supports the multifaceted development of the students' personality as well as the development of their professional and social awareness through the cultivation of a methodical and innovative way of thinking and problem solving. In particular, it seeks to instill in students an interest in scientific research and to gradually introduce them to the research processes of the Department, through their inclusion in its research groups and laboratories, in order to prepare graduates for third cycle academic studies. Additionaly, the Department actively seeks interaction with production units, service providers and related professional bodies in order to continuously strengthen the status of its graduates in the modern labour market.

In conclusion, the Department of Industrial Design and Production Engineering offers studies in a broad field of knowledge, in which research and innovation constantly produce new and important results that directly affect both production and economy, as well as everyday life. The Department's vision is to remain at the cutting edge of science and technology in the subject areas it treats and to provide studies that prepare, theoretically and practically, graduates that may respond effectively to modern requirements and future challenges.

### 3.3.3 Mission of the Department

The mission of the Department of Industrial Design and Production Engineering is:

- the provision of university education in the broader field of Industrial Design and Production Engineering, through undergraduate, postgraduate and doctoral studies,
- the production of new knowledge and the contribution to the development of technology through original research, both independently and in the context of national and international/European research collaborations,
- the contribution to the regional and national development of production, the economy and society, through outreach actions and partnerships with public and private bodies.

The Department currently offers one (1) undergraduate and seven (7) postgraduate programmes at the MSc level (autonomous, interdepartmental & inter-institutional), as well as one (1) organised PhD programme. The programmes offered cover the full range of studies in Industrial Design and Production Engineering. Thanks to the high academic qualifications of its staff, the Department is able not only to follow, but also to actively participate in the developments of science and technology at international level. This ensures the provision of curricula that prepare graduates to fully meet the modern demands of the market and society. The main objective of these studies is to provide the tools for understanding the fundamental principles underlying new technologies, but also to contribute to the development of critical thinking in engineering, which will enable graduates to apply these technologies successfully to today's complex design, planning and production problems. In addition, the Department adopts as a strategic objective of its mission the collaborations with other educational, research and social institutions, public or private, which are active in related disciplines.

### **3.3.4** Principles of the Department

Within the framework of its mission, the Department of Industrial Design and Production Engineering of the School of Engineering of UNIWA provides a 5-year engineering program of high quality education based on the principles of mutual respect between all members of the academic community, fairness and meritocracy, transparency, democracy, cooperation in the context of full academic freedom, but also the pursuit of extroversion that will enhance this mission, in order to be beneficial to society in general. At the same time, innovation and excellence in teaching and research are encouraged.

### 3.3.5 Research Policy of the Department

The Department of Industrial Design and Production Engineering is staffed with highly qualified members, who are active in research and participate as principal investigators or coordinators in many national and international research and development projects. In addition, it has a proven track record of significant published work in international journals and conferences and can support research activities in cutting-edge technologies in the broader field of Industrial Design and Production Engineering.

The main objective of the Department's policy is excellence in research. The Department systematically seeks to strengthen its potential within the existing research structures, in order to create the necessary critical mass for the further development of research, increase the respective performance indices and secure resources from national and European or international sources. The vision of the Department is to consolidate and establish itself in the international research environment as a key and recognisable player in the field of modern science and technology. The research activity of the Department is supported by the entire staff, the undergraduate and postgraduate students and the ever-expanding network of national and international research collaborations and exchanges.

The research policy of the Department aims at parallel activities along three axes, to cover:

- ✓ main and classical areas of the subject of Industrial Design and Production Engineering,
- ✓ new emerging areas of research, which are areas of interdisciplinary cooperation,
- ✓ fields of common interest.

Undergraduate students of the Department are particularly encouraged to participate in research activities and programmes, while there is close interaction with the postgraduate and doctoral programmes offered by the Department.

Organisationally and administratively, the research activities of the Department are supported by the established Research Laboratories and their infrastructure. An important element of the Department's strategy is the provision of resources for the maintenance and upgrading of the laboratory infrastructure and equipment of the Research Laboratories as well as for their accreditation as service providers. The University supports these activities through the Special Research Funding Account. The Research Laboratories of the Department are staffed by members of the Faculty, Special Education Staff, Laboratory Teaching Staff and Special Technical Laboratory Staff, collaborating researchers as well as Postdoctoral Researchers, PhD Candidates, postgraduate and undergraduate students.

### **3.4 Department Bodies**

The Departments contain the following bodies: a) Department Assembly, b) Board of Directors, c) President, d) Deputy President

### 3.4.1 Department Assembly

The Assembly of the Department of Industrial Design and Production Engineering consists of:

- The President of the Department, the Deputy President of the Department and the Directors of the Department Sectors.
- All faculty members of the Department.
- One (1) representative from each category of the members of the Department's Special Teaching Staff, Laboratory Teaching Staff and Special Technical Laboratory Staff.
- Representatives of the students corresponding to fifteen percent (15%) of the total number of members of the first three categories, with a minimum representation of one (1) student per course of study.

The Board shall be legally constituted and function even if the representatives referred to in the last two categories have not been designated.

### **3.4.2 Department Board of Directors**

The Board of Directors is composed of: a) the President and the Deputy President of the Department, b) the Directors of the Department Sectors and c) one (1) of the three (3) elected representatives of the categories of Special Teaching Staff, Laboratory Teaching Staff or Special Technical Laboratory Staff.

The Board shall be legally constituted and function even if the representative referred to in c) has not been designated.

The Board of Directors exercises the responsibilities delegated to it by the Department Assembly for the smooth and effective operation of the Department and the support of its educational, research and operational needs.

### **3.4.3 Department President**

A full-time faculty member at the rank of Professor or Associate Professor is elected as Chair of the Department for a two (2) year term of office.

PRESIDENT OF THE DEPARTMENT OF INDUSTRIAL DESIGN & PRODUCTION ENGINEERING

Georgios Priniotakis,

Grade: Professor

e-mail: gprin@uniwa.gr | Tel: 210 538 1542 | Office: ZA010, Ground Floor, Building G

### **3.4.4 Department Deputy President**

A full-time faculty member at the rank of Professor or Associate Professor is elected as Deputy President of the Department for a term of two (2) years.

The Deputy Chair shall perform the duties of the Chair if the latter is absent or temporarily unavailable.

The most senior members of the Department Assembly shall perform the duties of the President and Deputy President respectively, if both are absent or temporarily unavailable.

DEPUTY PRESIDENT OF THE DEPARTMENT OF INDUSTRIAL DESIGN & PRODUCTION ENGINEERING

#### Michael Papoutsidakis,

Grade: Professor

e-mail: mipapou@uniwa.gr | Tel: 210 538 1483 | Office: ZA004, Ground Floor, Building G

### **3.5 Department Sectors**

The Department of Industrial Design and Production Engineering of UNIWA is organizationally divided into three (3) Sectors, which coordinate the teaching activities corresponding to a specific field or fields of science as follows:

- 1. Industrial Production Systems
- 2. Basic Sciences and Applied Technologies
- 3. Decision and Process Science

The three (3) Sectors of the Department define, in the broadest sense of the term, the three (3) different scientific areas in which the courses of the undergraduate programme are distributed and in this way there is no overlap of the work and scope among the Sectors of the Department.

The members of the faculty, Special Teaching Staff, Laboratory Teaching Staff and Special Technical Laboratory Staff of the Department are assigned to one (1) of the three (3) Sectors, according to the relevance of their scientific specialization. Each Sector of the Department is staffed by more than three (3) faculty members.

### 3.5.1 Sector Bodies

The Sector has the following bodies: a) The General Assembly of the Sector, which consists of: the Director of the Sector, the faculty members of the sector and one (1) representative from each category of the members of Special Education Staff, Laboratory Teaching Staff and Special Technical Laboratory Staff serving in the Sector, and b) the Director of the Sector.

SECTION I	Industrial Production Systems				
Director: Philip Azariadis Topaloglou Grade: Professor e-mail: <u>fazariadis@uniwa.gr</u>   Tel.: 210 538 1335   Office: ZA104, 1 <sup>st</sup> floor, Building Z					
SECTION II	Basic Sciences and Applied Technologies				
Director: Evangelo Grade: Professor e-mail: <u>epallis@uniwa</u>	os Pallis .gr   Tel: 210 538 1188   Office: ZA204, 2 <sup>nd</sup> Floor, Building Z				
SECTION III	Decision and Process Science				
Director: Alexand Grade: Professor email: <u>alex.a.vass@ur</u>	ros Vasileiadis niwa.gr   Tel: 210 538 1171   Office: B213, 2 <sup>nd</sup> Floor, Building B				

### 3.6 Department Staff

The staff serving in the Department of Industrial Design and Production Engineering of the UNIWA is divided into four categories:

- (i) Faculty
- (ii) Laboratory Teaching Staff
- (iii) Special Technical Laboratory Staff
- (iv) Administrative Staff

Apart from the academic staff members, the educational work of the Department of Industrial Design and Production is assisted by Emeritus Professors, researchers and Academic Fellows.

The academic staff of the Department for the Academic Year is as follows, arranged by category and rank.

### 3.6.1 Faculty

The members of the Faculty provide teaching, research/scientific and administrative work. The teaching work includes undergraduate and postgraduate courses, tutorials and seminars, laboratory and clinical exercises, organisation, supervision and operation of laboratories and clinics, writing teaching notes, supervision of assignments, assessment of students, conducting examinations, as well as supervisory tasks in the examination process. The research and scientific work includes basic or applied research, guidance and supervision in the preparation of bachelor, master theses and doctoral dissertations, and participation in scientific conferences, workshops and seminars.

In the Department of Industrial Design and Production Engineering during the Academic Year 2024-2025 there are twenty-five (25) members of the faculty, who are divided into a) eleven (11) Professors, b) nine (9) Assistant Professors, c) one (1) University Lecturer and d) five (5) Application Lecturers, as follows:

	PROFESSORS	
Philip Azariadis Topaloglou Subject: Mathematical Methods Sector: Industrial Production Sy	s of Design of Industrial Pro	oducts
@ <u>fazariadis@uniwa.gr</u>	<b>&amp;</b> +30 210 538 1057	ZA104, 1 <sup>st</sup> floor, Building G
Alexandros Vasileiadis Subject: Whitening and Painting Sector: Decision and Process S alex.a.vass@uniwa.gr	,	B213, 2 <sup>nd</sup> floor, Building B
Theodoros Gkanetsos Subject: Power Electronics with Sector: Basic Sciences and Ap		of Microelectronic Power Devices
@ ganetsos@uniwa.gr	+30 210 538 1443	ZA114, 1 <sup>st</sup> floor, Building Z

		PR	OFESSORS (conti	nuec	1)
<b>Subje</b> Syste	trios Dimogianopoulos ect: Automatic Control Syst m Fault Diagnosis or: Industrial Production Sy	ems	-	ion ar	nd Applications in Algorithmic
@	<u>dimogian@uniwa.gr</u>	c	+30 210 538 1183		ZA103, 1 <sup>st</sup> floor, Building Z
Subje Comp	etrios Cantzos ect: Electrical Measuremen pressed Audio Frequency S pr: Industrial Production Sy	igna	lls	easur	ement and Digital Restoration of
@	<u>cantzos@uniwa.gr</u>	C	+30 210 538 1588		ZA205, 2 <sup>nd</sup> floor, Building Z
Subje Secto	n C. (Nelly) Leligou ect: Computer Networks wi or: Basic Sciences and App			Web	Server Applications
@	e.leligkou@uniwa.gr	C	+30 210 538 1484	U	ZA202, 2 <sup>nd</sup> floor, Building Z
Subje	trios Nikolopoulos ect: Applied Radiation Physor: Basic Sciences and App			nd Ma	an
@	dniko@uniwa.gr	C	+30 210 538 1338		ZA203, 2 <sup>nd</sup> floor, Building Z
Subje	<b>igelos Pallis</b> ect: Wireless Networks or: Basic Sciences and App	liod	Technologies		
@	epallis@uniwa.gr		+30 210 538 1188		ZA204, 2 <sup>nd</sup> floor, Building Z
Subje - Pne Secto	ael Papoutsidakis ect: Modern Methods of Au umatic Systems or: Industrial Production Sy			ı Syst	ems and Applications in Hydraulic
@	mipapou@uniwa.gr	C	+30 210 538 1483		ZA004, Ground floor, Building Z
Subje	onios Primentas ect: Structural Mechanics - or: Industrial Production Sy		-	Textile	e Yarns
@	aprim@uniwa.gr	C	+30 210 538 1411		$\Delta$ δ3, West Alley, A & B Building
Georgios Priniotakis Subject: Applications of Innovative Textile Technologies for Multifunctional Apparel Products Sector: Industrial Production Systems					
@	<u>gprin@uniwa.gr</u>	C	+30 210 538 1542		ZA010, Ground floor, Building Z

	ļ	ASSISTANT PROFES	SOR	S
Soul	tana Vasileiadou			
Subj	ect: Automatic Control: Simu	lation, Applications and	Histo	rical Evolution
Secto	or: Industrial Production Syst	ems		
@	svasil@uniwa.gr	<b>C</b> +30 210 538 1178		B201, 2 <sup>nd</sup> floor, Building B
Anas	stasios Gkotsopoulos			
Produ	0	Materials of Special En		cesses of Synthetic Fabrics for the ring and Chemical Requirements
@	<u>tgotsopoulos@uniwa.gr</u>	<b>\$</b> +30 210 538 1211		ZA102, 1 <sup>st</sup> floor, Building Z
Chri	stos Drossos			
applic	•	es in fourth generation in	•	s and methods for optimisation of ent industrial production systems
@	drossosx@uniwa.gr	<b>\$</b> +30 210 538 1531		ZA003, Ground floor, Building Z
Para	skevi Zacharia			
-	ect: Industrial Supervisory Sy or: Industrial Production Syst	· · ·	ificial	Intelligence Heuristic Algorithms
@	p.zacharia@uniwa.gr	<b>L</b> +30 210 538 1338		ZA002, Ground floor, Building Z
Niko	laos Laskaris			
-	ect: Electronics with Emphas onment	sis on the Use of Technic	ques	with Applications in Art and the
	ornern or: Basic Sciences and Appli	ed Technologies		
0000				
@	n.laskaris@uniwa.gr	<b>\$</b> +30 210 538 1290		ZA105, 1 <sup>st</sup> floor, Building Z
	silis Papadakis			
-	ect: Development and appli spectral imaging	cation of devices and r	netho	ds for non-destructive control and
Secto	or: Basic Sciences & Applied	Technologies		
@	v.papadakis@uniwa.gr	<b>\$</b> +30 210 538		ZA113, 1 <sup>st</sup> floor, Building Z
Pana	agiota Fragkouli			
Subj	ect: Characterisation techniq	ues of textile polymers		
Secto	or: Decision and Process Sci	ience		
@	pgfragouli@uniwa.gr	<b>L</b> +30 210 538 1206		B210, 2 <sup>nd</sup> floor, Building B
Georgia Cheirhanteri				
Subject: Applications of Architecture and Industrial Design in Graphic Communication				
Secto	or: Industrial Production Syst	tems		
@	georgiaxeir@uniwa.gr	<b>L</b> +30 210 538 1209		Г025, Ground floor, Building Г

ASSISTANT PROFESSORS (continued)
Avraam Chatzopoulos         Subject:       Embedded Automation and Mechatronics Systems and Educational Autonomous         Robotic Systems         Sector:       Industrial Production Systems         @ xatzopoulos@uniwa.gr       +30 210 538 1288         ZA106, 1 <sup>st</sup> Floor, Building Z
UNIVERSITY LECTURERS
Gregorios Nikolaou (PhD) Specialisation: Digital signal processing - Communications Sector: Decision and Process Science
<u>nikolaou@uniwa.gr</u> +30 210 538 1314   ZA206, 2 <sup>nd</sup> Floor, Building Z
APPLICATION LECTURERS
Stavros Alexiadis Subject: Chemistry, Pigments and Printing Materials Sector: Decision and Process Science
@ <u>s.alexiadis@uniwa.gr</u> <b>&amp;</b> +30 210 538 1802 📕 B131β, 1 <sup>st</sup> floor, Building B
Nikolaos Karapetis         Subject: Textile dyes and finishing materials         Sector: Decision and Process Science         @ nikos.karapetis@uniwa.gr       +30 210 538 1802         B214, 2 <sup>nd</sup> floor, Building B
Charalambos Moutsatsos
Subject: Weaving design Sector: Decision and Process Science
@ <u>chmout@uniwa.gr</u>
Eleni-Orsalia Sklavounou Subject: Industrial Processes for Renewable Energy and Green Technology Sector: Industrial Production Systems
@ <u>e.sklavounou@uniwa.gr</u> 🌜 +30 210 538 1291 🗒 ZA201, 2 <sup>nd</sup> floor, Building Z
Emmanuela Sfyroera Subject: Technologies for Innovative Knitted Garments with Ecological Characteristics Sector: Industrial Production Systems
@ <u>emsfir@uniwa.gr</u>

### **3.6.2** Professors Emeritus

Emeritus Professors are recognized as Professors of UNIWA. Emeritus Professors may offer teaching, research and generally scientific work in the undergraduate or postgraduate programs and may be research project managers or participate in research projects, in

accordance with the applicable legislation. The Emeritus Professors of the Department of Industrial Design and Production Engineering during the Academic Year 2024-2025 are:

PROFESSORS EMERITUS				
Konstantinos Alafodimos Subject: Energy Sector (Electrical Machines, Electrical Installations)				
@	calafod@uniwa.gr	<b>\$</b> +30 210 538 1327		ZA010, Ground floor, Building Z
Efthymios Gravas				
Subject: Knitting				
@	egra@uniwa.gr	<b>L</b> +30 210 538 1203		Γ08, Ground floor, Building Z
Dimitrios Tseles Subject: CAD, CAM, CAE				
@	<u>dtsel@uniwa.gr</u>	<b>\$</b> +30 210 538 1200		ZA114, 1 <sup>st</sup> floor, Building Z

### **3.6.3 Honorary Professors**

The title of Honorary Professor is awarded by decision of the Senate of UNIWA, following a proposal, after a decision of the Department Assembly which is taken by a majority of at least more than 50% of the members present. Honorary Professors have served as Professors of other Higher Educational Institutions in the country or abroad. The title of Honorary Professor is honorary and does not create rights and obligations in relation to teaching or administration of the University.

The Honorary Professors of the Department of Industrial Design and Production Engineering during the Academic Year 2024-2025 are:

HONORARY PROFESSORS					
Elias Sideras-Haddad (BScHons, MSc, PhD)					
<ul> <li>Professor at the University of the Witwatersrand (WITS) in South Africa (University of the Witwatersrand, Johannesburg) - School of Physics</li> <li>Director of the Materials Physics Research Institute (MPRI) in South Africa</li> <li><a href="https://www.wits.ac.za/staff/academic-a-z-listing/s/eliassideras-haddadwitsacza/">https://www.wits.ac.za/staff/academic-a-z-listing/s/eliassideras-haddadwitsacza/</a></li> </ul>					
Ioannis Skarlatos (BS, MS, MPhil, PhD)					
<ul> <li>Professor at Bogaziçi University, Instanbul, Turkey (Bogaziçi University, Instanbul) - Physics Department</li> <li><u>http://www.phys.boun.edu.tr/faculty_wp/yani_skarlatos.html</u></li> </ul>					
Lieva Van Langenhove (BS, PhD)					
<ul> <li>Professor at Ghent University, Ghent, Belgium - Faculty of Engineering and Architecture</li> <li><u>https://biblio.ugent.be/person/801000648543</u></li> </ul>					

### **3.6.4 Laboratory Teaching Staff**

The members of the Laboratory Teaching Staff perform laboratory and applied teaching work and in particular conduct laboratory and clinical exercises, as well as practical exercises in the fields of application of the relevant sciences, as well as any form of scientific and research work. The members of the teaching staff who hold a Doctoral Degree may be assigned independent teaching work, as well as the supervision of undergraduate and postgraduate theses, following a decision by the Department Assembly.

The Department of Industrial Design and Production Engineering of UNIWA during the Academic Year 2024-2025 has six (6) members in the Laboratory Teaching Staff as follows:

LABORATORY TEACHING STAFF				
Efstathios Theocharis (PhD) Subject: Industrial Automation Systems, Remote Control, Risk Analysis and Safe Operation Methodologies. Grade: A (final) Sector: Industrial Production Systems				
-	03, Ground floor, Building Z			
Ioannis Kizlaridis Subject: - Grade: A (final) Sector: Decision and Process Science				
-	3, Ground floor, Building Z			
Evangelos Papakitsos (PhD) Subject: Information Systems with an emphasis on Humanities Grade: A (final) Sector: Basic Sciences and Applied Technologies				
@ papakitsev@uniwa.gr 🌜 +30 210 538 1810 🗒 ZA2	13, 2 <sup>nd</sup> floor, Building Z			
Andrew Ronald Short (PhD) Subject: Methodologies and Applications of Machine Learning in Industrial Production Grade: A (final) Sector: Industrial Production Systems				
@ <u>ashort@uniwa.gr</u> <b>%</b> +30 210 538 1287 🗒 ZAC	03, Ground floor, Building Z			
Eleni Symeonaki (PhD) Subject: Internet of Things and Sustainable Development Grade: A (final) Sector: Industrial Production Systems @ esimeon@uniwa.gr +30 210 538 1540 ZA114, 1st floor, Building Z				
Anastasios Tzerachoglou	· · · , · · · · · · · · · · · · · · · ·			
Subject:				
Grade: A (final)				
Sector: Industrial Production Systems				
@ <u>tasos@uniwa.gr</u> 📞 +30 210 538 1169 📕 F02	1, Ground floor, Building Z			

### 3.6.5 Special Technical Laboratory Staff

The members of the category of Special Technical Laboratory Staff perform special teaching work, offering specialized technical and laboratory services to the department. In the Department of Industrial Design and Production Engineering during the Academic Year 2024-

2025, one (1) member of the Department of Industrial Design and Production serves as follows:

SPECIAL TECHNICAL LABORATORY STAFF					
Alexandros Markesinis					
Sector: Basic Sciences and Applied Technologies					
@	alexmark@uniwa.gr	ç	+30 210 538 1442		ZA213, 2 <sup>nd</sup> floor, Building Z

### 3.6.6 Academic Scholars

The laboratory teaching work and part of the ongoing research work in the Department is supported by Academic Fellows for the academic year 2024-2025.

### 3.6.7 Administrative staff

The members of the Administrative Staff form the Department's Secretariat, providing the necessary administrative work to support the proper functioning of the Department. Three (3) members of the Administrative Staff erve in the Department of Industrial Design and Production Engineering during the Academic Year 2023-2025 as follows:

ADMINISTRATIVE STAFF					
Konstantinos Dodos Head of Secretariat					
@	kdodos@uniwa.gr	C	+30 210 538 1727		ZA207, 2 <sup>nd</sup> floor, Building Z
Elen	Eleni Gyalinou				
@	egyal@uniwa.gr	C	+30 210 538 1216		ZA207, 2 <sup>nd</sup> floor, Building Z
Margarita Kefalaki					
@	<u>mkefalaki@uniwa.gr</u>	C	+30 210 538 1133		ZA207, 2 <sup>nd</sup> floor, Building Z

### **3.7 Research Laboratories**

The Research Laboratories are key fascilitators of the research conducted at the Department of Industrial Design and Production Engineering and in general at the School of Engineering. The main objective of the Research Laboratories of the Department is the development of scientific research with the simultaneous production of high quality knowledge in the scientific fields in which they are active. In particular, the aim of the research carried out in the Department's Research Laboratories is the development of technical know-how, innovative technological processes and original methodologies for the design of new products that can be the basis for further research development and industrial application. Each Research Laboratory supports the educational activities of the Department at undergraduate, postgraduate and doctoral level.

The Research Laboratories of the Department of Industrial Design and Production Engineering, as well as all the Research Laboratories of UNIWA, are connected to the GUNET (Greek University Network). The following Research Laboratories belong to the Department of Industrial Design and Production Engineering:

### DEPARTMENTAL RESEARCH LABORATORIES

Laboratory of Industrial Systems and Mechatronics Applications

Title: Laboratory of Industrial Systems and Mechatronics Applications

**Government Gazette of Establishment:** B´ 2905/11.07.2019

**Director:** Michael Papoutsidakis (Professor)

http://isma.uniwa.gr

Laboratory of Electronic Automation, Telematics and Cyber-physical Systems

Title: Laboratory of Electronic Automation, Telematics and Cyber-Physical Systems

Government Gazette of Establishment: B´ 2966/19.07.2019

**Director:** Demetrios Cantzos (Professor)

http://eatcps.uniwa.gr

Laboratory of Design and Development of Knitted Innovative Textile and Clothing Products

**Title:** Laboratory of Design and Development of Innovative Knitted Textiles and Garments - DIKNIGA

Government Gazette of Establishment: B' 2070/04.06.2019

Director: Georgios Priniotakis (Professor)

http://sapke.uniwa.gr/

Laboratory of Computational Intelligence and Intelligent Systems

Title: Laboratory of Computational Intelligence and Intelligent Systems - LCIIS

Government Gazette of Establishment: B´ 2966/19.07.2019

**Director:** Eleni Aikaterini Leligou (Professor)

https://eynes.uniwa.gr/

The following Research Laboratories belong to a Sector of the Department of Industrial Design and Production Engineering:

### DEPARTMENTAL RESEARCH LABORATORIES

Laboratory of Dyeing, Refining, Dyes and Advanced Polymers

Title: Laboratory of Dyeing, Finishing, Dyestuffs and Advanced Polymers

Government Gazette of Establishment: B' 2905/11.07.2019

**Sector:** Pending integration into a Sector of the Department

**Director:** Alexandros Vasileiadis (Professor)

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Laboratory for Technological Research, Design and Development of Anodes (TESAI)

**Title:** Laboratory of Technological Research, Design and Development of Fibrous Structures - TREDDEFIS

Government Gazette of Establishment: B' 1119/04.04.2019

Sector: Pending integration into a Sector of the Department

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There are also Research Laboratories directly under the supervision of the School of Engineering and have Directors and members who serve in the Department of Industrial Design and Production Engineering. These are the following:

#### **RESEARCH LABORATORIES OF THE SCHOOL OF ENGINEERING**

\*Director and Members serving in the Department of Industrial Design and Production Engineering

Laboratory of Non-Destructive Testing and System Diagnostic Methodologies

Title: Non Destructive Techniques Laboratory

Government Gazette of Establishment: B' 1273/15.04.2019

**Director:** Theodoros Ganetsos (Professor)

<u>https://ndt.uniwa.gr/</u>

## **3.8 Secretariat of the Department**

The Secretariat of the Department of Industrial Design and Production Engineering is responsible for the registration of students and the maintainance of relevant records, the issuance of official certificates and documents, the communication with other administrative services and the attendance to administrative matters of all students and staff of the Department.

The Secretariat is open to the public on Tuesday-Wednesday-Thursday between 12.00 and 14.00.

Secretariat Contact Details University Campus of Ancient Olive Grove, 250 Thevon 250 and P. Ralli, 12241, Egaleo, Office ZA207, 2°<sup>c</sup> floor, Building Z e-mail: <u>idpe@uniwa.gr</u> | Tel: 210 538 1726 -1727

# 4. Undergraduate Studies Programme

## 4.1 Identity of the Undergraduate Studies Programme

The undergraduate studies programme (Programme) of the Department of Industrial Design and Production Engineering of UNIWA is a five-year programme, designed to provide the necessary knowledge, skills and abilities for the practice of engineering in two fields:

- Industrial Production: In the field of industrial production, the Programme provides the necessary background for employment in the research, design, planning, design, construction and safe operation of industrial plants and devices of all types. This provides a basis for a comprehensive and multifaceted examination of the issues of industrial practice, e.g. from energy production to packaging, from initial design to the control of every manufacturing detail, from production planning to the transport of the product to the final consumer, with simultaneous monitoring and evaluation of the results.
- Administration and Management: in the field of Administration and Management, the Programme covers modern methods for the collection and processing of information, the support of business decision-making processes, automation and control as well as the supervision of industrial production systems. The subjects covered by the relevant courses focus in particular on digital methods and technologies. Thus, the problem of management and administration is addressed in an integrated and comprehensive manner at different time and spatial scales, e.g. from the level of the automated production line to the level of the networked production chain and interconnected industrial units (global cluster).

Great importance is given to the integration of the practices of both fields in the context and practices of the 4th industrial revolution (Industry 4.0), which is the future for the development of both the personal professional carreer of the engineer and the country. For this reason, a number of courses taught in higher semesters (from 7th to 9th) promote students' knowledge related to the 4th industrial revolution, seeking to offer knowledge related to automated decision-making and, in general, the idea of intelligent interconnection of machines and processes in the industry with the help of information and communication technologies.

The Programme has a duration of 5 years (10 semesters) and corresponds to 300 credits of the European ECTS system, covering uniformly levels 6 and 7 of the European Qualification Framework (EQF) and the National Qualification Framework (NQF).

Upon successful completion of the Programme, the Department awards a Diploma in Industrial Design and Production Engineering, which is a single and indivisible postgraduate degree (Integrated Master) at level 7 of NQF, in accordance with the provisions of article 78 of Law No. 4957/2022.

The content of the Programme curriculum complies with:

- the national legislation in force,
- ✓ the guidelines of the National Authority for Higher Education,
- the ECTS units system
- the Greek and international practice from relevant, undergraduate programmes of other engineering departments and the standards of scientific associations and organizations (e.g. Technical Chamber of Greece).

At the same time, the integration of cutting-edge research and technology into the academic framework of the Department's activities is sought through the development of original research and the production of new knowledge both independently and in the context of national and international collaborations. The attendance to the needs of society, production and the economy at local, regional and national level through outreach actions and collaborations with public and private institutions, as well as the implementation of education and research with modern tools and methods, ensures the sustainability of the Department of Industrial Design and Production Engineering.

## 4.2 Scope and Objectives of the Undergraduate Studies Programme

The subject of the Programme is the set of all knowledge related to the scientific area of Industrial Design and Production Engineering, the technologies that result from it, as well as its fields of application, either monothematic or interdisciplinary.

The main objective of the Programme is to train scientists capable of designing, studying and analysing industrial products and their production processes with respect to the natural and man-made environment. The Programme aims to provide the required theoretical and applied knowledge through the application of classical and modern methods and tools in the educational process, to cultivate critical thinking and to develop skills of data analysis-synthesis.

At the same time, great importance is given to the integration of internationally established practices from the fields of Industrial Production, Administration and Management, in the context and practices of Industry 4.0. For this reason, a number of courses taught in upper semesters (from 7th to 9th) promote students' knowledge related to Industry 4.0 and particularly related to automated decision-making and the idea of intelligent interconnected machines and processes in the industry.

Finally, the Programme aims at the organized interconnection and interaction with production units and/or service providers and with the related professional bodies in the field of Industrial Design and Production Engineering in order to ensure the status of graduates in the modern labour market. In this context, emphasis is placed on the preparation of the European and international professional perspective of the graduates, through the active participation of the Department in educational exchange programmes and international scientific and professional collaborations.

## **4.3 Learning Outcomes of the Undergraduate Studies Programme**

Upon completion of the Department's undergraduate studies program, graduates have proven knowledge in the field of Industrial Design and Production Engineering, which lead to a high level of specialization in both established areas of industrial design and production (for example, consumer products, mass or customized production, appliance components, packaging, etc.) and innovative applications using cutting-edge technology (nanotechnology and composite materials, automation and autonomous vehicles). The understanding of the theory presented in a progressively deepening manner, the integration of cutting-edge technology in the taught subjects, as well as the involvement with innovative technologies offered in the context of upper semester courses, promote original thinking in students, so that the latter, as a graduate, can deal effectively with issues of his/her professional life.

Above all, through the design of the Programme and the involvement with different scientific fields (examples of which are production technology, automation, nanotechnology, cyber-physics, energy and its environmentally efficient management and organisation), the interdisciplinarity of the Industrial Design and Production Engineer is promoted. The latter is an indispensable asset for the modern engineer, who is called upon to address issues in complex applications that are functionally based on the simultaneous use of technologies from several scientific fields (Mechanical and Engineering, Electronics, Telecommunications, etc.).

In particular the graduates:

- Receive knowledge in subjects that constitute the basic core of the studies, such as Mathematics, Physics, Electrical and Electronic Circuits, Measurements and Sensors, Materials, Computer-Aided Design, Computer Programming, Production Management and Programming, Algorithm Design.
- They apply this knowledge as a basis to develop new knowledge, skills and competences in subjects that are part of the specialised studies, such as Machine Elements, Electrical Machines, Automation Application Optimisation, Mechatronics, Design of Production and Supply Systems, Digital Applications, Computer and Decision Support Systems, Business Administration and Marketing.
- Solve complex and interdisciplinary problems in cutting-edge applications using research principles to develop innovative solutions in the context of the 4.0 Industrial Revolution.
- Analyse and synthesise industrial systems and processes: Industrial Design, System Design with Microcontrollers, Automatic Control Systems (and) with application in Industrial Environment (PLC), Additive Manufacturing Processes (3D printing), Non-destructive Control of Systems, Quality Control, Product Management and the Environment, Design of Self Propelled Vehicles, Nanotechnology and Nanodevices, Internet of Things Applications, Cyber-physical Systems and Human-Machine Interaction.
- Synthesise (due to the interdisciplinary nature of the applications) and apply the acquired knowledge in industrial work environments.
- Apply knowledge and evaluate scenaria related to the implementation and promotion of innovative solutions and professional practices and evaluate their performance in individual and team contexts.

Ultimately, the sum of these competencies defines a higher level of maturity for graduates that acquire a critical perspective on the science of Industrial Design and Manufacturing Engineering. Graduates are equipped to operate in a given socio-economic context with the necessary awareness of professional and ethical responsibility towards society and the environment.

In conclusion, it follows from the above that:

The graduates of the Department, apart from forming a complete scientific and professional profile, develop the knowledge acquisition skills that are necessary for them to continue in further studies (3°<sup>c</sup> cycle of studies) with a high degree of autonomy.

## **4.4 Graduate Profile - Job Prospects**

Graduates of the Department of Industrial Design and Production Engineering complete a 5year Programme of Studies and are awarded a Diploma in Industrial Design and Production Engineering which is a single and inseparable postgraduate level (Integrated Master) degree at level 7 of the National and European Qualifications Framework, in accordance with the provisions of Article 78 of Law No. 4957/2022. In addition, the holders of the Diploma in Industrial Design and Production Engineering have the same professional rights of the Production and Management Engineer, which are defined in Article 15 of the Decree 99/A/05-11-2018. The graduate of the Department of Industrial Design and Production Engineering is able to process and analyse problems related to his/her field of study, choosing the most appropriate method, using new information and communication technologies, while at the same time he/she is able to filter and evaluate the results of the solutions proposed. In addition, the graduate will be able to work effectively either individually or as part of a team.

The graduate has high level skills, both "vertical" within the discipline of Industrial Design Engineering and "horizontal". In particular, the graduate:

- Is able to specify the solution based on the needs, priorities and specifications set by the operating environment.
- Seeks the autonomy required to work individually but also bears the responsibility to work within an interdisciplinary team, manage complex technical or professional activities and work plans, and take decisions in unpredictable work environments.
- Can manage and transform complex or unpredictable work environments and develop new strategies to approach them.
- Identifies and manages his/her personal and professional learning needs, while also taking responsibility for managing the professional development of other individuals and groups, thus demonstrating his/her commitment to the goal of lifelong learning.
- Has the maturity for critical reflection on the science and the profession of Industrial Design and Production Engineering within the socio-economic context in which it operates and is aware of his/her professional and ethical responsibility towards society and the environment.

At the same time, compared to the corresponding existing programmes of similar departments in Greece, the Programme has been enriched in some important dimensions, in an innovative manner. On the one hand, it offers the traditional practices for a conceptually and thematically unified knowledge of the industrial value chain. This knowledge covers all kinds of industrial production: technological, energy, economical, environmental, institutional and investment. On the other hand, through its emphasis on digital technologies, the Programme promotes knowledge necessary for the emerging industrial landscape. These include, among others, additive manufacturing, cyber-physical systems, cyber-security management, cloud computing and other pillars of the evolving 4th Industrial Revolution.

Graduates of the department are provided with theoretical and practical knowledge in a wide range of topics and skills in the science of Industrial Design and Production Engineering and have the appropriate orientation from their education, so that they can directly meet the needs of the market for professionals with theoretical and practical training. Consequently, they are active in a very broad field of professional employment, which transcends different market sectors. More specifically, the fields of employment of the graduates of the Department include, among others:

- Design and management of production systems and facilities
- Development and management of information systems
- Digital transformation of production systems and services
- Electromechanical studies
- Development of e-business applications
- Computer-aided product design and rapid prototyping
- Occupational health and safety

- Logistical and dynamic resource allocation
- Study and design of robotic installations and vehicles
- Project management and scheduling
- Telematics transport
- Organisation of quality assurance systems and procedures
- Financial management and evaluation of investment projects
- Financial engineering and financial risk management
- Development of decision support systems
- Environmental impact studies
- Consumer behaviour study and technological marketing
- Operations research and multi-criteria decision analysis
- Research and development of new products

## **4.5 Structure of the Undergraduate Studies Programme**

The Programme of the Department of Industrial Design and Production Engineering is completed in ten (10) semesters, i.e. nine (9) semesters of course teaching and one (1) semester for the Dissertation. The Programme also includes the possibility of a 3-month Internship in the ninth semester of study. It is structured **in University** (or general background) courses which provide the necessary basic scientific knowledge for the understanding of the scientific field of the Programme, in **core** (or specialised background) courses which provide knowledge directly related to the scientific field of the Programme of Studies and in **deepening/concentration** courses in the subjects of the specialisation of Industrial Design and Production Engineering.

The first central objective of the Programme is the education in the broad and interdisciplinary subject of Industrial Design and Production Engineering and is served by a strong core of compulsory theoretical and technological courses that run through all ten semesters of study. This objective is mainly met during the first six (6) semesters, where the largest number of General Background Courses (GBC) and Special Background Courses (SBC), compulsory for all students, are taught.

The second central objective of the Programme is that of grasping, in a manner similar to MSc programmes, the most recent and emerging advances of the 4th Industrial Revolution, from the initial stage of design and information flow, to the organisation and supervision of production, to the minimisation of environmental impacts, and finally to the optimisation of market promotion. The second objective is covered during the last four (4) semesters of study, where the specialization courses (SPE) are developed, which function as specialization pathways to achieve deepening of the basic theoretical and laboratory knowledge acquired in the previous semesters.

**The Diploma Thesis (30 ECTS)** is of one (1) semester duration, focusing on a cutting-edge issue in the field of the specialty and characterized by originality and systematic investigation in order to provide an in-depth treatment of the issue being addressed. For students, it thus offers an introduction to the way of thinking and functioning of a researcher.

**The Practical Training or internship (10 ECTS)** is optional, lasting 3 months and is offered from the 9th<sup>o</sup> semester. The Practical Training offers experience to students in the form of

immersion in theoretical and practical issues arising from the exercise of the duties of an Engineer, and therefore, enhances the consolidation of the already acquired knowledge in real problems in the field of the profession and - of course - the integration of the student into the labour market. Information can be found at the following link: https://idpe.uniwa.gr/instructions

To graduate, students must accumulate a total of at least three hundred (300) ECTS credits. In particular, they must:

- Pass at least fifty-four (54) courses, of which forty-three (43) are compulsory and the additional eleven (11) are electives from the 7th to the 9th semester, selected from a total of twenty-six (26) courses offered. In total, the courses correspond to a minimum of two hundred and seventy (270) ECTS.
- To prepare and successfully support the Diploma Thesis which corresponds to thirty (30) ECTS.

The minimum number of semesters of study required to obtain a diploma is ten (10). The organization and the specific distribution of the courses of the Department are shown in Table 1.

# **Table 1.** Aggregated quantitative data of the MSc of the Department of Industrial Designand Production Engineering

Quantitative element of Curriculum	
Total number of courses for the Diploma	54
Total number of credits (ECTS) of courses for a Diploma	300
Total general background/infrastructure (University) courses	16 (80 ECTS)
Total of specific background/infrastructure (core) courses	29 (145 ECTS)
Total number of immersion/immersion courses ( <i>excluding Internship/Diploma Thesis</i> )	24 (120 ECTS)
Credits (ECTS) Diploma Thesis	30
Credits (ECTS) Practical Training	10
Total number of courses offered in the MSc ( <i>excluding Internship / Dissertation</i> )	69

Finally, it is stated that the undergraduate programme, both in terms of content and educational procedures adopted, fully complies with international academic standards and the principles of the HEAE Quality Standard and the Quality Assurance Principles of the European Higher Education Area, as certified by the HEAE with the accreditation decision No.36841/24-08-2023.

The immersion courses offered from the 7th<sup>o</sup> semester onwards, document knowledge and skills at level 7, according to the National and European Qualifications Framework<sup>1</sup>, given that they offer specialised knowledge and skills in the field of Industrial Design Engineering &

<sup>&</sup>lt;sup>1</sup> https://www.eoppep.gr/index.php/el/qualification-certificate/national-qualification-framework

Production. More specifically, a choice of 24 specialization courses is offered, corresponding to 120 ECTS, which far exceeds the minimum of 60 ECTS provided for the second cycle of studies by the Bologna Agreement. This option is thus designed to facilitate the specialisation of students by allowing them to both define and reach their learning targets, in the same way as they would do after the end of their undergraduate studies by choosing a MSc programme.

The specialization courses have been designed with special care in terms of both the methodology of the course and the subject matter. The methodology has given emphasis to the promotion of knowledge through the collaborative implementation of projects, the application of research and laboratory practice rules and the presentation of the results to the public. Thus, in a number of specialization courses (e.g. cyberphysical systems, cloud computing, Internet of Things, renewable sources, non-destructive testing) the preparation of research projects in groups and their presentation to the public determine by a significant percentage (> 40%) the result of the student's assessment. In other words, a methodological practice prevalent in postgraduate level teaching is applied.

The subject matter of the specialization courses is also designed to treat, in a manner equivalent to postgraduate programs, the most recent issues and needs of the 4<sup>th</sup> Industrial Revolution:

- From the initial stage of design and information flow (e.g. cloud computing, cyberphysical systems, industrial product design, innovative design and sustainability, artificial intelligence),
- in the organization and supervision of its production (e.g. production information systems, Internet of Things, non-destructive testing, power electronics smart grid, intelligent systems),
- minimising the problematic effects on the environment and society as a whole (e.g. byproduct management and the environment , renewable energy sources ),
- and ultimately to optimize the market promotion (e.g. transport systems management)

The compulsory Diploma Thesis (30 ECTS), conducted in the last semester of studies, offers significant specialization in current subjects of Industrial Design and Production Engineering. Having previously acquired the necessary methodological skills through a research methodology course, students perform research and project implementation that have a direct connection with design and production in the labour market. The Diploma Thesis is required to have elements of research originality and enables students to deepen their understanding of a topic related to the subject of Industrial Design and Production Engineering, and to understand and apply consistently the rules of writing a sound scientific/technical thesis.

The Practical Training/internship (10 ECTS), offered as an elective course, serves the objective of linking studies with field applications in the the labour market, while offering additional specialization.

After completion of the 5-year Programme of 300 ECTS in the Department, graduates, apart from forming a complete scientific and professional profile, have an advantage over graduates of conventional MSc programmes in that they have also developed the knowledge acquisition skills necessary to continue into the third cycle of studies and the preparation of a PhD thesis with a high degree of autonomy.

Finally, the knowledge and skills acquired are validated by a significant number of student publications in scientific conferences/journals and student awards in competitions, a fact that corroborates the research nature of the specialization courses and the Diploma Thesis, fully verifying that the knowledge acquired corresponds to level 7 studies.

## 4.6. Courses of the MSc by Semester of Studies

		1° SEMESTER COURSE		COURSE		COURSE	CREDIT
a/a	Code	COURSES (Compulsory)	CATEGORY	HOURS	UNITS		
1	1001	LINEAR ALGEBRA	GBC	4	5		
2	1002	GENERAL PHYSICS	GBC	4	5		
3	1003	COMPUTER PROGRAMMING	GBC	4	5		
4	1004	MECHANICAL DRAWING	GBC	4	5		
5	1005	DESIGN THEORY AND METHODOLOGY	GBC	4	5		
6	1006	ELECTRICAL CIRCUITS	GBC	4	5		
	Semester totals:				30		

	2° SEMESTER COURSE		COURSE	COURSE	CREDIT
a/a	Code	COURSES (Compulsory)	CATEGORY	HOURS	UNITS
1	2001	NUMERICAL ANALYSIS	GBC	4	5
2	2002	<b>TECHNICAL ENGINEERING - STATICS</b>	GBC	4	5
3	2003	ALGORITHMS AND DATA STRUCTURES	GBC	4	5
4	2004	DIFFERENTIAL AND INTEGRAL CALCULUS I	GBC	4	5
5	2005	MEASUREMENT AND SENSOR TECHNOLOGY	GBC	4	5
6	2006	BUSINESS FINANCE	GBC	4	5
	Semester totals: 24 30				

3° SEMESTER		COURSE	COURSE	CREDIT	
a/a	Code	COURSES (Compulsory)	CATEGORY	HOURS	UNITS
1	3001	DIFFERENTIAL AND INTEGRAL CALCULUS III	GBC	4	5
2	3002	COMPUTER-AIDED DESIGN AND MANUFACTURING (CAD/CAM)	SBC	4	5
3	3003	PRODUCTION TECHNOLOGY I	SBC	4	5
4	3004	STRENGTH OF MATERIALS	SBC	4	5
5	3005	ELECTRONICS	SBC	4	5
6	3006	SYSTEM AND SIGNAL ANALYSIS	SBC	4	5
	Semester totals: 24 30				

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	4° SEMESTER		COURSE	COURSE	CREDIT
a/a	Code	COURSES (Compulsory)	CATEGORY	HOURS	UNITS
1	4001	MACHINE ELEMENTS	GBC	4	5
2	4002	STATISTICS AND PROBABILITY FOR ENGINEERS	GBC	4	5
3	4003	SUPPLY CHAIN MANAGEMENT	SBC	4	5
4	4004	DATA COLLECTION AND ANALYSIS	SBC	4	5
5	4005	DIFFERENTIAL EQUATIONS	GBC	4	5
6	4006	ERGONOMIC ANALYSIS AND DESIGN	SBC	4	5
	Semester totals:				30

5° SEMESTER		COURSE	COURSE	CREDIT	
a/a	Code	COURSES (Compulsory)	CATEGORY	HOURS	UNITS
1	5001	DESIGN OF INDUSTRIAL ACTUATION SYSTEMS	SBC	4	5
2	5002	OPTIMISATION METHODS	SBC	4	5
3	5003	PRODUCTION TECHNOLOGY II	SBC	4	5
4	5004	AUTOMATIC CONTROL SYSTEMS I	SBC	4	5
5	5005	OCCUPATIONAL SAFETY MANAGEMENT	SBC	4	5
6	5006	THERMODYNAMICS	SBC	4	5
		Sem	ester totals:	24	30

6° SEMESTER		COURSE	COURSE	CREDIT	
a/a	Code	COURSES (Compulsory)	CATEGORY	HOURS	UNITS
1	6001	INDUSTRIAL DESIGN I	SBC	4	5
2	6002	QUALITY CONTROL AND TOTAL QUALITY MANAGEMENT	SBC	4	5
3	6003	DECISION SUPPORT SYSTEMS	SBC	4	5
4	6004	MICROCONTROLLER-BASED SYSTEM DESIGN	SBC	4	5
5	6005	FLUID MECHANICS	SBC	4	5
6	6006	INTERNET TECHNOLOGY IN THE DIGITAL INDUSTRY	SBC	4	5
		Sem	ester totals:	24	30

	7° SEMESTER		COURSE	COURSE	CREDIT		
a/a	Code	COURSES (Compulsory)	CATEGORY	HOURS	UNITS		
1	7001	MECHATRONICS	SBC	4	5		
2	7002	INFORMATION PRODUCTION SYSTEMS	SPE	4	5		
3	7003	ARTIFICIAL INTELLIGENCE	SPE	4	5		
	Elective Compulsory 7 <sup>ou</sup> Semester <i>(choice of 3 courses)</i>						
4	7004	ENTREPRENEURSHIP AND INNOVATION MANAGEMENT	SBC	4	5		
5	7005	ENVIRONMENT - MANAGEMENT OF BYPRODUCTS	SPE	4	5		
6	7006	POWER ELECTRONICS – SMART GRID	SPE	4	5		
7	7007	ELECTROMECHANICAL INSTALLATIONS DESIGN	SBC	4	5		
8	7008	INDUSTRIAL DESIGN II	SBC	4	5		
9	9 7009 BUSINESS INTELLIGENCE AND BIG DATA ANALYSIS		SPE	4	5		
10	7010	ART, TECHNOLOGY AND CULTURE	SPE	4	5		
11	7011	ENGLISH TERMINOLOGY I	SBC	4	5		
		Sem	ester totals:	24	30		

	8° SEMESTER		COURSE	COURSE	CREDIT UNITS		
a/a	Code	COURSES (Compulsory)	CATEGORY	HOURS			
1	8001	ADDITIVE MANUFACTURING PROCESSES - 3D PRINTING	SPE	4	5		
2	8002	INDUSTRIAL AUTOMATION – PLC	SPE	4	5		
3	8003	PRODUCTION SYSTEMS	SBC	4	5		
	Elective Compulsory 8 <sup>ou</sup> Semester <i>(choice of 3 courses)</i>						
4	8004	AUTOMATIC CONTROL SYSTEMS II	SPE	4	5		
5	8005	NON-DESTRUCTIVE TESTING	SPE	4	5		
6	8006	INTERNET OF THINGS	SPE	4	5		
7	8007	INNOVATIVE DESIGN AND SUSTAINABILITY	SPE	4	5		
8	8008	INTELLIGENT SYSTEMS	SPE	4	5		
9	8009	RENEWABLE SOURCES OF ENERGY	SPE	4	5		
10	8010	DESIGN AND DEVELOPMENT OF NANODEVICES	SPE	4	5		
11	8011	ENGLISH TERMINOLOGY II	SBC	4	5		
	Semester totals:				30		

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	Acade	emic \	<b>Year</b>	2024-20	25
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		9° SEMESTER	COURSE	COURSE	CREDIT			
a/a	Code	COURSES (Compulsory)	CATEGORY	HOURS	UNITS			
1	9001	ROBOTICS	SPE	4	5			
	Elective Compulsory 9 <sup>ou</sup> Semester <i>(choice of 5 courses)</i>							
2	9002	SELF-DRIVING VEHICLE DESIGN	SPE	4	5			
3	9003	CLOUD COMPUTING	SPE	4	5			
4	9004	SMART MATERIALS	SPE	4	5			
5	9005	MARKETING	SBC	4	5			
6	9006	METHODOLOGY OF RESEARCH PROJECTS	SPE	4	5			
7	9007	CYBERPHYSICAL SYSTEMS	SPE	4	5			
8	9008	TRANSPORTATION SYSTEMS MANAGEMENT	SPE	4	5			
9	9009	PROJECT MANAGEMENT	SBC	4	5			
10	9010	DATA SECURITY AND PROTECTION	SPE	4	5			
11	9011	DESIGN OF INTERACTIVE SYSTEMS	SPE	4	5			
		ster totals:	24	30				

		10° SEMESTER	COURSE	COURSE	CREDIT		
a/a	Code	COURSES (Compulsory)	CATEGORY	HOURS	UNITS		
1	10001	THESIS	SPE	-	30		
	Optional 10ºº Semester						
2	10002	PRACTICAL TRAINING*	SPE	-	10		
	Semester totals: 24 30						

\* The Practical Training/internship is three months long and gives the option of exemption from a total of two (2) elective compulsory courses (SBC) of the 8th and/or 9th semester.

## 4.7 Courses by Sector

SECTION I	SECTION II	SECTION III
INDUSTRIAL PRODUCTION SYSTEMS	BASIC SCIENCES AND APPLIED TECHNOLOGIES	DECISION AND PROCESS SCIENCE
MECHANICAL DRAWING	LINEAR ALGEBRA	BUSINESS FINANCE
DESIGN THEORY AND	GENERAL PHYSICS	PRODUCTION TECHNOLOGY III
METHODOLOGY TECHNICAL ENGINEERING –		QUALITY CONTROL AND TOTAL
STATICS MEASUREMENT AND SENSOR	COMPUTER PROGRAMMING	QUALITY MANAGEMENT ENTREPRENEURSHIP AND
TECHNOLOGY	ELECTRICAL CIRCUITS	INNOVATION MANAGEMENT
COMPUTER-AIDED DESIGN AND MANUFACTURING (CAD/CAM)	NUMERICAL ANALYSIS	ENVIRONENT - MANAGEMENT OF BYPRODUCTS
PRODUCTION TECHNOLOGY I	ALGORITHMS AND DATA STRUCTURES	BUSINESS INTELLIGENCE AND BIG DATA ANALYSIS
STRENGTH OF MATERIALS	DIFFERENTIAL AND INTEGRAL CALCULUS I	DESIGN AND DEVELOPMENT OF NANODEVICES
SYSTEM AND SIGNAL ANALYSIS	DIFFERENTIAL AND INTEGRAL CALCULUS III	SMART MATERIALS
MACHINE ELEMENTS	ELECTRONICS	MARKETING
SUPPLY CHAIN MANAGEMENT	STATISTICS AND PROBABILITIES FOR ENGINEERS	PROJECT MANAGEMENT
ERGONOMIC ANALYSIS AND DESIGN	DATA COLLECTION AND ANALYSIS	
DESIGN OF INDUSTRIAL ACTUATION SYSTEMS	DIFFERENTIAL EQUATIONS	
AUTOMATIC CONTROL SYSTEMS I	OPTIMISATION METHODS	
WORK SAFETY MANAGEMENT	THERMODYNAMICS	
INDUSTRIAL DESIGN I	DECISION SUPPORT SYSTEMS	
MECHATRONICS	MICROCONTROLLER-BASED SYSTEM DESIGN	
ARTIFICIAL INTELLIGENCE	FLUID MECHANICS	
ELECTROMECHANICAL INSTALLATIONS DESIGN	INTERNET TECHNOLOGY IN THE DIGITAL INDUSTRY	
INDUSTRIAL DESIGN II	INFORMATION PRODUCTION SYSTEMS	
INDUSTRIAL AUTOMATION - PLC	POWER ELECTRONICS - SMART GRID	
PRODUCTION SYSTEMS	ART, TECHNOLOGY AND CULTURE	
AUTOMATIC CONTROL SYSTEMS (SAE) I	ENGLISH TERMINOLOGY I	
INNOVATIVE DESIGN AND SUSTAINABILITY	ADDITIVE MANUFACTURING PROCESSES - 3D PRINTING	
INTELLIGENT SYSTEMS	NON-DESTRUCTIVE TESTING	
ROBOTICS	INTERNET OF THINGS	
SELF-DRIVING VEHICLES DESIGN	RENEWABLE SOURCES OF ENERGY	
TRANSPORTATION SYSTEMS MANAGEMENT	ENGLISH TERMINOLOGY II	
DESIGN OF INTERACTIVE SYSTEMS	CLOUD COMPUTING ENGINEERING	
	METHODOLOGY OF RESEARCH PROJECTS	
	CYBERPHYSICAL SYSTEMS	
	DATA SECURITY AND PROTECTION	

## **4.8 Detailed Course Description (Outlines)**

A detailed description of the courses, as reflected in their respective course outlines, which is an integral part of this Study Guide, is posted on the department's website at the link:

https://idpe.uniwa.gr/en/courses

## **4.9 Diploma Thesis**

The Diploma Thesis (Dissertation) is an extensive and comprehensive scientific work that is carried out by the final year students during the last two semesters of the Programme (9th and 10th). It is the culmination of the student's studies and at the same time, it can be a useful tool for a professional career or for a postgraduate (or doctoral) course of study at a national or foreign university.

It is required to have elements of research originality and gives the student the opportunity to delve into a topic related to the subjects covered by Industrial Design and Production Engineering.

In particular, the student during the IC is required to:

- to apply and combine a variety of knowledge acquired during their studies,
- become familiar with the search, selection and critical study of sources (literature and others),
- ✓ apply the appropriate scientific methodology to investigate and solve problems in his/her field of expertise.

The preparation of the dissertation is done individually by each student, while the scope of the topic must correspond to the workload of a dissertation, so that its completion is possible within the academic semester (10th). The total systematic workload should be in the order of 750 hours per student. The Thesis as a scientific study must be presented in such a form that it is comprehensive and thoroughly describes the problem and the methodology for solving it.

The topics of the dissertations are proposed by the competent faculy members or by the student concerned and if the faculty member agrees, the student, upon request, undertakes the preparation of the dissertation with the faculty member becoming his/her supervisor. The Thesis is prepared under the primary responsibility of the student and in an advisory - supervisory role by the supervisor. The student, taking into account the comments and suggestions of the supervisor, makes the necessary corrections until the completion of the Thesis.

Throughout the period of the dissertation assignment, the supervisor is scientifically responsible for the progress of the dissertation and its monitoring through communication with the student by any appropriate means (face-to-face, distance meetings, etc.).

## 4.10 Practical Training (Internship)

The Practical Training (Internship), lasting 3 months, is offered as an option in the 9th semester of studies, aiming at linking academic knowledge with professional practice and the labour market. According to the Department's long experience, it is an important tool for the professional integration of students, enhancing the application of their knowledge in real-life situations.

The duration of the Practical Training is designed to provide sufficient time to gain initial professional experience, while at the same time allowing students to meet their other obligations, such as completing their studies, especially during the summer months.

The successful completion of the Practical Training provides the option to be exempted from two (2) elective compulsory courses of the 8th and/or 9th semester, of a total value of 10 ECTS. The fulfilment of specific academic criteria, which have been defined by the Department, is required for the undertaking of the internship.

The detailed procedure, the required criteria and the necessary forms for the Practical Training are available on the official website of the Department.

## 4.11 Graduation Requirements and Degree

To graduate, students must accumulate a total of at least three hundred (300) ECTS. In particular, they must:

- Pass at least fifty-four (54) courses. Specifically, forty-three (43) courses designated as Mandatory and an additional eleven (11) courses from the 7th to the 9th semester, designated as Elective Mandatory. The eleven (11) Electives are selected from a total of twenty-six (26) courses offered in this category, specifically three (3) from the 7° semester, three (3) from the 8° semester, and five (5) from the 9° semester. In total the courses correspond to a minimum of two hundred and seventy (270) ECTS.
- To prepare and successfully support the Diploma Thesis which corresponds to thirty (30) ECTS.
- ✓ The minimum number of semesters required for the Diploma is ten (10).

The final grade of the Degree/Diploma is equal to the sum of the sum of the multiplied course grades multiplied by the number of Credit Units [Course Grade x Credit Units (ECTS) of the course] to the total number of Credit Units (ECTS). The final degree/diploma grade is calculated to the nearest hundredth (two decimal places).

$$B \alpha \theta \mu \acute{o}\varsigma \pi \tau \upsilon \chi \acute{o}\upsilon = \; \frac{ \sum \Bigl( ECTS_{\mu \alpha \theta} \cdot B \alpha \theta \mu \acute{o}\varsigma_{\mu \alpha \theta} \Bigr) + ECTS_{\delta \upsilon \tau \lambda. \text{ srg.}} \cdot B \alpha \theta \mu \acute{o}\varsigma_{\delta \upsilon \tau \lambda. \text{ srg.}} }{ \sum \Bigl( ECTS_{\mu \alpha \theta} \Bigr) + ECTS_{\delta \upsilon \tau \lambda. \text{ srg.}} } \; .$$

The degree classification of the Diploma of graduates is determined as follows:

- from 5,00 6,49 "Good"
- from 6,50 8,49 "Very good"
- from 8,50 10,00 "Excellent".

## **4.12 Diploma Supplement**

In addition to the Diploma, the Diploma Supplement is given upon graduation. It is a personal document issued to graduates of higher education institutions together with their Diploma or Degree. It is not a substitute for the degree, but is attached to it. The Diploma Supplement is an explanatory document containing information on the nature, level, general context, content and status of the holder's studies. It is issued automatically in Greek and English by the Department, after the completion of the studies and without any financial fee.

## 4.13 Certificate of Digital Skills Acquisition

Students who successfully pass at least four courses conducted using computers or whose subjects are related to the subject of computers can obtain a certificate of computer skills. The certificate will indicate the relevant courses in which they have passed and which fall within the scope of computer subjects.

Specifically for the Department of Industrial Design and Production Engineering, the following undergraduate semester courses fall within the area of computer science and computer operation:

- 1003 Computer programming
- 2003 Algorithms and Data Structures
- 3002 Computer Aided Design and Manufacturing (CAD/CAM)
- 4002 Statistics and Probability for Engineers
- 6004 Systems Design with Microcontrollers
- 6006 Internet Technology in Digital Industry
- 7003 Artificial Intelligence
- 7009 Business Intelligence and Big Data Analysis
- 8006 Internet of Things (IoT)
- 8008 Intelligent Systems
- 9003 Neural Engineering
- 9007 Cyber-physical systems
- 9011 Design of Interactive Systems

It should be noted that digital tools (e.g. eclass, MS Teams) are used in the teaching of all courses in the curriculum, while all assignments are developed in word processing software (e.g. MS Word) and the corresponding presentations are delivered in MS Powerpoint.

## **4.14 Evaluation of the Programme by the Students.**

The electronic evaluation by the students of the teaching work of each semester is fascilitated by the online Information System of the Quality Assurance Unit of UNIWA. The course evaluation period lasts from the 8th to the 11th week of the semester in question for all taught courses. The Internal Evaluation Team of the Department ensures the organisation of the online assessment process for each course in order to maximise the participation of students.

After the end of the evaluation period, the Department's Internal Evaluation Team analyzes the results of the evaluation and recommends in writing to the Department Assembly any improvement actions based on the evaluation of the teaching staff's educational work. The recommendation is attached as an Annex to the minutes of the Assembly.

## 4.15 Accreditation of the Department's Programme

The undergraduate programme of the Department of Industrial Design and Production Engineering has recently been successfully accredited according to the relevant Accreditation Decision (36841/24.08.2023) of the Hellenic Authority for Higher Education. The Certification Decision and the Certification Report can be found at the following link:

#### https://idpe.uniwa.gr/news/department/pistopoiese-programmaton-spoudon-tmematos

The relevant approval for the level 7 certification of the Programme studies according to the National and European Qualifications Framework has also being given.

Finally, the process of officialy equating the Department of Industrial Design and Production Engineering with the Departments of Production Engineering and Management of the corresponding Polytechnic Schools in Greece, has been successfully completed. After the publication in the Goverment Gazette of the relevant Ministerial Decisions, as required by Article 66 of Law 4610, all graduates of our Department's 5-year Study Program will be able to register with the Technical Chamber of Greece (TEE) and acquire the corresponding professional rights.

# **5. Studying at the Department**

The student status is acquired upon enrolment in the Department and is maintained until the award of the degree, in accordance with the undergraduate programme of studies. The minimum duration of the Department's undergraduate programme is five years (n=5).

The period of regular study is equal to the minimum number of semesters necessary for the award of the degree (n=5), plus four semesters, or n+2 academic years. Students are entitled to student care benefits throughout the period of regular study.

## **5.1 Registration / Admission Procedures for First Year Students**

The registration of incoming first cycle students is carried out through the online application of the Ministry of Education, Religious Affairs and Sports, according to the procedure and dates set by the Ministry.

A new student who did not register within the prescribed dates may submit a request to the Department, stating the reason for not registering on time in accordance with the regulations and accompanied by the necessary documents proving the above reason. The student's application shall be submitted to the Department Assembly for approval. In any case, the completion of the registration is achieved after registration in the electronic application of the Ministry of Education, Religious Affairs and Sports, by submitting the required documents to the Department's Secretariat in a manner and at a time announced by the Secretariat.

Students who meet the requirements for part-time status must submit an application with the necessary supporting documents to the Department's Secretariat. Their admission is granted after the approval of their application by the Department Assembly.

## **5.2 Course Registration**

Every semester, the student has the obligation to register for courses, on dates and deadlines determined by the academic calendar and announced on the Department's website.

After the deadline for the submission of course registrations, students who have not submitted a registration, have the opportunity within ten (10) calendar days to submit to the Department's Secretariat a request for late registration, stating the reason for not submitting an online course registration, as well as the courses they wish to attend. Late registration requests will be accepted if the reasons invoked by the student for late registration are sufficiently documented. The decision on the approval of late registration and course registration is taken by the Department Assembly.

After the expiration of all ten (10) calendar days, no late course registration will be accepted by the Secretariat. Students who have not submitted a course declaration for the fall or spring semester are not eligible to take course examinations for both regular and repeat exam periods.

The student may choose courses offered, according to the curriculum. In any case, the total number of hours of courses that the student may choose to attend may not exceed, per week:

- Thirty-eight (38) if the student has not exceeded the minimum number of semesters necessary for the award of the degree.
- Fifty-two (52) if the student has exceeded the minimum number of semesters necessary for the award of the degree.

Upon recommendation of the Department Assembly and approval by the Senate, the total limit of hours in the course registration may be modified.

After the the acceptance of the course registration by the Secretariat of the Department, up to three (3) courses of the submitted course registratin may be modified on dates determined by the Secretariat.

## **5.3 Suspension of Studies**

Students of the Department may, after a request to the Secretariat of the Department concerned, suspend their studies. The maximum duration of the suspension of studies may not exceed the maximum duration of studies of the Department, i.e. may not exceed four (4) semesters of studies.

The period of suspension does not count towards the normal period of study. Regardless of the date of submission of the application, the suspension of attendance shall take effect from the beginning of classes in the following semester. Students who discontinue their studies as described above do not retain their student status throughout the period of suspension. After the end of the suspension, students are reintegrated into the active student body of the Department.

During the period of suspension of studies, the student does not have, automatically, the right to use the facilities of the Institution, as well as the benefits resulting from his/her student status.

## **5.4 Student Transfers**

Student transfers at UNIWA are carried out in accordance with the annual decisions of the Ministry according to the current legislation. It is necessary for the students to be deregistered from their home institution to register in another department.

## **5.5 Courses Transfer**

Students who transfer or enrol from other universities or from other departments of UNIWA may transfer completed courses (compulsory and/or elective courses of the first or second cycle of studies) of their department of origin to the Department of Industrial Design and Production Engineering with the corresponding grade and credit points (ECTS), if the two curricula coincide in the specific courses.

The recognition of courses is carried out by decision of the Department Assembly, following the submission of an application to the Department Secretariat.

By decision of the Assembly of the Department, students who have been admitted by qualifying examinations are exempted from the examination of the courses in which they were examined for their placement, if they have a grade of five (5) or higher in these courses. The Department Assembly may exempt admitted students from taking courses in the Department's curriculum which were fully or adequately taught in the Department of origin, on the basis of the outlines of the corresponding courses in the Curriculum of the Department of origin.

For those who have attended international or European education programmes (e.g. Erasmus mobility programmes), the time spent attending the educational programme is recognised as the actual time of attendance, and the corresponding grade of the courses that have been successfully examined is converted into the grading scale applicable at UNIWA, provided that the subject matter corresponds to the Department's course syllabus and in there is a relevant educational agreement between UNIWA and the foreign Institution. The grades of courses at foreign higher education institution, bearing the relevant attestation provided for by the international conventions in force.

## 5.6 Academic Year and Teaching of Courses

The academic year begins on 1 September of each year and ends on 31 August of the following year. Undergraduate studies are conducted on the basis of a semester course system. The educational process is structured in two semesters, the winter and spring semesters. Each semester includes at least thirteen (13) full weeks of instruction and three (3) weeks of examinations.

The teaching of the courses of the curriculum is carried out according to the timetable, which is prepared and announced in time and includes the distribution of teaching hours for all courses within the five working days of the week, the number of available classes, the teaching staff and the classrooms.

In addition, it is recommended that students with disabilities (PwD) inform the Departmental Adviser for PwD and the teacher in charge of the course in question of their special needs during the teaching process, in order to facilitate their needs.

## 5.7 Exams

The exams are held after the completion of the courses, according to the Academic Calendar, on dates determined by the Department Assembly and announced on the Department's website. The re-examination of the courses of both semesters (winter and spring) is held in September on dates determined and announced in the same way.

The student has the right to participate in the examination of the courses selected during the course registration.

Following a decision of the Department Assembly, students who have exceeded the minimum duration of study are given the opportunity to take examinations in courses that have been registered, even once during their studies, during the examination period of the winter or spring semester, regardless of whether they are taught in the corresponding winter or spring semester.

The syllabus of the courses includes the syllabus announced to the students at the beginning of the semester, together with possible clarifications or modifications made by the lecturer during the semester. At the beginning of the examination, the proctors check the identity of the examinees. A student who is found to be copying in any way (e.g., from books or notes, from student writing, using a cell phone), or collaborating with another student or students, or interfering with the smooth conduct of the examination shall receive a zero grade, after his/her writing has been marked and by

the proctor and the Department Chair shall be notified in order to initiate the prescribed disciplinary procedure.

The assessment of the students' performance is carried out by the lecturers of each course. The lecturer may, at his/her discretion, organise written or oral examinations, or rely on assignments assigned to students, or combine any of the above. The student assessment process shall be completed within deadlines set by the instructor and in any case shall not exceed the end of the examination period of the current semester. If a course has been assigned by the Departmental Assembly to more than one instructor, the examination of the course may be organised jointly and the way in which students are assessed may either be common or different for each instructor, provided that students are informed of this at the beginning of the semester. Information on how each course in the curriculum is assessed is given in the relevant course outline, which is posted on the Department's website.

Lecturers are required to take the necessary care for the examination of students with disabilities, in accordance with the procedures described in detail in the Internal Regulations of the University (article 37), while students with disabilities must also inform the Departmental Adviser for Students with Disabilities and the lecturer in charge of the course in question of their special needs when conducting the examinations.

Finally, it should be noted that the exam papers are kept for twelve (12) months under the custody of the person in charge of the course. After this time, the papers cease to be valid and are destroyed, unless there are pending criminal, disciplinary or any other administrative proceedings.

## 5.8 Grading and Grade Improvement

Grades in all courses are expressed on a numerical scale of zero to ten (0-10), with a pass mark of five (5). Grades are rounded to one decimal place.

For courses, a student is considered successful if he/she earns at least five (5.0) points according to the examination procedures provided in the course outline (e.g. midterm examinations, group or individual assignments, final examination).

The student has the right to improve his/her grade in a course that has been successfully examined, upon request to the Department's Secretariat. In such cases, students are examined during the examination periods in which the examinations for the course in question are held and not by exception. The application shall be submitted before the examination period on fixed dates determined by the Departmental Assembly. A student retains the right to improve grades in up to three (3) courses in total during the course of study and only once per course. The higher of the two grades received by the student shall be chosen between the examination and the revision grade.

The entry of an incorrect grade for a student is corrected by the lecturer upon his/her recommendation to the Department's Secretariat. No other kind of recalibration is possible.

In the event that a student fails more than three (3) times in a course, he/she may be examined, upon his/her request, by a three-member committee of faculty members with the same or related subject, appointed by the Dean, in accordance with the

current legislation, following the recommendation of the Department Assembly. The lecturer in charge of the examination shall be excluded from the committee.

## **5.9 Certificates**

Upon request, the Secretariat of the Department issues the following certificates:

- Certificate of Studies,
- Detailed Grade Report,
- Certificate of Computer Literacy,
- Certificate of Student Status,
- Housing Benefit Certificate,
- Certificate of Completion of Practical Training Requirements,
- Certificate of Successful Completion of Practical Training,
- Copy of Diploma and
- Diploma Supplement.

The issue of a certificate of studies, a certificate of student status (usually required by the military offices), and a detailed grade report is performed electronically and exclusively through the student register.

## 5.10 Textbooks

Undergraduate students are entitled to free textbooks and other aids in accordance with the provisions of the applicable legislation. Any printed or electronic book, including free access electronic books, as well as printed or electronic academic notes are considered textbooks, after their annual approval by the Departmental Assembly. The textbook corresponds in a comprehensive manner to the subject matter of a course and covers all or most of its material and content, as defined in the regulations for undergraduate studies, in accordance with the approved curriculum of the Department.

The list of teaching texts includes at least one proposed teaching text per compulsory or elective course, which is drawn from the texts registered in the Central Information System EYDOXOS (https://eudoxus.gr) and is drawn up following the recommendations of the relevant lecturers or those responsible for each of them, as well as other teachers holding a position in the same or related subject area as the subject area of the course. The list of declared texts in the EADOXO is updated at the beginning of each academic year.

The declaration of textbooks follows the course declaration and must be consistent with it, i.e. the student can only declare textbooks for the courses he/she has declared in his/her course declaration. The declaration of coursework is made in the online service EYDOXOS, where the student can obtain all the relevant information.

## **5.11 Qualifying Examinations**

The qualifying examinations are conducted in accordance with the provisions set out in Ministerial Decision No.  $\Phi1/192329/B3$  (Government Gazette 3185/2013, vol. B).

Under the current legislation, a percentage of 12% of the number of students admitted to each academic year in each University Department is set at 12% of the number of students admitted through the Qualifying Examinations.

The selection of candidates by qualifying examinations is carried out through the participation in a written examination of three (3) courses, which are determined by the Assembly of the Department.

By decision of the Department Assembly, the semester of admission is determined, which cannot exceed the 5th semester of studies.

Applications are submitted to the Department's Secretariat and are accompanied by a copy of the Degree/Diploma or a certificate of successful completion of studies, while for graduates of foreign institutions a certificate of equivalence of their degree from the competent institution is also submitted.

Candidates with disabilities and special learning needs are tested orally or in writing according to their abilities. If you wish to sit the oral test, you must submit an application form together with your supporting documents, accompanied by a certificate from the relevant health authority stating that you are unable to sit the written test, in accordance with the disability certification system in force at the time.

The application and supporting documents are submitted from November 1 to 15, while the qualifying examinations are held between December 1 and 20 of each academic year. The application form, the necessary supporting documents, the courses to be examined, their syllabus and the examination schedule are posted on the Department's website.

The successful students of the qualifying examinations are enrolled on dates determined by the Department's Secretariat and announced on the Department's website.

# 6. Postgraduate Studies

The Department of Industrial Design and Production Engineering organizes and operates Postgraduate Studies Programmes (MSc) either independently or in collaboration with other Departments of UNIWA or other Universities.

## 6.1 Independent Postgraduate Programmes

### 6.1.1 MSc "Industrial Automation"

The Postgraduate Programme "Industrial Automation" is organized and operated independently by the Department of Industrial Design and Production Engineering of the Faculty of Engineering of UNIWA(Government Gazette B 3214/06.08.2018).

The MSc awards a Diploma of Postgraduate Studies in "Industrial Automation". The postgraduate degree in English is defined as: "MSc in Industrial Automation".

Director of the MSc: Theodoros Ganetsos (Professor)

Website of the MSc: <u>http://mscinautomation.uniwa.gr</u>

### 6.1.2 MSc "Unmanned Autonomous and Remote Controlled Systems"

The Postgraduate Program "Unmanned Autonomous and Remote Controlled Systems" is organized and operated independently by the Department of Industrial Design and Production Engineering of the School of Engineering of UNIWA (Government Gazette B' 2162/25.05.2021).

The Master of Science degree is awarded in "Unmanned Autonomous and Remote Controlled Systems". The postgraduate degree in English is defined as: "MSc in Unmanned Autonomous and Remote Controlled Systems".

Director of the MSc: Michael Papoutsidakis (Professor)

Website of the MSc: <u>http:</u>//msc-drones.uniwa.gr

## 6.1.3 MSc "Circular Economy and Sustainability Strategies"

The Foreign Language Postgraduate Programme "Circular Economy and Sustainability Strategies" is organised and operated by the Department of Industrial Design and Production Engineering of the School of Engineering of UNIWAwith the teaching language English (Government Gazette B' 3041/17.06.2022).

The MSc awards a Diploma of Postgraduate Studies entitled "Circular Economy and Sustainability Strategies". The postgraduate title in Greek is: "Circular Economy and Sustainability Strategies".

Director of the MSc: Georgios Priniotakis (Professor) Website of the MSc: https://msc-circular.uniwa.gr/

## 6.2 Interdepartmental Postgraduate Programmes

## 6.2.1 MSc "Artificial Intelligence and Deep Learning"

The Postgraduate Program "Artificial Intelligence and Deep Learning" is organized and operated in collaboration with the Departments of Electrical and Electronic Engineering and Industrial Design and Production Engineering of the Faculty of Engineering of UNIWA(Government Gazette B' 1104/22.03.2021).

The MSc awards a Diploma of Postgraduate Studies in "Artificial Intelligence and Deep Learning". The postgraduate degree is defined in English as "MSc in Artificial Intelligence and Deep Learning".

**Director of the MSc:** Charalambos Patrikakis (Professor)

Website of the MSc: https://aidl.uniwa.gr/

## 6.3 Inter-institutional Postgraduate Programmes

#### 6.3.1 MSc "New Technologies in Shipping and Transport"

The Postgraduate Programme "New Technologies in Shipping and Transport" is organised and operated by the Department of Industrial Design and Production Engineering of the School of Engineering of UNIWAin collaboration with the Department of Shipping and Business Services of the University of the Aegean (Government Gazette B'484/21.08.2018).

The MSc awards a Diploma of Postgraduate Studies in "New Technologies in Shipping and Transport" with two specializations a) Operational Management in Shipping and Supply Chain - Logistics and b) Technology of Automation in Shipping and Transport.

Director of the MSc: Michael Papoutsidakis (Professor)

Website of the MSc: http://ntst-aegean.uniwa.gr

## 6.3.2 MSc "Advanced Technologies in Cultural Heritage"

The foreign language postgraduate programme "Advanced Technologies in Cultural Heritage" is organized and operated by the Department of Industrial Design and Production Engineering of the School of Engineering of UNIWA in collaboration with the Department of Conservation of Antiquities and Works of Art of the School of Applied Arts and Culture of UNIWA and the University of Évora (University of Évora) of Portugal, with teaching in English (Government Gazette B' 5309/14.10.2022).

The MSc in Advanced Technologies in Cultural Heritage is awarded with the title "MSc in Advanced Technologies in Cultural Heritage".

Director of the MSc: Theodoros Ganetsos (Professor)

Website of the MSc: -

#### 6.3.3 MSc "World Textile Engineering Advanced Master:WE-TEAM"

The postgraduate programme "World Textile Engineering Advanced Master:WE-TEAM" is organised and operated within the framework of ERASMUS MUNDUS in collaboration with the Departments of Industrial Design and Production Engineering of the School of Engineering of UNIWA, the University of Ghent University in Belgium, the Kyoto Institute of Technology in Japan, the University of Haute-Alsace UHA in France, the University of BORÅS in Sweden and the Universitat Politècnica de València in Spain (Government Gazette B 125/19).01.2021 and B 6560/31.12.2021).

The MSc awards a separate Master's degree with the title "Advanced Studies in Textile Engineering Advanced Master (WE-TEAM)" In order for one of the partner universities to participate in the separate Master's degree, students must receive from it at least 30 credits.

**Director of the MSc:** Georgios Priniotakis (Professor)

Website of the MSc: <u>https:</u>//we-team.education/

# 7. Doctoral Studies

The doctoral studies program of the Department of Industrial Design and Production Engineering of the School of Engineering of UNIWA is organized and operates in accordance with the provisions of Law no. 4485/2017 and the general institutional framework as in force at any given time. The preparation of a doctoral thesis is governed by the provisions of articles 90-97 of Law No. 4957/2022, which regulate the institutional framework for doctoral studies.

The Doctoral Degree is an academic title that certifies that the holder has carried out original scientific research in depth and has contributed to the development of modern scientific knowledge by independently producing scientific results in the relevant scientific field.

The PhD programme of the Department of Industrial Design and Production Engineering of the School of Engineering of UNIWA provides specialisation in the broader fields of the Department and related fields.

The primary purpose of the PhD Programme of the Department of Industrial Design and Production Engineering is to develop researchers for the advancement of science and the development of applications. The aim is for PhD Candidates to produce original and innovative scientific research in all fields/objects treated in the Department and/or in fields/objects with which these sciences cooperate and interact within the framework of necessary interdisciplinary approaches, in order to be able to staff, in Greece and internationally, universities, research centres, enterprises and organisations of the private and public sector.

The Doctoral Thesis is carried out under the supervision of a faculty member of the Department of Industrial Design and Production Engineering, of the rank of Professor, Associate Professor or Assistant Professor, who has the main responsibility for the guidance of the Doctoral Candidate. In addition, on the recommendation of the Supervising Professor, a three-member Advisory Committee is appointed by the Departmental Assembly in order to frame and support the preparation and writing of the Doctoral Thesis. In addition to the Supervising Professor, the Tripartite Advisory Committee is composed of members of relevant fields of study in accordance with the provisions of the Department's Regulations for Doctoral Studies.

The duration of the Doctoral Degree is at least three (3) full calendar years from the date of appointment of the Tripartite Advisory Committee. The indicative maximum time for completion of the Doctoral Dissertation is six (6) full calendar years from the date of appointment of the Tripartite Advisory Committee.

For the award of the Doctoral Degree, sufficient published work in high quality journals and conferences and the successful support of the Doctoral Thesis before a seven-member Examination Committee is required, according to the Regulations for Doctoral Studies of the Department. The date of receipt of the Doctoral Degree is the date of successful support of the Doctoral Thesis.

## 7.1 Admittance to the Doctoral Studies Programme

The Department of Industrial Design and Production Engineering of the School of Engineering of UNIWA accepts applications for the filling of PhD Candidate positions,

either during the whole academic year without a Notice or by publishing a Notice with all relevant details (dates, place of application, necessary supporting documents, description of the subject, etc.).

The candidate, after consultation with a faculty member of the Department of Industrial Design and Production Engineering, submits an application to the Department's Secretariat and proposes the Supervising Professor of his/her PhD studies. In case of publication of a relevant Notice, the procedure provided for in the Department's Regulations for Doctoral Studies and the specific requirements of the Notice shall be followed.

The Department's Secretariat, after checking the formal completeness of the applications, forwards the complete application files to the Department's Assembly which approves or rejects the applications of the candidates according to the applicable legislation and the Department's Regulations for Doctoral Studies. Applications without the signature of the Supervising Professor will not be evaluated by the Departmental Assembly.

## 7.1.1 Selection Criteria

For admission to the PhD Programme, candidates should have the following qualifications:

- Degree of a Greek university (University or Technological Sector) or a degree of a TEI or a degree of a similar university abroad recognized by the IOATAP.
- Diploma of postgraduate studies or Doctoral Degree from a Greek university or a similar university abroad recognized by DOATAP. If you do not hold an MSc, you must have proven qualifications at level 7 of the National and European Qualifications Framework, as referred to in paragraph 1. 1 of Article 46 of Law No. 46 of the Law. 4485/2017, as amended by Article 42 of Law No. 4521/2018. The grade of the GPA should be: a) For studies in Greece, greater than or equal to "7.0". b) For studies in the United Kingdom, greater than or equal to "60%". c) For studies in the USA, higher or equal to "B". d) For studies from other countries will be determined by the Departmental Assembly.
- Proficiency in the English language documented by a relevant certificate at least equivalent to the State Certificate of Attainment Level B2 or another certificate documenting good knowledge or another - scientifically acceptable
   language or other reliable evidence that certifies the ability to access the relevant international literature and ensure scientific communication. This requirement does not apply to holders of an undergraduate or postgraduate degree from a higher education institution in English or another - scientifically valid - language.

In exceptional cases, applications that do not meet the aforementioned standards (e.g. possession of an MSc or PhD degree, grading criteria, etc.) may be discussed at the Departmental Assembly. This may be done, following a well-founded proposal by the supervising faculty member concerned, in order to take into account the following essential qualifications. a) Documented ability and potential for research (scientific publications of the candidate, employment in research institutions - organisations). b) Proven significant professional experience (at least three years) in the scientific field of the proposed doctoral thesis. c) Proven significant professional experience (at least three years) in the scientific field of the proposed doctoral thesis.

## 7.1.2 Supporting Documents Requirements

Each candidate's application must be accompanied by the following required documents:

- Short CV.
- A photocopy of your identity card or passport.
- A copy of a Degree or Diploma recognised by the IOATAP, if obtained from a foreign university. If, at the time of application, the degree or diploma is in the process of being recognised, the act of recognition may be replaced by a declaration of recognition. The IOATP recognition shall be presented by the submission of the first annual progress report, otherwise the PhD Candidate will be removed from the registers.
- Certificate of analytical score.
- Evidence (diplomas, copies of examination results, etc.) of knowledge of English or another language, where this knowledge does not result from the candidate's undergraduate or postgraduate studies.
- At least two (2) letters of recommendation in envelopes sealed by the authors (the name, title, address and telephone number of the author are also indicated in the PhD Candidate's application). At least one of the letters must come from the academic world.
- Summary of the thesis (if available).
- Copies of scientific publications and certificates of participation in research projects or relevant professional experience (if available).
- Research Proposal.

For full information on the institutional framework of the doctoral studies programme in the Department of Industrial Design and Production Engineering of the School of Engineering of UNIWA, please refer to the REGULATION OF DOCTORAL STUDIES (Government Gazette B' 5704/15.10.2024) which is available at the link: <u>https://idpe.UNIWA.gr/studies/doctoral</u>

## 8. Postdoctoral Research

The Department of Industrial Design and Production Engineering of UNIWA encourages and provides young scientists with the opportunity to conduct postdoctoral research in subjects that fall within the interests of the Department and its established Research Laboratories, in accordance with the principles set out in the "Regulation on Postdoctoral Research at UNIWA" as published in the Official Gazette B' 827/08.03.2019.

Postdoctoral research is defined as research carried out by holders of a PhD degree, aiming at solving specific scientific problems and developing new research directions in cutting-edge fields.

## The main objectives of postdoctoral research at UNIWA are the following:

- To support young scientists capable of contributing to the advancement of science, research and its applications, especially in cutting-edge fields and to promote UNIWA as an institution supporting young scientists,
- The extension of the results of the doctoral thesis of the researchers to new scientific directions of interest to the research groups of the University,
- The qualitative upgrading of scientific research and the dissemination of results and transfer of know-how.

Postdoctoral Research is carried out under the supervision of a faculty member of the Department of Industrial Design and Production Engineering, of the rank of Professor, Associate Professor or Assistant Professor, whose subject or scientific work must belong to the same or a related scientific field in which the Postdoctoral Research is carried out.

The duration of the Postdoctoral Research cannot be less than twelve (12) months from the date of the decision of acceptance and approval by the Departmental Assembly and in any case not longer than three (3) years.

Upon completion of the Postdoctoral Research, a Postdoctoral Research Certificate is issued, indicating the Institution, the Department, the full name of the Researcher, his/her father's name, the subject of the research, as well as the time of the research and the name and status of the supervising faculty member. The certificate shall be signed by the Chair of the Department. The certificate shall in no case constitute a degree.

## 8.1 Commencement of Postdoctoral Research

The right to apply for Postdoctoral Research is open (during the whole year) to holders of a PhD degree from a higher education institution in Greece or a recognized equivalent degree from a foreign institution.

Applications are submitted and registered at the Secretariat of the Department of Industrial Design and Production Engineering of the School of Engineering of UNIWA and are accompanied by:

- A copy of a copy of a degree or Diploma of a domestic university or equivalent foreign degree.
- A copy of a Master's degree from a domestic university or an equivalent foreign degree.
- A copy of a Doctoral Degree from a domestic university or an equivalent degree from a foreign university.
- Detailed curriculum vitae.
- Copies of scientific publications.
- Two (2) letters of recommendation, from a faculty member or a researcher of A', B' or C' level, holding a PhD degree, from a recognized Research Center in Greece or abroad.
- A description of the postdoctoral research, co-signed by the faculty member who intends to supervise the research.

The application is submitted to the Assembly of the host department, which approves the postdoctoral research, after evaluating the relevance, feasibility and availability of the infrastructure and at the same time approves the supervising faculty member.

For full information on the institutional framework of postdoctoral research at UNIWA, please refer to the REGULATION ON POSTDOCTORAL RESEARCH (Government Gazette B' 827/08.03.2019) which is available at the following link: <u>http://www.idpe.UNIWA .gr/images/Useful\_Docs/UNIWA\_Post-Regulations-FEK.pdf</u>

# 9. Life at UNIWA

The Department of Industrial Design and Production Engineering is housed in the facilities of the Ancient Olive Grove Campus of UNIWA, in the historic area of the Ancient Olive Grove of Athens. The Ancient Olive Grove Campus of UNIWA covers a total area of 100,000 sq.m., while the built-up area of more than 50,000 sq.m. consists of energy upgraded buildings that meet all modern architectural and functional standards.

## 9.1 Access and Facilities

In addition to the teaching facilities, the Ancient Olive Grove Campus has a library, a state-of-the-art conference centre, recreational and sports facilities, as well as a large number of parking spaces, and wireless internet access (WiFi) with supported services. Finally, the campus spaces are designed to be disability-friendly.



Entrance to the Ancient Olive Grove Campus is possible from Gate 2 on Thivon Avenue and from Gate 3 on Petrou Ralli Avenue.



The location of the University Campus of Ancient Olive Grove is within the metropolitan area of Athens and is surrounded by the main roads of Thivon, Petrou Ralli and Kifissos Avenues, approximately 3 km from the Egaleo station of line 3 of Attiko Metro and 6.5 km from the Piraeus station of line 1. In addition, city buses run regularly to and from the campus in order to provide easy access to it.

The bus lines based on the nearest bus stops are:

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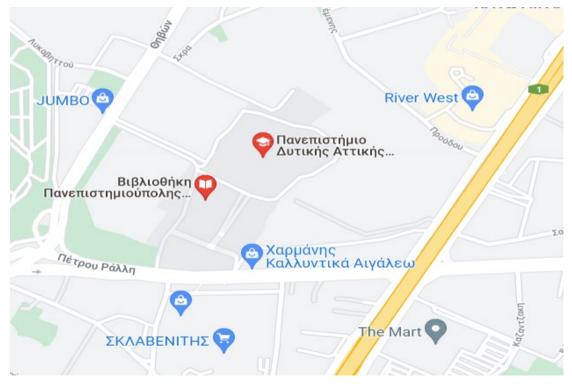
- Bus stop Ancient Olive Grove Campus (inside the campus):
  - 829 ANCIENT OLIVE GROVE St.EGALEO UNIWA ALSOS EGALEO (Circular)
- Stop UNIWA Ancient Olive Grove University Campus (on Thivon, direction from Piraeus to Egaleo):
  - 829 ARCHAEIOΣ ELAIONAS St.EGALEO UNIWA ALSOS EGALEO (Cyclical - to Egaleo Metro Station)
  - o 703 AD. LIBERTARIOS AG. ANARGYRI PIRAEUS
  - 803 FOREST OF HAIDARIO PIRAEUS
  - o 845 PIRAEUS ELEUSINA (via Thebes)
  - 852 NEAPOLI EGALEO METRO STATION (roundabout)
- Stop FIX (on Petrou Ralli):
  - 829 ANCIENT OLIVE GROVE St.EGALEO UNIWA ALSOS EGALEO (Circular)
  - Trolley 21 NIKAIA P. RALLI OMONOIA (Cyclical)
- Ladopoulos stop (on Thivon road, direction from Egaleo to Piraeus):
  - o 703 AD. LIBERTARIOS AG. ANARGYRI PIRAEUS
  - 803 FOREST OF HAIDARIO PIRAEUS
  - o 845 PIRAEUS ELEUSINA (via Thebes)
  - o 852 NEAPOLI EGALEO METRO STATION (roundabout)

(Information on access by public transport is available at <u>www.oasa.gr</u> and www.stasy.gr).

The Department of Industrial Design and Production Engineering is located in the first wing of Building Z of the Ancient Olive Grove Campus. Building Z is one of the most recently rebuilt buildings of UNIWA. It is one of the most modern buildings of the University.



#### Study Guide of the Department of Industrial Design & Engineering Production, UNIWA. Academic Year 2023-2024



The classrooms and laboratories of the Department of Industrial Design and Production Engineering, which apart from Building Z are also distributed in Buildings A, B and C, are technologically well equipped, creating the ideal conditions for optimal educational and research results.



UNIWA operates a physical and electronic marking system. The **electronic** interactive mapping **service** Campusplan is available at the link <u>http://campusplan.UNIWA .gr/</u> and fascilitates the digital mapping and electronic management of the University's premises (offices, halls, administrative services, educational and research laboratories, event spaces, etc.).

The **physical signage** which, through the integration of appropriate **QR codes**, cooperates with the Campusplan application and enables digital navigation, via smartphone, in the areas of the Egaleo Park and Ancient Olive Grove campuses.

## 9.2 Study Support, Services and Facilities

In the context of more effective support for the studies of all undergraduate and postgraduate students as well as doctoral candidates, a series of services and benefits are offered during their studies. Detailed information on this subject is also available at the following link: <u>https://www.UNIWA .gr/foitites/</u>

## 9.2.1 Academic Identity Card



Ακαδημαϊκή Ταυτότητα http://academicid.minedu.gov.gr As of 24/09/2012, undergraduate, postgraduate and doctoral students of all universities in Greece can submit their application for a new academic identity (ID) card online.

The new ID card has strong mechanical strength and anti-counterfeiting features. In addition, it is designed to be valid for as many years as the student status lasts, and to cover multiple uses, in addition to the Student Ticket (Pass). The cards will be delivered to the pick-up point chosen by each student at the time of application, at no financial cost.

The new ID cards indicate the exact period of validity of the Student Ticket entitlement. If the student is not entitled to a Student Ticket, the card will be used as a simple identity card.

Each institution can use the new identities to develop new services and applications to better serve its students.

The Electronic Academic Identity Service is provided by the Ministry of Education, Religious Affairs and Sports with the technical support of the National Network of Infrastructures for Research and Technology.

#### ELECTRONIC SERVICE FOR OBTAINING AN ACADEMIC IDENTITY CARD

https://academicid.minedu.gov.gr/

#### 9.2.2 Meal Card

The campuses of UNIWA have student restaurants, which provide breakfast, lunch and dinner. The student restaurants are open daily and on weekends and holidays from September 1 to June 30 of each academic year, except for the Christmas and Easter holidays.

According to the current legislation, students of UNIWA have the opportunity to apply for free meals. Students who are not entitled to free meals have the possibility to be fed in the student restaurants, paying a low daily fee for a full menu (lunch and dinner).

More detailed information on free meals, the application procedure and the necessary documents are provided at the beginning of each academic year by the Student Services Department.

## 9.2.3 Electronic services

UNIWA offers to its academic community a variety of modern electronic services, the most important of which are the following:

- Institutional Electronic Services and Email User Account
  - Instructions: <u>https:</u>//wiki.noc.UNIWA .gr/doku.php?id=my\_UNIWA \_service
- Wireless Access Service (WI-FI)

#### Study Guide of the Department of Industrial Design & Engineering Production, UNIWA. Academic Year 2023-2024

0	Instructions:	https://wiki.noc.UNIWA
	.gr/doku.php?id=wireless_access_service	

- OPENVPN type VPN connection
  - Instructions: .gr/doku.php?id=vpn\_service\_openvpn
- File Sending Service (UNIWA FileSender Service)
  - Instructions:
     .gr/doku.php?id=filesender service

https://wiki.noc.UNIWA

https://wiki.noc.UNIWA

- Asynchronous eLearning Platform (eclass)
  - Instructions: <u>https:</u>//eclass.UNIWA .gr/info/manual.php

Electronic Student Register <u>https://www.UNIWA.gr/i-zoi-sto-UNIWA/ilektronikes-ypiresies/</u>

Online Platforms (e.g. Moodle, MsTeams) and Software Packages (e.g. Office365, SPPS, Matlab) <u>https://www.UNIWA .gr/i-zoi-sto-UNIWA/ilektronikes-ypiresies/</u>

More information about the electronic services of UNIWA is available on the website of UNIWA and in particular at the following link:

https://www.UNIWA .gr/foitites/

### 9.2.4 Academic Advisor

The Academic Advisor of the Department is a member of the Department's Teaching and Research Staff, who through his/her educational, research and work experience provides support and guidance on educational and career issues.

The members of the Board of Directors, the Board of Governors, the Board of Governors, the Board of Directors, the Board of Governors, the Board of Directors, the Board of Governors, the Board of Governors, the Board of Governors, E.T.E.P. and other teaching staff, the administrative staff, the Directors of the Laboratories, the Directors of the Departments, the Chairmen of the Departments, as well as the competent services of the Institution cooperate and support the Academic Advisors in their work, while taking into account their information, observations, suggestions and requests, for any deficiencies and malfunctions that create problems for students and any proposals for dealing with them.

The term of office of the Academic Advisors is annual and is renewed for the next Academic Year by decision of the Department Assembly every May.

In particular, the Academic Advisor of the Department:

- advises and supports first-year students in order to facilitate their transition from secondary to higher education,
- provides support and guidance to students on issues related to the progress and successful completion of their studies (at undergraduate and postgraduate level) as well as on career issues.

Meetings of interested students/graduates with the Academic Advisor of the Department can be held after contacting them to set a specific appointment.

ACADEMIC ADVISOR OF THE DEPARTMENT OF INDUSTRIAL DESIGN & PRODUCTION ENGINEERING

#### Paraskevi Zacharia Grade: Assistant Professor

e-mail: p.zacharia@UNIWA .gr | Tel: 210 538 1055 | ZA002, Ground Floor, Building Z

#### 9.2.5 Student Advocate

The institution of the Student Advocate was established by Article 55 of Law No. 4009/2011 in order to mediate between students and professors or administrative services of the Institution, in order to address cases of maladministration, and to ensure the observance of legality and the proper functioning of the Institution. The Student Advocate has no competence in matters of examinations and student grades.

Within the framework of its competences, the Student Advocate investigates cases ex officio or following a student's report and mediates in the competent bodies for their resolution. It may request from the services of the institution any information, document or other evidence relating to the case, examine persons, conduct an autopsy and order an expert opinion. If it finds that in a particular case there is a lack of legality, maladministration or a disturbance in the proper functioning of the institution, it shall draw up a report, which it shall communicate to the professor concerned or the competent administrative department and the student who submitted the report, and shall mediate in every appropriate way to resolve the problem. The Student Advocate may, by an act of the Student Advocate, place on file a report that is deemed manifestly vague, unfounded or unsubstantiated and, if he/she finds that there are indications that disciplinary misconduct has been committed, forward the case to the appropriate disciplinary body.

#### STUDENT ADVOCATE OF UNIWA

https://advedu.UNIWA .gr/

#### 9.2.6 Distribution of Academic Textbooks

Undergraduate students are entitled to free textbooks and other aids in accordance with the provisions of the applicable legislation.



Textbook selection declarations for all courses of the Programme of Studies are made within a certain deadline at the beginning of each Academic Semester through the Electronic Service for Integrated Textbook Management "Eudoxos" of the Ministry of Education and Religious Affairs.

The Assembly of the Department, after a relevant recommendation of the Departments, approves the relevant list of textbooks per course, which is registered in the Electronic Service of Integrated Textbook Management "Eudoxos" by the Department's Secretariat and is communicated to the students.

Please note that students must exercise particular care when selecting texts in the "Eudoxos" Integrated Textbook Management Service and that they are entitled to select one textbook per course and only for the courses they have selected in the course attendance declaration. Textbooks selected in courses not included in the student's course declaration must be returned in accordance with the prescribed procedure.

## 9.2.7 Libraries

The central libraries of both the Egaleo Campus and the Ancient Olive Grove Campus and the Athens Campus are available to students.

The libraries have the necessary qualified staff as well as the appropriate infrastructure to serve students. The libraries' web hub lists in detail all the services offered and provides access to computerised catalogues, electronic resources, e-journals, etc.

#### ANCIENT OLIVE CAMPUS LIBRARY

https://library2.UNIWA .gr/iguana/www.main.cls?surl=library

#### 9.2.8 Institutional Repository "Polynoi"

The Institutional Repository (I.A.) "Polynoe" ("Polynoe") of UNIWA is an infrastructure of organized digital content which was created with the aim of collecting, documenting and promoting the scientific production of the University. In a systematic way, following international practice and standards, documents from the entire educational research and administrative activity of the Institution, as well as special collections when deemed appropriate, are registered in this system.

This material is classified in collections by subject or thematic category and for each case of material a digital entry is created with appropriate descriptive metadata, which is linked to the corresponding digital file that has been deposited. In the first phase of operation of the I.A. "Polynoi", the bachelor, diploma and master theses and doctoral dissertations prepared by the students of UNIWA must be deposited. All registered material is made available to the Academic Community and the general public via the Internet, in accordance with the rules governing Open Access, the relevant licenses and Open Data.

The Library of the University and the staff members assigned with this role are responsible for the management of the digital collection of the I.A., i.e., the control, the acceptance of deposits and ensuring the integrity of the collection and equal access to it.

#### INSTITUTIONAL REPOSITORY "POLYNOI"

https://www.UNIWA .gr/idrymatiko-apothetirio-polynoi/

#### 9.2.9 Student Services

The Student Services Depertment takes care of the quality of students' living conditions during their studies.

Its purpose is to provide quality services and proper information on student life issues, related to food, housing, health care (European Health Insurance Card), housing allowance and generally anything that facilitates students in their daily life, taking into account the current legislation of the state and the decisions of the administration of our University.

The Division of Student Affairs consists of the following Departments:

- Health Department
- Department of Psychological and Counselling Support
- Department of Financial Support for Food Student Housing

- Liaison, Mediation & Liaison Department Innovation
- Department of Sport
- Equal Access Unit for People with Disabilities and People with Special Educational Needs Needs
- Early Childhood Care and Education Unit

#### **STUDENT CARE OF UNIWA**

https://merimna.UNIWA .gr/foititiki-merimna/

#### 9.2.10 Student Mobility

The mobility of students and staff abroad is considered particularly important because the benefits for those who go abroad are many. Through mobility, students have the opportunity to develop new skills and qualifications which contribute to their personal development. In particular, students are given the opportunity to improve their language skills, develop intercultural skills, become European citizens, and students who move for work placements can gain valuable work experience in a company/organisation abroad.

DEPARTMENT OF INTERNATIONAL ACADEMIC AFFAIRS AND STUDENT EXCHANGE OF UNIWA

https://erasmus.UNIWA .gr/

# MOBILITY OF STUDENTS OF THE DEPARTMENT OF INDUSTRIAL DESIGN & PRODUCTION ENGINEERING

**RESPONSIBLE (for Classical Mobility)** 

Philip Azariadis-Topaloglou Grade: Professor, first grade

e-mail: <u>fazariadis@UNIWA .gr</u> | Tel: 210 538 1057 | ZA104, 2°<sup>c</sup> floor, Building Z

**RESPONSIBLE (for International Mobility)** 

#### Theodoros Ganetsos

Grade: Professor, first grade

e-mail: ganetsos@UNIWA .gr | Tel: 210 538 1443 | ZA114, 1°<sup>c</sup> floor, Building Z

#### 9.2.11 Student Internship

UNIWA, in the context of linking education with the labour market, has developed and operates the Internship Office. The Internship Office of UNIWA is responsible for the planning, coordination, organization and implementation of internships of the University's departments.

The programme "Internship for Students of UNIWA" is implemented through the Operational Programme "Human Resources Development, Education and Lifelong Learning" and the Operational Programme "Human Resources and Social Cohesion 2021 - 2027" and is co-funded by the European Union (European Social Fund - EKT) and national resources.

#### INTERNSHIP AT UNIWA

https://praktiki.UNIWA .gr/

# PRACTICAL EXERCISE OF THE DEPARTMENT OF INDUSTRIAL DESIGN & PRODUCTION ENGINEERING

#### RESPONSIBLE

#### SoultanaVasileiadou Grade: Assistant Professor

e-mail: svasil@UNIWA .gr | Tel: 210 538 1178 | ZA201, 2°<sup>c</sup> floor, Building Z

#### 9.2.12 Department of Career Liaison and Innovation

The Career Liaison and Innovation Department is addressed to:

- to all students and graduates of Higher Education, with priority to those of the University
- all private and public sector enterprises, organisations, local government services, as well as collective bodies such as chambers of commerce, cooperatives, etc.

With a modern communication network at its core, the Liaison, Mediation & Innovation is active in achieving the following objectives:

- contributing to the training, specialization and professional rehabilitation of the University's graduates and graduates, providing timely and accurate information on educational, professional orientation and counselling issues
- meeting the needs of businesses with qualified staff, acting as a link between UNIWA and the labour market
- informing the University about the needs and requirements of production and participating in curriculum adaptation activities
- cooperation with the respective offices of universities in Greece and abroad

In particular, the Department supports the integration of students and graduates of the University into the labour market (including entrepreneurship), the monitoring of the progress of graduates through systematic recording of labour market data, which are taken into account by the administration for the formulation of its development planning, as well as the promotion of young innovative entrepreneurship.

#### CAREER LIAISON AND INNOVATION DEPARTMENT

https://career.UNIWA .gr/

## 9.2.13 Technology Transfer Office (PlaTTO)

The Technology Transfer Office (PlaTTO) of UNIWA was established in 2022. PlaTTO provides targeted services in terms of linking the research developed at UNIWA with production and the market in the context of the exploitation of research results. PlaTTO seeks cooperation with institutions and companies from the public and private sectors and is responsible for:

 The exploitation of the results of the research carried out at the UNIWA through support in the filing of applications for the registration of intellectual property rights, in particular patent applications and the monitoring of applications

- The exploitation of the results of the research carried out in the UNIWA through the interface with the market
- The establishment of procedures for the management of intellectual property rights
- To support the University's researchers in finding funding for the exploitation of their research.
- Advice on commercial exploitation of research results and marketing.
- The negotiation and conclusion of agreements between the UNIWA and third parties (organisations and companies) concerning the licensing of rights
- The negotiation and conclusion of agreements on the creation of spin-off companies
- The organisation of actions to promote the research results

### TECHNOLOGY AND TECHNOLOGY TRANSFER OFFICE PlaTTO

https://tto.UNIWA .gr/

### 9.2.14 Awards and Scholarships

UNIWA supports both undergraduate and postgraduate students through scholarships and awards. In the context of transparency and meritocracy, the University, throughout the academic year, announces various scholarship announcements from the Ministry of Education and Religious Affairs, the State Scholarship University, endowments and other public and private sector institutions.

The main purpose of UNIWA's scholarships and awards is both to attract and reward excellent students.

The scholarships and awards granted by the University are distinguished as follows:

- Scholarships and prizes given to first cycle students.
- Scholarships and awards given to second cycle students.
- Scholarships and awards given to third cycle students.

The procedure and criteria for awarding scholarships are determined by the conditions set by the donors or the University Senate (e.g. grades, financial status, social criteria, origin).

## 9.2.15 Educational Tours

The Department of Industrial Design and Production Engineering organizes educational excursions throughout the academic year as part of the courses so that students have the opportunity to come into direct contact with private and public institutions.

Educational excursions are organized to private institutions such as factories and industries within the framework of the courses "Design of Electromechanical Installations" and "Industrial Automation - P.L.C." and public institutions such as museums and archaeological sites in the context of the course 'Art, Technology and Culture'.

## 9.2.16 Restaurants

The campuses of UNIWA have student restaurants, which provide breakfast, lunch and dinner. The student restaurants are open daily and on weekends and holidays from September 1 to June 30 of each academic year, except for the Christmas and Easter holidays.

According to the current legislation, students of UNIWA have the opportunity to apply for free meals. Students who are not entitled to free meals have the possibility to be fed in the student restaurants, paying a low daily fee for a full menu (lunch and dinner).

More detailed information on the application for free meals, the application procedure and the necessary documents are provided at the beginning of each academic year by the Directorate of Student Affairs.

#### **ELECTRONIC RATIONS SERVICE**

http://sitisi.UNIWA .gr/

### 9.2.17 Department of Sports

UNIWA has two gyms, at the Egaleo Grove Campus and at the Ancient Olive Grove Campus, where students and staff of the University can exercise every day except Saturdays and Sundays. The gyms are fully equipped with fitness equipment, while the staff of the gyms guides and supervises every interested visitor.

The purpose of the gyms is to offer a wide range of sports programmes and activities, which will ensure quality of life, as well as mental and physical health for the participants.

Apart from the gym facilities, UNIWA offers its students a wide range of sports activities, tailored to their different needs and interests.

For the coordination of all the sports activities implemented in our University, the Department of Sports was established, which organizes a variety of group sports programmes, as well as interdepartmental internal championships (basketball, volleyball, football, chess, table tennis, etc.).

More detailed information on the operation of the gyms and the organisation of sports activities is provided at the beginning of each academic year by the Department of Sports.

#### SPORTS DEPARTMENT

https://sports.UNIWA .gr/

#### 9.2.18 Theatre Group - Choirs - Dances

UNIWA supports the operation of Cultural Departments, the creation of Musical Ensembles, the creation of Dance Groups, such as Classical and Contemporary Dance, Traditional and Folk Dances.

The Music Group of UNIWA was founded in 2009 by the former TEI of Piraeus and belongs to the Department of Sports. It has already accompanied numerous events such as national holidays, concerts, presentations and various other events.

Every semester students of our University join the Music Group and Music Ensembles of various genres of music are created, such as Classical Music, Classic and Modern Rock, Jazz, Traditional Music, Rebecca, Folk, Artistic and others.

All rehearsals, the repertoire, the stage presence, the organization, the filing and the continuous information of the students, as well as the participation in the events are supervised and supervised by the Diploma Musicians of UNIWA.

The Theatre Group of UNIWA, "The Third Bell", was founded in 2004.

Its aim is to contribute to the cultural activity and development of the members of the academic community and the region in which it is based, creating a cultural nucleus in the local community through theatrical art.

Among the performances he has staged are works of ancient Greek tragedy and comedy, as well as classical and contemporary plays, while he has participated in national and international theatre festivals.

The founder and head of the team is the director Panagiotis Spiliopoulos.

## 9.2.19 Student Groups

UNIWA supports the development and operation of student groups with the aim of participating in various projects and research programmes. The teams involve both faculty and members of the institution in supervisory and advisory roles.

The following groups operate at UNIWA:

 The TALOS team was founded in mid-2016 by students of the Department of Computer Systems Engineering, former TEI of Piraeus, with the aim of learning and research on unmanned aerial vehicles (UAVs). With the merger of TEI of Piraeus and TEI of Athens into UNIWA and the renaming of the department to Computer and Information Engineering, there was interest in non-airborne systems, and the team decided to broaden its horizons to deal with all kinds of unmanned systems (UVs). During these years several members of the student community of the department, and beyond, have been actively involved and engaged in order to gain new knowledge and experience in electronics and computing.

http://www.talosuvs.ice.UNIWA .gr/

• **Poseidon team** is a research student team of UNIWA that designs and manufactures single-seater vehicles. The team started as a simple idea in 2012 by two students of the Department of Mechanical Engineering with the initial name Trireme, participating in competitions such as SHELL ECO - MARATHON, and is now preparing for its entry into the world of Formula Student competition.

https://poseidonteam.gr/

• The "Kostas Antonopoulos" **static modeling group** that operates within the Laboratory of *Electronic Automation, Telematics and Cyberphysical Systems* (EITCS) at the Department of Industrial Design and Production Engineering of UNIWA.

Static modeling is a contemporary visual art that combines construction technology, craftsmanship, painting and history. The object of this activity is the construction of scale models/simulations on a variety of subjects such as vehicles of all kinds ("models"), landscapes, human constructions ("dioramas", models) and living beings (real or imaginary), which are usually but not necessarily static (i.e. without the possibility of movement). The group's name thus pays homage to Kostas Antonopoulos (1930-2022), a pioneer in the art of static modelling.

http://eatcps.UNIWA .gr/

# **# END OF STUDY GUIDE #**