Studies Guide 2019-2020

DEPARTMENT OF BIOMEDICAL SCIENCES

Division of
Dental Technology

Egaleo, 2019

1. Introduction

The newly-formed Department of Biomedical Sciences, of the School of Health and Care Sciences, of the University of West Attica, was created by the collaboration-merge of the former Department of 1) Aesthetics & Cosmetology, 2) Radiation and Radiology Therapy, 3) Medical Laboratory Sciences, 4) Dental Technology and 5) Optics and Optometry of the School of Health and Caring Professions of the Technological Educational Institute of Athens.

The aim of the Department of Biomedical Sciences is to provide high quality education to the trainee scientists in order to develop a high-level of proficiency, skills and abilities within the broader field of Biomedical Sciences.

The Department's Undergraduate Curriculum has been developed according to the international curricula standards and approaches, following a recent search in every cognitive subject of the new divisions and taking into account the guidelines of the Hellenic Quality Assurance & Accreditation Agency.

The Department covers subject areas of the broader and ever-evolving scientific field of Biomedical Sciences and their Applications and is comprised of:

- Five (5) divisions of advanced semesters (Aesthetics & Cosmetology, Radiation and Radiology Therapy, Medical Laboratory Sciences, Dental Technology, Optics and Optometry)
- A declarative element of the provided degree is the Division's title

Students entering the Department attend three (3) semesters with common core courses in Biomedical Sciences.

Subsequently students choose one of the following divisions:

- Division - Sector **"Aesthetics & Cosmetology"** after successful attending, students graduate with the degree of "Biomedical Sciences, Division: Aesthetics & Cosmetology" with duration of studies (8) semesters.
- Division - Sector **"Radiation and Radiology Therapy"** after successful attending, students graduate with the degree of "Biomedical Sciences, Division: Radiation and Radiology Therapy" with duration of studies (8) semesters.
- Division - Sector **"Medical Laboratory Sciences"** after successful attending, students graduate with the degree of "Biomedical Sciences, Division: Medical Laboratory Sciences" with duration of studies (8) semesters.
- Division - Sector **"Dental Technology"** after successful attending, students graduate with the degree of "Biomedical Sciences, Division: Dental Technology" with duration of studies (8) semesters.
- Division - Sector **"Optics and Optometry"** after successful attending, students graduate with the degree of "Biomedical Sciences, Division: Optics and Optometry" with duration of studies (8) semesters.

By the end of Undergraduate course curriculum, the graduate has:

- ✓ a high level of basic proficiency and skills on which Biomedical Sciences are based, which are useful in the diagnosis and treatment of human pathophysiological conditions.
- ✓ Special background knowledge and specialization in the subject area of the aforementioned divisions.

2. Structure of Undergraduate course curriculum

2.1 Course curriculum duration

The study duration in the Department of Biomedical Sciences is 8 (eight) semesters. The initial (3) three semesters offer general and specialized background knowledge and are common in the "Aesthetics & Cosmetology", "Radiation and Radiology Therapy", "Medical Laboratory Sciences", "Dental Technology" and "Optics and Optometry" Divisions.

The following five (5) semesters offer specialization and special background knowledge for each Division respectively.

According to the guidelines of the Administration Committee, the Program Study Committee proposes the following nineteen (19) common courses of the three semesters.

A. The Course Curriculum of the three (3) common semesters is comprised of General and Special Background courses from which the student can acquire general and specialized knowledge on the subject area of Biomedical Sciences worth of ninety (90) credit units.

- **Seventeen (17) Compulsory General Foundation Courses,** which cover fundamental concepts and skills based on Biomedical Sciences. Students receive training in the subject areas of Human Anatomy I and II, Physiology, Cell Biology, Biophysics, General and Inorganic Chemistry, Organic Chemistry, Biochemistry, General Microbiology, Pharmacology, First Aid Training, Biomedical English Terminology, Biostatistics, Bioinformatics, Research Methodology, Introduction to Biomedical Sciences. During the 2nd semester, students are advised to choose «Mathematics in Biomedical Sciences». The aim of this subject is to introduce the Department students to the general cognitive area of Biomedical Sciences as well as the specialized subject area of each division which constitutes the Biomedical Sciences Department.
- **Three (3) Elective/Compulsory Specific Foundation Courses:** Each Division has chosen and defined their subject so as students get an impression and prepare for the subject area of the division which they will have to select in the 4th semester.

B. The Course Curriculum of the remaining five (5) semesters is comprised of Specialization as well as Specific Foundation Courses (Compulsory and/or Elective) for each division, with total worth of 150 credit units.

C. Undergraduate internship takes place in the private or public sector according to the Departments curriculum for undergraduate studies. In order to be optimally linked with the labor market as well as the graduates' employability growth, its duration is set to four (4) months

3. Course Curriculum of The Three First Semesters

3.1 1st Semester

The first (1st) Semester of Studies (

) is comprised of six (6) General Foundation Courses offering students thirty (30) credit units. Students must attend seventeen (17) theory course hours per semester and six (6) laboratory course hours per semester, in small teams (Human Anatomy I, General & Inorganic Chemistry, Cell Biology, Biophysics, Bioinformatics, Biomedical English Terminology).

3.2 2nd Semester

The second (2nd) Semester of Studies (**Σφάλμα! Το αρχείο προέλευσης της αναφοράς δεν βρέθηκε.**) is comprised of six (6) General Foundation Courses offering students thirty (30) credit units. Students must attend twenty (20) theory course hours per semester and four (4) laboratory course hours per semester, in small teams (Human Anatomy II, Biochemistry, Organic Chemistry, Introduction to Biomedical Sciences, Human Physiology and Biostatistics).

3.3 3rd Semester

The second (3rd) Semester of Studies (**Σφάλμα! Το αρχείο προέλευσης της αναφοράς δεν βρέθηκε.**) is comprised of four (4) General Foundation Courses and three (3) Specific Foundation Courses, compulsory /elective for each of the five (5) divisions offering students thirty (30) credit units.

In that way, the students are introduced to the courses of the division they have to choose.

Students must attend twenty-four (24) theory course hours and four (4) laboratory course hours per semester in small teams.

Department of Biomedical Sciences common semesters (1st, 2nd and 3rd) course curriculum

Table 3.1 – 1st Semester study guide

Course code	Order No	1st Semester	Theoretical courses (hours/week)	Laboratory courses (hours/week)	Total hours per week	Course working load	ECTS credits	Course type
1011-1012	**1**	HUMAN ANATOMY I	3	2	5	180	7	GFC /C
1021-1022	**2**	GENERAL & INORGANIC CHEMISTRY	3	2	5	180	7	GFC /C
1031	**3**	CELL BIOLOGY	3	0	3	110	4	GFC /C
1041-1042	**4**	BIOPHYSICS	3	2	5	180	7	GFC /C
1051	**5**	BIOINFORMATICS	3	0	3	90	3	GFC /C
1061	**6**	MATHEMATICS IN BIOMEDICAL SCIENCES [1]	2	0	2	60	2	GFC /C
		TOTAL	**17**	**6**	**23**	**800**	**30**	

Table 3.2 – 2nd Semester study guide

Course code	Order No	2nd Semester	Theoretical courses (hours/week)	Laboratory courses (hours/week)	Total hours per week	Course working load	ECTS credits	Course type
2011	**1**	HUMAN ANATOMY II	4	0	4	160	6	GFC /C
2021	**2**	BIOCHEMISTRY	3	0	3	90	3	GFC /C
2031	**3**	ORGANIC CHEMISTRY	3	0	3	90	3	GFC /C
2041	**4**	INTRODUCTION TO BIOMEDICAL SCIENCES	2	0	2	60	2	GFC /C
2051-2052	**5**	HUMAN PHYSIOLOGY	4	2	6	210	8	GFC /C
2061-2062	**6**	MEDICAL STATISTICS	2	2	4	160	6	GFC /C
2071	**7**	BIOMEDICAL ENGLISH TERMINOLOGY[2]	2	0	2	60	2	GFC /C
		TOTAL	**20**	**4**	**24**	**830**	**30**	

Chart 3.3 – 3rd Semester study guide

Course code	Order No	3rd Semester	Theoretical courses (hours/week)	Laboratory courses (hours/week)	Total hours per week	Course working load	ECTS credits	Course type
3011	**1**	PHARMACOLOGY	3	0	3	90	3	GFC /C
3021	**2**	RESEARCH METHODOLOGY	4	0	4	120	4	GFC /C
3031-3032	**3**	FIRST AID TRAINING COURSE	2	2	4	120	4	GFC /C
3041	**4**	GENERAL MICROBIOLOGY	4	0	4	120	4	GFC /C
3051	**5a**	PHYSIOLOGY OF THE STOMATOGNATHIC SYSTEM	3	0	3	**90**	**3**	SFC/EC
3052	**5b**	EYE AND OCULAR ADNEXA ANATOMY						
3053	**5c**	NOSOLOGY*						
3061	**6a**	HISTOLOGY OF ORAL CAVITY AND DENTAL TISSUES	4	0	4	**140**	5	SFC/EC
3062	**6b**	EYEGLASSES LENS MATERIAL AND GLASS HISTORY						
3063	**6c**	BASIC PRISNCIPLES OF SKIN COSMETOLOGY						
3064	**6d**	PATHOPHYSIOLOGY						
3065	**6e**	RADIATION INTRODUCTION						
3071-3072	**7a**	INTRODUCTION TO BIOMATERIALS OF DENTAL TECHNOLOGY	4	2	6	180	7	SFC/EC
3073-3074	**7b**	GEOMETRICAL AND PHYSICAL OPTICS						
3075-3076	**7c**	BASIC PRINCIPLES OF DERMATOLOGY						
3077-3078	**7d**	PRINCIPLES OF INSTRUMENTAL ANALYSIS						
3079-3080	**7e**	INTRODUCTION TO MEDICAL IMAGING AND THERAPEUTICS						
		TOTAL	**24**	**4**	**28**	**860**	**30**	

* Shared elective course for the Divisions of: Aesthetics & Cosmetology, Radiology & Radiation Therapy, Medical Laboratory

ABBREVIATIONS

General Foundation Course: GFC
Specific Foundation Course: SFC
Specialization Course: SC
Elective Compulsory: EC
Compulsory (C)

4 Study Program of the Division of Dental Technology

4.1 Program of Studies general characteristics and descriptive elements

Academic character of the Program – Division of Dental Technology

The studies content of the Dental Technology science Division covers the cognitive subject of design, manufacture and repair of the various types of dental prosthetic appliances such as inlays, crowns, bridges, full and partial dentures, implant restorations, metal-ceramic and all-ceramic restorations, orthodontic appliances and maxillofacial prostheses.

A Dental Technician does not resell, does not modify, does not trade and is not just a mere operator. He manufactures from scratch and forms various materials into dental prostheses by combining knowledge from various Sciences such as the science of Biomaterials, Engineering, Physics, Biostatistics and also Health Sciences such as Physiology, Biology, Microbiology and others. He's also involved with facial aesthetics as a primary characteristic.

For the fabrication of these prostheses, biomaterials are used which are formed into shape via the use of contemporary scientific methods such as the science and technology of induction electronic devices, lasers and CAD/CAM, following the principles of biomechanics, so that they can be placed into the mouth in contact with the tissues and body-fluids (bone, mucosa, saliva) and function with the maximum efficiency in harmony and in combination with the existing natural teeth. It becomes obvious that any Dental prosthetic device is a Biomedical device.

A Biomedical product is by definition every instrument, appliance, apparatus, equipment, material or any other kind of product, inclusive of the software that is necessary for its correct function, that is being used alone or in combination with other products, which the manufacturer intends to use on humans for medical purposes, and the main action of which inside or onto the human body cannot be achieved with pharmacological or immunological means, nor through metabolism.

In order to be introduced to the Cognitive Subject of Dental Technology, General knowledge of Inorganic Chemistry, Organic Chemistry, Microbiology, Biology, Biochemistry, Biophysics, Anatomy and Physiology is required. In order to advance the academic character of the Division of Dental Technology and so that a Dental Technician can follow the evolution in the respective Science field, but also so as to successfully attend Research courses, there are also General Background Subjects (GBS) such as Research Methodology, Biostatistics, Informatics of Biomedical Sciences, Mathematics in Biomedical Sciences and Biomedical English Terminology. In order for the Dental Technician to qualify in designing and manufacturing dental prostheses, the New Program of Studies also includes Specialization (Division) Subjects (SPS). These have been designed with an appropriate proportion of theoretical and laboratory workload so that both theoretical knowledge and the appropriate necessary skills are optimally acquired.

To serve this purpose, there are SPS for all kinds of Dental prostheses (Fixed Prosthodontics I&II, Removable Prosthodontics I,II&III, Dental Ceramics I&II, Implant Prosthodontics, Combined Prosthodontics, Orthodontics I&II, Maxillofacial Prosthetics), while newer, contemporary subjects such as Informatics of Dental Technology (the study of CAD/CAM technology), Biomechanics of Dental Technology, Research coordination, Fixed Prosthodontics III, Polymer and Ceramic aesthetic veneering materials) etc. have been included. All these subjects help the student achieve a scientific background so as to keep up with the most contemporary and high-end technologies off the relevant Science field.

In order to prepare this New Program of Studies, the Programs of Studies of Autonomous Dental Technology departments from European Universities have been taken into consideration.

4.1.1 Purpose of the Program of Studies

The program of studies is aimed both at delivering theoretical teaching as well as laboratory training of specialized scientific knowledge, so that the graduates of the Dental Technology Division are competent to work:

In the Private Sector:

- To have the exclusive responsibility to establish and operate Dental Technology laboratories. Moreover, the program is aimed at providing the capability of designing, organizing and managing these laboratories as well as implementing the knowledge and methodologies obtained after the acquisition of 240 credits.
- As employees in Dental Technology laboratories
- As trade partners in domestic Dental Technology companies but also large International companies
- As trainers in domestic Dental Technology companies but also large International companies
- As collaborators in Research programs for companies or private Universities

In the Public Sector:

- In public Dental Prosthetic Care organizations

In Education:

- Based on the level of the Degree acquired (6,7 or 8), in all educational levels
- As academic teachers in domestic or overseas Universities

4.1.2 Studies structure – Dental Technology Division

The **first three (3) semesters** offer both General and Specialized Background knowledge and they are in common with the Divisions of "Medical Laboratories", "Radiology and Radiotherapy", "Aesthetics and Cosmetology", "Dental Technology" and "Optics and Optometry".

The **next five (5) semesters** offer Specialization knowledge and Special Background knowledge for every Division respectively.

In the **last two (2) semesters**, the Dental Technology Division student, performs Practical Training of four months duration in total while, in the last semester, the student writes up a Dissertation. These two possibilities (Practical Training and Dissertation) can be combined with **Selective/Compulsory Subjects (SCS)**. This combination is offered as four different choices.

4.1.3 Dissertation

Writing up a Dissertation constitutes a hugely important intellectual task for the student of the Dental Technology Division. The student acquires experience in collecting and managing data from various print and electronic sources of information, in writing scientific projects and, finally, the student becomes more informed and up-to-date on the specific topic of the study.

The Dissertation topic is given to the student in the last semester of studies, 8th semester, and it is a **SCS** for all the five divisions of the Department of Biomedical Sciences:

1. Aesthetics and Cosmetology
2. Radiology and Radiotherapy
3. Medical Laboratories

4. Dental Technology
5. Optics and Optometry

Aim of conducting a Dissertation

The aim of a student study is to look through deeply into the currently acquired knowledge, the meticulous study of a specific scientific problem, the interpretation of a specific phenomenon or situation, or any combination of the above depending on the subject, and the capability of the student in analyzing, composing, and logical processing of data. The most common ways to approach a Dissertation are: the Literature Review, the Experimental Research Study, the Case Study and the Clinical-Statistical Studies.

The procedure for conducting a Dissertation is analytically explained in the relevant Guide which is found in the Departmental website https://bisc.uniwa.gr/diplomatiki-ergasia/.

The assessment of the dissertation is completed after the student has presented the topic to the Dissertation Committee (three members of staff) as well as to an audience of other students.

Dissertation Assessment criteria

The Department of Biomedical Sciences introduces the following assessment criteria for Dissertations based on which the Dissertation Committee will assign marks to the Dissertation.

- Content correctness (60%)
- Referencing sufficiency (15%)
- Presentation (15%)
- Innovative elements and Research prospects (5%)
- Correct use of the Greek language (5%)

4.1.4 Practical Training

Dental Technology is a combination of Science and Technology. Following graduation, the student will have all the necessary theoretical knowledge and hand skills to meet any potential career choice. Practical Training for four consecutive months will help towards a speedier incorporation of the graduate in the job market.

During the Practical Training, the students gradually conceptualize the role which they are asked to fulfil as graduates in implementing the theoretical and practical knowledge acquired during their studies. They familiarise with decision-making, they autonomously fulfil specific duties, they face the ethical and legal restrictions relevant to collaborative work in certain professional spaces and also to the management and running of small or large businesses.

The experience that the students can acquire (in a certified lab) which is relevant to the function of the free market, as well as the professional relationships with their colleagues or the collaborating dentists, cannot be acquired during their studies. The Practical Training can be fulfilled in any Dental Technology lab of the private or the public sector that holds the relevant legal permit of operation.

The Practical Training is fulfilled under the Division's members of staff supervision and it is coordinated from the Practical Training Committee. The assessment of the Practical Training is done through participation of all the organizing parts involved. The Practical Training Committee sets the assessment criteria for this subject.

Scope of the Biomedical Sciences Department graduate, Division of Dental Technology

After the completion of their studies, the graduates of the Division will have acquired the necessary scientific and technological knowledge, skills and capabilities so that they can become active as the Dental Technicians in charge in sectors of their domain:

- They undertake the responsibility of organizing and operating a Dental Technology lab which is in the position to ensure the quality and certify the appropriateness of the Dental prostheses manufactured
- They choose the appropriate appliances and instruments to equip Dental Laboratories, they take care of their maintenance and implement the recommended hygiene and safety rules
- They are constantly updated on contemporary materials, choosing the appropriate ones based on the expected biological behaviour. They also choose the relevant laboratory method that they will use to form those materials based on the patient case they will work on.
- They man the Dental Laboratory with specialized personnel which they supervise and upon which they assign the relevant tasks according to their specialty.
- They design and manufacture all the types of Dental Prostheses, both fixed and removable, implant retained prostheses, as well as maxillofacial appliances, according to the written instructions of the dentist, always aiming at maintaining or restoring the balance of the stomatognathic system.
- They design and manufacture orthodontic appliances of various types, both intra and extraoral, always according to the instructions given by the dentist
- They participate in work groups with specialist dentists for the design and manufacture of the aforementioned prostheses.
- They conduct studies and participate in research groups
- They can be employed in various levels of Education always according to the legislation in force

4.1.5 Certification of the Dental Technician's profession

The Dental Technician's profession can be practiced after a special permit has been granted from the Minister of Health, Welfare and Social Insurance according to the procedures that are defined in Law No 1666/1986 (National Gazette No: 200 A'), as modified by article 24, Law No 3868/2010 (National Gazette No: 129 A') and completed by article 37, Law No 4058/2012 (National Gazette No: 63 A').

Whoever, according to the Law, acquires the professional work permit as Dental Technicians, may also acquire the permit for establishing and operating a Dental Laboratory, according to the operating specifications required by Law.

4.1.6 Professional rights

1. The graduates of the Dental Technology Division, Biomedical Sciences Department, School of Health and Care Sciences, University of West Attica, based on their specialized scientific & technical knowledge, can be employed in the private or the public sector covering all the spectrum of Dental Technology and Orthodontic appliances as well as any prosthetic appliance for the restoration of oral cavity anomalies.
2. In particular, the aforementioned graduates have the right to be employed either as executive members or become self-employed in the following areas and activities:

i) Manufacturing all kinds of Dental prostheses and Orthodontic devices such as full and partial dentures, inlays, crowns and bridges, precision attachments in removable prosthetic devices, orthodontic devices and prosthetic appliances for the restoration of oral cavity anomalies. All these appliances can be explicitly manufactured in a Dental laboratory based on the oral impressions and the instructions by the Dentist, who can oversee these processes in order to confirm abidance to the instructions given.
ii) Any other professional activity that may emerge with the evolution of Technology and is evidently covered by the cognitive subject of their specialty.

3. The graduates of the aforementioned Division can be employed in all levels of Education according to the current legislation. They can also be employed as members of research teams in topics of their specialty.
4. The graduates of the aforementioned Division can establish, organize and manage a Dental Laboratory in a responsible manner and always based on the current legislation.
5. The graduates of the aforementioned Division practice their profession within the limits of the above professional rights after the acquisition of a professional practicing permit, that can be granted from the relevant services of the Ministry of Health, Care and Social Insurance.

DIVISION OF DENTAL TECHNOLOGY

PROGRAM OF STUDIES – ACADEMIC YEAR 2019-2020

The fourth semester of studies of the Dental Technology Division consists of two Special Background Subjects (SBS) and three Specialization Subjects (SPS), where the student can acquire 30 credit units. The student attends thirteen (13) hours per semester of theoretical teaching as well as seventeen (17) hours per semester of laboratory teaching in small groups (Dental Morphology, Occlusion and Removable Prosthodontics I).

The fifth semester of studies of the Dental Technology Division consists of one SBS and three SPS with which the student acquires thirty (30) credit units. The student attends ten (10) hours per semester of theoretical teaching and twenty (20) hours per semester of laboratory teaching in small groups (Fixed Prosthodontics I, Orthodontics I and Removable Prosthodontics II).

The 6th semester of studies of the Dental Technology Division consists of four (4) SPS where the student can acquire thirty (30) credit units. The student attends nine (9) hours per semester of theoretical teaching and twenty-one (21) hours per semester of laboratory teaching in small groups (Fixed Prosthodontics II, Orthodontics II, Dental Ceramics I and Removable Prosthodontics III).

The 7th semester of studies of the Dental Technology Division consists of four (4) SPS where the student can acquire 30 credit units. The student attends eleven (11) hours per semester of theoretical teaching and nineteen (19) hours per semester of laboratory teaching in small groups (Fixed prosthodontics III, Dental Ceramics II and Combined Prosthodontics Precision attachments)

The last semester (8th) of studies of the Dental Technology Division consists of five (5) SPS and three (3) SBS.

4.2 Program of Studies Tables – Division of Dental Technology

See tables below

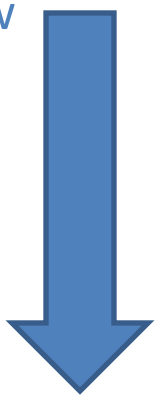

Table 4.1 – Weekly Timetable - 4th Semester

Subject Code	s/n	4th Semester	Theoretical	Lab	Total	Total Workload	ECTS	Subject Category
4011-4012	**1**	DENTAL MORPHOLOGY	3	6	9	270	9	SBS/C
4021	**2**	BIOMATERIALS of DENTAL TECHNOLOGY	2	0	2	90	3	SS/C
4031-4032	**3**	OCCLUSION	2	2	4	150	5	SS/C
4041-4042	**4**	REMOVABLE PROSTHODONTICS I	4	9	13	300	10	SS/C
4051	**5α**	PRINCIPLES of BUSINESS ADMINISTRATION and LABORATORY ORGANIZATION	2	0	2	90	3	SBS/SC
4052	**5β**	PRINCIPLES of MARKETING						
		TOTAL	**13**	**17**	**30**	**900**	**30**	

Table 4.2 – Weekly Timetable - 5th Semester

Subject Code	s/n	5th Semester	Theoretical	Lab	Total	Total Workload	ECTS	Subject Category
5011-5012	**1**	FIXED PROSTHODONTICS I	3	9	12	300	10	SS/C
5021-5022	**2**	ORTHODONTICS I	2	2	4	180	7	SS/C
5031-5032	**3**	REMOVABLE PROSTHODONTICS II	3	9	12	300	10	SS/C
5041	**4**	ORAL and LAB HYGIENE	2	0	2	90	3	SBS/SC
		TOTAL	**10**	**20**	**30**	**900**	**30**	

Table 4.3 – Weekly Timetable - 6th Semester

Subject Code	s/n	6th Semester	Theoretical	Lab	Total	Total Workload	ECTS	Subject Category
6011-6012	**1**	FIXED PROSTHODONTICS II	2	7	9	270	9	SS/C
6021-6022	**2**	ORTHODONTICS II	2	2	4	180	5	SS/C
6031-6032	**3**	DENTAL CERAMICS I	2	7	9	240	9	SS/C
6041-6042	**4**	REMOVABLE PROSTHODONTICS III	3	5	8	210	7	SS/C
		TOTAL	**9**	**21**	**30**	**900**	**30**	

Table 4.4 – Weekly Timetable - 7th Semester

Subject Code	s/n	7th Semester	Theoretical	Lab	Total	Total Workload	ECTS	Subject Category
7011-7012	**1**	DENTAL CERAMICS II	3	6	9	240	8	SS/C
7021-7022	**2**	COMBINED PROSTHODONTICS – PRECISION ATTACHMENTS	3	6	9	240	8	SS/C
7031	**3**	AESTHETICS of PROSTHETIC RESTORATION	2	0	2	90	4	SS/C
7041-7042	**4**	FIXED PROSTHODONTICS III	3	7	10	300	10	SS/C
		TOTAL	**11**	**19**	**30**	**870**	**30**	

Table 4.5 – Weekly Timetable - 8th Semester

Subject Code	s/n	8th Semester	Theoretical	Lab	Total	Total Workload	ECTS	Subject Category
8011	**1**	MANAGEMENT of OCCLUSAL DISORDERS	3	0	3	90	3	SS/C
8021-8022	**2**	IMPLANT PROSTHODONTICS	4	6	10	300	10	SBS/C
8031-8032	**3**	DIGITAL DENTAL TECHNOLOGY	3	4	7	180	6	SBS/C
8041	**4α**	POLYMER AESTHETIC VENEERING MATERIALS*	3	0	3	120	4	SS/SC
8042	**4β**	CERAMIC AESTHETIC VENEERING MATERIALS*						
8051-8052	**5α**	MAXILLOFACIAL PROSTHODONTICS*	3	2	5	150	5	SS/SC
8053-8054	**5β**	SPECIALIZED ORTHODONTICS*						
8061	**6α**	RESEARCH ORGANIZATION*	2	0	2	60	2	SBS/C
8062	**6β**	BIOMECHANICS OF DENTAL TECHNOLOGY*						
8071	**7**	DISSERTATION*				150	5	SS/SC
8082	**8**	PRACTICE TRAINING*				150	6	SS/SC
		TOTAL	**18**	**12**	**30**	**900**	**30**	

4.2 Subject Options 8th Semester

The final 8th Semester in the Curriculum of Dental Technology compromises five (5) Specialisation (division) Subject (SS) and three (3) Special Background Subjects (SBS).

Dissertation and practice training are Selective/Compulsory Subjects (SCS).

*FOR THE FULFILMENT OF THE 30 ECTS UNITS OF THIS SEMESTER THEY ARE OFFERED THE ABOVE OPTIONS:

1. THREE SELECTIVE SUBJECTS (4α or 4β, AND 5α or 5β, AND 6α or 6β)
2. DISSERTATION AND PRACTICE TRAINING
3. SELECTIVE SUBJECT 5α or 5β AND PRACTICE TRAINING
4. SELECTIVE SUBJECT 4α or 4β AND SELECTIVE SUBJECT 6α or 6β AND DISSERTATION

OPTION 1. Student selects three Selective Compulsory Subjects, two Specialization Subjects and 1 Special Background Subject leading to a total workload of 330 units and 11 ECTS, not included Dissertation or Practice Training.

OPTION 2. Student selects Dissertation and Practice Training. Dissertation and Practice Training correspond to a total workload of 300 units and 11 ECTS in total.

OPTION 3. Student selects Practice Training and one (1) Selective Compulsory Subject of a total workload of 300 units and 11 ECTS. Practice Training corresponds to a total workload of 150 units and 6 ECTS and the Selective Compulsory Subject to a total workload of 150 units and 5 ECTS.

OPTION 4. Student selects Dissertation and two Selective Compulsory Subjects of a total workload of 330 units and 11 ECTS. Dissertation corresponds to a total workload of 150 units and the two Selective Compulsory Subjects to a total workload of 180 units and 6 ECTS.

ABBREVIATIONS

Special Background Subjects (SBS)
Specialisation Subject (SS)
Selective Compulsory Subjects (SC)
Compulsory (C)

DIVISION OF DENTAL TECHNOLOGY

EQUIVALENTS (4th,5th, 6th,7th,8th SEMESTER) - ACADEMIC YEAR 2019-20*

PROGRAM STUDIES (PS) - DENTAL TECHNOLOGY				
Previous Subject		PS	Current Subject	
Code	Title		Code	Title
	1st Semester		NEW PS (WEBSITE NEW PS)	
N2-1010	PHYSICS		1040 (1041-1042)	BIOPHYSICS
			1041 (1041)	BIOPHYSICS-T
			1042 (1042)	BIOPHYSICS-L
			1061 (1061)	MATHEMATICS IN BIOMEDICAL
N2-1020	CHEMISTRY of DENTAL MATERIALS		1020 (1021-1022)	GENERAL & INORGANIC CHEMISTRY
			1021 (1021)	GENERAL & INORGANIC CHEMISTRY-
			1022 (1022)	GENERAL & INORGANIC CHEMISTRY-
N2-1030	PRINCIPLES of DENTAL TECHNOLOGY		2041 (2041)	INTRODUCTION to BIOMEDICAL
N2-1040	DENTAL MORPHOLOGY		4010OT (4011-4012)	DENTAL MORPHOLOGY
N2-1040-L	DENTAL MORPHOLOGY-L		4012OT (4012)	DENTAL MORPHOLOGY-L
N2-1040-T	DENTAL MORPHOLOGY-T		4011OT (4011)	DENTAL MORPHOLOGY-T
N2-1050	ANATOMY		1010 (1011-1012)	ANATOMY I
			1011 (1011)	ANATOMY I-T
			1012 (1012)	ANATOMY I-L
			2011 (2011)	ANATOMY II

	2nd Semester		EQUIVALENTS	
Previous Subject		PS	Current Subject	
Code	Title		Code	Title
N2-2010	REMOVABLE PROSTHODONTICS I		4040OT (4041-4042)	REMOVABLE PROSTHODONTICS I
N2-2010-E	REMOVABLE PROSTHODONTICS-L		4042OT (4042)	REMOVABLE PROSTHODONTICS I-L
N2-2010-Θ	REMOVABLE PROSTHODONTICS-T		4041OT (4041)	REMOVABLE PROSTHODONTICS I-T
N2-2020	DENTAL BIOMATERIALS I		3070 (3071-3072 7α)	INTRODUCTION to DENTAL TECHNOLOGY BIOMATERIALS
			3071 (3071)	INTRODUCTION to DENTAL TECHNOLOGY BIOMATERIALS-T
			3072 (3072)	INTRODUCTION to DENTAL TECHNOLOGY BIOMATERIALS-L
N2-2030	BIOLOGY		1031 (1031)	CELL BIOLOGY
N2-2040	PHYSIOLOGY		2050 (2051-2052)	PHYSIOLOGY
			2051 (2051)	PHYSIOLOGY-T
			2052 (2052)	PHYSIOLOGY-L
N2-2050	PHYSIOLOGY of STOMATOGNATHIC SYSTEM-OCCLUSION		3051 (3051-5α)	PHYSIOLOGY of STOMATOGNATHIC SYSTEM
			4030OT (4031-4032)	OCCLUSION
			4031OT (4031)	OCCLUSION-T
			4032OT (4032)	OCCLUSION-L

3rd Semester			EQUIVALENTS	
Previous Subject		PS	Current Subject	
Code	Title		Code	Title
N2-3010	REMOVABLE PROSTHODONTICS II		5030OT (5031-5032)	REMOVABLE PROSTHODONTICS II
N2-3010-L	REMOVABLE PROSTHODONTICS II-L		5032OT (5032)	REMOVABLE PROSTHODONTICS II-L
N2-3010-T	REMOVABLE PROSTHODONTICS II-Th		5031OT (5031)	REMOVABLE PROSTHODONTICS II-T
N2-3020	DENTAL BIOMATERIALS II		4021OT (4021)	BIOMATERIALS of DENTAL TECHNOLOGY
N2-3030	ORAL HISTOLOGY		3061 (3061-6α)	ORAL HISTOLOGY and HISTOLOGY OF DENTAL TISSUES
N2-3040	PROFESSIONAL ETHICS		2041 (2041)	INTRODUCTION to BIOMEDICAL SCIENCES
N2-3050	BIOMETRY-BIOSTATISTICS		2060 (2061-2062)	BIOSTATISTICS
			2061 (2061)	BIOSTATISTICS-T
			2062 (2062)	BIOSTATISTICS-L
			1061 (1061)	MATHEMATICS in BIOMEDICAL SCIENCES*
4th Semester			EQUIVALENTS	
N2-4010-Θ	FIXED PROSTHODONTICS I		5010OT (5011-5012)	FIXED PROSTHODONTICS I
N2-4010- E	FIXED PROSTHODONTICS I-L		5012OT (5012)	FIXED PROSTHODONTICS I-L
N2-4010-Θ	FIXED PROSTHODONTICS I-Th		5011OT (5011)	FIXED PROSTHODONTICS I-T
N2-4020	PROSTHODONTICS and AESTHETICS		7031OT (7031)	AESTHETICS of PROSTHETIC RESTORATIONS
N2-4030-Θ	ORTHODONTICS I		5020OT (5021-5022)	ORTHODONTICS I
N2-4030-E	ORTHODONTICS I-L		5022OT (5022)	ORTHODONTICS I-L
N2-4030-Θ	ORTHODONTICS I-Th		5021OT (5021)	ORTHODONTICS I-T
N2-4040	MICROBIOLOGY of ORAL CAVITY		3041 (3041)	GENERAL MICROBIOLOGY
N2-4050	METHODOLOGY - RESEARCH		3021 (3021)	RESEARCH METHODOLOGY
			8061OT (8061-6α)	RESEARCH ORGANIZATION

5th Semester			EQUIVALENTS	
Previous Subject		PS	Current Subject	
Code	Title		Code	Title
N2-5010	FIXED PROSTHODONTICS II		6010OT (6011-6012)	FIXED PROSTHODONTICS II
N2-5010-E	FIXED PROSTHODONTICS II-L		6012OT (6012)	FIXED PROSTHODONTICS II-L
N2-5010-Θ	FIXED PROSTHODONTICS II-Th		6011OT (6011)	FIXED PROSTHODONTICS II-T
N2-5020	MANAGEMENT of OCCLUSION and DYSFUNCTIONAL DISORDERS OF STOMATOGNATHIC SYSTEM		8011OT (8011)	MANAGEMENT of OCCLUSAL DISORDERS
N2-5030	ORTHODONTICS II		6020OT (6021-6022)	ORTHODONTICS II
N2-5030-E	ORTHODONTICS II-L		6022OT (6022)	ORTHODONTICS II-L
N2-5030-Θ	ORTHODONTICS II-Th		6021OT (6021)	ORTHODONTICS II-T
N2-5040	ORAL and LAB HYGIENE		5041OT (5041)	ORAL and LAB HYGIENE
N2-5050	FIRST AID		3030 (3031-3032)	FIRST AID
			3031 (3031)	FIRST AID-T
			3032 (3032)	FIRST AID-L
N2-5060	PRINCIPLES of BUSINESS ADMINISTRATION and LAB ORGANIZATION		4051OT (4051-5α)	PRINCIPLES of BUSINESS ADMINISTRATION and LABORATORY ORGANIZATION

6th Semester			EQUIVALENTS	
Previous Subject		PS	Current Subject	
Code	Title		Code	Title
N2-6010	DENTAL CERAMICS I		6030OT (6031-6032)	DENTAL CERAMICS I
N2-6010-E	DENTAL CERAMICS I-L		6032OT (6032)	DENTAL CERAMICS I-L
N2-6010-Θ	DENTAL CERAMICS I-Th		6031OT (6031)	DENTAL CERAMICS I-T
N2-6020	MAXILLOFACIAL PROSTHODONTICS		8050OT (8051-8052 5α)	MAXILLOFACIAL PROSTHODONTICS
			8051OT (8051)	MAXILLOFACIAL PROSTHODONTICS-T
			8052OT (8052)	MAXILLOFACIAL PROSTHODONTICS-L
			8062OT (8062 6β)	BIOMECHANICS of DENTAL TECHNOLOGY
N2-6030	IMPLANT PROSTHODONTICS		8020OT (8021-8022)	IMPLANT PROSTHODONTICS
			8021OT (8021)	IMPLANT PROSTHODONTICS-T
			8022OT (8022)	IMPLANT PROSTHODONTICS-L
N2-6040	INFORMATICS in DENTAL TECHNOLOGY		8030OT (8031-8032)	DIGITAL DENTAL TECHNOLOGY
			8031OT (8031)	DIGITAL DENTAL TECHNOLOGY-T
			8032OT (8032)	DIGITAL DENTAL TECHNOLOGY-L
			1061 (1061)	MATHEMATICS IN BIOMEDICAL SCIENCES*
N2-6A50	ENTREPRENEURSHIP		4052OT (4052-5β)	PRINCIPLES of MARKETING
N2-6B50	PRINCIPLES of HEALTH SERVICES ORGANIZATION and MANAGEMENT		4051OT (4051-5α)	PRINCIPLES of BUSINESS ADMINISTRATION and LABORATORY ORGANIZATION

7th Semester			EQUIVALENTS	
Code	**Title**		**Code**	**Title**
N2-7010	DENTAL CERAMICS II		7010OT (7011-7012)	DENTAL CERAMICS II
N2-7010-E	DENTAL CERAMICS II-L		7012OT (7012)	DENTAL CERAMICS II-L
N2-7010-Θ	DENTAL CERAMICS II-T		7011OT (7011)	DENTAL CERAMICS II-T
			8042OT (8042-4β)	CERAMIC AESTHETIC VENEERING MATERIALS
N2-7020	REMOVABLE PROSTHODONTICS III		6040OT (6041-6042)	REMOVABLE PROSTHODONTICS III
N2-7020 -E	REMOVABLE PROSTHODONTICS III-L		6042OT (6042)	REMOVABLE PROSTHODONTICS III-L
N2-7020 –Θ	REMOVABLE PROSTHODONTICS III-T		6041OT (6041)	REMOVABLE PROSTHODONTICS III-T
N2-7030	COMBINED PROSTHODONTICS – PRECISION ATTACHMENTS		7020OT (7021-7022)	COMBINED PROSTHODONTICS – PRECISION ATTACHMENTS
N2-7030-E	COMBINED PROSTHODONTICS – PRECISION ATTACHMENTS-L		7022OT (7022)	COMBINED PROSTHODONTICS – PRECISION ATTACHMENTS-L
N2-7030-Θ	COMBINED PROSTHODONTICS – PRECISION ATTACHMENTS-T		7021OT (7021)	COMBINED PROSTHODONTICS – PRECISION ATTACHMENTS-T
			7040OT (7041-7042)	FIXED PROSTHODONTICS III
			7041OT (7041)	FIXED PROSTHODONTICS III-T
			7042OT (7042)	FIXED PROSTHODONTICS III-L
N2-7040	ENGLISH for DENTAL TECHNOLOGY		2071 (2071)	BIOMEDICAL ENGLISH TERMINOLOGY
N2-7A50	SOCIOLOGY of HEALTH		1051 (1051)	INFORMATICS in BIOMEDICAL SCIENCES
			4052OT (4052-5β)	PRINCIPLES of MARKETING
N2-7B50	FUNDAMENTALS of MARKETING		1051 (1051)	INFORMATICS in BIOMEDICAL SCIENCES
			4052OT (4052-5β)	PRINCIPLES of MARKETING

8th Semester		PS	EQUIVALENTS	
Code	**Title**		**Code**	**Title**
DISSERTATION	**DISSERTATION**		**8071OT (8071)**	**DISSERTATION**
			8053OT (8053-8054 5β)	**SPECIALIZED ORTHODONTICS**
			8054OT (8053)	**SPECIALIZED ORTHODONTICS-T**
			8055OT (8054)	**SPECIALIZED ORTHODONTICS-L**
PRACTICE TRAINING	**PRACTICE TRAINING**		**8082OT (8082)**	**PRACTICE TRAINING**
			8041OT (8041-4α)	**POLYMER AESTHETIC VENEERING MATERIALS**
			NEW CURRENT SUBJECTS - NON MACHED	
			2021 (2021)	**BIOCHEMISTRY**
			2031 (2031)	**ORGANIC CHEMISTRY**
			3011 (3011)	**PHARMACOLOGY**

Subject options 8th Semester

The final 8th Semester in the Curriculum of Dental Technology consists of five (5) Specialisation (division) Subjects and three (3) General Background Subjects.

Dissertation and Practice Training are Selective/Compulsory Subjects

* FOR THE FULFILMENT OF THE 30 ECTS UNITS OF THIS SEMESTER THEY ARE OFFERED THE ABOVE OPTIONS:

OP 1.: THREE SELECTIVE/COMPULSORY SUBJECTS (8041OT or 8042OT, AND 8050OT (T+L) or 8052OT (T+L), AND 8061OT or 8062OT)

OP 2.: DISSERTATION (8071OT) AND PRACTICE TRAINING (8082OT)

OP 3.: ONE (1) SELECTIVE/COMPULSORY SUBJECT (8050OT (T+L) or (8053OT (T+L), AND PRACTICE TRAINING (8082OT)

OP 4.: TWO SELECTIVE/COMPULSORY SUBJECTS; SELECTIVE SUBJECT 1 (8041OT or 8042OT) AND SELECTIVE SUBJECT 2 (8061OT or 8062OT) AND DISSERTATION (8082OT)

DECLARATION: WITH RED INK THE CODES OF THE NEW PROGRAM STUDIES SUBJECTS AS THEY APPEAR AT THE DIGITAL DATA FORM (e-study)

WITH BLACK INK AND IN BRACKETS THE CODES OF NEW SUBJECTS AS THEY APPEAR AT THE DEPARTMENT'S WEBSITE (bisc@uniwa.gr) .

* CHANGES IN PROGRAM STUDIES OF ACADEMIC YEAR 2019-20 *(General Committee meeting No. 12/10.09.19)*: The COMMON semester A subject "Biomedical English Terminology – Code 1061" is being moved to semester B with code 2071, keeping the same teaching hours and ECTS credits while its place in semester A is taken by the **new subject "Mathematics in Biomedical Sciences"** with the same code 1061, the same teaching hours and the same ECTS credits.

2) For the semester B COMMON subject: «Introduction to Biomedical Sciences-code 2041» the teaching hours and the ECTS credits are reduced from 4 to 2