



# UNDERGRADUATE DEGREE PROGRAMME IN SOUND AND IMAGE ENGINEERING (CODE 59SO)

### **ACADEMIC YEAR 2013-2014**

### **FIRST YEAR**

CODE	COURSES	ECTS	TYPE	SEMESTER	DEPARTMENT CODE
595000101	LINEAR ALGEBRA	6	Elem	1 <sup>st</sup> and 2 <sup>nd</sup>	5904
595000103	CIRCUITS ANALYSIS I	6	Elem	1 <sup>st</sup> and 2 <sup>nd</sup>	5902
595000102	CALCULUS I	6	Elem	1 <sup>st</sup> and 2 <sup>nd</sup>	5904
595000105	INTRODUCTION TO TELECOMMUNICATIONS	3	Comp	1 <sup>st</sup>	5901
595000104	PROGRAMMING I	6	Elem	1 <sup>st</sup> and 2 <sup>nd</sup>	5903
595000100	INTRODUCTORY WORKSHOP ON ENGINEERING	3	Comp	1 <sup>st</sup>	5905
595000107	CIRCUITS ANALYSIS II	6	Elem	1 <sup>st</sup> and 2 <sup>nd</sup>	5902
595000109	CALCULUS II	6	Elem	1 <sup>st</sup> and 2 <sup>nd</sup>	5904
595000106	PROFESSIONAL COMMUNICATION SKILLS	3	Comp	2 <sup>nd</sup>	1004
595000108	ELECTRONICS I	6	Elem	1 <sup>st</sup> and 2 <sup>nd</sup>	5905
595000110	PROGRAMMING II	6	Elem	1 <sup>st</sup> and 2 <sup>nd</sup>	5903
595000111	SEARCH TECHNIQUES AND INFORMATION SYSTEMS 3 Comp 2 <sup>nd</sup>		2 <sup>nd</sup>	5903	

### **SECOND YEAR**

CODE	COURSES		TYPE	SEMESTER	DEPARTMENT CODE
595000112	ELECTROMAGNETISM AND WAVES	6	Elem	1 <sup>st</sup> and 2 <sup>nd</sup>	0915
595000114	ELECTRONICS II	6	Comp	1 <sup>st</sup> and 2 <sup>nd</sup>	5905
595000113	STATISTICS AND STOCHASTIC PROCESSES	6	Elem	1 <sup>st</sup> and 2 <sup>nd</sup>	5904
595000115	TELECOMMUNICATIONS NETWORKS AND SERVICES	6	Comp	1 <sup>st</sup> and 2 <sup>nd</sup>	5903
595000116	SIGNALS AND SYSTEMS	6	Comp	1 <sup>st</sup> and 2 <sup>nd</sup>	5902
595000117	SCIENCE. TECHNOLOGY AND SOCIETY	3	Comp	1 <sup>st</sup> and 2 <sup>nd</sup>	5903
595000122	SOUND AND IMAGES FUNDAMENTALS	6	Comp	2 <sup>nd</sup>	5901
595000120	MICROPROCESSORS	6	Comp	1 <sup>st</sup> and 2 <sup>nd</sup>	5905
595000124	DIGITAL SIGNAL PROCESSING	4.5	Comp	1 <sup>st</sup> and 2 <sup>nd</sup>	5902
595000118	WAVE TRANSMISSION AND PROPAGATION	4.5	Comp	1 <sup>st</sup> and 2 <sup>nd</sup>	0915
595000121	COMMUNICATION THEORY	6	Comp	1 <sup>st</sup> and 2 <sup>nd</sup>	5901

### THIRD YEAR

CODE	COURSES	ECTS	TYPE	SEMESTER	DEPARTMENT CODE
595000123	ECONOMICS AND BUSINESS MANAGEMENT	4.5	Comp	1 <sup>st</sup>	0515
595000127	ACOUSTIC ENGINEERING	6	Comp	1 <sup>st</sup>	5901
595000126	AUDIO ENGINEERING I	4.5	Comp	1 <sup>st</sup>	5901
595000119	AUDIOVISUAL SYSTEMS	4.5	Comp	1 <sup>st</sup>	5901
595000125	OPERATING SYSTEMS	4.5	Comp	1 <sup>st</sup>	5903
595000128	IMAGE AND VIDEO TECHNOLOGIES	6	Comp	1 <sup>st</sup>	5901
595000130	ROOM ACOUSTICS	6	Comp	2 <sup>nd</sup>	5901
595000131	AUDIO ENGINEERING II	6	Comp	2 <sup>nd</sup>	5901
595000132	VIDEO ENGINEERING	EO ENGINEERING 4.5 Comp		2 <sup>nd</sup>	5901
595000129	000129 COMPUTER NETWORKS		Comp	2 <sup>nd</sup>	5903
	ELECTIVE SUBJECTS/INTERNSHIP CREDITS	9	Elec		

# **FORTH YEAR**

CODE	COURSES		TYPE	SEMESTER	DEPARTMENT CODE
595000133	ENGLISH FOR PROFESSIONAL AND ACADEMIC COMMUNICATION (*)	6	Comp	1 <sup>st</sup> and 2 <sup>nd</sup>	1004
595000134	ELECTROACOUSTIC SYSTEMS	6	Comp	1 <sup>st</sup>	5901
595000135	AUDIOVISUAL CONTENT DISTRIBUTION	4.5	Comp	1 <sup>st</sup>	5901
	ELECTIVE SUBJECTS/INTERNSHIP CREDITS	13.5	Elec	1 <sup>st</sup>	
595000136	PROJECT MANAGEMENT	4.5	Comp	2 <sup>nd</sup>	0515
595000137	ENVIRONMENTAL ACOUSTIC	4.5	Comp	2 <sup>nd</sup>	5901
595000140	FINAL DEGREE PROJECT *	12	Comp	1 <sup>st</sup> and 2 <sup>nd</sup>	ALL
	ELECTIVE SUBJECTS/INTERNSHIP CREDITS	9	Elec	2 <sup>nd</sup>	

(\*) A B2 English certificate is required for the enrolment.

# **TYPE OF COURSES:**

- "Elem" Elementary.
- "Comp" Compulsory.
  "Elec" Elective.

# **ELECTIVE COURSES**

TYPE	SPEC	SEMESTER	YEAR	CODE	COURSES	ECTS	REQUIREMENTS	DEPT. CODE
Α	SO	SO 1 <sup>st</sup>		595010143	NOISE AND VIBRATION CONTROL	4.5	122/127/130	5901
			4 <sup>th</sup>	595010144	AUDIO ENGINEERING IV	4.5	122/126/131	5901
			4 <sup>th</sup>	595010145	IMAGE SYNTHESIS AND COMPUTER ANIMATION	4.5	122/128	5901
		2 <sup>nd</sup>	3 <sup>st</sup>	595010141	AUDIO ENGINEERING III	4.5	122/126 131	5901
			3 <sup>st</sup>	595010142	ADVANCED SIGNAL PROCESSING	4.5	116/124/126	5901
			4 <sup>th</sup>	595010146	SOUND REINFORCEMENT	4.5	122/127/130 /134	5901
			4 <sup>th</sup>	595010147	DIGITAL IMAGE PROCESSING	4.5	124/122/128	5901
В	EC	1 <sup>st</sup>		595021027	DIGITAL DESIGN I	4.5 114		5905
				595021028	MICROPROCESSOR-BASED SYSTEMS	6	120	5905
		2 <sup>nd</sup>		595021023	ANALOG ELECTRONICS I		108	5905
				595021033	PRODUCTION TECHNOLOGIES OF ELECTRONICS SYSTEMS			0910
	SC	1 <sup>st</sup>		595021327	WAVE TRANSMISSION AND PROPAGATION	6	118	5901
				595021328	COMMUNICATIONS ELECTRONICS I	6	21322	5901
		2 <sup>nd</sup> 5		595021322	ANALOG ELECTRONICS	6	108/114	5901
				595021331	COMMUNICATIONS ELECTRONICS II	6	21328	5901
	TL 1 <sup>st</sup>			595021228	TRANSMISSION SYSTEMS	6	121	5903
				595021234	MOBILE COMMUNICATIONS NETWORKS		115/129	5903
		2 <sup>nd</sup>		595021222	ADVANCED APPLICATION PROGRAMMING	6	104/110	5903
				595021231	NETWORKS AND SERVICES SECURITY		110/115/129	5903
		1 <sup>st</sup>		595030160	RENEWABLE ENERGY	3		0910
С	-	1		595030161	DIGITAL HOME	3	115	5903
				595030162	TELECOMUNNICATION COMMON INFRASTRUCTURES	3		5901
		595030163 AND 595030171 INTE AND 2nd 595030170 MAN		595030163	INTRODUCTION TO PROFESSIONAL AND ACADEMIC COMMUNICATION I	3		1004
				595030171	INTRODUCTION TO PROFESSIONAL AND ACADEMIC COMMUNICATION II	3	30163 o B2	1004
				595030170	MANAGEMENT OF TECHNOLOGICAL INNOVATION	3		5905
				595030172	DISCRETE MATHEMATICS	3		5904
				595030173	DINAMICAL SYSTEMS	3	101/102/109	5904
				595030174	CIS TO DEFENCE	3		5901
PE				595030175	P1 INTERNSHIP CREDITS	3	*	
				595030176	P2 INTERNSHIP CREDITS	4.5	*	
				595030177	P3 INTERNSHIP CREDITS	6	*	
			595030178	P4 INTERNSHIP CREDITS	9	*		
			595030179	P5 INTERNSHIP CREDITS	12	*		

#### **ELECTIVE COURSES**

• Each student must pass at least 31.5 elective ECTS to complete the degree.

#### **TYPES OF ELECTIVE COURSES**

Each academic year, the School Board will establish the range of optional courses.

**A Type -** Elective courses to strengthen the specialty.

**B** Type - Elective courses to strengthen other specialties.

C Type - Elective courses for the four degrees.

*PE* - Internship credits.

### **ADMISSION REQUIREMENTS FOR ELECTIVE COURSES**

To enroll on an elective course, every student must have taken or passed the course(s) shown in the **REQUIREMENTS** box.

#### SPEC .:

EC: Electronics for Communications. SC: Telecommunications Systems.

SO: Image and Sound.

TL: Telematics.

#### **DEPARTMENT CODES**

5901: Audiovisual Engineering and Communications.

5902: Circuits and Systems Engineering.

5903: Telematics Engineering and Architectures.

5904: Applied Mathematics to Telecommunications.

5905: Electronic and Control Systems.

0515: Organization Engineering, Business Management and Statistics.

0910: Departmental Section of Physical Electronics.

0915: Departmental Section of Applied Physics for Information Technologies.

1004: Departmental Section of Linguistics Applied to Science and Technology.