Universitatea Politehnica Timişoara
Facultatea de Electronică, Telecomunicații și Tehnologii Informaționale

PLAN DE ÎNVĂȚĂMÂNT

Pentru seria de studenti 2025-2029

Programul de studii - Licență:	**Tehnologii și Sisteme de telecomunicații, în limba engleză**
Domeniul fundamental (DFI):	**Stiințe Inginerești**
Ramura de stiinta (RSI):	**Inginerie Electrică, Electronică și Telecomunicații**
Domeniul de licenta (DL):	**Inginerie Electronică, Telecomunicații şi Tehnologii Informaţionale**
Durata studiilor / Numărul de credite:	**4 ani / 240 credite**
Forma de învățământ:	**IF - Invatamant cu frecventa**

RECTOR,
Conf.univ.dr.ing. Florin DRĂGAN

DECAN,
Prof.univ.dr.ing. Cătălin-Daniel CĂLEANU

Universitatea Politehnica Timişoara
Facultatea de Electronică, Telecomunicații și Tehnologii Informaționale

Misiunea programului de studii:

The didactic mission:
a) Training of highly qualified engineers in the field of Electronics and Telecommunication and Information Technologies, exhibiting in-depth knowledge regarding electronic circuit design, optical and mobile telecommunication systems, use of telecommunications software, technologies and multimedia production.
b) Training of graduates who have skills and abilities to design, develop, implement and maintain electronic telecommunications systems and equipment, voice, video and multimedia services, databases and telecommunications software applications.
The scientific reasearch mission:
a) Involving the education staff and the students in fundamental, exploratory and applied research in the field of Electronics and Telecommunications, in order to develop knowledge in accordance to the needs of the academic communicty and economic environment;
b) Producing graduates who are able to be involved in research activities and to improve their knowledge through master"s and doctoral studies, bu training them to carry out research topics and projects, under the coordination of the departments involved in the study programe.

Obiectivele programului de studii:

a. Competitice training of graduates with solid knowledge in the field of electronics, telecommunications and information technologies in general, with emphasis in telecommunications technologies and systems - optical and mobile telecommunications circuits specialized telecommunications software, technologies and multimedia production.
b. Training graduates in terms of scientific research, technological development and practica design

Competențele programului de studii:

Competențe profesionale:

Design a computer network
Supports users of ICT systems
Use the communication session controller
Uses a complex communication system
Records transmitter readings
Manages the internal telephone exchange
Calibrate electronic instruments
Works with electronic measuring instruments
Perform firmware updates
Perform analytical calculations
Develop digital content;
Use electronic services;
Approves engineering projects
Develops procedures for testing electronic products, systems and components
Designs electronic systems

Competenţe transversale:

Think creatively;
Critically evaluates information and its sources;
Assumes responsibility;
Accurately uses equipment, instruments or technological equipment

Rezultatele învăţării specifice programului de studii:

Cunoştinţe	Aptitudini	Responsabilitate și autonomie

C1. The student/graduate identifies and describes basic concepts, principles and methods in mathematics, physics, computer-aided graphics, the basics of electrical engineering, programming languages C2. The student/graduate explains and interprets theoretical and experimental results in mathematics, physics, circuit analysis and synthesis, computer programming, and computer-aided graphics. C3. The student/graduate describes, identifies, and summarizes elementary concepts and methods related to electronic devices, circuits, and instrumentation and their application to concrete problems. C4. The student/graduate describes, identifies, summarizes concepts and elementary methods of signal acquisition, analysis and processing, implemented in systems with general-purpose processors or signal processors and their application in concrete problems. C5. The student/graduate describes, identifies, summarizes elementary concepts and methods regarding the architecture of computer systems, microcontrollers, programming languages and techniques and their application in concrete problems. C6. The student/graduate explains the operation of elementary electronic devices and the principles of measuring electrical parameters. C7. The student/graduate explains concepts of communications, electromagnetic compatibility, and instrumentation. C8. The student/graduate identifies, formulates, analyzes the principles of electronic circuits and the risks associated with them. C9. The student/graduate describes, identifies, summarizes concepts of electronic engineering, telecommunications and information technologies such as functionality, replication capacity and design costs and how they are applied to carry out engineering projects. C10. The student/graduate explains and interprets drawings that detail the design of electronic engineering products, instruments, and systems. C11. The student/graduate describes, identifies, summarizes elementary concepts and methods regarding policies and legislation applicable in a specific field. C12. The student/graduate identifies the capacity of ICT systems. C13. The student/graduate identifies and summarizes the bandwidth requirements of networks. C14. The student/graduate describes and identifies technical requirements. C15. The student/graduate summarizes the process C16. The student/graduate identifies and summarizes the costs of installing telecommunications devices. C17. The student/graduate describes and summarizes the elements of a virtual private network. C18. The student/graduate describes and summarizes the elements of a computer network. C19. The student/graduate identifies and describes a complex communication system C20. The student/graduate summarizes the processes of an internal telephone exchange. C21. The student/graduate describes, identifies, summarizes the digital content development process C22. The student/graduate describes, identifies, summarizes the visual design process of websites	A1. The student/graduate operates with basic concepts, principles and methods in mathematics, physics, computer-aided graphics, the basics of electrical engineering, programming languages. A2. The student/graduate solves problems in mathematics, physics and the basics of electrical engineering with applicability in engineering and validates the solution obtained. A3. The student/graduate performs engineering and economic calculations of medium complexity and associates them with graphical representations or specific to computer-aided design. A4. The student/graduate applies mathematical and physical methods to analyze and model simple engineering problems. A5. The student/graduate applies criteria and evaluation methods to identify, model, experiment, analyze and qualitatively and quantitatively assess phenomena and processes specific to the fundamental field, including using digital technologies. A6. The student/graduate acquires and processes data, interprets theoretical and experimental results. A7. The student/graduate designs solutions, respecting relevant standards, for engineering problems of medium complexity that meet the specified needs, respecting public health, safety, welfare, environment, sustainability and economic factors, as well as other specific constraints. A8. The student/graduate develops technical execution and overall drawings in letter format or computer-aided design. A9. The student/graduate applies modern project management techniques, economic techniques and decision-making, including in a multidisciplinary framework. A10. The student/graduate uses fundamental methods of measuring electrical quantities and estimates electronic devices and circuits, as well as linear and digital integrated circuits of low/medium complexity. A11.The student/graduate designs, measures, evaluates performance, diagnoses and troubleshoots functional blocks composed of electronic devices and/or circuits of low/medium complexity. A12. The student/graduate designs electronic circuits of low/medium complexity and implements them using CAD techniques. A13. The student/graduate uses specific methods and tools for the characterization of signals in the time domain and in the frequency domain, performs the acquisition, analysis and digital processing of analog signals. A14. The student/graduate designs, measures, evaluates the performance, diagnoses and troubleshoots low/medium complexity functional blocks for digital signal analysis and processing, using dedicated simulation environments (Matlab, Python, etc.). A15. The student/graduate designs low/medium complexity functional blocks for digital signal analysis and processing and implements them on signal processors, microcontrollers or dedicated processors. A16. The student/graduate evaluates, based on specific performance criteria, the type of computing system, its architecture and the mode of use necessary for an efficient solution of concrete problems. A17. The student/graduate specifies requirements, develops programs in general-purpose programming languages (C, etc.) and/or object-oriented (C++, Java, etc.), executes, debugs and interprets the results of the programs developed in order to solve a concrete problem. A18. The student/graduate carries out projects of low/medium complexity that involve the simultaneous use of hardware components (microprocessors or microcontrollers) and software components (the related	RA1. The student/graduate applies the values of ethics and deontology of the engineering profession. RA2. The student/graduate practices logical reasoning, evaluation, and self-assessment in decision-making. RA3. The student/graduate communicates effectively about engineering activities with a wide range of audiences. RA4. The student/graduate is engaged in lifelong learning to acquire and implement knowledge, as needed, using appropriate learning strategies. RA5. The student/graduate promotes dialogue, cooperation, respect for others, and interculturality. RA6. The student/graduate works effectively as a team member or team leader. RA7. The student/graduate carries out processes in electronics, telecommunications and information technology project management, taking on different roles in the team and clearly and concisely describing the results, verbally and in writing. RA8.The student/graduate shows a spirit of initiative and action to update professional, economic and organizational culture knowledge. RA9. The student/graduate behaves honorably, responsibly, ethically, in accordance with the law to ensure the reputation of the profession. RA10. The student/graduate demonstrates the ability to self-organize and manage study time, respecting the requirements and deadlines of academic activities. RA11. The student/graduate applies project management methods and economic methods, such as risk and change management, as well as their limits. RA12. The student/graduate reflects critically, reflexively, with a sense of responsibility and in a democratic spirit on the ethical and social responsibilities related to the management of activities in the field of energy engineering, decision-making and the formulation of opinions.

(microprocessors or microcontrollers) and software components (the related programs).
A19. The student/graduate develops and solves practical exercises, laboratory work and applied problems, demonstrating the ability to integrate theoretical concepts.
A20. The student/graduate evaluates the quality and performance of electronic equipment and performs system testing.
A21. The student/graduate adjusts product or product part designs so that they meet requirements.
A22. The student/graduate creates and/or executes a plan or specification for the design of electronic systems.
A23. The student/graduate discovers defects in electronic circuits and can repair them.
A24. The student/graduate tests and replaces electronic components, using measuring devices and soldering equipment.
A25. The student/graduate explains electronic circuits.
A26. The student/graduate specifies technical properties of goods, materials, methods, processes, services, systems, software and functionalities, by identifying and responding to particular needs to be met according to customer requirements.
A27. The student/graduate performs the evaluation and analysis of an intelligent electronic or telecommunications system.
A28. The student/graduate performs a standardized study to determine the contribution, costs and constraints to energy saving
and conducts research to support the decision-making process, taking into account the challenges and opportunities associated with the implementation of technologies in the fields of electronics, telecommunications and information technology.
A29. The student/graduate develops analog and digital, electronic and telecommunications circuits, systems and products.
A30. The student/graduate uses modeling, simulation and testing of process elements in a problem-oriented manner in their integration during development
A31. The student/graduate draws sketches and designs electronic systems, products and components using computer-aided design (CAD) software and equipment.
A32. The student/graduate draws electronic schematics.
A33. The student/graduate creates sketches and technical drawings using specialized software.
A34. The student/graduate selects and applies current modeling, calculation, design and testing methods for their field.
A35. The student/graduate uses databases, standards, codes of practice and safety regulations.
A36. The student/graduate evaluates the impact of engineering solutions in a social environment, integrating the environmental context.
A37. The student/graduate evaluates the performance of ICT systems.
A38. The student/graduate evaluates the bandwidth requirements of networks.
A39. The student/graduate carries out projects of low/medium complexity in accordance with specific technical requirements.
A40. The student/graduate designs and evaluates process performance.
A41. The student/graduate estimates the costs of installing telecommunications devices.
A42. The student/graduate designs and implements a virtual private network.
A43. The student/graduate designs and implements a computer network.
A44. The student/graduate creates complex communication systems.
A45. The student/graduate uses an internal telephone exchange.
A46. The student/graduate develops digital content
A47. The student/graduate implements the visual design of websites

Rezultatele complementare ale învățării:

Cunoștințe	Aptitudini	Responsabilitate și autonomie
C1. The student/graduate identifies and describes principles of economic and managerial engineering, characteristics of software packages to assist activities in the field. C2. The student/graduate identifies the object of study of management science, based on advanced knowledge related to management processes, managerial functions, company functions as well as the managerial tools used within organizations, in order to adopt optimal decisions at any level. C3. The student/graduate explains and interprets technical, economic and managerial documentation for the development of projects and processes specific to the field. Accumulates knowledge regarding the components, typology and role of managerial strategies and policies as well as their substantiation, development and implementation within organizations as a whole or by subdivisions. C4. The student/graduate defines economic concepts, principles and theories, as well as concepts regarding decision-making, planning, organization and control processes of activities. At the same time, they will identify and select methods and techniques specific to marketing activity. C5. The student/graduate has the necessary knowledge and critical understanding regarding the formation and development of project teams, as well as those regarding the specifics of communication processes within projects. C6. The student/graduate describes and classifies the main linguistic concepts and theories regarding the phonetic, lexical, syntactic, semantic and pragmatic system of foreign languages. C7. The student/graduate distinguishes in English and German the linguistic standards and norms and the terminology specific to different professional contexts. C8. The student/graduate knows the physical demands of daily or professional activities. C9. The student/graduate knows the benefits of regular physical activity. C10. The student/graduate knows the fundamental rules of personal and collective hygiene.	A1. The student/graduate appreciates the quality and identifies the limits of concepts, symbolizations and representations specific to the field. A2. The student/graduate selects and applies concepts, principles and methods to solve particular problems in the development of technical, economic and managerial documentation. A3. The student/graduate develops skills in the development and implementation of organizational strategies and policies, in the design, redesign and improvement of the organization's management system and its subcomponents A4. The student/graduate applies health and safety standards in solving field-specific tasks. A5. The student/graduate evaluates the advantages and limitations of software applications for solving field-specific tasks. A6. The student/graduate develops skills in developing and implementing organizational strategies and policies, in designing, redesigning and improving the organization's management system and its subcomponents. A7. The student/graduate develops technical, economic and managerial documentation associated with specific engineering and management projects. A8. The student/graduate develops computer-assisted technical-economic and/or managerial projects by using software applications specific to the field. A9. The student/graduate demonstrates skills in using economic indicators to analyze the evolution of economic phenomena, interpreting trends and their impact on the business environment. They will also adequately apply the methodology of planning and coordinating the decision-making process, using specific control, evaluation and monitoring tools to optimize economic and managerial activities. A10. The student/graduate experiences marketing techniques in analyzing the internal and external environment of an economic entity and analyzing the market for products and services. A11. The student/graduate develops skills for the appropriate use of concepts, theories, methods and tools of an informational, decision-making and organizational nature within organizations. A12. The student/graduate develops advanced communication and reporting skills within projects and in the formation of project teams. A13. The student/graduate applies the main linguistic concepts and theories in the production of texts in the foreign languages studied. A14. The student/graduate applies the standards and norms of the respective languages. A15. The student/graduate mobilizes himself/herself to cope with varied physical demands. A16. The student/graduate consistently participates in activities that support physical fitness and well-being A17. The student/graduate complies with hygiene standards in daily activities.	RA1. The student/graduate documents, describes and manages processes specific to engineering project management by taking on different roles in the team and presenting the results. RA2. The student/graduate develops work and communication skills for effective collaboration in carrying out tasks specific to the field. RA3. The student/graduate initiates and manages actions to update professional knowledge specific to the field. RA4. The student/graduate evaluates and capitalizes on business and entrepreneurial development opportunities. Demonstrates the ability to carry out analysis and diagnosis work related to the functioning of the organization as a whole or by subdivisions. RA5. The student/graduate is aware of the aspects of social responsibility and professional ethics. RA6. The student/graduate develops solutions to streamline economic activities, economic and financial reports, market studies, designs marketing policies and strategies for business development, responsibly assuming decision-making and implementing the results of monitoring and control activities at the organizational level. RA7. The student/graduate demonstrates the ability to apply management functions both at the level of the organization's functions and as a whole and to assume the responsibilities specific to the position of manager at different hierarchical levels within organizations, in order to initiate, implement and monitor organizational strategies and policies. RA8. The student/graduate demonstrates the ability to initiate, carry out and monitor complex investment processes, based on the use of a methodology specific to feasibility studies and business plans, using appropriate tools (investment estimate, Gantt charts, cost-benefit analysis). RA9. The student/graduate uses appropriate expressions and words in producing texts in foreign languages. RA10. The student/graduate autonomously uses specific terminology from different professional contexts in English and German. applicable and identifies the appropriate terminology to be used. RA11. The student/graduate actively engages in physical tasks, adapting to the context. RA12. The student/graduate shows initiative to maintain a healthy lifestyle RA13. The student/graduate acts autonomously to maintain personal hygiene and common space.

Finalități:

Absolvenții programului de studii universitare de licență vor accesa următoarele ocupații posibile conform Clasificării Ocupațiilor din România ISCO-08:

2153.1 - telecommunications engineer (ESCO)
215303 - electrotechnical engineer
215310 - communications design engineer
*2513.5 Web Developer
*2152.1 Electronics Engineer

Universitatea Politehnica Timişoara

Facultatea de Electronică, Telecomunicaţii şi Tehnologii Informaţionale

Domeniul fundamental **(DFI):** Ştiinţe Inginereşti

Ramura de stiinta **(RSI):** Inginerie Electrică, Electronică şi Telecomunicaţii

Domeniul de licenta **(DL):** Inginerie Electronică, Telecomunicaţii şi Tehnologii Informaţionale

Programul de studii - Licenţă: Tehnologii şi Sisteme de telecomunicaţii, în limba engleză

Cod DFI	CodRSI	CodDL	Cod S	ciclul	c1c2c3	a1a2
20	**20**	**100**	**10**	**L**	**230**	**25**

PLAN DE ÎNVĂŢĂMÂNT

Pentru seria de studenti 2025-2029

ANUL I (2025-2026) — SEMESTRUL 1

1	Calculus 1	L230.25.01.F1	4	E	28	28	0	0	0	DF	44
2	Linear Algebra, Analytic and Differential Geometry	L230.25.01.F2	4	E	28	28	0	0	0	DF	44
3	Computer Aided Graphics	L230.25.01.F3	4	E	28	0	14	0	0	DF	58
4	Physics	L230.25.01.F4	5	E	42	14	14	0	0	DF	55
5	Programming Languages 1	L230.25.01.F5	5	V	28	0	28	0	0	DF	69
6	Applied Informatics 1	L230.25.01.F6	3	V	14	0	14	0	0	DF	47
7	Communication Discipline	L230.25.01.C7	2	V	14	14	0	0	0	DC	22
8	Foreign Language 1	L230.25.01.C8	2	V	0	28	0	0	0	DC	22
9	Educaţie fizică şi sport 1 - Sport 1	L230.25.01.C9	1	V	0	14	0	0	0	DC	11
10											
11											
total/ sem.	ore didactice: **378**	VPI:					**372**				
	credite: **30**	evaluări:					4E,5V,0C				
total/ săpt.	ore didactice: **27.0**										
	din care:	13.0	9.0	5.0	0.0	(c, s, l, p)					

ANUL I (2025-2026) — SEMESTRUL 2

1	Calculus 2	L230.25.02.F1	4	E	28	28	0	0	0	DF	44
2	Special Mathematics	L230.25.02.F2	4	V	28	14	14	0	0	DF	44
3	Materials for Electronics	L230.25.02.F3	5	E	28	14	14	0	0	DF	69
4	Electrical Circuits Analysis and Synthesis	L230.25.02.F4	5	E	28	0	28	0	0	DF	69
5	Electronic Devices	L230.25.02.F5	5	E	42	0	28	0	0	DF	55
6	Computer Programming	L230.25.02.F6	4	V	28	0	28	0	0	DF	44
7	Foreign Language 2	L230.25.02.C7	2	V	0	28	0	0	0	DC	22
8	Educaţie fizică şi sport 2 - Sport 2	L230.25.02.C8	1	V	0	14	0	0	0	DC	11
9											
10											
11											
total/ sem.	ore: **392**	VPI:					**358**				
	credite: **30**	evaluări:					4E,4V,0C				
total/ săpt.	ore: **28**										
	din care:	13.0	7.0	8.0	0.0	(c, s, l, p)					

ANUL II (2026-2027) — SEMESTRUL 3

1	Electronic Circuits Fundamentals	L230.25.03.F1	5	E	28	0	28	0	0	DF	69
2	Fundamentals of Electrical Engineering	L230.25.03.F2	4	V	28	14	0	0	0	DF	58
3	Signals and Systems	L230.25.03.F3	4	E	28	14	14	0	0	DF	44
4	Digital Integrated Circuits	L230.25.03.F4	4	E	28	0	28	0	0	DF	44
5	CAD Techniques in Electronic Modules Manufacturing	L230.25.03.F5	4	V	28	0	28	0	0	DF	44
6	Measurements in Electronics and Telecommunications	L230.25.03.F6	4	E	28	14	14	0	0	DF	44
7	Programming Languages 2	L230.25.03.F7	4	V	28	0	28	0	0	DF	44
8	Educaţie fizică şi sport 3 - Sport 3	L230.25.03.C8	1	V	0	14	0	0	0	DC	11
9											
10											
11											
total/ sem.	ore: **392**	VPI:					**358**				
	credite: **30**	evaluări:					4E,4V,0C				
total/ săpt.	ore: **28**										
	din care:	14.0	4.0	10.0	0.0	(c, s, l, p)					

ANUL II (2026-2027) — SEMESTRUL 4

1	Analog Integrated Circuits	L230.25.04.F1	5	E	42	14	14	0	0	DF	55
2	General Economics	L230.25.04.C2	3	V	28	14	0	0	0	DC	33
3	Network Architectures and Internet	L230.25.04.F3	4	E	28	0	28	0	0	DF	44
4	Applied Informatics 2	L230.25.04.F4	4	V	28	0	28	0	0	DF	44
5	Digital Signal Processing	L230.25.04.F5	5	E	28	0	28	0	0	DF	69
6	Microcontrollers	L230.25.04.F6	5	E	42	0	28	0	0	DF	55
7	Fundamentals Electronic Circuits Project	L230.25.04.F7	3	V	0	0	0	28	0	DF	47
8	Educaţie fizică şi sport 4 - Sport 4	L230.25.04.C8	1	V	0	14	0	0	0	DC	11
9											
10											
11											
total/ sem.	ore: **392**	VPI:					**358**				
	credite: **30**	evaluări:					4E,4V,0C				
total/ săpt.	ore: **28**										
	din care:	14.0	3.0	9.0	2.0	(c, s, l, p)					

Observatii:

RECTOR,
Conf.univ.dr.ing. Florin DRĂGAN

DECAN,
Prof.univ.dr.ing. Cătălin-Daniel CĂLEANU

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ANUL III (2027-2028)

SEMESTRUL 5

1	Socio-Humanistic Disciplines 1									
	L230.25.05.C1	3	V	28	14	0	0	0	DC	33
2	Electronic Instrumentation for Measurements									
	L230.25.05.F2	5	E	28	0	28	0	0	DF	69
3	Radiocommunications									
	L230.25.05.S3	5	V	42	0	28	0	0	DS	55
4	Virtual Instrumentation for Electronics									
	L230.25.05.S4	4	E	28	0	14	14	0	DS	44
5	Information Transmission Theory									
	L230.25.05.F5	4	V	28	14	14	0	0	DF	44
6	Communication Systems									
	L230.25.05.F6	4	E	28	0	28	0	0	DF	44
7	Microwaves									
	L230.25.05.F7	5	E	42	0	14	0	0	DF	69
8										
9										
10										
11										
total/ sem.	ore:	392	VPI:				358			
	credite:	30	evaluări:				4E,3V,0C			
total/ săpt.	ore:	28								
	din care:		16.0	2.0	9.0	1.0	(c, s, l, p)			

SEMESTRUL 6

1	VHDL Modelling Fundamentals									
	L230.25.06.S1	3	V	28	0	14	14	0	DS	19
2	Power Electronics									
	L230.25.06.F2	3	E	28	0	14	14	0	DF	19
3	Optional Topic 1 Set 1L6 (1 discipline out of 2)									
	L230.25.06.S3-ij	3	E	28	0	28	0	0	DS	19
4	Embedded Systems									
	L230.25.06.S4	3	E	28	0	28	0	0	DS	19
5	Digital Telephony									
	L230.25.06.S5	3	E	28	0	28	0	0	DS	19
6	Television									
	L230.25.06.F6	3	V	28	0	28	0	0	DF	19
7	Optional Topic 2 Set 2L6 (1 discipline out of 2)									
	L230.25.06.C7-ij	2	V	14	14	0	0	0	DC	22
8	Development Project									
	L230.25.06.F8	2	V	0	0	0	28	0	DF	22
9	Practical Training - Domain									
	L230.25.06.F9	4	C	0	0	0	0	90	DF	10
10	Practical Training - Specialisation									
	L230.25.06.S10	4	C	0	0	0	0	90	DS	10
11										
total/ sem.	ore:	392	VPI:				178			
	credite:	30	evaluări:				4E,4V,2C			
total/ săpt.	ore:	28								
	din care:		13.0	1.0	10.0	4.0	(c, s, l, p)			

ANUL IV (2028-2029)

SEMESTRUL 7

1	Electronic Equipment Testing for Telecomunications									
	L230.25.07.S1	5	E	28	0	28	0	0	DS	69
2	Software Engineering and Applications									
	L230.25.07.S2	4	V	28	0	14	14	0	DS	44
3	Optional Topic 3 Set 3L7 (3L7.1 or 3L7.2)									
	L230.25.07.S3-ij	5	E	42	0	28	0	0	DS	55
4	Optional Topic 4 Set 4L7 (4L7.1 or 4L7.2)									
	L230.25.07.S4-ij	2	V	0	0	0	28	0	DS	22
5	Optional Topic 5 Set 5L7 (5L7.1 or 5L7.2)									
	L230.25.07.S5-ij	5	E	28	0	28	0	0	DS	69
6	Optional Topic 6 Set 6L7 (6L7.1 or 6L7.2)									
	L230.25.07.S6-ij	5	V	28	0	14	14	0	DS	69
7	Integrated Digital Networks									
	L230.25.07.S7	4	E	28	0	28	0	0	DS	44
8										
9										
10										
11										
total/ sem.	ore:	378	VPI:				372			
	credite:	30	evaluări:				4E,3V,0C			
total/ săpt.	ore:	27								
	din care:		13.0	0.0	10.0	4.0	(c, s, l, p)			

SEMESTRUL 8

1	Optional Topic 7 Set 7L8 (2 disciplines out of 3)									
	L230.25.08.S1-ij	4	E	21	0	21	0	0	DS	58
2	Optional Topic 8 Set 7L8 (2 discipline out of 3)									
	L230.25.08.S2-ij	4	E	21	0	21	0	0	DS	58
3	Software Project for Telecommunications									
	L230.25.08.S3	3	V	0	0	0	14	0	DS	61
4	Electronic Technology									
	L230.25.08.S4	5	E	21	0	21	0	0	DS	83
5	Optional Topic 9 Set 9L8 (1 discipline out of 2)									
	L230.25.08.S5-ij	4	E	21	0	21	0	0	DS	58
6	Elaborare proiect de diplomă - Diploma Project Elaboration									
	L230.25.08.S6	10	V	0	0	0	112	60	DS	78
7	Examen de diplomă - Diploma Exam*									
	L230.25.08.7	10	E							
8										
9										
10										
11										
total/ sem.	ore:	294	VPI:				396			
	credite:	30+10**	evaluări:				5E,2V,0C			
total/ săpt.	ore:	21								
	din care:		6.0	0.0	6.0	9.0	(c, s, l, p)			

* constă din: a. verificarea cunoştinţelor fundamentale şi de specialitate; b. susţinerea lucrării de licenţă/diplomă.
** Credite suplimentare alocate Examenului de diplomă

Observatii:

Legenda

Nume disciplina									
Cod	nc	FE	c	s	l	p	Pr	CF	VPI

Cod = cod disciplina
nc = nr.credite transferabile
FE = forma de evaluare {E, V, C}
E-examen, V-verificare, C-colocviu

c=nr.ore curs
s=nr.ore seminar
l=nr.ore laborator
p=nr.ore proiect

Pr - volum de ore necesar activitatilor partial asistate / practica
CF=categorie formativa careia ii apartine disciplina
CF {DF, DS, DC}
DF - disciplina fundamentala
DS - disciplina de specializare
DC - disciplina complementara

VPI = volum de ore necesar pregatirii individuale

Exemplu

Calculus 1								
Cod	4	E	28	28	0	0	0	DF	44

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Domeniul fundamental **(DFI):** Ştiinţe Inginereşti

Ramura de stiinta **(RSI):** Inginerie Electrică, Electronică şi Telecomunicaţii

Domeniul de licenta **(DL):** Inginerie Electronică, Telecomunicaţii şi Tehnologii Informaţionale

Programul de studii - Licenţă: Tehnologii şi Sisteme de telecomunicaţii, în limba engleză

DISCIPLINE OPTIONALE

Pentru seria de studenti 2025-2029

	ANUL I (2025-2026)		ANUL II (2026-2027)	
	SEMESTRUL 1	SEMESTRUL 2	SEMESTRUL 3	SEMESTRUL 4
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				

Nota: Din fiecare dintre grupurile de **Discipline opţionale** se activează un număr de discipline în funcţie de opţiunile studenţilor, de numărul studenţilor şi de acoperirea financiară.

Observatii: (*) - *discipline opţionale activate în anul univ. 2020-2021*

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Domeniul fundamental **(DFI):**	Stiințe Inginerești
Ramura de stiinta **(RSI):**	Inginerie Electrică, Electronică și Telecomunicații
Domeniul de licenta **(DL):**	Inginerie Electronică, Telecomunicaţii şi Tehnologii Informaţionale
Programul de studii - Licență:	Tehnologii și Sisteme de telecomunicații, în limba engleză

DISCIPLINE OPTIONALE

Pentru seria de studenti 2025-2029

ANUL III (2027-2028)

SEMESTRUL 5

01										
02										
03										
04										
05										
06										
07										
08										
09										
10										
11										
12										
13										

SEMESTRUL 6

01	Optional Topic 1L6.1 - Electromagnetic Compatibility	L230.25.06.S3-01	3	E	28	0	28	0	0	DS	19
02	Optional Topic 1L6.2 - Communication Protocols	L230.25.06.S3-02	3	E	28	0	28	0	0	DS	19
03	Optional Topic 2 Set 2L6.1 - Academic Ethics and Integrity	L230.25.06.S3-03	2	V	14	14	0	0	0	DC	22
04	Optional Topic 2 Set 2L6.2 - Culture and Civilization	L230.25.06.S3-04	2	V	14	14	0	0	0	DC	22
05											
06											
07											
08											
09											
10											
11											
12											
13											

ANUL IV (2028-2029)

SEMESTRUL 7

01	Optional Topic 3L7.1 - Digital VLSI Design Techniques	L230.25.07.S3-01	5	E	42	0	28	0	0	DS	55
02	Optional Topic 4L7.1 - Digital VLSI Design Techniques Project	L230.25.07.S3-02	2	V	0	0	0	28	0	DS	22
03	Optional Topic 3L7.2 - Digital Signal Processors	L230.25.07.S3-03	5	E	42	0	28	0	0	DS	55
04	Optional Topic 4L7.2 - Digital Signal Processors Project	L230.25.07.S3-04	2	V	0	0	0	28	0	DS	22
05	Optional Topic 5L7.1 - Technological Fundamentals of Microelectronics	L230.25.07.S3-05	5	E	28	0	28	0	0	DS	69
06	Optional Topic 5L7.2 - Machine Learning	L230.25.07.S3-06	5	E	28	0	14	14	0	DS	69
07	Optional Topic 6L7.1 - Mobile Communications	L230.25.07.S3-07	5	V	28	0	14	14	0	DS	69
08	Optional Topic 6L7.2 - Optical Communications	L230.25.07.S3-08	5	V	28	0	14	14	0	DS	69
09											
10											
11											
12											
13											

SEMESTRUL 8

01	Optional Topic 7,8L8.1 - Digital Communications	L230.25.08.S1-01	4	E	21	0	21	0	0	DS	58
02	Optional Topic 7,8L8.2 - Medical Electronics and Informatics	L230.25.08.S1-02	4	E	21	0	21	0	0	DS	58
03	Optional Topic 7,8L8.3 - Digital Image Processing	L230.25.08.S1-03	4	E	21	0	21	0	0	DS	58
04	Optional Topic 9L8.1 Electronic Circuits Computer Assisted Analysis	L230.25.08.S1-04	4	E	21	0	21	0	0	DS	58
05	Optional Topic 9L8.2 Topology Elements of Electronic Systems	L230.25.08.S1-05	4	E	21	0	21	0	0	DS	58
06											
07											
08											
09											
10											
11											
12											
13											

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DISCIPLINE OPTIONALE

Pentru seria de studenti 2025-2029

	ANUL III (2027-2028)		ANUL IV (2028-2029)	
	SEMESTRUL 5	SEMESTRUL 6	SEMESTRUL 7	SEMESTRUL 8
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

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Observatii: (*) - *discipline opţionale activate în anul univ. 2020-2021*

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DISCIPLINE FACULTATIVE

Pentru seria de studenti 2025-2029

ANUL I (2025-2026)

SEMESTRUL 1

01	Psihologia educaţiei										
	L230.25.01.F11-01	5	E	28	28	0	0	0	F	69	
02											
03											
04											
05											
total/ sem.	ore:	56		VPI:			69				
	credite:	5		evaluări:			1E,0V,0C				
total/ săpt.	ore:	4									
	din care:			2.0	2.0	0.0	0.0	(c, s, l, p)			

SEMESTRUL 2

01	Pedagogie I (Fundamentele pedagogiei; Teoria şi metodologia curriculum-ului)										
	L230.25.02.F11-01	5	E	28	28	0	0	0	F	69	
02	Voluntariat										
	L230.25.02.F11-02	2	C	0	0	0	28	0	F	22	
03											
04											
05											
total/ sem.	ore:	84		VPI:			91				
	credite:	7		evaluări:			1E,0V,1C				
total/ săpt.	ore:	6									
	din care:			2.0	2.0	0.0	2.0	(c, s, l, p)			

ANUL II (2026-2027)

SEMESTRUL 3

01	Pedagogie II (Teoria şi metodologia instruirii; Teoria şi metodologia evaluării)										
	L230.25.03.F11-01	5	E	28	28	0	0	0	F	69	
02	Limbi moderne 3										
	L230.25.03.C11-02	2	V	0	28	0	0	0	DC	22	
03											
04											
05											
total/ sem.	ore:	84		VPI:			91				
	credite:	7		evaluări:			1E,1V,0C				
total/ săpt.	ore:	6									
	din care:			2.0	4.0	0.0	0.0	(c, s, l, p)			

SEMESTRUL 4

01	Responsabilitate socială şi activism civic										
	L230.25.04.F11-01	3	E	28	28	0	0	0	F	19	
02	Didactica specializării										
	L230.25.04.F11-02	5	E	28	28	0	0	0	F	69	
03	Limbi moderne 4										
	L230.25.04.C11-03	2	V	0	28	0	0	0	DC	22	
04	Voluntariat										
	L230.25.04.F11-04	2	C	0	0	0	28	0	F	50	
05											
total/ sem.	ore:	168		VPI:			160				
	credite:	12		evaluări:			2E,1V,1C				
total/ săpt.	ore:	12									
	din care:			4.0	6.0	0.0	2.0	(c, s, l, p)			

Observatii:

DISCIPLINE FACULTATIVE

Pentru seria de studenti 2025-2029

ANUL III (2027-2028)

SEMESTRUL 5

01	Instruire asistată de calculator										
	L230.25.05.F11-01	2	C	14	14	0	0	0	F	22	
02	Practică pedagogică de specialitate în învăţământul preuniversitar										
	L230.25.05.F11-02	3	C	0	42	0	0	0	F	33	
03											
04											
05											
total/ sem.	ore:	70		VPI:			55				
	credite:	5		evaluări:			0E,0V,2C				
total/ săpt.	ore:	5									
	din care:			1.0	4.0	0.0	0.0	(c, s, l, p)			

SEMESTRUL 6

01	Practică pedagogică de specialitate în învăţământul preuniversitar										
	L230.25.06.F11-01	2	C	0	36	0	0	0	F	14	
02	Managementul clasei de elevi										
	L230.25.06.F11-02	3	E	14	14	0	0	0	F	47	
03	Examen de absolvire:Nivel 1										
	L230.25.06. 11-03	5	E	0	0	0	0	0		125	
04	Voluntariat										
	L230.25.06.F11-04	2	C	0	0	0	28	0	F	50	
05											
total/ sem.	ore:	92		VPI:			236				
	credite:	12		evaluări:			2E,0V,2C				
total/ săpt.	ore:	7									
	din care:			1.0	3.6	0.0	2.0	(c, s, l, p)			

ANUL IV (2028-2029)

SEMESTRUL 7

01											
02											
03											
04											
05											
total/ sem.	ore:	0		VPI:			0				
	credite:	0		evaluări:			0E,0V,0C				
total/ săpt.	ore:	0									
	din care:			0.0	0.0	0.0	0.0	(c, s, l, p)			

SEMESTRUL 8

01	Voluntariat										
	L230.25.08.F11-01	2	C	0	0	0	28	0	F	22	
02											
03											
04											
05											
total/ sem.	ore:	28		VPI:			22				
	credite:	2		evaluări:			0E,0V,1C				
total/ săpt.	ore:	2									
	din care:			0.0	0.0	0.0	2.0	(c, s, l, p)			

Observatii: