

TABLE 2: COURSE DISTRIBUTION PER SEMESTER (T= Theory, L= Laboratory)

A/A	Course Type	Course Name	Course Code	Periods per week	Period duration	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
A' Semester (33 ECTS)								
1.	Compulsory	Advanced Mathematics I	EEI 101	2T	2	13	26	5
2.	Compulsory	Physics I	EEI 102	2T	2	13	26	6
3.	Compulsory	Electrical and Electronic Circuits	CEI 121	2T + 1L	2	13	39	6
4.	Compulsory	Introduction to Computing and Programming (C)	EEI 132	2T + 1L	2	13	39	6
5.	Compulsory	English for Academic Purposes	LCE 115	2T	1,5	13	26	4
6.	Compulsory	Fundamentals of Electrical Engineering, Computer Engineering and Informatics	CEI 131	2T	2	13	26	6
B' Semester (30 ECTS)								
1.	Compulsory	Advanced Mathematics II	EEI 103	2T	2	13	26	5

2.	Compulsory	Linear Algebra	EEI 104	2T	2	13	26	5
3.	Compulsory	Digital Logic	CEI 122	2T+1L	2	13	39	5
4.	Compulsory	Free Elective		2T or 2T+1L	2	13	26 or 39	
5.	Compulsory	Object Oriented Methodology and Programming with C++	EEI 133	2T+1L	2	13	39	6
6.	Compulsory	English for Computer Scientists and Engineers	LCE 116	2T	1.5	13	16	4
C' Semester (31 ECTS)								
1.	Compulsory	Discrete Mathematics	CEI 221	2T	2	13	26	5
2.	Compulsory	Analysis and Design of Information Systems	CEI 223	2T+1L	2	13	39	5
3.	Compulsory	Introduction to Biology	EEI 203	2T	2	13	26	5
4.	Compulsory	Principles of Programming Languages and Compilers	CEI 222	2T+1L	2	13	39	6
5.	Compulsory	Data Structures and Algorithms	CEI 224	2T+1L	2	13	39	5
6.	Compulsory	Operating Systems	CEI 225	2T+1L	2	13	39	5

D' Semester (34 ECTS)								
1.	Compulsory	Bioinformatics	EEI 229	2T	2	13	26	6
2.	Compulsory	Systems Programming	CEI 228	2T+1L	2	13	39	5
3.	Compulsory	Algorithms and Complexity	CEI 226	2T+1L	2	13	39	5
4.	Compulsory	Signals and Systems	EEI 231	2T+1L	2	13	39	6
5.	Compulsory	Computer Organization	EEI 233	2T+1L	2	13	39	6
6.	Compulsory	Advanced Object Oriented Methodology and Programming (UML, Java)	CEI 227	2T+2L	2	13	52	6
E' Semester (30 ECTS)								
1.	Compulsory	Computer Networks and Communications	CEI 321	2T	2	13	26	5
2.	Compulsory	Computer Networks and Communications Laboratory	CEI 322	2L	2	13	26	4
3.	Compulsory	Computer Architecture	CEI 323	2T+1L	2	13	39	6
4.	Compulsory	Software Engineering	CEI 324	2T+1L	2	13	39	5
5.	Compulsory	Databases	CEI 325	2T+1L	2	13	39	5
6.	Compulsory	Probabilities and Random Processes	EEI 331	2T	2	13	26	5

F' Semester (30 ECTS)								
1.	Compulsory	Web Engineering	CEI 326	2T+1L	2	13	39	6
2.	Compulsory	Parallel Processing and Distributed Systems	CEI 327	2T	2	13	26	6
3.	Compulsory	Software Engineering Project and Professional Practice	CEI 328	2T+1L	2	13	39	7
4.	Compulsory	Statistical Pattern Recognition and Machine Learning	CEI 329	2T+1L	2	13	39	6
5.	Compulsory	Departmental Elective I			2	13		5
G' Semester (30 ECTS)								
1.	Compulsory	Thesis I	CEI 421		2	13		5
2.	Departmental Elective II							5
3.	Departmental Elective III							5
4.	Departmental Elective IV							5
5.	Elective from the Faculty of Engineering							5
6.	Free Elective							5

H' Semester (30 ECTS)							
1.	Compulsory	Thesis II	CEI 422		2	13	10
2.	Departmental Elective V						5
3.	Departmental Elective VI						5
4.	Elective from the Faculty of Engineering						5
5.	Free Elective						5
Elective Modules							
Departmental Elective I							
1.	Digital Cultural Heritage	CEI 361	2T	2	13	26	5
2.	Digital Signal Processing	EEN 318	2T	2	13	26	5
3.	Electronics I	EEN 214	2T	2	13	26	6
4.	Research Methods	CEI 362	2T	2	13	26	5
Departmental Elective II							
5.	Advanced and Distributed Operating Systems	CEI 461	2T	2	13	26	5
6.	Integrated Circuits Design and Testing	CEI 470	2T	2	13	26	5

7.	Electrical Laboratory II	EEN 215	2L	2	13	26	5
Departmental Elective III							
8.	Mobile Computing	CEI 462	2T	2	13	26	5
9.	Advanced Topics in Software Engineering	CEI 463	1T	3	13	13	5
10.	Electronics II	EEN 312	2T	2	13	26	6
Departmental Elective IV							
11.	Computer Graphics	CEI 464	2T	2	13	26	5
12.	Systems Design VLSI	EEN 314	2T+1L	2	13	39	5
13.	Dynamic Programming Languages	CEI473	2T+1L	2	13	39	5
14.	Data Science	CEI 471	1T	3	13	13	5
Departmental Elective V							
15.	Web Information Retrieval	CEI 465	2T	2	13	26	5
16.	Production Organization Information Systems	CEI 472	2T	2	13	26	5
17.	Communication Systems	EEN 317	2T	2	13	26	5
Departmental Elective VI							
18.	Advanced Topics in Architecture and Parallel Computers	CEI 466	1T	3	13	13	5

19.	Advanced Topics in Data Processing Systems	CEI 467	1T	3	13	13	5
20.	Human-Computer Interaction	CEI 468	2T	2	13	26	5
21.	Computer Security and Cryptography	CEI 469	2T	2	13	26	5
22.	Digital Image Processing	EEN 444	2T	2	13	26	5
Other Departmental Electives							
23.	Introduction to Photonics and Fiber Optics	EEN 441	2T	2	13	26	5
24.	Power Systems II	EEN 442	2T	2	13	26	5
25.	Power Electronics	EEN 443	2T	2	13	26	5
26.	Renewable Energy Sources	EEN 445	2T	2	13	26	5
27.	Wireless Communications	EEN 446	2T	2	13	26	5
28.	Advanced Electronics	EEN 447	2T	2	13	26	5
29.	Advanced Digital Signal Processing	EEN 448	2T	2	13	26	5
30.	Medical Imaging	EEN 449	2T	2	13	26	5