

English Version

Tables of Marks

Marks of courses are given as:

1- Courses with Labs

Exam	Final	Mid term	Year work	Lab & Oral	Total
Marks	40	20	20	20	100

2- Courses without Labs

Exam	Final	Mid term	Year work	Total
Marks	40	20	40	100

University Requirements Courses UR (19 Credit Hrs)

Title	Code	Lecture	Tutorial	Lab	Contact Hrs	Total credit Hrs	Level
English 1	UR 041	1	2	-	3	2	0
English 2	UR 042	2	2	-	4	3	0
Environmental Eng.	UR 142	2	-	-	2	2	1
History of Eng. Science	UR 143	2	-	-	2	2	1
Human rights	UR 345	2	-	-	2	2	3
Engineering economics	UR 446	2	-	-	2	2	4
Quality assurance standards	UR 247	2	-	-	2	2	2
Technical reports writing	UR 347	1	2	-	3	2	3
Projects managements	UR 448	2	-	-	2	2	4

College Requirements Engineering Courses CR (47 Credit Hrs)

Title	Code	Lecture	Tutorial	Lab	Contact Hrs	Total credit Hrs	Level
Mathematics 1	CR 001	2	2	-	4	3	0
Mathematics 2	CR 002	2	2	-	4	3	0
Eng. Mathematics1	CR 106	2	2	-	4	3	1
Eng. Mathematics2	CR 107	2	2	-	4	3	1
Probability theory and random variables	CR 208	2	2	-	4	3	2
Signal analysis	CR 209	2	2	-	4	3	2
Eng. Mechanics 1	CR 003	2	2	-	4	3	0
Eng. Mechanics 2	CR 004	2	2	-	4	3	0
Physics 1	CR 011	2	2	3	7	4	0
Physics 2	CR 013	2	2	3	7	4	0
Eng. Chemistry	CR 021	2	2	3	7	4	0
Engineering drawing using computer	CR 031	1	-	6	7	3	0
Electronic circuits and components drawing using computer	CR 131	1	-	6	7	3	1
Solid state Physics	CR 132	2	2	-	4	3	1
Mechanical workshop	CR 032	1	-	3	4	2	0

**Specialization Requirement (Major) Courses for Communications
and Networks Engineering (56 Credits Hrs)**

Title	Code	Lecture	Tutorial	Lab	Contact Hrs	Total credit Hrs	Level
Electrical Eng.	ECE161	2	2	-	4	3	1
Electrical circuits	ECE261	2	2	3	7	4	2
Electronics 1	ECE171	2	2	3	7	4	1
Electronics 2	ECE172	2	2	3	7	4	1
Electronic Circuits	ECE264	2	2	3	7	4	2
Electric Power and Machines Eng.	ACE272	2	2	-	4	3	2
Fields and waves	ECE262	2	2	-	4	3	2
Communication Theory	ECE263	2	2	3	7	4	2
Computer Programming 1	CSE051	2	-	3	5	3	0
Computer Programming 2	CSE151	2	-	3	5	3	1
Computer Eng.	CSE251	2	-	3	5	3	2
Semiconductor Technology	ECE173	2	2	-	4	3	2
VLSI Technology	ECE274	2	2	3	7	4	2
Electrical Workshop	ECE181	1	-	6	7	3	1
Electronics Workshop	ECE281	1	-	6	7	3	2
Applied Project	ECE282	1	-	3	4	2	2
Summer Training 1	ECE090	-	-	3	3	1	0
Summer Tanning 2	ECE190	-	-	3	3	1	1
Summer Training 3	ECE290	-	-	3	3	1	2

Minor Requirement Courses for Communications and Networks Engineering (53 Credits Hrs)

1- Minor Requirement Compulsory 11 courses (35 Credit Hrs)

Title	Code	Lecture	Tutorial	Lab	Contact Hrs	Total credit Hrs	Level
Digital Communication	ECE302	2	2	3	7	4	3
Digital Signal Processing	ECE311	2	2	-	4	3	3
Digital Electronics	ECE375	2	2	-	4	3	3
Optical communication systems	ECE420	2	2	3	7	4	4
Acoustics and studio Eng.	ECE431	2	2	-	4	3	4
Comm. Networks Planning	ECE484	2	2	-	4	3	4
Computer Networks	ECE385	2	2	-	4	3	3
Wireless Networks	ECE386	2	2	-	4	3	3
Networking Fundamentals	ECE387	2	-	3	5	3	3
Networking security Fundamentals	ECE478	2	-	3	5	3	4
Graduation Project	ECE480	1	-	9	10	4	4

2- Minor Requirement Specialization Elective Courses (18 Credits Hrs), Student should choose 4 courses (12 Credits Hrs) from List 1 in level 3, and 2 courses (6 Credits Hrs) from List 2 in level 4

List 1

Title	Code	Lecture	Tutorial	Lab	Contact Hrs	Total credit Hrs	Level
Microwave Transmission Media	ECE380	2	2	-	4	3	3
Mobile communication systems	ECE381	2	2	-	4	3	3
Electronic exchanges	ECE382	2	2	-	4	3	3
TV. and Broadcasting Eng.	ECE383	2	2	-	4	3	3
Microwave Electronics Eng.	ECE361	2	2	--	4	3	3
Antenna and wave Prop. Eng.	ECE362	2	2	--	4	3	3
Satellites Communication systems	ECE363	2	2	--	4	3	3
Information and Coding Theory	ECE364	2	2	--	4	3	3
Data transfer systems	ECE365	2	2	--	4	3	3
Pattern recognition	ECE366	2	2	--	4	3	3
Surface acoustic Waves	ECE367	2	2	--	4	3	3
Networks Routing and switching	ECE374	2	2	-	4	3	3
Wireless sensor networks	ECE368	2	2	-	4	3	3
Wireless sensor networks protocols	ECE369	2	2	-	4	3	3
Wireless sensor networks problems	ECE371	2	2	-	4	3	3
Radio networks planning and optimization	ECE372	2	2	-	4	3	3
Optical networks	ECE373	2	2	-	4	3	3

List 2

Title	Code	Lecture	Tutorial	Lab	Contact Hrs	Total credit Hrs	Level
Underwater Acoustics and applications	ECE462	2	2	--	4	3	4
Radar and remote sensing	ECE453	2	2	--	4	3	4
Digital Image processing	ECE441	2	2	--	4	3	4
Microwave Engineering	ECE471	2	2	--	4	3	4
Optical Electronics	ECE472	2	2	--	4	3	4
Satellite communication networks	ECE486	2	2	-	4	3	4
Mobile satellite communication networks	ECE487	2	2	-	4	3	4
Wireless Networks Security	ECE488	2	2	-	4	3	4

Prerequisites of Specialization Elective Courses**List 1**

Title	Code	Prerequisite	Code
Microwave Transmission Media	ECE380	Fields and waves	ECE 262
Mobile communication systems	ECE381	Communication System	ECE263
Electronic exchanges	ECE382	Computer eng.	CSE251
TV. and Broadcasting Eng.	ECE383	Fields and Waves	ECE262
Microwave Electronics Eng.	ECE361	Fields and Waves	ECE262
Antenna and wave Prop. Eng.	ECE362	Field and Waves	ECS 262
Satellites Communication systems	ECE363	Digital communication	ECE302
Information and Coding Theory	ECE364	Digital communication	ECE302
Data transfer systems	ECE365	Computer Eng. Information Theory and coding	CSE251 ECE321
Pattern recognition	ECE366	Digital signal Processing	ECE311
Surface acoustic Waves	ECE367	Fields and Waves	ECE262
Networks Routing and switching	ECE374	Network principles	<u>ECE387</u>
Wireless sensor networks	ECE368	Network principles	<u>ECE387</u>
Wireless sensor networks protocols	ECE369	Network principles	<u>ECE387</u>
Wireless sensor networks problems	ECE371	Network principles	<u>ECE387</u>
Radio networks planning and optimization	ECE372	Network principles	<u>ECE387</u>
Optical networks	ECE373	Network principles	<u>ECE387</u>

List 2

Title	Code	Prerequisite	Code
Underwater Acoustics and applications	ECE462	Acoustics and Studio Eng.	ECE431
Radar and remote sensing	ECE453	Field and Waves	ECS 262
Digital Image processing	ECE441	Digital signal Processing	ECE311
Microwave Engineering	ECE471	Field and Waves	ECS 262
Optical Electronics	ECE472	Electronics2	ECE172
Satellite communication networks	ECE486	Computer networks	ECE385
Mobile satellite communication networks	ECE487	Computer networks	ECE385
Wireless Networks Security	ECE488	Computer networks	ECE385

Table for Level 0**First term**

Title	Code	Lecture	Tutorial	Lab	Contact Hrs	Total credit Hrs
Mathematics 1	CR 001	2	2	-	4	3
Physics 1	CR 011	2	2	3	7	4
Eng. Chemistry	CR 021	2	2	3	7	4
Eng. Mechanics 1	CR 003	2	2	-	4	3
Computer Programming 1	CSE051	2	-	3	5	3
English 1	UR 041	1	2	-	3	2
Total		11	10	9	30	19

Second term

Title	Code	Lecture	Tutorial	Lab	Contact Hrs	Total credit Hrs
Mathematics 2	CR 002	2	2	-	4	3
Physics 2	CR 013	2	2	3	7	4
Eng. Mechanics 2	CR 004	2	2	-	4	3
Engineering drawing using computers	CR 031	1	-	6	7	3
English 2	UR 042	2	2	-	4	3
Mechanical workshop	CR 032	1	-	3	4	2
Total		10	8	12	30	18

Term	code	Lecture	Tutorial	Lab	Contact Hrs	Total credit Hrs
Summer training1	ECE 090	-	-	3	3	1

**Table for Level 1
First term**

Title	Code	Lecture	Tutorial	Lab	Contact Hrs	Total credit Hrs
Eng Mathematics 1	CR 101	2	2	-	4	3
Electronic circuits and components drawing using computers	CR 131	1	-	6	7	3
Electrical Eng.	ECE161	2	2	-	4	3
Solid state Physics	CR 132	2	2	-	4	3
Electronics 1	ECE171	2	2	3	7	4
Environmental Eng.	UR 142	2		-	2	2
Total		11	8	9	28	19

Second term

Title	Code	Lecture	Tutorial	Lab	Contact Hrs	Total credit Hrs
Eng. Mathematics 2	CR 107	2	2	-	4	3
Electronics 2	ECE172	2	2	3	7	4
Semiconductor Technology	ECE173	2	2	-	4	3
Electrical Workshop	ECE181	1	-	6	5	3
Computer Programming 2	CSE151	2	-	3	7	3
History of Eng. Science	UR 143	2	-	-	2	2
Total		11	6	12	29	18

Term	code	Lecture	Tutorial	Lab	Contact Hrs	Total credit Hrs
Summer training2	ECE 190	-	-	3	3	1

**Table for Level 2
First term**

Title	Code	Lecture	Tutorial	Lab	Contact Hrs	Total credit Hrs
Signal analysis	CR 209	2	2	-	4	3
Electrical circuits	ECE261	2	2	3	7	4
VLSI Technology	ECE274	2	2	3	7	4
Electrical Power and Machines Eng.	ACE272	2	2	-	4	3
Computer Eng.	CSE251	2	-	3	5	3
Quality assurance standards	UR 247	2	-	-	2	2
Total		12	8	9	29	19

Second term

Title	Code	Lecture	Tutorial	Lab	Contact Hrs	Total credit Hrs
Electronic Circuits	ECE264	2	2	3	7	4
Fields and waves	ECE262	2	2	-	4	3
Communication Theory	ECE263	2	2	3	7	4
Electronics Workshop	ECE281	1	-	6	7	3
Probability theory and random variables	CR 208	2	2	-	4	3
Applied Project	ECE282	1	-	3	4	2
Total		10	8	15	33	20

Term	code	Lecture	Tutorial	Lab	Contact Hrs	Total credit Hrs
Summer training3	ECE 290	-	-	3	3	1

Table for Level 3**First term**

Title	Code	Lecture	Tutorial	Lab	Contact Hrs	Total credit Hrs
Networking Fundamentals	ECE387	2	-	3	5	3
Digital Communication	ECE302	2	2	3	7	4
Digital Electronics	ECE375	2	2	-	4	3
Elective 1	ECE3**	2	2	-	4	3
Elective 2	ECE3**	2	2	-	4	3
Technical reports writing	UR 347	1	2	-	3	2
Total		11	10	6	27	18

Second term

Title	Code	Lecture	Tutorial	Lab	Contact Hrs	Total credit Hrs
Digital Signal Processing	ECE311	2	2	-	4	3
Computer Networks	ECE385	2	2	-	4	3
Wireless Networks	ECE386	2	2	-	4	3
Elective 3	ECE3**	2	2	-	4	3
Elective 4	ECE3**	2	2	-	4	3
Human rights	UR 345	2	-	-	2	2
Total		12	10	-	22	16

**Table for Level 4
First term**

Title	Code	Lecture	Tutorial	Lab	Contact Hrs	Total credit Hrs
Engineering economics	UR 446	2	-	-	2	2
Networking security Fundamentals	ECE478	2	-	3	5	3
Acoustics and studio Eng.	ECE431	2	2	-	4	3
Elective 5	ECE4**	2	2	-	4	3
Project	ECE480	1	-	3	4	2
Total		9	4	6	19	13

Second term

Title	Code	Lecture	Tutorial	Lab	Contact Hrs	Total credit Hrs
Project management	UR 448	2	-	-	2	2
Optical communication systems	ECE420	2	2	-	4	3
Comm. Network Planning	ECE484	2	2	-	4	3
Elective 6	ECE4**	2	2	-	4	3
Project	ECE480	-	-	6	6	2
Total		8	6	6	20	13.