DEVI AHILYA VISHWAVIDYALAYA, INDORE

School of Electronics

1.1.2
Minutes of the Meetings and Changes in Syllabus

M. Sc. Electronics & Communication Scheme Revision Session: 2013 – 15

Semester I — **34 Credits** — **34 Credits**

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ECN 11	Signals and Systems	4	ECN 11	Signals and Systems	4
2	ECN 12	Electromagnetic Theory	4	ECN 12	Electromagnetic Theory	4
3	ECN 13	Programming in C Language	4	ECN 13	Programming in C Language	4
4	ECN 14	Analog Interface Electronics	4	ECN 14	Analog Interface Electronics	4
5	ECN 15	Digital Design	4	ECN 15	Digital Design	4
6	ECN 16	(a) Analog Lab (b) Digital Lab	2+2	ECN 16	(a) Analog Lab (b) Digital Lab	2+2
7	ECN 17	Computer Lab (C Programming)	4	ECN 17	Computer Lab (C Programming)	4
8	ECN 18	Seminar	2	ECN 18	Seminar	2
9	ECN 19	Comprehensive Viva	4	ECN 19	Comprehensive Viva	4

Semester II: — **34 Credits** — **34 Credits**

S.N	Course Code	Course Name (Pre-revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ECN 21	Network Theory	4	ECN 21	Network Theory	4
2	ECN 22	Analog & Digital Communication	4	ECN 22	Analog & Digital Communication	4
3	ECN 23	Computer Networks	4	ECN 23	Computer Networks	4
4	ECN 24	Digital Signal Processing	4	ECN 24	Digital Signal Processing	4
5	ECN 25	OOPS(C++)	4	ECN 25	OOPS(using C++)	4
6	ECN 26	(a) MATLAB Laboratory (b) ADC Lab	2+2	ECN 26	(a) MATLAB Laboratory (b) ADC Lab	2+2
7	ECN 27	(a) C++ Lab (b) Network Lab	2+2	ECN 27	(a) C++ Lab (b) Network Lab	2+2
8	ECN 28	Seminar	2	ECN 28	Seminar	2
9	ECN 29	Comprehensive Viva	4	ECN 29	Comprehensive Viva	4

Semester III: — **26 Credits** — **30 Credits**

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ECN 31	Control Systems	4	ECN 31	Control Systems	4
2	ECN 32	Microwave Engineering	4	ECN 32	Microwave Engineering	4
3	ECN 33	Microprocessors & Interfacing	4	ECN 33	Microprocessors & Interfacing	4
4	ECN 34	Wireless Communication	4	ECN 34	Wireless Communication	4
5	ECN 35	Wireless Comm. Laboratory	3	ECN 35	VHDL	4
6	ECN 36	Microprocessor Lab.	3	ECN 36	Wireless Comm. Laboratory	2
7	ECN 37	Comprehensive Viva	4	ECN 37	VHDL Laboratory	2
8				ECE 38	Microprocessor Lab.	2
9				ECE 39	Comprehensive Viva	4

Semester IV: — **26 Credits** — **26 Credits**

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ECN 41 **Elective-I**	(a) CMOS Technology & VLSI Design (b) Microcontroller & Embedded System	4	ECN 41 **Elective-I**	(a) CMOS Technology & VLSI Design (b) Microcontroller & Embedded System	4
2	ECN 42	JAVA	4	ECN 42	JAVA	4
3	ECN 43	(a) VLSI Lab / (b) Microcontroller Lab	3	ECN 43	(a) VLSI Lab / (b) Microcontroller Lab	3
4	ECN 44	Java Lab	3	ECN 44	Java Lab	3
5	ECN 45	Major Project	8	ECN 45	Major Project	4
6	ECN 46	Comprehensive Viva	4	ECN 46	Comprehensive Viva	4

Total Credits: 120 — **Total Credits: 124**

Notes: 1. Courses marked with RED Ink are deleted courses and courses marked with GREEN ink are newly introduced ones. BLUE marked courses have minor changes in name and/or syllabus.

2. The CBCS scheme has been introduced from 2013 onwards.

Departmental Meeting 26/03/2014

A departmental meeting was held on 26/03/2014. Following faculty members were present.

1. Dr. A. Kumar
2. Dr. S. Katiyal
3. Dr. M.K. Chattopadhyay
4. Ms. Kirti Panwas
5. Mr. R.R. Chowdhary

Minutes:

1. Admission related data should be provided to committee for advertisement
2. Dates of project phase - II has to be decided for first week of June-14
3. Wireless Network paper should be shifted to first semester from second semester for MTech MCT
4. New paper must be introduced in MTech MCT named "Real Time OS".
5. Paper Embedded System is replaced by Real Time OS in first semester for MTech ES.
6. DBMS paper is replaced by Java Programming in MTech ES.

7. Wireless Comm. Course will be introduced in M.Sc Electronics III Sem.

8. VHDL Course will be introduced in M.Sc Electronics & Comm. III Sem.

9. Credits for both the M.Sc Programmes will be revised accordingly.

10. Credits in Sem I and Sem II for M.Sc will be revised as per the revision for Batch 2014-16.

11.

M. Sc. Electronics & Communication Scheme Revision Session: 2014 – 16

Semester I — 34 Credits / 32 Credits

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ECN 11	Signals and Systems	4	ECN 11	Signals and Systems-I (Continuous)	4
2	ECN 12	Electromagnetic Theory	4	ECN 12	Electromagnetic Theory	4
3	ECN 13	Programming in C Language	4	ECN 13	Programming in C Language	4
4	ECN 14	Analog Interface Electronics	4	ECN 14	Analog Interface Electronics	4
5	ECN 15	Digital Design	4	ECN 15	Digital Design	4
6	ECN 16	(a) Analog Lab (b) Digital Lab	2+2	ECN 16	(a) Analog Lab (b) Digital Lab	2+2
7	ECN 17	Computer Lab (C Programming)	4	ECN 17	Computer Lab (C Programming)	2
8	ECN 18	Seminar	2	ECN 18	Seminar	2
9	ECN 19	Comprehensive Viva	4	ECN 19	Comprehensive Viva	4

Semester II: — 34 Credits / 32 Credits

S.N	Course Code	Course Name (Pre-revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ECN 21	Network Theory	4	ECN 21	Network Theory	4
2	ECN 22	Analog & Digital Communication	4	ECN 22	Analog Communication System	4
3	ECN 23	Computer Networks	4	ECN 23	Computer Networks	4
4	ECN 24	Digital Signal Processing	4	ECN 24	Signals and Systems-II (Discrete)	4
5	ECN 25	OOPS(C++)	4	ECN 25	OOPS(using C++)	4
6	ECN 26	(a) MATLAB Laboratory (b) ADC Lab	2+2	ECN 26	(a) MATLAB Laboratory (b) ADC Lab	2+2
7	ECN 27	(a) C++ Lab (b) Network Lab	2+2	ECN 27	(a) C++ Lab (b) Network Lab	2+2
8	ECN 28	Seminar	2	ECN 28	Comprehensive Viva	4
9	ECN 29	Comprehensive Viva	4			

Semester III: — 30 Credits / 30 Credits

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ECN 31	Control Systems	4	ECN 31	Control Systems	4
2	ECN 32	Microwave Engineering	4	ECN 32	Microwave Communication	4
3	ECN 33	Microprocessors & Interfacing	4	ECN 33	Microprocessors & Interfacing	4
4	ECN 34	Wireless Communication	4	ECN 34	Wireless Communication	4
5	ECN 35	VHDL	4	ECN 35	VHDL	4
6	ECN 36	Wireless Comm. Laboratory	2	ECN 36	Wireless Comm. Laboratory	2
7	ECN 37	VHDL Laboratory	2	ECN 37	Microprocessor Lab.	2
8	ECN 38	Microprocessor Lab.	2	ECN 38	VHDL Laboratory	2
9	ECN 39	Comprehensive Viva	4	ECN 39	Comprehensive Viva	4

Semester IV: — 26 Credits / 26 Credits

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ECN 41 Elective-I	(a) CMOS Technology & VLSI Design (b) Microcontroller & Embedded System	4	ECN 41 Elective-I	(a) CMOS Technology & VLSI Design (b) Microcontroller & Embedded System	4
2	ECN 42	JAVA	4	ECN 42	JAVA	4
3	ECN 43	(a) VLSI Lab / (b) Microcontroller Lab	3	ECN 43	(a) VLSI Lab / (b) Microcontroller Lab	3
4	ECN 44	Java Lab	3	ECN 44	Java Lab	3
5	ECN 45	Major Project	8	ECN 45	Major Project	8
6	ECN 46	Comprehensive Viva	4	ECN 46	Comprehensive Viva	4

Total Credits: 124   **Total Credits: 120**

Notes: 1. Courses marked with RED Ink are deleted courses and courses marked with GREEN ink are newly introduced ones. BLUE marked courses have minor changes in name and/or syllabus.

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Departmental Meeting 26/03/2014

A departmental meeting was held on 26/03/2014. Following faculty members were present.

1. Dr. A. Kumar
2. Dr. S. Katiyal
3. Dr. M.K. Chattopadhyay
4. Ms. Kirti Panwar
5. Mr. R.R. Chowdhary

Minutes:

1. Admission related data should be provided to committee for advertisement
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8. VHDL Course will be introduced in M.Sc Electronics & Comm. III Sem.

9. Credits for both the M.Sc Programmes will be revised accordingly.

10. Credits in Sem I and Sem II for M.Sc will be revised as per the revision for Batch 2014-16.

11.

M. Sc. Electronics & Communication Scheme Revision Session: 2015 – 17

Semester I — **32 Credits** — **32 Credits**

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ECN 11	Signals and Systems-I (Continuous)	4	EL51101	Signals and Systems-I (Continuous)	4
2	ECN 12	Electromagnetic Theory	4	EL51102	Electromagnetic Theory	4
3	ECN 13	Programming in C Language	4	EL51103	Programming in C	4
4	ECN 14	Analog Interface Electronics	4	EL51104	Analog Interface Electronics	4
5	ECN 15	Digital Design	4	EL51105	Digital Design	4
6	ECN 16	(a) Analog Lab (b) Digital Lab	2+2	EL51203	Computer Lab (C Programming)	2+2
7	ECN 17	Computer Lab (C Programming)	2	EL51204/05	(a) Analog Lab (b) Digital Lab	2
8	ECN 18	Seminar	2	EL51301	Seminar	2
9	ECN 19	Comprehensive Viva	4	EL51401	Comprehensive Viva	4

Semester II: — **32 Credits** — **32 Credits**

S.N	Course Code	Course Name (Pre-revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ECN 21	Network Theory	4	EL52101	Network Theory	4
2	ECN 22	Analog Communication System	4	EL52102	Analog Communication System	4
3	ECN 23	Computer Networks	4	EL52103	Computer Networks	4
4	ECN 24	Signals and Systems-II (Discrete)	4	EL52104	Signals and Systems-II (Discrete)	4
5	ECN 25	OOPS(C++)	4	EL52105	Object Oriented Programming (using C++)	4
6	ECN 26	(a) MATLAB Laboratory (b) ADC Lab	2+2	EL52202/03	(a) ADC Lab (b) Computer Network Lab	2+2
7	ECN 27	(a) C++ Lab (b) Network Lab	2+2	EL52204/05	(a) MATLAB Laboratory (b) C++ Lab	2+2
8	ECN 28	Comprehensive Viva	4	EL52401	Comprehensive Viva	4

Semester III: — **30 Credits** — **30 Credits**

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ECN 31	Control Systems	4	EL53101	Control Systems	4
2	ECN 32	Microwave Communication	4	EL53102	Microwave Communication	4
3	ECN 33	Microprocessors & Interfacing	4	EL53103	Microprocessors & Interfacing	4
4	ECN 34	Wireless Communication	4	EL53104	Wireless Communication	4
5	ECN 35	VHDL	4	EL53105	VHDL	4
6	ECN 36	Wireless Comm. Laboratory	2	EL53202	Wireless Comm. Laboratory	2
7	ECN 37	VHDL Laboratory	2	EL53205	VHDL Laboratory	2
8	ECN 38	Microprocessor Lab.	2	EL53203	Microprocessor Lab.	2
9	ECN 39	Comprehensive Viva	4	EL53401	Comprehensive Viva	4

Semester IV: — **26 Credits** — **26 Credits**

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ECN 41 **Elective-I**	(a) CMOS Technology & VLSI Design (b) Microcontroller & Embedded System	4	EL54101/02 **Elective-I**	(a) CMOS Technology & VLSI Design (b) Microcontroller & Embedded System	4
2	ECN 42	JAVA	4	EL54103	JAVA	4
3	ECN 43	(a) VLSI Lab / (b) Microcontroller Lab	3	EL54201/03	(a) VLSI Lab / (b) Microcontroller Lab	3
4	ECN 44	Java Lab	3	EL54202	Java Lab	3
5	ECN 45	Major Project	8	EL54501	Major Project	8
6	ECN 46	Comprehensive Viva	4	EL54401	Comprehensive Viva	4

Total Credits: 120 — **Total Credits: 120**

Notes: 1. Courses marked with RED Ink are deleted courses and courses marked with GREEN ink are newly introduced ones. BLUE marked courses have minor changes in name and/or syllabus.

2. The CBCS scheme has been introduced from 2013 onwards.

Departmental Meeting

A departmental committee was held on 10/04/15
Following Faculty members were present.

1. Dr. Abhay Kumar
2. Dr. M. K. Chattopadhyay
3. Ms. Kirti Panwar
4. Mr. R. R. Chowdhary

Minutes

1. Ordinance 31 is revised by University. Syllabus for all course will be revised as per new Ordinance. Credit will be revised accordingly for all programmes

2. Elective (generic and subject specific) course should be offered to Student

M. Sc. Electronics & Communication Scheme Revision Session: 2016 – 18

Semester I — **32 Credits** — **32 Credits**

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	EL51101	Signals and Systems-I (Continuous)	4	EL51101	Signals and Systems-I (Continuous)	4
2	EL51102	Electromagnetic Theory	4	EL51102	Electromagnetic Theory	4
3	EL51103	Programming in C	4	EL51103	Programming in C	4
4	EL51104	Analog Interface Electronics	4	EL51104	Devices and Circuit Theory	4
5	EL51105	Digital Design	4	EL51105	Digital Design	4
6	EL51203	Computer Lab (C Programming)	2+2	EL51203	C Programming Lab	2+2
7	EL51204/05	(a) Analog Lab (b) Digital Design Lab	2	EL51204/05	Device and Circuit Lab / Digital Design Lab	2
8	EL51301	Seminar	2	EL51301	Seminar	2
9	EL51401	Comprehensive Viva	4	EL51401	Comprehensive Viva	4

Semester II: — **32 Credits** — **32 Credits**

S.N	Course Code	Course Name (Pre-revised)	Credit	Course Code	Course Name (Revised)	Credit
1	EL52101	Network Theory	4	EL52101	Microprocessor & Interfacing	4
2	EL52102	Analog Communication System	4	EL52102	Analog & Digital Communication	4
3	EL52103	Computer Networks	4	EL52103	Computer Networks	4
4	EL52104	Signals and Systems-II (Discrete)	4	EL52104	Signals and Systems-II (Discrete)	4
5	EL52105	Object Oriented Programming (using C++)	4	EL52105	Object Oriented Programming (using JAVA)	4
6	EL52202/03	(a) ADC Lab (b) Computer Network Lab	2+2	EL52201/02	Microprocessor Lab. / Analog & Digital Communication Lab	2+2
7	EL52204/05	(a) MATLAB Laboratory (b) C++ Lab	2+2	EL52204/05	MATLAB Laboratory / JAVA Lab	2+2
8	EL52401	Comprehensive Viva	4	EL52401	Comprehensive Viva	4

Semester III: — **30 Credits** — **30 Credits**

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	EL53101	Control Systems	4	EL53101	Control Systems	4
2	EL53102	Microwave Communication	4	EL53102	Microwave Communication	4
3	EL53103	Microprocessors & Interfacing	4	EL53103	Microcontroller & Interfacing	4
4	EL53104	Wireless Communication	4	EL53104	Wireless Communication	4
5	EL53105	VHDL	4	EL53105	VHDL	4
6	EL53202	Wireless Comm. Laboratory	2	EL53203	Microcontroller Lab.	2
7	EL53205	VHDL Laboratory	2	EL53204	Wireless Comm. Laboratory	2
8	EL53203	Microprocessor Lab.	2	EL53205	VHDL Laboratory	2
9	EL53401	Comprehensive Viva	4	EL53401	Comprehensive Viva	4

Semester IV: — **26 Credits** — **12 Credits**

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	EL54101/02 **Elective-I**	(a) CMOS Technology & VLSI Design (b) Microcontroller & Embedded System	4			
2	EL54103	JAVA	4			
3	EL54201/02	(a) VLSI Lab / (b) Microcontroller Lab	3	EL54501	Major Project	12
4	EL54203	Java Lab	3			
5	EL54501	Major Project	8			
6	EL54401	Comprehensive Viva	4			

Total Credits: 120 — **Total Credits: 106**

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Departmental Meeting 25/03/2016

A departmental meeting was held on 25/03/2016
Following faculty members were present.

1. Dr. Abhay Kumar

2. Dr. S. Katiyal   *signature*

3. Dr. M.K. Chattopadhyay   Maji.

4. Ms. Kirti Pannu Bhati   *signature*

5. Mr. R.R. Chowdhary.   2mg

Minutes.

1. Project phase – II Viva Voce will be held in June-16

2. Obsolete paper "Analog Interface Electronics" course will be replaced by " Devices and Circuit Theory" in M.Sc Programmes in Semester I.

3. Scheme for both the M.Sc programmes will be revised to accomodate I semester project training in industry for and credits will be revised accordingly.

4. Few papers in M.Sc programmes. will be merged and rearranged accordingly.

M. Sc. Electronics Scheme Revision Session: 2013 – 15

Semester I — 34 Credits / 34 Credits

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ELE 11	Signals and Systems	4	ELE 11	Signals and Systems	4
2	ELE 12	Electromagnetic Theory	4	ELE 12	Electromagnetic Theory	4
3	ELE 13	Programming in C Language	4	ELE 13	Programming in C Language	4
4	ELE 14	Analog Interface Electronics	4	ELE 14	Analog Interface Electronics	4
5	ELE 15	Digital Design	4	ELE 15	Digital Design	4
6	ELE 16	(a) Analog Lab (b) Digital Lab	2+2	ELE 16	(a) Analog Lab (b) Digital Lab	2+2
7	ELE 17	Computer Lab (C Programming)	4	ELE 17	Computer Lab (C Programming)	4
8	ELE 18	Seminar	2	ELE 18	Seminar	2
9	ELE 19	Comprehensive Viva	4	ELE 19	Comprehensive Viva	4

Semester II: — 34 Credits / 34 Credits

S.N	Course Code	Course Name (Pre-revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ELE 21	Network Theory	4	ELE 21	Network Theory	4
2	ELE 22	Analog & Digital Communication	4	ELE 22	Analog & Digital Communication	4
3	ELE 23	Computer Networks	4	ELE 23	Computer Networks	4
4	ELE 24	Digital Signal Processing	4	ELE 24	Digital Signal Processing	4
5	ELE 25	OOPS(C++)	4	ELE 25	OOPS(using C++)	4
6	ELE 26	(a) MATLAB Laboratory (b) ADC Lab	2+2	ELE 26	(a) MATLAB Laboratory (b) ADC Lab	2+2
7	ELE 27	(a) C++ Lab (b) Network Lab	2+2	ELE 27	(a) C++ Lab (b) Network Lab	2+2
8	ELE 28	Seminar	2	ELE 28	Seminar	2
9	ELE 29	Comprehensive Viva	4	ELE 29	Comprehensive Viva	4

Semester III: — 26 Credits / 30 Credits

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ELE 31	Control Systems	4	ELE 31	Control Systems	4
2	ELE 32	Microwave Engineering	4	ELE 32	Microwave Engineering	4
3	ELE 33	Microprocessors & Interfacing	4	ELE 33	Microprocessors & Interfacing	4
4	ELE 34	VHDL	4	ELE 34	Wireless Communication	4
5	ELE 35	VHDL Laboratory	3	ELE 35	VHDL	4
6	ELE 36	Microprocessor Lab.	3	ELE 36	Wireless Comm. Laboratory	2
7	ELE 37	Comprehensive Viva	4	ELE 37	VHDL Laboratory	2
8				ELE 38	Microprocessor Lab.	2
				ELE 39	Comprehensive Viva	4

Semester IV: — 26 Credits / 26 Credits

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ELE41	CMOS Technology & VLSI Design	4	ELE41	CMOS Technology & VLSI Design	4
2	ELE 42	Microcontroller & Embedded System	4	ELE 42	Microcontroller & Embedded System	4
3	ELE 43	VLSI Lab	3	ELE 43	VLSI Lab	3
4	ELE 44	Microcontroller Lab	3	ELE 44	Microcontroller Lab	3
5	ELE 45	Major Project	8	ELE 45	Major Project	4
6	ELE 46	Comprehensive Viva	4	ELE 46	Comprehensive Viva	4

Total Credits: ~~120~~   **Total Credits: 124**

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8. VHDL Course will be introduced in M.Sc Electronics & Comm. III sem.

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M. Sc. Electronics Scheme Revision Session: 2014 – 16

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S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
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2	ELE 12	Electromagnetic Theory	4	ELE 12	Electromagnetic Theory	4
3	ELE 13	Programming in C Language	4	ELE 13	Programming in C Language	4
4	ELE 14	Analog Interface Electronics	4	ELE 14	Analog Interface Electronics	4
5	ELE 15	Digital Design	4	ELE 15	Digital Design	4
6	ELE 16	(a) Analog Lab (b) Digital Lab	2+2	ELE 16	(a) Analog Lab (b) Digital Lab	2+2
7	ELE 17	Computer Lab (C Programming)	4	ELE 17	Computer Lab (C Programming)	2
8	ELE 18	Seminar	2	ELE 18	Seminar	2
9	ELE 19	Comprehensive Viva	4	ELE 19	Comprehensive Viva	4

Semester II: — ~~34~~ Credits — 32 Credits

S.N	Course Code	Course Name (Pre-revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ELE 21	Network Theory	4	ELE 21	Network Theory	4
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4	ELE 24	Digital Signal Processing	4	ELE 24	Signals and Systems-II (Discrete)	4
5	ELE 25	OOPS(C++)	4	ELE 25	OOPS(using C++)	4
6	ELE 26	(a) MATLAB Laboratory (b) ADC Lab	2+2	ELE 26	(a) MATLAB Laboratory (b) ADC Lab	2+2
7	ELE 27	(a) C++ Lab (b) Network Lab	2+2	ELE 27	(a) C++ Lab (b) Network Lab	2+2
8	~~ELE 28~~	~~Seminar~~	~~2~~	ELE 28	Comprehensive Viva	4
9	ELE 29	Comprehensive Viva	4			

Semester III: — 30 Credits — 30 Credits

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ELE 31	Control Systems	4	ELE 31	Control Systems	4
2	ELE 32	Microwave Engineering	4	ELE 32	Microwave Communication	4
3	ELE 33	Microprocessors & Interfacing	4	ELE 33	Microprocessors & Interfacing	4
4	ELE 34	Wireless Communication	4	ELE 34	Wireless Communication	4
5	ELE 35	VHDL	4	ELE 35	VHDL	4
6	ELE 36	Wireless Comm. Laboratory	2	ELE 36	Wireless Comm. Laboratory	2
7	ELE 37	VHDL Laboratory	2	ELE 37	VHDL Laboratory	2
8	ELE 38	Microprocessor Lab.	2	ELE 38	Microprocessor Lab.	2
	ELE 39	Comprehensive Viva	4	ELE 39	Comprehensive Viva	4

Semester IV: — 26 Credits — 26 Credits

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1	ELE41	CMOS Technology & VLSI Design	4	ELE41	CMOS Technology & VLSI Design	4
2	ELE 42	Microcontroller & Embedded System	4	ELE 42	Microcontroller & Embedded System	4
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Departmental Meeting 26/03/2014

A departmental meeting was held on 26/03/2014. Following faculty members were present.

1. Dr. A. Kumar
2. Dr. S. Katiyal
3. Dr. M.K. Chattopadhyay
4. Ms. Kirti Panwar
5. Mr. R.R. Chowdhary

Minutes:

1. Admission related data should be provided to committee for advertisement.
2. Dates of project phase - II has to be decided has first week of June-14.
3. Wireless Network paper should be shifted to first semester from second semester for MTech MCT.
4. New paper must be introduced in MTech MCT named "Real Time OS".
5. Paper Embedded System is replaced by Real Time OS in first semester for MTech ES.
6. DBMS paper is replaced by Java Programming in MTech ES.

7. Wireless Comm. Course will be introduced in M.Sc Electronics III Sem.

8. VHDL Course will be introduced in M.Sc Electronics & Comm. III Sem.

9. Credits for both the M.Sc Programmes will be revised accordingly.

10. Credits in Sem I and Sem II for M.Sc will be revised as per the revision for Batch 2014-16.

11.

M. Sc. Electronics Scheme Revision Session: 2015 – 17

Semester I   **32 Credits**   **32 Credits**

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ELE 11	Signals and Systems-I (Continuous)	4	EL51101	Signals and Systems-I (Continuous)	4
2	ELE 12	Electromagnetic Theory	4	EL51102	Electromagnetic Theory	4
3	ELE 13	Programming in C Language	4	EL51103	Programming in C	4
4	ELE 14	Analog Interface Electronics	4	EL51104	Analog Interface Electronics	4
5	ELE 15	Digital Design	4	EL51105	Digital Design	4
6	ELE 16	(a) Analog Lab (b) Digital Lab	2+2	EL51203	Computer Lab (C Programming)	2
7	ELE 17	Computer Lab (C Programming)	**2**	EL51204/05	(a) Analog Lab (b) Digital Lab	2+2
8	ELE 18	Seminar	2	EL51301	Seminar	2
9	ELE 19	Comprehensive Viva	4	EL51401	Comprehensive Viva	4

Semester II: **32 Credits**   **32 Credits**

S.N	Course Code	Course Name (Pre-revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ELE 21	Network Theory	4	EL52101	Network Theory	4
2	ELE 22	Analog Communication System	4	EL52102	Analog Communication System	4
3	ELE 23	Computer Networks	4	EL52103	Computer Networks	4
4	ELE 24	Signals and Systems-II (Discrete)	4	EL52104	Signals and Systems-II (Discrete)	4
5	ELE 25	OOPS(C++)	4	EL52105	Object Oriented Programming (using C++)	4
6	ELE 26	(a) MATLAB Laboratory (b) ADC Lab	2+2	EL52202/03	(a) ADC Lab (b) Computer Network Lab	2+2
7	ELE 27	(a) C++ Lab (b) Network Lab	2+2	EL52204/05	(a) MATLAB Laboratory (b) C++ Lab	2+2
8	ELE 28	Comprehensive Viva	4	EL52401	Comprehensive Viva	4

Semester III: **30 Credits**   **30 Credits**

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ELE 31	Control Systems	4	EL53101	Control Systems	4
2	ELE 32	Microwave Communication	4	EL53102	Microwave Communication	4
3	ELE 33	Microprocessors & Interfacing	4	EL53103	Microprocessors & Interfacing	4
4	ELE 34	Wireless Communication	4	EL53104	Wireless Communication	4
5	ELE 35	VHDL	4	EL53105	VHDL	4
6	ELE 36	Wireless Comm. Laboratory	2	EL53202	Wireless Comm. Laboratory	2
7	ELE 37	VHDL Laboratory	**2**	EL53205	VHDL Laboratory	**2**
8	ELE 38	Microprocessor Lab.	**2**	EL53203	Microprocessor Lab.	**2**
	ELE 39	Comprehensive Viva	4	EL53401	Comprehensive Viva	4

Semester IV: **26 Credits**   **26 Credits**

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	ELE41	CMOS Technology & VLSI Design	4	EL54101	CMOS Technology & VLSI Design	4
2	ELE 42	Microcontroller & Embedded System	4	EL54102	Microcontroller & Embedded System	4
3	ELE 43	VLSI Lab	3	EL54201	VLSI Lab	3
4	ELE 44	Microcontroller Lab	3	EL54202	Microcontroller Lab	3
5	ELE 45	Major Project	8	EL54501	Major Project	8
6	ELE 46	Comprehensive Viva	4	EL54401	Comprehensive Viva	4

Total Credits: 120   **Total Credits: 120**

Notes: 1. Courses marked with RED Ink are deleted courses and courses marked with GREEN ink are newly introduced ones. BLUE marked courses have
   minor changes in name and/or syllabus.

   2. The CBCS scheme has been introduced from 2013 onwards.

Departmental Meeting

10/04/2015

A departmental committee was held on 10/04/15. Following Faculty members were present.

1. Dr. Abhay Kumar
2. Dr. M. K. Chattopadhyay
3. Ms. Kirti Panwar
4. Mr. R. R. Chowdhary

Minutes

1. Ordinance 31 is revised by University. Syllabus for all course will be revised as per new Ordinance. Credit will be revised accordingly for all programmes.

2. Elective (generic and subject specific) course should be offered to student.

M. Sc. Electronics Scheme Revision Session: 2016 – 18

Semester I — 32 Credits — 32 Credits

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	EL51101	Signals and Systems-I (Continuous)	4	EL51101	Signals and Systems-I (Continuous)	4
2	EL51102	Electromagnetic Theory	4	EL51102	Electromagnetic Theory	4
3	EL51103	Programming in C	4	EL51103	Programming in C	4
4	EL51104	Analog Interface Electronics	4	EL51104	Devices and Circuit Theory	4
5	EL51105	Digital Design	4	EL51105	Digital Design	4
6	EL51203	Computer Lab (C Programming)	2	EL51203	C Programming Lab	2
7	EL51204/05	(a) Analog Lab (b) Digital Lab	2+2	EL51204/05	Device and Circuit Lab / Digital Design Lab	2+2
8	EL51301	Seminar	2	EL51301	Seminar	2
9	EL51401	Comprehensive Viva	4	EL51401	Comprehensive Viva	4

Semester II: — 32 Credits — 32 Credits

S.N	Course Code	Course Name (Pre-revised)	Credit	Course Code	Course Name (Revised)	Credit
1	EL52101	Network Theory	4	EL52101	Microprocessor & Interfacing	4
2	EL52102	Analog Communication System	4	EL52102	Analog & Digital Communication	4
3	EL52103	Computer Networks	4	EL52103	Computer Networks	4
4	EL52104	Signals and Systems-II (Discrete)	4	EL52104	Signals and Systems-II (Discrete)	4
5	EL52105	Object Oriented Programming (using C++)	4	EL52105	Object Oriented Programming (using JAVA)	4
6	EL52202/03	(a) ADC Lab (b) Computer Network Lab	2+2	EL52201/02	Microprocessor & Inft. Lab. / Analog & Digital Communication Lab	2+2
7	EL52204/05	(a) MATLAB Laboratory (b) C++ Lab	2+2	EL52204/05	MATLAB Laboratory / JAVA Lab	2+2
8	EL52401	Comprehensive Viva	4	EL52401	Comprehensive Viva	4

Semester III: — 30 Credits — 30 Credits

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	EL53101	Control Systems	4	EL53101	Control Systems	4
2	EL53102	Microwave Communication	4	EL53102	Microwave Communication	4
3	EL53103	Microprocessors & Interfacing	4	EL53103	Microcontroller & Interfacing	4
4	EL53104	Wireless Communication	4	EL53106	CMOS Technology & VLSI Design	4
5	EL53105	VHDL	4	EL53105	VHDL	4
6	EL53202	Wireless Comm. Laboratory	2	EL53203	Microcontroller Lab.	2
7	EL53205	VHDL Laboratory	**2**	EL53206	CMOS Technology & VLSI Design Laboratory	**2**
8	EL53203	Microprocessor Lab.	**2**	EL53205	VHDL Laboratory	**2**
	EL53401	Comprehensive Viva	4	EL53401	Comprehensive Viva	4

Semester IV: — 26 Credits — 12 Credits

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	EL54101	CMOS Technology & VLSI Design	4			
2	EL54102	Microcontroller & Embedded System	4			
3	EL54201	VLSI Lab	3	EL54501	Major Project	12
4	EL54202	Microcontroller Lab.	3			
5	EL54501	Major Project	8			
6	EL54401	Comprehensive Viva	4			

Total Credits: 120 — **Total Credits: 106**

Notes: 1. Courses marked with RED Ink are deleted courses and courses marked with GREEN ink are newly introduced ones. BLUE marked courses have minor changes in name and/or syllabus.

  2. The CBCS scheme has been introduced from 2013 onwards.

Departmental Meeting 25/03/2016

A departmental meeting was held on 25/03/2016 Following faculty members were present.

1. Dr. Abhay Kumar

2. Dr. S. Katiyal

3. Dr. M.K. Chattopadhyay

4. Ms. Kirti Pannu Bhati

5. Mr. R.R. Chowdhary

Minutes.

1. Project phase - II viva voce will be held in June-16

2. Obsolete paper "Analog Interface Electronics" course will be replaced by " Devices and Circuit Theory" in M.Sc Programmes in Semester I.

3. Scheme for both the M.Sc programme will be revised to accommodate I semester project training in industry and credits will be revised accordingly.

4. Few paper in M.Sc programmes. will be merged and rearranged accordingly.

M. Sc. Electronics Scheme Revision Session: 2017 – 19

Semester I — **32 Credits** — **32 Credits**

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	EL51101	Signals and Systems-I (Continuous)	4	EL51101	Signals and Systems-I (Continuous)	4
2	EL51102	Electromagnetic Theory	4	EL51102	Electromagnetic Theory	4
3	EL51103	Programming in C	4	EL51103	Programming in C	4
4	EL51104	Devices and Circuit Theory	4	EL51104	Devices and Circuit Theory	4
5	EL51105	Digital Design	4	EL51105	Digital Design	4
6	EL51203	C Programming Lab	2	EL51203	C Programming Lab	2
7	EL51204/05	Device and Circuit Lab / Digital Design Lab	2+2	EL51204/05	Device and Circuit Lab / Digital Design Lab	2+2
8	EL51301	Seminar	2	EL51301	Seminar	2
9	EL51401	Comprehensive Viva	4	EL51401	Comprehensive Viva	4

Semester II: — **32 Credits** — **32 Credits**

S.N	Course Code	Course Name (Pre-revised)	Credit	Course Code	Course Name (Revised)	Credit
1	EL52101	Microprocessor & Interfacing	4	EL52101	Microprocessor & Interfacing	4
2	EL52102	Analog & Digital Communication	4	EL52102	Analog & Digital Communication	4
3	EL52103	Computer Networks	4	EL52103	Computer Networks	4
4	EL52104	Signals and Systems-II (Discrete)	4	EL52104	Signals and Systems-II (Discrete)	4
5	EL52105	Object Oriented Programming (using JAVA)	4	EL52105	Object Oriented Programming (using JAVA)	4
6	EL52201/02	Microprocessor Lab. / Analog & Digital Communication Lab	2+2	EL52201/02	Microprocessor Lab. / Analog & Digital Communication Lab	2+2
7	EL52204/05	MATLAB Laboratory / JAVA Lab	2+2	EL52204/05	MATLAB Laboratory / JAVA Lab	2+2
8	EL52401	Comprehensive Viva	4	EL52401	Comprehensive Viva	4

Semester III: — **30 Credits** — **30 Credits**

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	EL53101	Control Systems	4	EL53101	Control Systems	4
2	EL53102	Microwave Communication	4	EL53102	Microwave Communication	4
3	EL53103	Microcontroller & Interfacing	4	EL53103	Microcontroller & Interfacing	4
4	~~EL53106~~	~~CMOS Technology & VLSI Design~~	4	EL53104	Wireless Communication	4
5	EL53105	VHDL	4	EL53105	VHDL	4
6	EL53203	Microcontroller Lab.	2	EL53203	Microcontroller Lab.	2
7	~~EL53206~~	~~CMOS Technology & VLSI Design Laboratory~~	2	EL53204	Wireless Communication Laboratory	2
8	EL53205	VHDL Laboratory	2	EL53205	VHDL Laboratory	2
	EL53401	Comprehensive Viva	4	EL53401	Comprehensive Viva	4

Semester IV: — **12 Credits** — **12Credits**

S.N	Course Code	Course Name (Pre-Revised)	Credit	Course Code	Course Name (Revised)	Credit
1	EL54501	Major Project	12	EL54501	Major Project	12

Total Credits: 106 — **Total Credits: 106**

Notes: 1. Courses marked with RED Ink are deleted courses and courses marked with GREEN ink are newly introduced ones. BLUE marked courses have minor changes in name and/or syllabus.

2. The CBCS scheme has been introduced from 2013 onwards.

Departmental Meeting 17/04/17

A departmental meeting was held on 17/04/17. Following faculty members were present

1. Dr. Abhay Kumar
2. Dr. S. Katiyal
3. Dr. M. K. Chattopadhyay
4. Ms. Kirti Pannu
5. Mr. R. R. Chowdhary

Minutes :-

1. Project Phase-II Viva Voce will be held in June, 17.

2. Plagiarization detection software "Urkund" adopted by University will be used for checking the Phase project thesis for plagiarization.

3. Embedded Microcontroller course is introduced as core subject for M.Tech MC7

4. A new course Wireless Computer Network & IoT is introduced in

M.Tech (MCT & ES) for exposing Students to current trends and technologies.

5. Wireless course will be removed from M.Tech (ES) first semester.

6. "FPGA introduction" should chapter is added to Advance Logic Design Course for M-Tech (ES) first semester

7. In M.Sc Electronics program "CMOS VLSI Design" course will be replaced by "Wireless Commn".