New Horizon College of Engineering

Department of Electronics and Communication Engineering

BOARD OF STUDIES MEETING - 4

DATE: 10/03/2018
VENUE: EC lab, Department of ECE
Time: 10 AM to 1:30 PM

New Horizon College of Engineering
Department of Electronics and Communication Engineering

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Time: 10 AM to 1:30 PM

AGENDA

1. Discussion on Scheme and Syllabus of B.E Courses of VII and VIII semesters.
2. Approval of course outcomes for each of the proposed courses for 4^{th} year.

New Horizon College of Engineering

Department of Electronics and Communication Engineering.

Members of the Board of Studies (BOS)

Sl. No.		Name	Official Mail id & Ph.No
1.	Faculty with different specialization	Dr. Sanjeev Sharma HOD-ECE, NHCE Chairman-BOS	hod_ece@newhorizonindia.edu 7829176479
2.		Dr. Mohan Kumar Naik Professor, ECE, NHCE	mohan72003@gmail.com 9986985232
3.		Dr. Nisha KCR Professor, ECE, NHCE	nishashaji2007@gmail.com 9902953427
4.		Mr. Aravinda K Sr. Assistant Professor, ECE, NHCE	aravindake@gmail.com 9886724072
5.		Ms. Dharmambal Sr. Assistant Professor, ECE, NHCE	dharmambal62@gmail.com 9900131185
6.		Ms. A Susmitha Sr. Assistant Professor, ECE, NHCE	susmitha.academic@gmail.com 9972699755
7.	Subject Expert	Dr. Aravinda H S Professor & HOD-ECE, JSS Academy of Technical Education	aravindhs1@gmail.com hodec@jssateb.ac.in 9742265523
8.		Dr. Rajeshwari Hegde Associate Professor & HOD-TCE, BMS College of Engineering	rajeshwari.hedge@gmail.com rajeshwari.tce@bmsce.ac.in 9008355922
9.	VTU Nominee (Expert-VC)	Dr. P A Vijaya Professor & HOD-ECE, BNMIT	pavmkv@gmail.com 9980632822
10.	Industry Expert	Dr. C. M. Anand Head, Aerospace Electronics and Systems Division(ALD) at CSIR-NAL Deputy Director, National Aerospace Laboratories	ananda_cm@nal.res.in
11.		Mr. Satyesh B N Senior Vice President, International Business, Tejas Networks Limited	satyesh@india.tejasnetworks.com
12.		Mr. Shashikanth Patil Sr. Project Engineer, WIPRO Technologies Ltd.	shashi.vnit@gmail.com 9880962096
13.	Co-opted member	Ms. Lipsa Dash Sr. Assistant Professor, ECE, NHCE	lipsa.nhce@gmail.com 8095532669

14.		Ms. Divya Sharma Sr. Assistant Professor, ECE, NHCE	er.divyasharma@gmail.com 9535895612
15.	Student-PG Alumni	Mr. Kiran Somaji B.Tech, INTEL Technologies	kiransomayaji.n@gmail.com kiran.n@intel.com

MINUTES OF THE 4TH MEETING OF THE BOARD OF STUDIES FOR AY 2018-19

1. Welcome and Introductory remarks by the BOS Chairman

The Chairman welcomed VTU Nominee, expert members from academics and industry and other members of the Board of Studies and highlighted the following salient points for discussion in the 4th BOS Meeting.

- Curriculum (Scheme and Syllabus) design for B.E. VII and VIII semesters.
- Approval of course outcomes for each of the proposed courses for 4th year.
- Curriculum design for new scheme with 175 credits.

Introductory remarks by the BOS Chairman

1. Chairman remarked on the need of accreditation process which is predominantly outcome based aiming at giving more weightage to the curriculum design, execution and outcome.
2. Chairman also mentioned about the 3 levels of expectation by the NBA namely the achievement of course outcomes, program outcomes and the program educational objectives.
3. Chairman mentioned that different guidelines such as that proposed by AICTE, Lead Professional Societies and VTU are available on the curriculum structure i.e., number of courses to be offered under for B.E. program.
4. Chairman sought opinion of industry experts on curriculum design and structure that could promote learning and impart industry-specific skills most importantly technical. He also invited responses from the external academic experts on the same

Remarks by Experts and Members

1. Industry expert informed that Open source softwares to be used by for final year projects giving students exposure to new simulation tools for current industry needs.
2. Academic expert suggested refinement of course outcomes and CO-PO mapping

for all courses.

3. One expert member advised to review assessment process of open elective courses.

2. The Board of Studies in Electronics & Communication Engineering recommended the following

The Standing Committee recommended

- that the following Practical courses namely

ECE57 Mini Project - 3
ECE67 Mini project - 4

To be included in 5th and 6th semester respectively for the batches of students in AY 2018-19.

- That the revision of total credit points for B.E. program from 200 credits to 175 credits as per AICTE guidelines to be implemented. The following table shows the proposed distribution of 175 credit points:

Sl. No.	Category	Credits earmarked	Number of courses offered
1	Basic Sciences	22	8
2	Engineering Sciences	22	6
3	Humanities and Social Sciences	8	5
4	Professional Core Courses	72	19
5	Professional Elective Courses	21	7
6	Open Elective Courses	6	2
7	Internship and Project Work	24	6

- As mentioned in the above table,
  - 7 Professional Elective courses to be offered as 1 in 5th semester, 2 each in 6th, 7th and 8th semesters.
  - Open Elective courses are to be offered 1 each in 6th and 7th semesters.

- that the replacement of the following course in 5th Semester named

ECE52 Microcontrollers

with **"Microprocessors"** syllabus as in **Appendix I** be ratified and that this takes effect for the batches of students in AY 2020-21 under 175 credit points system.

- . that the following practical courses namely

  "Communication lab" and "Advanced Communication Lab"

  to be moved to 6th semester and 7th semester respectively, with revision in syllabus takes effect for the batches of students in AY 2020-21 under 175 credit points system.

- That introduction of new Practical course namely

  "EDA Software Workshop Lab"

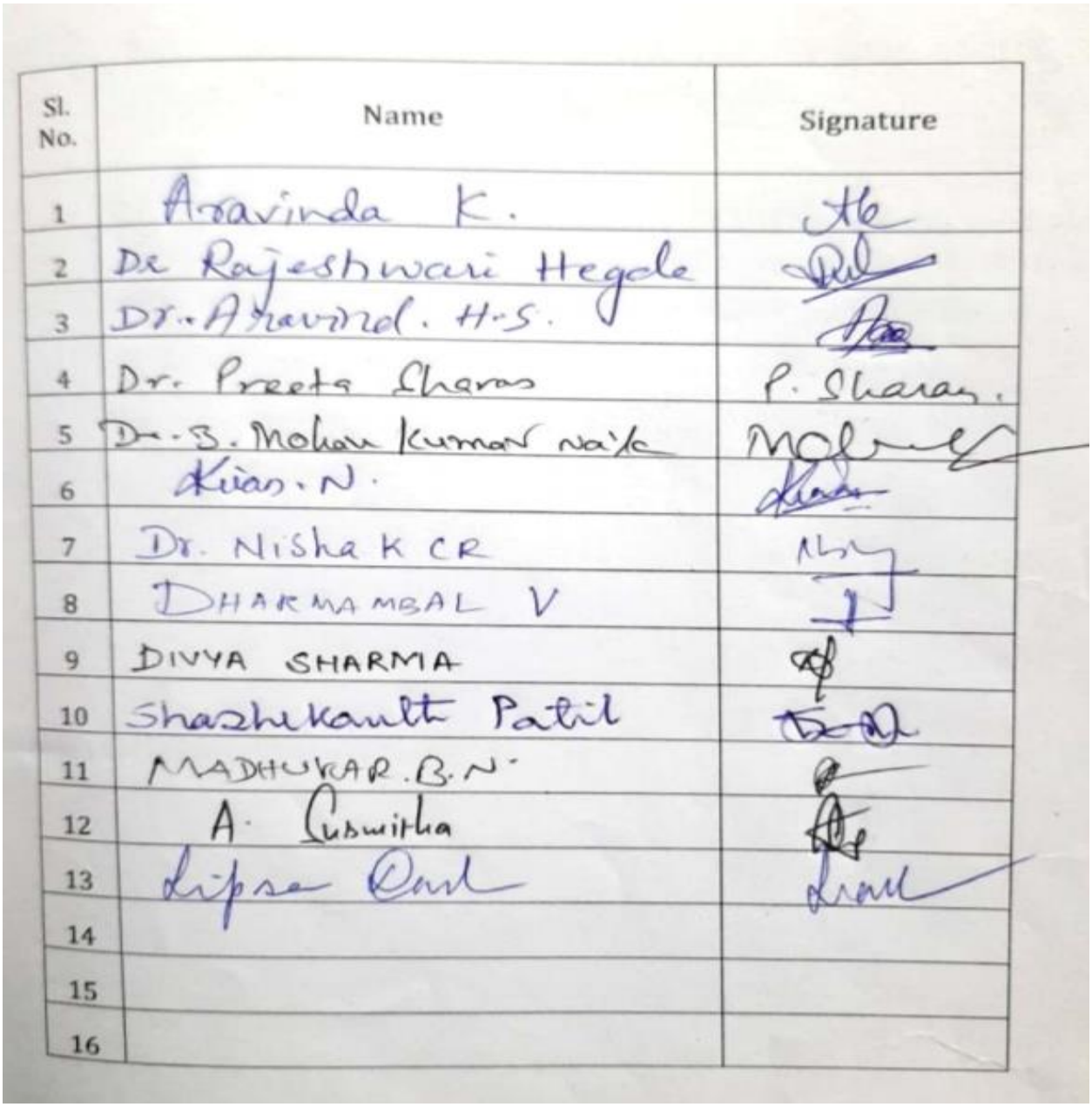
  to be included in the 7th semester for the batches of students in AY 2021-22 under 175 credit points system.

The B.E. scheme of batch 2017-21 and batch 2018 – 2022 is included in **Appendix II.**

3. Vote of Thanks by the Chairman- BOS

The meeting concluded with the vote of thanks by the chairman (HOD, ECE Department). He appreciated the comments from all the experts, faculty and student alumni for their valuable inputs and suggestions.

List of members present



Sl. No.	Name	Signature
1	Aravinda K.	
2	Dr Rajeshwari Hegde	
3	Dr. Aravind. H.S.	
4	Dr. Preeta Sharas	P. Sharas.
5	Dr. B. Mohan Kumar Naik	
6	Kiran. N.	
7	Dr. Nisha K CR	
8	DHARMAMBAL V	
9	DIVYA SHARMA	
10	Shashikanth Patil	
11	MADHUKAR. B. N.	
12	A. Suswitha	
13	Dipsa Das	
14		
15		
16		

APPENDIX I

MICROPROCESSORS

Course Code : 20ECE52 | **Credits : 03**
L: T: P : 3:0:0 | **CIE Marks : 50**
Exam Hours : 03 | **SEE Marks : 50**

Course Outcomes: At the end of the Course, the student will be able to:

CO1	Explain the functional features of 8086 Microprocessor.
CO2	Apply the knowledge of addressing modes to write assembly language program in 8086.
CO3	Make use of assembler directives and interrupt methods in 8086 programming.
CO4	Examine the timing diagrams using minimum and maximum mode configuration of 8086.
CO5	Demonstrate the peripheral Interfacing concepts in 8086.
CO6	Appraise the architectural features of 8051 Microcontroller to develop assembly language program.

Mapping of Course Outcomes to Program Outcomes

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**
CO1	-	-	-	-	-	-	-	-	-	-	-	-
CO2	3	-	-	-	3	-	-	-	3	-	-	3
CO3	3	3	-	-	3	-	-	-	3	-	-	3
CO4	3	3	-	-	-	-	-	-	-	-	-	-
CO5	3	3	2	2	3	-	-	-	3	-	-	3
CO6	3	3	2	2	3	-	-	-	3	-	-	3

Module No	Module Contents	Hours	COs
1	**ARCHITECTURE OF 8086** - Functional Block Diagram and Description - Addressing Modes, Machine language instruction formats, Instruction set.	9	**CO1,CO2**
	Text-1: 2.12,2.13,2.14,2.15,2.16, Text-2: 2.1, 2.2, 2.3		
2	**ASSEMBLY LANGUAGE PROGRAMMING**: 8086 Simple Assembly Language Programming, Assembler Directives, Interrupts, Interrupt cycle of 8086 and Interrupt Service Routines.	9	**CO3**
	Text-1: 6.30 -6.36 Text-2: 2.4, 4.3, 4.4, 4.5, 4.6, 4.7		
3	**8086 BUS CONFIGURATION AND TIMINGS:** Pin Diagram of 8086,Memory Organization , Minimum Mode and Timing diagrams, Maximum Mode and Timing diagrams, Memory Interfacing, Coprocessor-8087	9	**CO4**
	Text-2: 1.3,1.4, 1.8,1.9, 5.1.1, 8.3		
4	**PERIPHERAL INTERFACING&APPLICATION:** Programmable Peripheral Interface (8255), Keyboard Display controller (8279), Programmable interrupt controller (8259), Programmable DMA Controller(8257),	9	**CO5**
	Text-2: 5.4,5.5,6.2,6.3,7.1.7.2		
5	**MICROCONTROLLER** 8051 – Architecture, Special Function Registers (SFRs), I/O Pins Ports and Circuits, Instruction set, Addressing modes, Assembly language programming.	9	**CO6**
	Text 3 : 3.1,3.2, 5.0-5.6, 6.0-6.4,7.0-7.7		

TEXT BOOKS:

1. Microprocessor and Interfacing- Douglas V Hall, SSSP Rao, 3rd edition ,TMH, 2012.
2. Advanced Microprocessors and Peripherals- A.K. Ray and K.M. Bhurchandi, TMH, 3rd Edition, 2015.
3. The 8051 Microcontroller and Embedded Systems – using assembly and C , Muhammad Ali Mazidi and Janice Gillespie Mazidi and Rollin D. McKinlay, 2nd Edition, 2013,Pearson.

REFERENCE BOOKS:

1. Microcomputer systems-The 8086 / 8088 Family – Y.C. Liu and A.Gibson, 2nd edition, PHI -2003.
2. The Intel Microprocessor, Architecture, Programming and Interfacing - Barry B. Brey, 6e, Pearson Education / PHI, 2003.
3. The 8086 Microprocessor: Programming & Interfacing the PC -Kenneth J Ayala, CENGAGE Learning, 2011

Mapping of CO v/s PSO:

COs	PSO1	PSO2
20ECE52	Microprocessors	
CO1	3	-
CO2	3	-
CO3	3	2
CO4	3	-
CO5	3	-
CO6	3	-

Assessment Pattern

Sl. No.	Description	Type
1.	Student Assignment	Direct
2.	Internal assessment	Direct
3.	University exam	Direct
4.	Student feedback	Indirect
5.	Alumni feedback	Indirect
6.	Employers feedback	Indirect

CIE- Continuous Internal Evaluation (50 Marks)

Bloom's Taxonomy	**Tests**	**Assignments**	**Quizzes**
Marks	**25**	**15**	**10**
Remember	5	5	
Understand	5	5	
Apply	10	5	5
Analyze	5		5
Evaluate			
Create			

SEE- Semester End Examination (50 Marks)

Bloom's Taxonomy	**Tests**
Remember	10

Understand	10
Apply	20
Analyze	10
Evaluate	-
Create	-

APPENDIX II

B.E. Program - Batch: 2017 -2021

Department of Electronics and Communication Engineering

Scheme of Third and Fourth Semester

Second Year / Third Semester												
Sl. No.	**Course code**	**Course title**	**Credit Distribution**				**Overall credits**	**Theory hours**	**Lab hours**	**Marks**		
			L	**P**	**T**	**S**				**CIE**	**SEE**	**Total**
1	MAT31	Engineering Mathematics - III	4	0	1	0	5	6	0	50	50	100
	HSS322	Life Skills for Engineers	2	0	0	1	3	2	0	50	50	100
3	ECE33	Digital Electronic Circuits	3	2	0	0	5	3	4	75	75	150
4	ECE34	Analog Electronic Circuits	3	2	0	0	5	3	4	75	75	150
5	ECE35	Network Analysis	3	0	1	0	4	5	0	50	50	100
6	ECE36	Signals and Systems	3	0	0	0	3	4	0	50	50	100
7	ECE37	Mini project - 1	0	2	0	0	2	0	0	25	25	50
TOTAL							27	23	8	375	375	750
Second Year / Fourth Semester												
Sl. No.	**Course code**	**Course title**	**Credit Distribution**				**Overall credits**	**Theory hours**	**Lab hours**	**Marks**		
			L	**P**	**T**	**S**				**CIE**	**SEE**	**Total**
1	MAT41	Engineering Mathematics-IV	4	0	1	0	5	6	0	50	50	100
2	HSS421	Economics for Engineers	2	0	0	1	3	2	0	50	50	100
3	ECE43	System Design using HDL	3	2	0	0	5	3	4	75	75	150
4	ECE44	Digital Signal Processing	3	2	0	0	5	3	4	75	75	150

5	ECE45	Control Systems	3	0	1	0	4	5	0	50	50	100
6	ECE46	Linear Integrated Circuits	3	0	0	0	3	4	0	50	50	100
7	ECE47	Mini Project-II	0	2	0	0	2	0	0	25	25	50
TOTAL							27	23	8	375	375	750

B.E. Program - Batch: 2017 -2021

Department of Electronics and Communication Engineering

Scheme of Fifth and Sixth Semester

Third Year / Fifth Semester												
Sl. No.	**Course code**	**Course title**	**Credit Distribution**				**Overall credits**	**Theory hours**	**Lab hours**	**Marks**		
			L	**P**	**T**	**S**				**CIE**	**SEE**	**Total**
1	ECE51	Analog Communication	3	2	0	0	5	3	4	75	75	150
2	ECE52	Microcontrollers	3	2	0	0	5	3	4	75	75	150
3	ECE53	CMOS VLSI Design	3	2	0	0	5	3	4	75	75	150
4	ECE54	Information Theory and Coding	3	0	0	0	3	4	0	50	50	100
5	ECE55	Engineering Electromagnetics	3	0	1	0	4	5	0	50	50	100
6	ECE56X	Professional Elective – I	3	0	0	1	4	3	0	50	50	100
7	ECE57	Mini Project-III	0	2	0	0	2	0	0	25	25	50
		TOTAL					**28**	**21**	**12**	**400**	**400**	**800**

Third Year / Sixth Semester												
Sl. No.	**Course code**	**Course title**	**Credit Distribution**				**Overall credits**	**Theory hours**	**Lab hours**	**Marks**		
			L	**P**	**T**	**S**				**CIE**	**SEE**	**Total**
1	ECE61	Digital Communication	3	2	0	0	5	3	4	75	75	150
2	ECE62	Embedded System Design	3	2	0	0	5	3	4	75	75	150
3	ECE63	Microelectronic Circuits	4	0	0	0	4	4	0	50	50	100
4	ECE64	Microwaves and Radar	4	0	0	0	4	4	0	50	50	100

5	ECE65X	Professional Elective – II	3	0	0	1	4	3	0	50	50	100
6	NHOPXX	Open Elective – I	3	0	0	1	4	3	0	50	50	100
7	ECE67	Mini Project-IV	0	2	0	0	2	0	0	25	25	50
TOTAL							**28**	**20**	**8**	**375**	**375**	**750**

B.E. Program - Batch: 2017 -2021

Department of Electronics and Communication Engineering

Scheme of Seventh and Eighth Semester

Fourth Year / Seventh Semester												
Sl. No.	**Course code**	**Course title**	**Credit Distribution**				**Overall credits**	**Theory hours**	**Lab hours**	**Marks**		
			L	**P**	**T**	**S**				**CIE**	**SEE**	**Total**
1	ECE71	Wireless and Mobile Communications	3	2	0	0	5	3	4	75	75	150
2	ECE72	Antennas and Wave Propagation	3	0	0	0	3	4	0	50	50	100
3	ECE73X	Professional Elective – III	3	0	0	1	4	3	0	50	50	100
4	ECE74X	Professional Elective – IV	3	0	0	1	4	3	0	50	50	100
5	ECE75X	Professional Elective – V	3	0	0	1	4	3	0	50	50	100
6	NHOPXX	Open Elective – II	3	0	0	1	4	3	0	50	50	100
TOTAL							24	19	4	325	325	650

Fourth Year / Eighth Semester												
Sl. No.	**Course code**	**Course title**	**Credit Distribution**				**Overall credits**	**Theory hours**	**Lab hours**	**Marks**		
			L	**P**	**T**	**S**				**CIE**	**SEE**	**Total**
1	NHOPXX	Open Elective – III	3	0	0	1	4	3	0	50	50	100
2	ECE82	Internship	0	4	0	0	4	0	4	50	50	100
3	ECE86	Project Work	0	8	0	0	8	0	8	50	50	100
TOTAL							16	3	12	150	150	300

B.E. Program - Batch: 2018 -2022

Department of Electronics and Communication Engineering

		New Horizon College of Engineering Department of Electronics and Communication Engineering Scheme of III Semester (Autonomous) (2019-20)									
		Semester III									
Sl. No.	Course Code	Course	BOS	Credit Distribution			Overall Credits	Contact hours	Marks		
				L	T	P			CIE	SEE	Total
1	19ECE31	Applied Mathematics-III	BS	2	1	0	3	4	50	50	100
2	19HSS322	Life Skills for Engineers	HSS	3	0	0	3	3	50	50	100
4	19ECE33	Digital Electronic Circuits	ECE	3	0	0	3	3	50	50	100
5	19ECE34	Analog Electronic Circuits	ECE	3	0	0	3	3	50	50	100
6	19ECE35	Network Analysis	ECE	3	0	0	3	3	50	50	100
7	19ECE36	Signals and Systems	ECE	2	1	0	3	4	50	50	100
8	19ECL37	Digital Electronic Circuits Lab	ECE	0	0	1.5	1.5	3	25	25	50
9	19ECL38	Analog Electronic Circuits Lab	ECE	0	0	1.5	1.5	3	25	25	50
10	19ECL39	Mini project-I	ECE	0	0	2	2	0	25	25	50
						Total	**23**	**26**	**375**	**375**	**750**

		New Horizon College of Engineering Department of Electronics and Communication Engineering Scheme of IV Semester (Autonomous) (2019-20)									
		Semester IV									
Sl. No.	Course Code	Course	BOS	Credit Distribution			Overall Credits	Contact hours	Marks		
				L	T	P			CIE	SEE	Total
1	19ECE41	Applied Mathematics-IV	BS	2	1	0	3	4	50	50	100
2	20HSS421	Economics for Engineers	HSS	2	0	0	2	2	25	25	50
3	19HSS423	Environmental Science and Awareness	HSS	0	0	0	0	1	25	25	50
4	19ECE43	System Design using HDL	ECE	3	0	0	3	3	50	50	100
5	19ECE44	Digital Signal Processing	ECE	3	0	0	3	3	50	50	100
6	19ECE45	Control Systems	ECE	2	1	0	3	4	50	50	100
7	19ECE46	Linear Integrated Circuits	ECE	3	0	0	3	3	50	50	100
8	19ECL47	Hardware Description Language Lab	ECE	0	0	1.5	1.5	3	25	25	50
9	19ECL48	Digital Signal Processing Lab	ECE	0	0	1.5	1.5	3	25	25	50

10	19ECL49	Mini project-II	ECE	0	0	2	2	0	25	25	50
						Total	**23**	**27**	**400**	**400**	**800**

New Horizon College of Engineering

Department of Electronics and Communication Engineering

SCHEME OF FIFTH SEMESTER (Autonomous) (2020-21)

Sl. No	Course Code	Course	Credit Distribution			Overall Credits	Contact hours	Marks		
			L	T	P			CIE	SEE	Total
1	20ECE51	Analog Communication	3	0	0	3	3	50	50	100
2	20ECE52	Microprocessors	3	0	0	3	3	50	50	100
3	20ECE53	CMOS VLSI Design	3	0	0	3	3	50	50	100
4	20ECE54	Information Theory and Coding	3	0	0	3	3	50	50	100
5	20ECE55	Engineering Electromagnetics	2	1	0	3	4	50	50	100
6	20ECE56X	Professional Elective-I	3	0	0	3	3	50	50	100
7	20ECL57	Microprocessors Lab	0	0	1.5	1.5	3	25	25	50
8	20ECL58	CMOS VLSI Design Lab	0	0	1.5	1.5	3	25	25	50
9	20ECL59	Mini project-III	-	-	-	2	-	25	25	50
TOTAL						**23**	**25**	**375**	**375**	**750**

New Horizon College of Engineering

Department of Electronics and Communication Engineering

SCHEME OF SIXTH SEMESTER (Autonomous) (2020-21)

Sl. No	Course Code	Course	Credit Distribution			Overall Credits	Contact hours	Marks		
			L	T	P			CIE	SEE	Total
1	20ECE61	Digital Communication	3	0	0	3	3	50	50	100
2	20ECE62	Embedded System Design	3	0	0	3	3	50	50	100
3	20ECE63	Microelectronic Circuits	3	0	0	3	3	50	50	100
4	20ECE64X	Professional Elective-II	3	0	0	3	3	50	50	100
5	20ECE65X	Professional Elective-III	3	0	0	3	3	50	50	100
6	20ECL66	Communication Lab	0	0	1.5	1.5	3	25	25	50
7	20ECL67	Embedded System Design Lab	0	0	1.5	1.5	3	25	25	50
8	20ECL68	Mini project-IV	-	-	-	2	-	25	25	50
9	NHOPXX	Open Elective-I	3	0	0	3	3	50	50	100
TOTAL						**23**	**24**	**375**	**375**	**750**

New Horizon College of Engineering

Department of Electronics and Communication Engineering

SCHEME OF SEVENTH AND EIGHTH SEMESTER (Autonomous) (2021-22)

Semester VII											
Sl. No.	Course Code	Course	Credit Distribution			Overall Credits	Contact hours	Marks		
			L	T	P			CIE	SEE	Total
1	21ECE71	Wireless and Mobile Communications	3	0	0	3	3	50	50	100
2	21ECE72	Antennas and Wave propagation	3	0	0	3	3	50	50	100
3	21ECE73	Fiber Optic Communication	3	0	0	3	3	50	50	100
4	21ECE74X	Professional Elective-IV	3	0	0	3	3	50	50	100
	21ECE741	Embedded Computing								
	21ECE742	Advanced Semiconductors								
	21ECE743	Satellite Communications								
	21ECE744	Biomedical Signal Processing								
	21ECE745	Artificial Intelligence and Cognitive Computing								
	21ECE746	Software Defined Radio								
5	21ECE75X	Professional Elective-V	3	0	0	3	3	50	50	100
	21ECE751	Robotics								
	21ECE752	Low power VLSI Design								
	21ECE753	Wireless Ad-hoc Sensor Networks								
	21ECE754	VLSI Signal Processing								
	21ECE755	Neural Networks								
	21ECE756	Renewable Energy								
6	21ECL76	Advanced Communication Lab	0	0	1.5	1.5	3	25	25	50
7	21ECL77	EDA Software Workshop Lab	0	0	1.5	1.5	3	25	25	50
8	21ECL78	Project Phase-1	-	-	-	2	0	25	25	50
9	NHOPXX	Open Elective-II	3	0	0	3	3	50	50	100
	NHOP12	Cisco - Routing & Switching - 2								
	NHOP13	Network security and Cryptography								
					Total	**23**	**24**	**375**	**375**	**750**

Semester VIII										
Sl. No.	Course Code	Course	Credit Distribution			Overall Credits	Contact hours	Marks		
			L	T	P			CIE	SEE	Total
1	21ECE81X	Professional Elective-VI	3	0	0	3	3	50	50	100
	21ECE811	Internet of Things								
	21ECE812	VLSI Design Manufacturing								
	21ECE813	Cellular Mobile Communication								
	21ECE814	Industrial Automation								
	21ECE815	Python and R Programming								
	21ECE816	Optical Networks								
2	21ECE82X	Professional Elective-VII	3	0	0	3	3	50	50	100
	21ECE821	Switching & Finite Automata Theory								
	21ECE822	Digital Neurocomputing								
	21ECE823	Digital Image Processing								
	21ECE824	Radar networks								
	21ECE825	Wireless and High speed ICs and Systems								
	21ECE826	Block Chain Technology								
3	21ECL83	Internship	-	-	-	4	0	50	50	100
4	21ECL84	Project Phase-2	-	-	-	10	0	150	150	300
					Total	**20**	**6**	**300**	**300**	**600**

Semesters				Credits	Hrs			Marks
I & II				40	40			1500
III				23	26			750
IV				23	27			800
V				23	25			750
VI				23	24			750
VII				23	24			750
VIII				20	6			600
Total				175	172			5900

Semester/Category	BS	ES	HU	PC	PE	OE	PW	Total
1 & 2	16	22	2					40
3	3		3	15			2	23

4	3		3	15			2	23
5				18	3		2	23
6				12	6	3	2	23
7				12	6	3	2	23
8					6		14	20
Total (Actual)	22	22	8	72	21	6	24	175
Credits Earmarked	24	21	10	69	21	6	24	175
Difference	-2	1	-2	3	0	0	0	0