1.2.2

1) Provide List of programs in which CBCS/ECS was implemented in the last completed academic year as certified by the Registrar.

2) 2 )Provide Minutes of the Academic Council/BOS meetings highlighting the relevant documents to this metric.

1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/elective course system has been implemented (20)

Programme Code	Programme name	Year of Introduction	Status of implementation of CBCS / ECS (Yes/No)	Year of implementation of CBCS / ECS	LINK TO BOS MOM	LINK TO ACM
B.E	Automobile Engineering	2012	Yes	2015	https://newhorizonindia.edu/nhengineering/automobile-engineering/bos-boe- constitution/	
B.E	Civil Engineering	2009	Yes	2015	https://newhorizonindia.edu/nhengineering/department-of-civil- engineering/bos-boe-constitution/	
B.E	Computer Science and Engineering	2001	Yes	2015	https://newhorizonindia.edu/nhengineering/department-of-computer-science- engineering/bos-meeting/	
B.E	Electronics and Communication Engineering	2001	Yes	2015	https://newhorizonindia.edu/nhengineering/department-of-electronics-and- communication-engineering/bos-boe-constitution/	
B.E	Electrical and Electronics engineering	2001	Yes	2015	https://newhorizonindia.edu/nhengineering/department-of-electrical-and- electronics-engineering/bos-minutes-of-meeting/	
B.E	Information Science and Engineering	2001	Yes	2015	https://newhorizonindia.edu/nhengineering/information-science- engineering/bos-boe-constitution/	https://newhorizon-nhengineering.s3.ap-south- 1.amazonaws.com/nhengineering/wp-
B.E	Mechanical Engineering	2003	Yes	2015	https://newhorizonindia.edu/nhengineering/mechanical-engineering/bos-boe- constitution/	<u>content/uploads/2021/04/07063002/acm-final-</u> <u>1 organized organized.pdf</u>
MBA	Master of Business Administration	2004	Yes	2015	https://newhorizonindia.edu/nhengineering/mba/bos-minutes-of-meeting/	
МСА	Master of Computer Application	2002	Yes	2015	https://newhorizonindia.edu/nhengineering/mca/bos-boe-constitution/	
M.Tech	Cyber Forensics and Information Security	2019	Yes	2019	https://newhorizonindia.edu/nhengineering/information-science- engineering/bos-boe-constitution/	
M.Tech	Machine Design	2014	Yes	2015	https://newhorizonindia.edu/nhengineering/mechanical-engineering/bos-boe- constitution/	
M.Tech	Computer Science and Engineering	2010	Yes	2015	https://newhorizonindia.edu/nhengineering/department-of-computer-science- engineering/bos-meeting/	

Principal New Horizon College of Engineering Outer Ring Road, Bellandur Post, Bangalore 560 103.

1.2.2

**3)** Provide University letter endorsing the implementation of CBCS.

# Visvesvaraya Technological University

"Jnana Sangama", Belagavi - 590 018

### REGISTRAR

Phone: (0831) 2405468 Fax : (0831) 2405467

Date: 2 5 MAY 2015

Ref. No. VTU/Aca/A6/2014-15//3-79

CIRCULAR

This is to bring to the notice of the Principals of affiliated Engineering colleges that,

"As per the directions of University Grants Commission, New Delhi, the Choice Based Credit System (CBCS) will be introduced for B.E./B.Tech. Programs from the academic year 2015-16. In light of this it is decided to retain 2010 syllabus to the students admitted to B.E./B.Tech. during the academic year 2014-15".

Hence, the students who are admitted to:

- 1. FIRST Semester B.E./B.Tech. during the academic year 2014-15 will study the 2010 scheme and syllabus from III to VIII Semesters without any modification,
- 2. THIRD Semester B.E./B.Tech. (Lateral Entry) during the academic year 2015-16 will study the 2010 scheme and syllabus from III to VIII Semesters without any modification, and
- 3. The Question Paper Pattern (answering 5 out of 8 questions) will remain the same as that of the 2010 scheme.

The Principals of affiliated Engineering Colleges are requested to bring the contents of this circular to the notice of all the concerned.

Sd/-REGISTRAR

(Dr. K. E. Prakash)

To, The Principals of affiliated Engineering colleges.

Copy FWCs to:

- 1. The Registrar (Evaluation), VTU Belgaum, for information and needful.
- 2. The Special Officers of VTU Regional Offices, for information.
- 3. The Special Officer, Academic Section, VTU, for information.
- 4. The Secretary to VC, VTU Belgaum, for information.

**REGISTRAR** (Dr.K.E.Prakash)

1.2.2

4) Structure of the program clearly indicating the courses, credits/Electives as approved by the competent board to be provided.

# New Horizon College of Engineering, Bangalore Program: B.E in Automobile Engineering

## Credit Scheme for First Semester B.E.

SL No	Course Code	Former	BOS	D	Cr	edit butic	20	Overall	Contact		Mark	s
-20/510	59.7.9°T.	Course		L	P	Т	S	Credits	Hours	CIE	SEE	Total
1	15MAT11	Engineering Mathematics-I	MAT	4	0	1	0	5	6	50	50	100
2	15CHE12	Engineering Chemistry	CHE	3	1	0	1	5	5	75	75	150
3	15CSE13	Introduction to Programming with C	CSE	3	1	0	I.	5	5	75	75	150
4	15MEE14	Computer Aided Engineering Drawing	MEE	2	1	1	0	4	6	50	50	100
5	15ECE15	Basic Electronics	ECE	3	0	1	0	4	5	50	50	100
6	16HSS161	Environmental Science and Awareness	HSS	2	0	0	0	2	2	50	50	100
7	15HSS171	Essential English	HSS	N	land Cou	ator	y.	0	2	25	25	50
		Total				_		25	31	375	375	750

		FIRST	SEMES	TE	R-P	HY	SICS	SCYCLE		-		
SL.	Course	Course	BOS	D	Cr listri	edit bati	on	Overall	Contact	Marks		
310	Code			r	P	T	5	Credits	Hours	SEE	CIE	Total
1	15MAT11 Engineering Mathematics-		MAT	4	0	1	0	5	6	50	50	100
2	15PHY12	Engineering Physics	PHY	3	1	0	1	5	5	75	75	150
3	15MEE13	Elements of Mechanical Engineering	MEE	3	1	0	1	5	5	75	75	150
4	15CIV14	Elements of Civil Engineering	CIV	3	0	1	0	4	5	50	50	100
5	15EEE15	Basics of Electrical Engineering	EEE	3	0	I	0	4	5	50	50	100
5	15HSS162	Business Communication	HSS	2	0	0	0	2	2	50	50	100
,	15HSS172	Constitution of India and Professional Ethics	HSS	M	fand Cot	lato	ry	0	2	25	25	50
		Total						25	30	375	375	750

Jus Princhall New Horizon College of Engineering Outer Ring Road, Bellandur Post.

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SL No	Course Code	Course	BOS	Credit Distribution				Overall	Contact	Marks			
_				L	P	T	S	Credits	Hours	CIE	SEE	Tota	
1	15MAT21	Engineering Mathematics- II	MAT	4	0	T	0	5	6	50	50	100	
2	15CHE22	Engineering Chemistry	CHE	3	1	0	1	5	5	75	75	150	
3	15CSE23	Introduction to Programming with C	CSE	3	1	0	1	5	5	75	75	150	
4	15MEE24	Computer Aided Engineering Drawing	MEE	2	1	1	0	4	6	50	50	100	
5	15ECE25	Basic Electronics	ECE	3	0	1	0	4	5	50	50	100	
6	16HSS261	Environmental Science and Awareness	HSS	2	0	0	0	2	2	50	50	100	
7	15HSS271	Essential English	HSS	M	land	ator	y	0	2	25	25	50	
		Total		_	0.00	196	-	25	31	375	375	750	

# CREDIT SCHEME FOR SECOND SEMESTER B.E

No	Course Code	Course	BOS	E	Cr	edit buti	n	Overall Credits	Contact Hours		Marks	
				L	P	T	\$		4.010.017.904	SEE	CIE	Total
1	15MAT21 Engineering Mathematics -II		MAT	4	0	1	0	5	6	50	50	100
2	15PHY22 Engineering Physics		PHY	3	1	0	1	5	5	75	75	150
3	15MEE23	Elements of Mechanical Engineering	MEE	3	1	0	1	5	5	75	75	150
4	15CIV24	Elements of Civil Engineering	CIV	3	0	1	0	4	5	50	50	100
5	ISEEE25	Basics of Electrical Engineering	EEE	3	0	1	0	4	5	50	50	100
	15HSS262	Business Communication	HSS	2	0	0	0	2	2	50	50	100
	15HSS272	Constitution of India and Professional Ethics	HSS	Ma	inda	tor	y	0	2	25	25	50
		Total						25	30	375	375	750

New Horizon Colline of Engineering Guter Ring Kesd, Bellandur Post, Bangatore 560 103.

#### New Horizon College of Engineering Department of Automobile Engineering Scheme of CYCLE A

SI. No	Course Code	Course	C	redit C	listribu	tion	Overall Credits	Contact Hours weekly-	Contact Hours weekly-	Marks			
			1	P	T	5		Theory	(Lab)	CIE	SEE	Total	
1	MAT31/4 1	Engineering Mathematics-3/ 4	4	0	1	0	5	6	0	50	50	100	
2	H\$5922/4 22	Life skills for engineers	2	0	0	1	3	2	0	50	50	100	
3	AUT331/4 31	Computer Aided Machine Drawing	3	0	0	1	4	3	0	50	50	100	
4	AUT341/4 41	Casting & Forging Technology + Lab	3	2	σ	0	5	3	4			150	
5	AUT351/4 51	Mechanics of Materials + Lab	3	2	0	0	5	3	4	75	75	150	
5	AUT361/4 61	Material Sc. & Metallurgy + Lab	3	ż	0	0	:5	3	4	75	75	150	
_		Total					27	20	12	375	375	750	



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0 0	Course	rse Course Se		Credit O	istributi	on	Overall Credits	Contact Hours weekly	Contac t Hours	Marks			
			-	P	1.1	1 6	1	Theory	(Lab)	CIE	SEE	Tot	
			100	18	1.00	°	1					1	
16	MAT31/	Engineering Mathematics-3/4	4	0	1	0	5	4	0	50	50	100	
2	H55321 /421	Economics for Engineers	2	.0	o	1	з	2	o	50	50	100	
3	AU1332 /432	Basic Thermodynamics	а	0	0	1	4	3	Ô	50	50	100	
4	AUT342 /442	Machines for Manufacturing Technology+Lab	3	2	0	0	5	3	4	75	75	150	
5	AUT352 /452	Mechanizal Measurement& Metrology+Lab	3	22	o	0	5	з	4	75	75	150	
6	AUT462 /462	Fluid Mechanics+Lab	j.	2	0	0	5	3	4	75	75	150	
		Total					27	18	12	375	375	750	

#### New Horizon College of Engineering Department of Automobile Engineering Scheme of CYCLE B



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#### DEPARTMENT OF AUTOMOBILE ENGINEERING

SI No.	Course	rse Course Name L	Subject Area	D	Cri İstri	edit but	ion	Overall	Contact Hrs	Contact Hrs	Marks		
	Code		ι	P	T	s	Credits	Weekly Theory	Weekly Lab	CIE	SEE	Total	
1.	AUT51	Automotive Engines & Components Design + Lab	PCC	з	ż	0	0	5	3	4	75	75	150
2	AUT52	Automotive Thermodynamics + Lab	PCC	3	z	0	0	5	3	4	75	75	150
3;	AUT53	Vehicle Auxiliary Systems	PCC	3	0	0	o	3	3	0	50	50	100
4.	AUT54	Design of Machine Elements	PCC	2	0	1	o	3	2	0	50	50	100
5.	AUTSS	Theory of Machines	PCC	3	0	0	0	3	3	0	50	50	100
6.	AUTSEX	Professional Elective-I	PE	3	0	0	1	4	3	÷	50	50	100
7,	AUT57	Mini Project-1	PRJ	0	2	0	0	2	0	4	25	25	50
		Total		17	6	1	1	25	17	12	375	375	750

#### SCHEME OF FIFTH SEMESTER

#### Professional Electives - Group 1

Course Code	Course Name
AU7561	Engineering Economics and Automotive Cost Estimation
AUT562	Management and Entrepreneurship
AUT563	Statistical Quality Control (SQC)
AUT564	Total Quality Management (TQM)
AUT565	Vehicle Transport Management

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### DEPARTMENT OF AUTOMOBILE ENGINEERING

SI.No.	Course	ourse Code Course Name	Subject Area	D	Cri	edit buti	on	Overall	Contact Hrs	Contact Hrs	Marks		
	Code	course manie		LPTS		Credits	Weekly Theory	Weekly Lab	CIE	SEE	Total		
1.	AUT61	Finite Element Method + Lab	PCC	3	2	0	0	5	3	4	75	75	150
Z.	AUT62	Automotive Transmission + Lab	PEC	2	1	0	ö	3	2	2	75	75	150
3.	AUT63	Automotive Chassis & Suspension + Lab	PCC	з	2	0	0	5	3	- 14	75	75	150
4	AUT64	Automotive Electricals & Electronic Systems	PCC	2:	0	0	0	2	2	o	25	25	50
5.	AUT65X	Professional Elective-II	PE	3	0	0	1	4	3	0	50	50	100
6.	NHOPXX	Open Elective**	ÖE	3	0	0	1	4	3	0	50	50	100
7.	AUT67	Mini Project-2	PRJ	0	2	0	0	2	0	4	25	25	50
		Total		16	7	0	2	25	17	14	375	375	750

#### SCHEME OF SIXTH SEMESTER

Professional Elective - 2 (Thermal)						
Course Course Name						
AUT651	Hydraulics and Pneumatics					
AUT652	Alternative Fuels and Energy System					
AUT653	Vehicle Air Conditioning					
AUT654	Advanced IC Engines					
AUT655	Automotive Air Pollution and Control					
AUT654 AUT655	Advanced IC Engines Automotive Air Pollution and Control					

	Open Elective
Course	Course Name
NHOP01	Big Data Analytics using HP Vertica, 1
NHOP02	VM Ware virtualization Essentials - 1
NHOP03	Adobe Experience Manager - 1
NHOP04	Big Data Analytics using HP Vertica - 3
NHOPOS	VM Ware virtualitation Essentials - 3
NHOP06	Adobe Experience Mappeer - 2
NHOP07	CAP
NHOP08	Schneider - Industry Automation
NHOP09	Cisco - Bouting and Switching 1
NHOP10	Data Analytics
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#### DEPARTMENT OF AUTOMOBILE ENGINEERING

#### SCHEME OF SEVENTH SEMESTER

Sl.No.	Course	Course	Subject Area	Di	Cre strit	edit buti	on	Overall Credits	Contact Hrs	Contact Hrs	Marks		
51.140.	Code			ι	P	т	s		Weekly Theory	Weekly Lab	CIE	SEE	Total
1.	AUT71	Earth Moving Equipments and Tractors+ Lab	PCC	3	2	0	0	5	3	4	75	75	150
2.	AUT72	Mechanical Vibration+ Lab	PCC	3	2	0	0	5	3	4	75	75	150
3.	AUT73*	Professional Elective -III	PE	3	0	0	1	4	4	0	50	50	100
4,	AUT74*	Professional Elective -IV	PE	3	0	0	1	4	4	0	50	50	100
5.	NHOP**	Open Elective**	OE	3	0	0	1	4	4	0	50	50	100
6.	AUT77	Mini Project - 3	PRJ			-		2		e:	25	25	50
	Total				4	0	3	24	18	08	325	325	650

	Professional Elective - III (AUT73*)
Course	Course Name
AUT731	Operation Research
AUT732	Industrial Automation and Robotics
AUT733	Non Traditional Machining
AUT734	Composite Materials
AUT735	Computer Integrated Manufacturing

9	Professional Elective – IV (AUT74*)
Course	Course Name
AUT741	Rapid Prototyping
AUT742	Control Engineering
AUT743	Product Life Cycle Management
AUT744	Autotronics
AUT745	Automotive Aerodynamics

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#### SCHEME OF EIGHT SEMESTER

SI.No.	Course Code	Course	Subject Area	1	Cr Distri	edit butio	n	Overall Credits	Contact Hrs	Contact Hrs Weekly Lab	Marks			
				Ŀ	P	т	5		Weekly Theory		CIE	SEE	Total	
1.	AUT81*	Professional Elective -V	PE	3	0	0	1	4	4	0	50	50	100	
2.	AUT82*	Professional Elective -VI	PE	3	0	0	1	4	4	0	50	50	100	
З,	AUT83	Internship	INT	_			Ч	4	0	0	50	50	100	
4.	AUT84	Project Work	PRJ			10	0	0	150	150	300			
	Total			6	0	0	2	22	8	0	300	300	600	

Professional Elective - V (AUT81*)   Course Course   UT811 Vehicle Body Engineering and Safety   UT812 Hybrid and Electric Vehicles   UT813 Heat and Mass Transfer   Automotive Materials and Component   UT814 Testing					
Course					
Vehicle Body Engineering and Safety					
Hybrid and Electric Vehicles					
Heat and Mass Transfer					
Automotive Materials and Component Testing					
Two and Three Wheeled Vehicles					

	Professional Elective - VI (AUT82*)
Course	Course
AUT821	Non Destructive Testing
AUT822	Engine Management System
AUT823	Smart Materials
AUT824	Maintenance Engineering
AUT825	Engineering System Design

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# New Horizon College of Engineering, Bangalore Program: B.E in Civil Engineering

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# Credit Scheme for First Semester B.E

SL No	Course Code	Course	BOS	E	Cr istri	edit buti	00	Overall	Contact	Marks		
	10,000	Section 2		L	P	T	S	Credits	Hours	CIE	SEE	Tota
I	15MAT11	Engineering Mathematics-I	MAT	4	0	1	0	5	6	50	50	100
2	15CHE12	Engineering Chemistry	CHE	3	1	0	1	5	5	75	75	150
3	15CSE13	Introduction to Programming with C	CSE	3	1	0	1	5	5	75	75	150
4	15MEE14	Computer Aided Engineering Drawing	MEE	2	1	1	0	4	6	50	50	100
5	15ECE15	Basic Electronics	ECE	3	0	T	0	4	5	50	50	100
5	16HSS161	Environmental Science and Awareness	HSS	2	0	0	0	2	2	50	50	100
7	15HSS171	HSS	N	land Cou	ator	tory	0	2	25	25	50	
		Total	Total								375	750

_		FIRST	SEMES	TE	R-P	HY	SIC	SCYCLE	8	-		
SI. No	Course	Course	BOS	D	Cr Pistri	edit ibuti	on	Overall	Contact	Marks		
	COME.			L	P	T	S	Credits	Hours	SEE	CIE	Total
1	15MAT11	Engineering Mathematics-1	MAT	4	0	T	0	5	6	50	50	100
2	15PHY12	Engineering Physics	PHY	3	1	0	1	5	5	75	75	150
3	15MEE13	Elements of Mechanical Engineering	MEE	3	ł	0	1	5	5	75	75	150
4	15CIV14	Elements of Civil Engineering	CIV	3	0	1	0	4	5	50	50	100
	15EEE15	Basics of Electrical Engineering	EEE	3	0	1	0	4	5	50	50	100
	15HSS162	Business Communication	HSS	2	0	0	0	2	2	50	50	100
8	15HSS172 Constitution of India and HSS Professional Ethics				land Cou	ator	y	0	2	25	25	50
	Total								30	375	375	750

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New Horizon Cullege of Engineering Outer King Road, Bellendur Post, Bangalore, 560 103.

SL No	Course Code	Course	B0S	I	Cr Distri	redit ibuti	оп	Overall	Contact Hours		Marks		
				L	P	T	S	Credits		CIE	SEE	Tota	
1	15MAT21	Engineering Mathematics-	MAT	4	0	T	0	5	6	50	50	100	
2	15CHE22	Engineering Chemistry	CHE	3	1	0	1	5	5	75	76	160	
3	15CSE23	Introduction to Programming with C	CSE	3	1	0	1	5	5	75	75	150	
4	ISMEE24	Computer Aided Engineering Drawing	MEE	2	Ŀ	1	0	4	6	50	50	100	
	15ECE25	Basic Electronics	ECE	3	0	1	0	4	5	50	50	100	
	16HSS261	Environmental Science and Awareness	HSS	2	0	0	0	2	2	50	50	100	
	15HSS271	Essential English	HSS				ry	0	2	25	25	50	
		Total			cou	i se		25	31	375	375	750	

# CREDIT SCHEME FOR SECOND SEMESTER B.E

No	Course	Course	BOS	1	Ci	edit buti	00	Overall Credits	Contact Hours			
				L	P	T	S			SEE	CIE	Tota
1	15MAT21	Engineering Mathematics -11	MAT	4	0	1	0	5	6	50	50	100
2	15PHY22	Engineering Physics	РНҮ	3	T	0	1	5	5	75	75	150
3	15MEE23	Elements of Mechanical Engineering	MEE	3	T.	0	1	5	5	75	75	150
4	15CIV24	Elements of Civil Engineering	CIV	3	0	1	0	4	5	50	50	100
5	15EEE25	Basics of Electrical Engineering	EEE	3	0	1	0	4	5	50	50	100
5	15HSS262	Business Communication	HSS	2	0	0	0	2	2	50	50	100
	15HSS272	Constitution of India and Professional Ethics	HSS	HSS Mandatory		0	2	25	25	50		
		Total		- cu	urse		-	25	30	375	375	750

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Principal New Horizon Carage of Engineering Outer Ring Road, Bellander Post, Bangatore 560 103.

#### **III SEMESTER**

SI. No	Course Code	Course	Course	Course	Course	Course	Course	BOS	Cre	dit Di	stribu	tion	Overa II Credi LS	Contac t Hours weekly	Contact Hours weekly (Lab)		Marks	(
								_	y		CIE	SEE	Total					
				L	P	Т	S					_						
1	MAT31	Engineering Mathematics- III	мат	4	0	<b>1</b>	0	5	6	0	50	50	100					
2	HSS321	Economics for Engineers	HSS	2	0	0	(I	3	2	0	50	50	100					
3	CIV33	Building Materials & Construction	ES	3	0	0	j <b>i</b>	4	3	0	50	50	100					
¥,	CIV34	Strength of Materials	CIV	3	0 <b>2</b> 3	0	0	5	3	4	75	75	150					
5	CIV35	Plane Surveying	CIV	2	2	0	0	4	3	4	75	75	150					
6	CIV36	Mechanics of Fluids	CIV	3	2	0	0	5	3	4	75	75	150					
		Tot	Total								375	375	750					

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SI. No	Course Code	Course	BOS	Cree	lit Dis	stribu	tion	Overa 11 Credi ts	Contac t Hours weekly Theor	Contact Hours weekly (Lab)	Marks			
					p	-	c		y		CIE	SEE	Total	
_						- *	3						-	
1	MAT41	Engineering Mathematics-IV	MAT	æ	0	1	0	5	6	0	50	50	100	
2	HS\$422	Life Skills for Engineers	HSS	2	0	0	ı	3	2	0	50	50	100	
3	CIV43	Earth Science Engineering	CIV	3	0	0	0	3	3	0	50	50	100	
4	CIV44	Analysis of Determinate Structures	CIV	3	0	0	0	3	3	0	50	50	100	
5	CIV45	Higher Surveying	CIV	3	2	0	0	5	3	4	75	75	150	
6	CIV46	Applied Hydraulics and Machinery	civ	3	2	0	0	5	3	4	75	75	150	
7	CIV47	Building Planning & Drawing	CIV	0	2	Ö	ö	2	0	4	25	25	50	
		Tot	al					26	20	12	375	375	750	

#### IV SEMESTER

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Principal New Horizon College of Engineering Outor = - Food Bellandur Post New Jointe 560 (v3.

#### V SEMESTER

SI. No	Course Code	Course	Course BOS Credit O Distribution C		Overa II Credi ts	Contac t Hours	Marks					
				L	р	т	s			CIE	SEE	Total
1	CIV51	Concrete Technology	CIV	3	2	0	0	5	7	75	75	150
2	CIV52	Design of RCC Structural Elements	CIV	3	0	Ū.	0	3	3	50	50	100
3	CIV53	Highway Engineering	CIV	3	0	0	0	3	3	50	50	100
4	CIV54	Analysis of Indeterminate Structures	CIV	2	1	î	0	4	5	75	75	150
5	CIV55	Basics of Geotechnical Engineering	CIV	3	2	0	0	5	7	75	75	150
б	CIV56*	Professional Elective-1	CIV	Ż	0	0	1	3	3	50	50	100
7	CIV57*	Professional Elective-2	CIV	2	0	0	1	3	3	50	50	100
		Tot	al					26	31	425	425	850

Profes	sional Elective- Group 1		Professional Elective- Group 2
Course Code	Course	Course Code	Course
CIV561	Advance Surveying	CIV:571	Traffic Engineering
CIV562	Pavement Materials & Construction	CIV572	Alternative Building Materials
CIV563	Construction Management & Engineering Economics	CIV573	Open Channel Hydraulics
CIV564	Rock Mechanics	CIV574	Hydrology & Irrigation Engineering
CIV565	Mechanization in Construction	CIV575	Construction Quality and Safety
CIV566	Retrofitting and Rehabilitation of structures	CIV576	Pre fabricated structures

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New Horizon Ciclus and Engineering Guter Fing Road, Beitandur Post, Bangalare 560 103.

#### VI SEMESTER

SL. No	Course Code	Course		Cre	dit Di	stribu	tion	Overa II Credit S	Contact Hours	Marks			
				L	P	т	S			CIE	SEE	Total	
1	CIV61	Environmental Engineering-1	CIV	3	2	0	0	5	7	75	75	150	
2	CIV62	Design and Detailing of RC Structural Element	CIV	3	2	o	0	5	7	75	75	150	
3	CIV63	Design of Pre stressed Concrete Structures	CIV	3	0	0	0	3	3	50	50	100	
4	CIV64	Applied Geotechnical Engineering	CIV	3	0	0	0	3	3	50	50	100	
5	CTV65*	Professional Elective-III	CIV	3	0	0	1	. 4	3	50	50	100	
6	NHOPX X	Open Elective-I	CIV	3	0	0	1	4	3	50	50	100	
7	CIV67	Mini project (Extensive survey)	CIV	Ð	4	0	0	4	8	50	50	100	
	Total								34	400	400	800	

	Professional Elective, GROUP 3	P	rofessional Elective, GROUP 1
Course Code	Course	Course Code	Course
CIV651	Theory of Elasticity	NHOP01	Big Data Analytics using HP Vertica-1
CIV652	Ground Improvement Techniques	NHOP02	VM Ware Virtualization Essentials-1
CIV653	Advance Concrete Technology	NHOP03	Adobe Experience manager-1
CIV654	Water Resources Engineering	NHOP04	Big Data Analytics using HP Vertica-2
CIV655	Urban Transport Planning	NHOP05	VM Ware Virtualization Essentials-2
CIV656	Structural Dynamics	NHOP06	Adobe Experience manager-2
		NHOP07	SAP
		NHOP08	Schneider-Industry Automation
		NHOP09	Cisco-Routing and Switching-1
		NHOP10	Data Analytics

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#### VII SEMESTER

-14.2		Course	Credit Distribution			Overal l Credit	Contact	Contact	Marks			
SL.	Course						Hours weekly	Hours weekly	CIE	SEE	Total	
CHR (	couc		L	P	Т	S	S	Theory	(Lab)			
1	CIV71	Environmental Engineering-II	2	0	0	0	2	2		50	50	100
2	CIV72	Design and drawing of Steel Structural Elements	3	2	a	0	5	3	4	75	75	150
3	CIV73	Estimation & Valuation	3	0	0	0	3	3		50	50	100
4	CIV74*	Professional Elective-IV	3	0	0	0	3	3		50	50	100
5	CIV75*	Professional Elective-V	3	0	0	1	4	4		50	50	100
6	CIV76	Highway Materials Lab	0	2	0	0	2		4	25	25	50
7	CIV77	Project phase-1	0	3	0	0	3			50	50	100
8	NHOPXX	Open Elective-II	3	0	0	1	4	4		50	50	100
1	The reserve All	Total					26	19	08	400	400	800

	Elective-V		Elective-VI
Course	Course	Course Code	Course
CIV741	Matrix Method of Structural Analysis	CIV751	Industrial waste water treatment
CIV742	Design of Masonry Structures	CIV752	Numerical Method of Civil Engineering
CIV743	Solid Waste Management	CIV753	Earth and Earth Retaining Structures
CIV744	Design & Drawing of Irrigation structures	CIV754	Transportation systems
CIV745	Highway Geometric Design	CIV755	Advanced Pre-stressed Concrete Structures

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#### VIII SEMESTER

			Cradit Distribution					Contac	Contac		Marks	R.
		Course	Crea	int Dis	tribu	tion	Over all Credi ts	t Hours weekl y Theor y	t Hours weekl y (Lab)	CIE	SEE	Total
SI. No	Course Code		L	Р	T	5						
1	CIV 81	Pavement design	3	0	0	0	3	03		50	50	100
2	CIV82*	Professional elective VI	3	0	0	1	4	04		50	50	100
2	19CIV83	Project Work phase-II	0	7	0	0	7			50	50	100
3	19CIV84	Internship	0	4	0	0	4			50	50	100
	Total						18	07	00	200	200	400

	Professional Elective-VI
Course Code	Course
CIV821	Rural water Supply & Sanitation
CIV822	Advanced R.C Structures
CIV823	Ground Water Hydrology
CIV824	Air pollution

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## Consolidated credits from 1st Semester to 8th Semester

Semester	Basic Scienc e	Engineering Science	Humanities	Core Subjects	Professional Electives	Other Electives	Project Work	Total credits
1	10	13	2					25
11	10	13	2					25
111	5	4	3	14				26
IV	5		3	18				26
v				20	6			26
VI				16	-4	4	4	28
VII				12	7	4	3	26
VIII				03	4		7+4	18
Total	30	30	10	83	20	8	19	200

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### New Horizon College of Engineering, Bangalore Program: B.E in Mechanical Engineering

### Credit Scheme for First Semester B.E

		FIRST S	EMESTE	R- (	HE	MI	STR	Y CYCL	E			
S1.	Course	Course	BOS	BOS Distribution				Overall	Contact	Marks		
No	Code			L	P	T	S	Credits	Hours	CIE	SEE	Total
1	15MAT11	Engineering Mathematics-I	MAT	4	0	1	0	5	6	50	50	100
2	15CHE12	Engineering Chemistry	CHE	3	1	0	1	5	5	75	75	150
3	15CSE13	Introduction to Programming with C	CSE	3	1	0	1	5	5	75	75	150
4	15MEE14	Computer Aided Engineering Drawing	MEE	2	1	1	0	4	6	50	50	100
5	15ECE15	Basic Electronics	ECE	3	0	1	0	4	5	50	50	100
6	16HSS161	Environmental Science and Awareness	HSS	2	0	0	0	2	2	50	50	100
7	15HSS171	Essential English	HSS	N	fanc Cou	lator irse	у	0	2	25	25	50
		Total						25	31	375	375	750

		FIRST	SEMES	TEI	- P	HYS	SICS	SCYCLE				
SL	Course	Course	BOS	D	Cr	edit butis	m	Overall	Contact	Marks		
No	Code			L	P	T	S	Credits	Hours	SEE	CIE	Total
1	15MAT11	Engineering Mathematics-1	MAT	4	0	1	0	5	6	50	50	100
2	15PHY12	Engineering Physics	РНУ	3	1	0	1	5	5	75	75	150
3	15MEE13	Elements of Mechanical Engineering	MEE	3	1	0	1	5	5	75	75	150
4	15CIV14	Elements of Civil Engineering	CIV	3	0	1	0	4	5	50	50	100
5	15EEE15	Basics of Electrical Engineering	EEE	3	0	1	0	4	5	50	50	100
6	15HSS162	Business Communication	HSS	2	0	0	0	2	2	50	50	100
7	15HSS172	Constitution of India and Professional Ethics	HSS	N	land Coi	lato irse	ry	0	2	25	25	50
1		Total	·					25	30	375	375	750

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		SECOND	SEMEST	ER-	СН	EM	IST	RY CYCI	.E			
SL	Course	Course	BOS	D	Cr	edit butic	m	Overall	Contact	Marks		
No	Code	ACTORNANCE.		L	P	T	S	Credits	Hours	CIE	SEE	Total
1	15MAT21	Engineering Mathematics- II	MAT	4	0	1	0	5	6	50	50	100
2	15CHE22	Engineering Chemistry	CHE	3	1	0	16	5	5	75	75	150
3	15CSE23	Introduction to Programming with C	CSE	3	1	0	1	5	5	75	75	150
4	15MEE24	Computer Aided Engineering Drawing	MEE	2	1	1	0	4	6	50	50	100
5	15ECE25	Basic Electronics	ECE	3	0	1	0	:4	5	50	50	100
6	16HSS261	Environmental Science and Awareness	HSS	2	0	0	0	2	2	50	50	100
7	15HSS271	Essential English	HSS	N	danc Coi	lator	У	0	2	25	25	50
		Total	,					25	31	375	375	750

### CREDIT SCHEME FOR SECOND SEMESTER B.E.

		SECO	ND SEME	STE	R-	PHY	/SIC	S CYCL	E			
SL No	Course Code	Course	BOS	D	Cr	edit butic	n	Overall Credits	Contact Hours		Marks	ŝ.
				L	P	T	S			SEE	CIE	Total
1	15MAT21	Engineering Mathematics -II	MAT	4	0	1	0	5	6	50	50	100
2	15PHY22	Engineering Physics	PHY	3	1	0	1	5	5	75	75	150
3	15MEE23	Elements of Mechanical Engineering	MEE	3	1	0	I.	5	5	75	75	150
4	15CIV24	Elements of Civil Engineering	CIV	3	0	1	0	4	5	50	50	100
5	15EEE25	Basics of Electrical Engineering	EEE	3	0	1	0	4	5	50	50	100
6	15HSS262	Business Communication	HSS	2	0	0	0	2	2	50	50	100
7	15HSS272	Constitution of India and Professional Ethics	HSS	M Co	and	ator e	у	0	2	25	25	50
		Total						25	30	375	375	750

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# New Horizon College of Engineering

## Department of Mechanical Engineering

Scheme of CYCLE A

51 no	Course code	Course	c	C: listr	edit ibut	ion	Credits	Contact hours	Contact hours lab		marks	
			L	Ρ	T	5		1 Y		CIE	SEE	TOTAL
1	MAT31/ 41	Engineering maths- 3	4	0	1	0	5	5	0	50	50	100
2	H55322/ 422	Life skills for engineers	2	0	0	1	3	2	0	50	50	100
3	MEE331/ 431	Computer aided machine drawing	3	0	0	1	4	2	3	50	50	100
4	MEE341/ 441	Casting and forging technology+lab	3	2	0	O	5	4	3	75	75	150
5	MEE351/ 451	Mechanics of materials +lab	3	2	0	0	5	4	3	75	75	150
6	MEE361/ 461	Material sc and metallurgy+lab	3	2	0	0	5	4	3	75	75	150
		Total			_		27	21	12	375	375	750

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# New Horizon College of Engineering

# Department of Mechanical Engineering

SI. N	Course Code	Course		Cre Dis	dit tribut	kon	Over all Credits	Contact Hours	Contact Hours	M	arks	
0			L					Weekly	Weekly lab	CI E	SEE	Total
			L.F.	1 6	T	5	1 D					
a.	MAT31/4 1	Engineering Mathematics-3/4	4	0	1	0	5	5	o	50	50	100
2	H55321/4 21	Economics for Engineers	2	0	0	1	3	2	0	50	50	100
3	MEE332/4 32	Basic Thermodynamics					4	4	0	50	50	100
4	MEE342/4 42	Machines for Manufacturing Technology+Lab	3		0		5	4	3	75	75	150
5	MEE352/4 52	Mechanical Measurement& Metrology+Lab	3	2	0	0	5	4	3	75	75	150
6	MEE362/4 62	Fluid Mechanics+Lab	3	2	0	0	5	4	3	75	75	150
		Total					27	23	9	375	375	750

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### Department of Mechanical Engineering

SI. No	Course Code	Course	1	Cr Distr	edit	ion:	Overail Credits	Contact Hours	Contact Hours		Mark	i
-			i, k	P	1	135		(Theory)	(Lab)	CIE.	SEE	1
	MEES1	Machine Theory and Mechanism Design+ Lab	3	2	0	D	5	3	3	75	75	Ì
2	MEE52	Heat Power Cycles + Lab	13	12	0	0	5	2	1	70	1.70	ł
3	MEES3	Rotor Dynamics+ Lab	3	2	0	0	5	3	3	75	75	İ
4	MEE54	Design of Machine Elements 1	14	0	١.	0		-	L'an l		100	ł
5	MEESS	Project Management and Entrepreneurship	2	0	0	0	2	3	0	50 25	50 25	İ
6	MEE56x	Professional Elective- PE1	3	0	0	0	3	1	0	50	50	ŀ

3 0 0 0

0 1 0 0

MEES7

Mini project phase I

TOTAL

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51, No.	Professional Electives, PE1	
MEE561	Mechatronics and Microprocessors	
MEE562	Composite Materials	
MEE563	Refrigeration and Air conditioning	_
MEE564	Smart Materials	
MEE565	Theory of Elasticity	

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Total

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# Department of Mechanical Engineering

Scheme of Sixth Semester B.E. Program

SI. No	Course Code	Course	Credit Distribution				Overall Credits	Contact Hours	Contact Hours	Marks		
	MEE61	PULL	- L	P	T	5		Weekly (Theory)	Weekly	ÇIE	SEE	Totai
		Transfer + Lab	2	2	0	0	4	3	3	75	75	150
2	MEE62	Finite Element Methods+ Lab	2	12	- 0	240						
3	MEE63	Design of Machine Flements II	3	14	- 0 1	0	5	3	3	75	75	150
4	MEE64	Automation Engineering + Lab	3	0	1	•	4	4	0	50	50	100
5	MEEESy	Drofession of FL		14	0	U	4	3		75	75	150
-		Professional Elective-PE2	3	0	0	0	3	3	0	50	50	100
6	NHOPX	Open elective**	12	0	10	-				30	50	100
7	MEE67	Mini project et anne it	-	-	-	*	4	4	0	50	50	100
-	Contraction (	man project prase il	0	1	0	0	1	3		25	25	50
-		TOTAL		-	-	-	25	23	09	400	400	200

Scheme and Syllabus for open electives is available separately

Subject Code	Professional Elective-PE2
MEE651	Nanotechnology
MEE652	Fracture Mechanics
MEE653	Product Life Cycle Management
MEE654	Supply Chain Management
MEE655	Computational Fluid Dynamics

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		New i	lori	ton	Co	lle	ge of Eng	ineering				
		Departr	nen	t of	M	ect	nanical Er	ngineering			-	
		Scheme o	of Se	ver	nth	Se	mester 8	.E Program	n			
51.No	Course Code	Course	Dis	Cre trib	dit uti	on	Overall Credits	Contact Hours	Contact Hours	1	Mar	ks
			L	P	1	S		Weekly (Theory)	Weekly (Lab)	CIE	SEE	Total
1	MEE71	MECHANICAL VIBRATIONS + LAB	3	2	0	0	5	4	3	75	75	150
2	MEE72	CONTROL ENGINEERING + LAB	3	2	0	0	5	4	3	75	75	150
3	MEE73X	PROFESSIONAL ELECTIVE (PE3)	3	0	0	0	3	4	0	50	50	100
4	MEE74X	PROFESSIONALEL ECTIVE (PE4)	3	0	0	0	3	4	Ö	50	50	100
5	MEE75X	PROFESSIONAL ELECTIVE (PE5)	3	0	0	0	3	4	0	50	50	100
6	NHOPX**	OPEN ELECTIVE	3	0	0	1	4	4	0	50	50	100
*		TOTAL		- I	_	1	23	24	6	350	350	700

\*\* OPEN ELECTIVE SYLLABUS IS AVILABLE IN SEPARATE BOOK

X value	PROFESSIONAL ELECTIVE (MEE73X)	PROFESSIONAL ELECTIVE ( MEE74X)	PROFESSIONAL ELECTIVE ( MEE75X)
1	OPERATION RESEARCH	FUNDAMENTALS OF TRIBOLOGY	DESIGN FOR MANUFACTURING & ASSEMBLY
2	PRODUCTION AND OPERATIONAL MANAGEMENT	COMPUTER GRAPHICS	APPLIED NUMERICAL TECHNIQUES AND COMPUTING
3	RESEARCH METHODOLOGY	FUNDAMENTALS OF PLASTIC MOLD DESIGN AND DIE DESIGN	TOTAL QUALITY MANAGEMENT
4	ORGANIZATIONAL BEHAVIOUR & PROFESSIONAL ETHICS	EMERGING AUTOMOTIVE TECHNOLOGIES	HYDRAULICS AND PNEUMATICS
5	MACHINE LEARNING &ARTIFICIAL INTELLIGENCE	ADVANCED ROBOTICS	RAPID PROTOTYPING

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	_	Nev	N Ho	rizo	n C	olle	ge of Eng	ineering			_	_
		Depa	rtme	ent e	of N	lech	anical En	gineering				
	_	Scher	ne o	f Ei	tt :	Sem	ester B.E	Program				
SI.No	Course Code	Course	D	Cri istri	edit buti	na	Overall Credits	Contact Hours Weekly	Contact Hours Weekly		Mar	ks
-			L	P	T	5		(Theory)	(rao)	CIE	KEE	Total
1	MEE84	FRACTURE MECHANICS	3	0	0	1	4	4	0	50	50	100
2	MEE81X	PROFESSIONAL ELECTIVE (PE6)	3	0	0	0	3	4	0	50	50	100
3	MEE82	Internship	0	4	0	0	4			50	1.0	
4	MEE83	Project Work	12	0	0	0	12	0	5	200	200	400
_	_	TOTAL					23	8	S	350	350	700

MEE815-Non-Conventional Manufacturing Technologies

MEE816- Foundry Technology

MEE817- Agile Manufacturing

MEE818-Conventional and Non- Conventional Energy Resources MEE819- Industrial Robotics

MEE810- Sustainable Energy Sources

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### New Horizon College of Engineering, Bangalore Program: B.E in Electronics and Communication Engineering

#### Credit Scheme for First Semester B.E

SL.	Course		BOS	D	Cr istril	edit butic	n	Overall	Contact	Marks		
No	Code	Course		L	P	T	S	Credits	Hours	CIE	SEE	Total
1	15MAT11	Engineering Mathematics-I	MAT	4	0	1	0	5	6	50	50	100
2	15CHE12	Engineering Chemistry	CHE	3	1	0	1	5	5	75	75	150
3	15CSE13	Introduction to Programming with C	CSE	3	1	0	1	5	5	75	75	150
4	15MEE14	Computer Aided Engineering Drawing	MEE	2	1	1	0	4	6	50	50	100
5	15ECE15	Basic Electronics	ECE	3	0	1	0	4	5	50	50	100
6	16HSS161	Environmental Science and Awareness	HSS	2	0	0	0	2	2	50	50	100
7	15HSS171	Essential English	HSS	N	fanc Co	lator	y	0	2	25	25	50
		Total		-11-				25	31	375	375	750

Ϊ.,		FIRST	SEMES	TEF	- P	HYS	SICS	S CYCLE					
SI.	Course	Course	BOS	BOS Di			'n	Overall	Contact	Marks			
No	Code			L	P	T	S	Credits	Hours	SEE	CIE	Total	
1	15MAT11	Engineering Mathematics-1	MAT	4	0	1	0	5	6	50	50	100	
2	15PHY12	Engineering Physics	PHY	3	1	0	1	5	5	75	75	150	
3	15MEE13	Elements of Mechanical Engineering	MEE	3	1	0	1	5	5	75	75	150	
4	15CIV14	Elements of Civil Engineering	CIV	3	0	1	0	-4	5	50	50	100	
5	15EEE15	Basics of Electrical Engineering	EEE	3	0	1	0	4	5	50	50	100	
6	15HS\$162	Business Communication	HSS	2	0	0	0	2	2	50	50	100	
7	15HSS172	Constitution of India and Professional Ethics	HSS	N	fanc Coi	lato	ry	0	2	25	25	50	
		Total						25	30	375	375	750	

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		SECOND	SEMEST	ER-	CH	EM	IST	RY CYCI	F			
SI.	Course	Course	BOS	D	Cr	edit butic		Overall	Contact	Marks		
No	Code			L	P	T	5	Credits	Hours	CIE	SEE	Total
1	15MAT21	Engineering Mathematics- II	MAT	4	0	1	0	5	6	50	50	100
2	15CHE22	Engineering Chemistry	CHE	3	Т	0	1	5	5	75	75	150
3	15C\$E23	Introduction to Programming with C	CSE	3	1	0	1	5	5	75	75	150
4	15MEE24	Computer Aided Engineering Drawing	MEE	2	9	1	0	4	6	50	50	100
5	15ECE25	Basic Electronics	ECE	3	0	Т	0.	4	5	50	50	100
6	16HSS261	Environmental Science and Awareness	HSS	2	0	0	0	2	2	50	50	100
7	15HSS271	Essential English	HSS	N	Aand	lator	y	0	2	25	25	50
		Total		-	_			25	31	375	375	750

### CREDIT SCHEME FOR SECOND SEMESTER B.E.

SL No	Course Code	Course	BOS	D	Cr	edit butic	**	Overall Credits	Contact Hours	Marks		
	100000			L	P	T	s			SEE	CIE	Total
1	15MAT21	Engineering Mathematics -II	MAT	4	ō	3	0	5	6	50	50	100
2	15PHY22	Engineering Physics	PHY	3	1	0	1	5	5	75	75	150
3	15MEE23	Elements of Mechanical Engineering	MEE	3.	1	0	1	5	5	75	75	150
4	15CIV24	Elements of Civil Engineering	CIV	3	0	1	0	4	5	50	50	100
5	15EEE25	Basics of Electrical Engineering	EEE	3	0	1	0	4	5	50	50	100
6	15HSS262	Business Communication	HSS	2	0	0	0	2	2	50	50	100
7	15HS5272	Constitution of India and Professional Ethics	HSS	M	and	ator e	y	0	2	25	25	50
	Total							25	30	375	375	750

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### B.E. Program - Batch: 2016 -2020

# Department of Electronics and Communication Engineering

		Second Yea	-/ TI	hird S	eme	ster				-	Marth	
			Cr	dit D	istrib	ution	1	5	Ľ		Mark	
SL No	. Course code	e Course title	L	Р	т	s	Overal	Theory ho	Lab hou	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
3	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 /	Fou	rth §	Seme	ster						
	1	1	Cree	lit Dis	tribu	tion	its	Ľ			Mark	5
I. No.	Course code	Course title	L	P	т	s	<b>Overall cred</b>	Theory hou	Lab hour:	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

### Scheme of Third and Fourth Semester

Page 4 of 46

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# New Horizon College of Engineering, Bangalore

# B.E. Program - Batch: 2016 -2020

# Department of Electronics and Communication Engineering

## Scheme of Fifth and Sixth Semester

		1000 1000 11	Cree	lit Dis	tribu	tion	i:	C			Marks	
Sl. No.	Course code	Course title	L	P	T	s	Overall cree	Theory hou	Lab hours	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 - 1	3	0	0	1	4	3	0	50	50	100
					тот	AL	26	21	12	375	375	750
		Third Year / S	Sixth	Sen	este	r						_
-			Cree	lit Di	stribu	tion		ŝ	2		Mark	5
SL No.	Course code	Course title	L	P	т	s	Overall	Theory ho	Lab hour	CIE	SEE	Tota
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
	ECE67	Mini Project-III	0	2	0	0	2	0	0	25	25	50
	And March March 197 (F. 1			-	and the second se					the second second second second second second second second second second second second second second second se		

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New Manager General and Engineering Col., etc. - a. Bollandur Post. Biogenare 560 103.

# New Horizon College of Engineering, Bangalore

# B.E. Program - Batch: 2016 -2020

# Department of Electronics and Communication Engineering

		Fourth Year / Se	venth	Sen	neste	er						
			E	Crea	,	dits	Ľ	c	Marks			
SL No.	Course code	Course title	L	Р	τ	s	Overall cre	Theory ho	Lab hou	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	T	4	3	0	50	50	100
		TOTAL		-			24	19	4	325	325	650
		Fourth Year / E	ighth	Sen	neste	r						
			1	Cre Distrib	dit utio	0	edits	ours	5		Mark	5
SL No.	Course code	Course title	L	P	т	8	Overall cr	Theory h	Lab hot	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	10	0	0	10	0	4	50	50	100
	1	TOTAL					18	3	8	150	150	300

# Scheme of Seventh and Eighth Semester

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Principal

Guid Horizon Gree priof Engineering Guid Him Hord, Bellandur Post, Bringshuru 560 103,

### New Horizon College of Engineering, Bangalore Program: B.E in Computer Science Engineering

### **Credit Scheme for First Semester B.E**

SL.	Course	Course	BOS	D	Cruistril	edit butio	n	Overall Credits	Contact	Marks		
No	Code			L.	P	т	S		Hours	CIE	SEE	Total
1	15MAT11	Engineering Mathematics-I	MAT	4	0	1	0	5	6	50	50	100
2	15CHE12	Engineering Chemistry	CHE	3	1	0	1	5	5	75	75	150
3	ISCSE13	Introduction to Programming with C	CSE	3	3	0	1	5	5	75	75	150
4	15MEE14	Computer Aided Engineering Drawing	MEE	2	1	1	0	4	6	50	50	100
5	15ECE15	Basic Electronics	ECE	3	0	1	0	4	5	50	50	100
5	16HSS161	Environmental Science and Awareness	HSS	2	0	0	0	2	2	50	50	100
1	15HSS171	Essential English	HSS	N	Aana Co	dato urse	ry .	0	2	25	25	50
		Total						25	31	375	375	750

		FIRST	SEMES	TER	- Pl	IYS	ICS	CYCLE				
SI.	Course	Course	BOS	D	Cruistril	edit outio	n	Overall	Contact Hours	Marks		
No	Code			L	P	T	S	Credits		SEE	CIE	Total
1	15MAT11	Engineering Mathematics-1	MAT	4	0	1	0	5	6	50	50	100
2	15PHY12	Engineering Physics	PHY	3	1	0	1	5	5	75	75	150
3	15MEE13	Elements of Mechanical Engineering	MEE	3	1	0	1	5	5	75	75	150
4	15CIV14	Elements of Civil Engineering	CIV	3	0	1	0	4	5	50	50	100
5	15EEE15	Basics of Electrical Engineering	EEE	3	0	1	0	4	5	50	50	100
6	15HSS162	Business Communication	HSS	2	0	0	0	2	2	50	50	100
7	15HSS172	Constitution of India and Professional Ethics	HSS	N	land Co	lato	ry	0	2	25	25	50
-		Total						25	30	375	375	750

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New Horizon Coll-ge of Engineering Outer Bing Road, Bellandur Post, Bangatore 560 103.
## New Horizon College of Engineering, Bangalore Program: B.E in Computer Science Engineering

### Credit Scheme for First Semester B.E.

		FIRST S	EMESTE	R- (	HE	MI	STR	Y CYCL	E				
SI.	Course		BOS	n	Cr	edit buti	n	Overall	Contact	Marks			
No	Code	Course		L	P	T	5	Credits	Hours	CIE	SEE	Total	
1	15MAT11	Engineering Mathematics-I	MAT	4	0	21	0	5	6	50	50	100	
2	15CHE12	Engineering Chemistry	CHE	3	1	0	1	5	5	75	75	150	
3	15CSE13	Introduction to Programming with C	CSE	3	1	0	1	5	5	75	75	150	
4	15MEE14	Computer Aided Engineering Drawing	MEE	2	L.	1	0	4	6	50	50	100	
5	ISECE15	Basic Electronics	ECE	3	0	1	0	4	5	50	50	100	
5	16HSS161	Environmental Science and Awareness	HSS	2	0	0	0	2	2	50	50	100	
7.	15HSS171	Essential English	HSS	N	fand	lator	y.	0	2	25	25	50	
		Total						25	31	375	375	750	
						_	_						

		FIRST	SEMES	TE	₹- P	HY:	SIC	SCYCLE				
SL.	Course	Course	BOS	D	Cr	edit butis	on	Overall	Contact		Marks	
No	Code			L	P	T	5	Credits	Hours	SEE	CIE	Total
1	15MAT11	Engineering Mathematics-I	MAT	4	0	I	0	5	6	50	50	100
2	15PHY12	Engineering Physics	PHY	3	1	0	1	5	5	75	75	150
3	15MEE13	Elements of Mechanical Engineering	MEE	3	1	0	1	5	5	75	75	150
4	15CIV14	Elements of Civil Engineering	CIV	3	0	1	0	4	5	50	50	100
5	15EEE15	Basics of Electrical Engineering	EEE	3	0	1	0	4	5	50	50	100
6	15HSS162	Business Communication	HSS	2	0	0	0	2	2	50	50	100
7	15HSS172	Constitution of India and Professional Ethics	HSS	M	land Cot	lato irse	ry	0	2	25	25	50
		Total				******		25	30	375	375	750

atus Principal 3 New Horizon Callinge of Engineering Quice Amp Toad Bellandur Post,

Ballgature 560 103.

SL	Course	Course	BOS	D	Cr	edit butic		Overall	Contact		Mark	¢.
No	Code			L	P	T	5	Credits	Hours	CIE	SEE	Total
I.	15MAT21	Engineering Mathematics- II	MAT	4	0	1	0	5	6	50	50	100
2	15CHE22	Engineering Chemistry	CHE	3	1	0	1	5	5	75	75	150
3	15CSE23	Introduction to Programming with C	CSE	3	T.	0	1	5	5	75	75	150
4	15MEE24	Computer Aided Engineering Drawing	MEE	2	1	1	0	= 4	6	50	50	100
5	15ECE25	Basic Electronics	ECE	3	0	1	0	4	5	50	50	100
6	16HSS261	Environmental Science and Awareness	HSS	2	0	0	0	2	2	50	50	100
7	15HSS271	Essential English	HSS	N	fand Cor	lator	y	0	2	25	25	50
		Total						25	31	375	375	750

### CREDIT SCHEME FOR SECOND SEMESTER B.E.

SL No	Course Code	Course	BOS	Distribution				Overall Credits	Hours		Marks	
				L	P	T	S	]		SEE	CIE	Total
1	15MAT21	Engineering Mathematics -11	MAT	4	0	1	0	5	6	50	50	100
2	15PHY22	Engineering Physics	PHY	3	1	0	1	5	5	75	75	150
3	15MEE23	Elements of Mechanical Engineering	MEE	3	1	0	3	5	5	75	75	150
4	15CIV24	Elements of Civil Engineering	CIV	3	0	1	0	4	5	50	50	100
5	15EEE25	Basics of Electrical Engineering	EEE	3	0	4	0	4	5	50	50	100
6	15HSS262	Business Communication	HSS	2	0	0	0	2	2	50	50	100
7	15HSS272	Constitution of India and Professional Ethics	HSS	M Ca	and	ator e	y	0	2	25	25	50
-		Total		С.,				25	30	375	375	750

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#### New Horizon College of Engineering Department of Computer Science and Engineering Scheme of Third Semester B.E Program

SI. Na	Course Code	Course	¢	redit Di	istribut	an	Overall Credits	di Contact s Hours weekly-	Contact Hours weekly-	Marks			
								Theory	(Lab)	CIE	SEE	TOTAL	
			L	P	Ţ	s							
1	MAT31	Engineering Mathematics-III	4	0	<b>.</b> 1	0	5	6	ø	50	50	100	
1	H\$\$321	Introduction to Economics		a			- 1	,	õ	50	50	100	
	H55322	Soft Skills for Engineers		0				<sup>2</sup>			5-276		
3	CEB3	Analog and Digital Electronics	3	2	0	0	5	ŧ	4	75	75	150	
4	CSE34	Data Structures using C	3	2	0	0	5	3	.4	75	75	150	
5	CSEIS	UNIX & SRELL Programming	3	2	0	0	-4	ł	- 4	75	75	150	
6	C\$E36	Mini Project	0	2	0	0	2	0	4	50	50	100	
	-	Total		<u>i (</u>			24	17	16	375	375	750	

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#### New Horizon College of Engineering Department of Computer Science and Engineering Fourth Semester B.E Program-Scheme

SI. No	Course Code	Course	C	edit Dis	tribution	0	Overall Credits	Contact Hours weekly	Contact Hours weekly	Marks		
								Theory	(Lab)	CIE	SEE	TO
			L	P	Ţ	\$						
1	MAT41	Engineering Mathematics-IV	4	0	1	0	5	6	٥	50	50	100
2	H55421	Introduction to Economics	2	a	0	1	3	2	o	50	50	100
	H55422	SS for Engineers			1 1							
3	CSE43	Object Oriented Programming with C++	3	2	0	0	5	3	4	75	75	150
4	CSE44	Microprocessor	з	2	0	0	5	3	4	75	75	150
6	CSE45	Computer Organization	3	ø	Ø	1	4	3	0	50	50	100
7	CSE46	Mini Project	0	2	0	Ø	2	0	4	50	50	100
		Total					24	17	12	375	375	750

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#### NEW HORIZON COLLEGE OF ENGINEERING Department of Computer Science & Engineering Fifth Semester B.E. Program – Scheme AY: 2018-19

			Cre	dit Dis	tribu	tion		Contact	Contact		Marks	
S, No	Course Code	Course	L	P	т	s	Overall Credits	hours Weekly (Theory)	hours Weekly (Lab)	CIE	SEE	Total
1	CSE51	Analysis & Design of Algorithms	3	2	0	0	5	4	4	75	75	150
2	CSE52	Operating System	3	0	0	3	4	4	- 2	50	50	100
ŧ	CSE53	Database Management Systems	3	2	0	0	5	4	4	75	75	150
4	CSE54	Software Engineering	3	0	<b>:0</b>	1	- 4	4	0	50	50	100
5	CSE55x	Professional Elective - 1	3	0	0	1	4	0	3	50	50	100
6	CSE56	Mini Project	0	2	0	0	2	0	2	25	25	50
-		TOTAL			1000		24	16	13	325	325	650

	Professional Elective -1
CSE551	Digital Experience Management using Adobe Experience Manager
CSE552	Virtualization Essentials with VMware
CSE553	Big Data Analytics with HP Vertica

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#### NEW HORIZON COLLEGE OF ENGINEERING Department of Computer Science & Engineering Sixth Semester B.E. Program – Scheme AY: 2018-19

_			Cre	dit Di	stribu	tion		Contact	Contact	Marks		
S, No	Course Code	Course	L	Р	т	5	Overall Credits	hours Weekly (Theory)	hours Weekly (Lab)	CIE	SEE	Total
I	CSE61	Core JAVA Programming	3	2	0	0	5	4	4	75	75	150
2	CSE62	Computer Networks	3	2	0	0	5	4	4	7.5	75	150
3	CSE63	Finite Automata & Compiler Design	4	0	Ó	0	4	4	0	50	50	100
5	CSE64x	Professional Elective	3	0	Û	1	4	4	0	50	50	100
.6	NHOPXX	Open Elective	3	0	0	1	4	ö	3	50	50	100
7	CSE65	Mini Project	0	2	0	0	2	0	2	25	25	50
		TOTAL					24	16	13	325	325	050

Course Code	Professional Electives	
CSE641	Social network Analysis	
CSE642	Soft Computing	
CSE643	Usability and Human Computer Interaction	

Course Code	Open Electives
NHOP01	Big Data Analytics using HP Vertica- 1
NHOP02	VM Ware virtualization Essentials - 1
NHOP03	Adobe Experience manager - 1
NHOP04	Big Data Analytics using HP Vertica - 2 (Prerequisite : CSE553/ECE563/EFE563/ISE563)
NHOP05	VM Ware virtualization Essentials - 2 (Prerequisite : CSE552/ECE562/FEE562/ISE562)
NHOP06	Adobe Experience manager - 2 (Prerequisite : CSE551/ECE561/EEE561/ISE561)
NHOP07	SAP
NHOP08	Schneider - Industry Automation
NHOP09	Cisco - Routing and Switching - 1
NHOP10	Data Analytics
NHOP11	Machine Learning
NHOP12	Cisco - Routing and Switching - 2 (Prerequisite: NHOP09)
NHOP13	Industrial Internet of Things- Embedded Systems
NHOP14	Blockchain
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New Horizon Co., of Engineering Outer hand load, Bellandur Post, Bouganee S60 103.

#### NEW HORIZON COLLEGE OF ENGINEERING Department of Computer Science & Engineering Seventh Semester B.E. Program – Scheme AY: 2019-2020

	100000000	Part of the second	C	redit I	Distribu	ition	Owent	Contact	Contact		Marks	
No	Course	Course	1.	r	T	5	Overall Credits	Weekly (Theory)	Weekly (Lab)	CIE	SEE	Total
1	CSE71	Technologies	3	2	0	0	5	4	4	75	75	150
2	CSE72	Software Testing	3	2	0	0	5	4	4	75	75	150
3	CSE73	Mobile Application Development	3	2	ō	0	5	4	4	75	75	150
4	CSE74X	Elective	3.	0	o	1	4	4	0	50	50	100
5	CSE75X	Open Elective	3	0	0	1	4	Û.	3	50	50	100
6	CSE76	Mini Project	0	2	0	0	2	0	2	25	25	50
7	CSE77	Project Phase-1	0	4	0.	0	4		2	30	50	100
		TOTAL.					29	16	19	400	400	800

COURSE CODE	PROFESSIONAL ELECTIVE
CSE741	Fundamentals of Data Science
CSE742	Cryptography & Network Security
CSE743	Artificial Intelligence
CSE744	Real Time Operating System
CSE745	Cyber Security, Forensics and Law
CSE746	Internet of Things

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Course Code	Open Electives
NHOP01	Big Data Analytics using HP Vertica-1
NHOP02	VM Ware virtualization Essentials - 1
NHOP03	Adobe Experience manager - 1
NHOP04	Big Data Analytics using HP Vertica – 2 (Prerequisite: CSE553/ECE563/EEE563/ISE563/NHOP01)
NHOP05	VM Ware virtualization Essentials - 2 (Prerequisite: CSE552/ECE562/EEE562/ISE562/NHOP02)
NHOP06	Adobe Experience manager – 2 (Prerequisite: CSE551/ECE561/ISE561/NHOP03)
NHOP07	SAP
NHOP08	Schneider Industry Automation
NHOP09	Cisco - Routing and Switching ~ 1
NHOP10	Data Analytics
NHOPH	Machine Learning
NHOP12	Cisco - Routing and Switching - 2 (Prerequisite: NHOP09)
NHOP13	Industrial Internet of Things- Embedded Systems
NHOP14	Blockchain
NHOP15	Product Life Cycle Management

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#### NEW HORIZON COLLEGE OF ENGINEERING Department of Computer Science & Engineering Eighth Semester B.E. Program – Scheme AY: 2019-2020

			Cre	dit Di	stribu	tion		Contact	Contact	N	larks	
S. No	Course Code	Course	L	P	T	s	Overall Credits	hours Weekly (Theory)	hours Weekly (Lab)	CIE	SEE	Total
1	CSE81	Object Oriented Analysis and Design	3	0	ĵ	1	5	4	0	50	50	100
2	CSE82	Data Mining and Machine Learning	3	0	30	1	4	4	0	50	50	100
3	CSE83	Internship	0	4	0	0	- 4	- 30C	- 34 (	50	50	100
4	CSE84	Project	0	12	0	0	12			50	50	100
		TOTAL					25	8	0	200	200	400

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# New Horizon College of Engineering, Bangalore Program: B.E in Information Science Engineering

### Credit Scheme for First Semester B.E.

		FIRST S	EMESTE	R- (	HE	MI	STR	YCYCL	E			_
St.	Course		BOS	D	Cr	edit butic	a	Overall	Contact	Marks		
140	Code	Course		L	P	Т	S	Credits	Hours	CIE	SEE	Total
Į	15MAT11	Engineering Mathematics-I	MAT	4	0	T	0	5	6	50	50	100
2	15CHE12	Engineering Chemistry	CHE	3	1	0	1	5	5	75	75	150
3	ISCSE13	Introduction to Programming with C	CSE	3	1	0	1	5	5	75	75	150
4	15MEE14	Computer Aided Engineering Drawing	MEE	2	1	1	0	4	6	50	50	100
5	15ECE15	Basic Electronics	ECE	3	0	1	0	4	5	50	50	100
6	16HSS161	Environmental Science and Awareness	HSS	2	0	0	0	2	2	50	50	100
7	15HSS171	Essential English	HSS	N	fand Cot	iator	У.	0	2	25	25	50
		Total						25	31	375	375	750

		FIRST	SEMES	TEF	₹- P	HY	SICS	SCYCLE				
SI.	Course	Course	BOS	D	Cr	edit buti	pm	Overall	Contact Hours	Marks		
140	Code		, i	L	P	T	8	Credits		SEE	CIE	Total
1	15MAT11	Engineering Mathematics-1	MAT	4	0	1	0	5	6	50	50	100
2	15PHY12	Engineering Physics	PHY	3	1	0	1	5	5	75	75	150
3	ISMEE13	Elements of Mechanical Engineering	MEE	3	1	0	1	5	5	75	75	150
4	15CIV14	Elements of Civil Engineering	CIV	3	0	Ĩ	0	4	5	50	50	100
5	15EEE15	Basics of Electrical Engineering	EEE	3	0	1	0	4	5	50	50	100
6	15HSS162	Business Communication	HSS	2	Ö	0	0	2	2	50	50	100
7	15HSS172	Constitution of India and Professional Ethics	HSS	M	fand Cot	ato	ry	0	2	25	25	50
		Total					-	25	30	375	375	750

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si	Course	Course	805	0	Cr	edit batis	n	Overall	Contact		Mark	í.
No	Code		En Direct	L	P	T	5	Credits	Hours	CIE	SEE	Total
J	15MAT21	Engineering Mathematics-	MAT	4	0	E	0	5	6	50	50	100
2	15CHE22	Engineering Chemistry	CHE	3	1	0	1	5	5	75	75	150
3	15CSE23	Introduction to Programming with C	CSE	3	1	0	1	5	5	75	75	150
4	15MEE24	Computer Aided Engineering Drawing	MEE	2	1	1	0	4	6	50	50	100
5	15ECE25	Basic Electronics	ECE	3	0	1	0	4	5	50	50	100
6	16HSS261	Environmental Science and Awareness	HSS	2	0	0	0	2	2	50	50	100
7	15HSS271	Essential English	HSS	N	fand	ator	y	0	2	25	25	50
		Total						25	31	375	375	750

## CREDIT SCHEME FOR SECOND SEMESTER B.E

		SECO	ND SEMI	ESTE	R-	PHY	/SIC	S CYCL	E				
SL No	Course Code	Course	BOS	D	Cr	edit butic	-	Overall Credits	Contact Hours	Marks			
				L	P	T	S			SEE	CIE	Total	
1	15MAT21	Engineering Mathematics -II	MAT	4	0	1	0	5	6	50	50	100	
2	15PHY22	Engineering Physics	PHY	3	1	0	1	5	5	75	75	150	
3	15MEE23	Elements of Mechanical Engineering	MEE	3	1	0	1	5	5	75	75	150	
4	15CIV24	Elements of Civil Engineering	CIV	3	0	1	0	4	5	50	50	100	
5	15EEE25	Basics of Electrical Engineering	EEE	3	0	1	0	4.	5	50	50	100	
6	15HSS262	Business Communication	HSS	2	0	0	0	2	2	50	50	100	
7.	15HSS272	Constitution of India and Professional Ethics	HSS	M: Co	ind: urse	itor	Y.	0	2	25	25	50	
		Total						25	30	375	375	750	

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New Horizon College of Engineering Outer Rine Read, Bellander Post, Europeore 569 193.

## Academic Year 2017 - 18: 3rd & 4th Semesters

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New Horizon College of Engineering Department of information Science and Engineering Third Semester B.J. Program - Scheme AT: 2017-18

3L Ne	Course	Course	Environ Credit Distribution Overall Cantact Credits Hours					Contact Hours	Marks			
								weakly Theory	wrestly -(Late)	CI	541	TOTAL
			1	1.	1	8				0		
4	MATEL	Engineering Mathematics (II	4	a,	1	(g.	1.		p	540	30	100
2	165321	Reanismics For Engineers								5		M22
	H\$5122	Life with her Deprivers	1	8	8	3	3	1	D	54	-50	100
1	15433	Analog and Digital Ølectronics		3	a,	<u>.</u>	×	1	4	73	n	198
×	192.34	Data Structures using C	з	3	0	e.	. 5	-3	ж	75		130
\$	ILE IS	UNIX & SHELL Programming	4	T,	P	9	(4):	4	2	7	π	150
8	8636	Mini Propert	ø	1	0	0	12	4	7	25	25	50
		Tetal	_				34	11	12	850	150	790



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#### New Horizon College of Engineering Department Of Information Science and Engineering Fourth Semister 8.1 Program: Schema AY, 2017-18

SI. No	Caurse	Course	Cr.	dit Di	inibu:	Sign	Overall Credits	Hours	Hours	Garts			
							weekly Theory	(Lab)	CIE	81	TOTAL		
	I		4			\$	Ĩ	1.11111.001					
JL.	MAT43	Engineering Mathematics-IV	4	9	1	8	\$	٠	u	50	50	100	
7	H55423	invoduction fill Economics	2			1	а.	2	α	50	50	100	
	H15422	33 her Engineers											
1	0843	Object Oriented Programming with C++	3	1	•	0	з	5	:45	75	'n	150	
ε.	135.44	Microprocessel	1	2	.0	0	5	5	- 4	75	$\overline{n}$	150	
6	0845	Computer Organization	é.	8	0	e	4		¢	50	50	100	
1	158.46	Mins Project	0	1	8	φ.	2	0	1	25	25	50	
		Total	-		_		24	22	10	325	ш	650	



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# Academic Year 2018 - 19: 5th & 6th Semesters

#### New Horizon College of Engineering Department of Information Science and Engineering

#### Fifth Semester B.E Program-Scheme

			Cree	dit D	istrib	ution	14	Hours kly ory	Hours		Mar	ka
SLNo	Course Code	Course	È	Р	T	s	Ove Cree	Contact Wee	Contact Weekl	CIE	SEE	TOTAL
(j	ISE51	Software Engineering & Best Practices	3	0	0	0	3	4	0	50	50	100
2	ISE52	Database Manageme nt System	4	î,	0	o	5	4	2	75	75	150
3	ISE53	Operating Systems	3	0	0	0	3	4	0	50	50	100
4	ISE54	Design and Analysis of Algorithm	3	2	0	0	5	4	4	75	75	150
5	ISE551	Formal Languages and Automata Theory	4	0	0	1	5	4	0	50	50	100
6	ISE56X	Professional Electives-1	3	0	0	ň	4	3.	0	50	50	100
7	ISE57	Mini Project	0	2	0	0	2	0	0	25	25	50
		TOTAL					27	23	6	375	375	750

ISE561	Digital Experience Management using Adobe Experience Manager
ISE562	Virtualization Essentials with Vmware
ISE563	Big Data Analytics with HP Vertica
ISE564	Essentials of Cloud Computing
ISE565	Operations Research

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		Course		hitri	redit butio		dits		the start	Marks			
SL No.	Course Code		L.	P	т	5	85	Per Heren	and and and and and and and and and and	CIE	SEE	TOTAL	
ă	1SE61	Web Internet Programming	З	Ĩ	0	0	4	4	2	75	75	150	
2	1SE62	Computer Networks	3	Ĩ	0	0	4	4	2	75	75	150	
3	ISE63	Data Warehousing & Data Mining	3	0	0	4	4	4	0	50	50	100	
4	ISE641	JAVA & J2EE	3	2	0	0	5	4	4	75	75	150	
5	ISE65x	Professional Elective-1	3	0	0	0	3	3	0	50	50	100	
6	NHOPX X	Open Elective**	3	0	ø	1	.4	3	0	50	50	100	
7	ISE66	Mini Project	0	2	0	0	2	0	2	25	25	50	
		TOTAL					26	22	10	400	400	800	

### New Horizon College of Engineering Department of Information Science and Engineering Sixth Semester B.E. Program-Scheme

\*\* Scheme and Syllabus for Open Electives is available separately.

	Professional Electives-2
ISE651	Python Programming
ISE652	Cloud Computing
1SE653	Wireless Sensor Networks
1SE654	Compiler Design
ISE655	Mobile Application Development

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# Academic Year 2019 - 20: 7th & 8th semester scheme

\$1 No	Course	Course -		C Dist	redit ribut n	io	Overall Credits	Contact I Hours s Weekly	Contact Hours		Marks				
31.140	Code	Course	L	Р	т	s	Credits	Weekly Theory	Weekly Lab	CIE	SEE	TOTA L			
1	ISE71	Fundamentals of Machine Learning	3	2	0	0	5	4	4	75	75	150			
2	ISE72	SoftwareTestin g and Automation	3	ï	0	0	4	4	2	75	75	150			
3	ISE73x	Professional Elective-2	3	0	0	1	4	4	0	50	50	100			
4	ISE74x	Professional Elective-3	3	0	0	1	4	4	0	50	50	100			
5	ISE75x	Professional Elective-4	3	0	0	I	4	4	0	50	50	100			
6	NHOPX	Open Electives**	3	0	0	ĩ	4	4	0	50	50	100			
		TOTAL		_	_	+	25	24	5	350	350	700			

#### New Horizon College of Engineering Department of Information Science and Engineering Seventh Semester B.E Program-Scheme

\*\* Scheme and Syllabus for Open Electives is available separately

	Professional Elective-2		Professional Elective-3		Professional Elective-4
ISE731	OOMD	ISE741	Cryptography & Network Security	ISE751	Enterprise Application Programming
ISE732	C# & .NET	ISE742	Internet of Things	ISE752	Introduction to Social Network Analytics
ISE733	Artificial Intelligence	ISE743	User Interface Design	ISE753	Agile Methodologies
ISE734	Information Retrieval	ISE744	Software Architecture	ISE754	Human Computer Interaction
ISE735	Information Coding Theory	ISE745	Multimedia Systems	ISE755	Storage Area Networks

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### New Horizon College of Engineering Department of Information Science and Engineering Eighth Semester B.E Program-Scheme

51	Course	Course		C Distri	redit	8	Nerall	ontact Meurs Verkly Neory	the state	Marks		
No.	Course Course		L	્ય	T	s	60	°, ≢ ≩ ¢	3337	CIE	SEE	TOTAL
1	ISE81X	Professional Elective – 5	3	0	0	1	4	4	0	50	50	100
2	ISE82	Internship	0	:4	0	0	4	0	0	50	50	100
3	ISE83	Project Work	0	16	0	ï	16	0	0	200	200	400
		TOTAL					24	4	0	300	300	600

\*\* Scheme and Syllabus for Open Electives is available separately.

Professional Electives-5
Software Architecture and Design Patterns
Android Application Development
Management and Entrepreneurship
Management Information Systems
Software Quality Metrics

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# New Horizon College of Engineering, Bangalore Program: B.E in Electrical & Electronics Engineering

	1	FIRST S	EMESTI	ER- (	CHI	EMI	STR	Y CYCL	E			
SI. No	Course	Course	BOS	r	Ci	edit buti	08	Overall	Contact		Mark	5
103.	0.363	Course		L	P	T	5	Credits	Hours	CIE	SEE	Tota
1	15MAT11	Engineering Mathematics-1	MAT	4	0	1	0	5	6	50	50	100
2	15CHE12	Engineering Chemistry	CHE	3	1	0	1	5	5	75	75	150
3	15CSE13	Introduction to Programming with C	CSE	3	1	0	E	5	5	75	75	150
4	15MEE14	Computer Aided Engineering Drawing	MEE	2	đ	ł	0	4	6	50	50	100
5	15ECE15	Basic Electronics	ECE	3	0	1	0	4	5	50	50	100
6.	16HSS161	Environmental Science and Awareness	HSS	2	0	0	0	2	2	50	50	100
7	15HSS171	Essential English	HSS	M	land	ator	y	0	2	25	25	50
		Total						25	31	375	375	750

# Credit Scheme for First Semester B.E

		FIRST	SEMES	STE.	R-P	HY	SIC	SCYCLE				_
SL.	Course	Course	BOS	1	Cr	edit buti	он	Overall	Contact	Marks		
	Cont			L	P	T	S	Credits	Hours	SEE	CIE	Total
1	15MAT11	Engineering Mathematics-1	MAT	4	0	1	0	5	6	50	50	100
2	13PHY12	Engineering Physics	PHY	3	T	0	1	5	5	75	75	150
3	15MEE13	Elements of Mechanical Engineering	MEE	3	1	0	T	5	5	75	75	150
4	15CIV14	Elements of Civil Engineering	CIV	3	0	1	0	4	5	50	50	100
5	15EEE15	Basics of Electrical Engineering	EEE	3	0	T.	0	4	5	50	50	100
5	15HSS162	Business Communication	HSS	2	0	0	0	2	2	50	50	100
1	15HS\$172	Constitution of India and Professional Ethics	HSS	M	land Cou	ator	ý.	0	2	25	25	50
		Total				100		25	30	375	375	750

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		SECOND	SEMEST	ER-	СН	EM	IST	RY CYCI	E			
SL	Course	Course	B05	0	Cr	edit butis	m	Overall	Contact		Mark	,
No	Code	20030000	101.10	L	P	T	5	Credits	Hours	CIE	SEE	Total
1	15MAT21	Engineering Mathematics- II	MAT	4	0	ĩ	0	5	6	50	50	100
2	15CHE22	Engineering Chemistry	CHE	3	1	0	1	5	5	75	75	150
3	15CSE23	Introduction to Programming with C	CSE	3	1	0	1	5	5	75	75.	150
4	15MEE24	Computer Aided Engineering Drawing	MEE	2	1	1	0	4	6	50	50	100
5	15ECE25	Basic Electronics	ECE	-3	0	T	0	4	5	50	50	100
6	16HSS261	Environmental Science and Awareness	HSS	2	0	0	0	2	2	50	50	100
7	15HSS271	Essential English	HSS	1	fand Cor	lator	у	0	2	25	25	50
		Total			(1 bel	Col Topick lo		25	31	375	375	750

## CREDIT SCHEME FOR SECOND SEMESTER B.E.

		SECO	ND SEMP	STE	R-	PHY	SIC	S CYCLI	E			
SL No	Course Code	Course	BOS	D	Cr istri	edit butic	one:	Overall Credits	Contact Hours		Marks	
				Ŀ	P	т	s			SEE	CIE	Total
1	15MAT21	Engineering Mathematics	MAT	4)	0	J,	0	5	6	50	50	100
2	15PHY22	Engineering Physics	PHY	3	1	0	1	5	5	75	75	150
3	15MEE23	Elements of Mechanical Engineering	MEE	3	Ĵ	0	1	5	5	75	75	150
4	15CIV24	Elements of Civil Engineering	CIV	3.	0	T.	0	4	5	50	50	100
5	15EEE25	Basics of Electrical Engineering	EEE	3	0	1	0	4	5	50	50	100
6	15HSS262	Business Communication	HSS	2	٥	0	0	2	2	50	50	100
7	15HSS272	Constitution of India and Professional Ethics	HSS	M	and	ator e	y	0	2	25	25	50
		Total					Ū.	25	30	375	375	750

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#### New Horizon College of Engineering Department of Electrical & Electronics Engineering Scheme of Third Semester B.E Program

SI. No.	Course Code	Course	Crea	dit Dis	tribut	tion	Overall Credits	Contact Hours/week	Contact Hours/week		Marks   CIE SEE   50 50   50 50   50 50   50 50   75 75   75 75	
			1	P	T	5		Theory	Lab	CIE	SEE	Total
1	MAT31	Engineering Mathematics III	4	0	1	٥	5	6	0	50	50	100
2	H55321	Introduction to Economics		144.5	1.40				2414		0.004	
	H55322	Soft Skills for Engineers	1	9	.0	3		2 . 	0	50	-50	100
3	£££33	Material Science	4	0	0	0	4	4	0	50	\$D.	100
4	EEE34	Electronic Devices and Circuits	:3	-20	0	0	5	5	3	75	75	150
5	EEE35	Digital Electronics	3	2	0	a	5	5	3	75	75	150
6	EEE36	Electric Circuit Theory	з	2	0	0	5	5	3	75	75	150
	3	Total	19	6	1	1	27	27	9	375	375	75

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# New Horizon College of Engineering Department of Electrical & Electronics Engineering Scheme of Fourth Semester B.E Program

SI. No.	Course Code	ode Course Credit		redit Distribution Ov		Overall	Contact	Contact	1		- 2		
1	1		1		P	TI	5	Credits	Hours/week	Hours/week	1	Mark	£ 11
4	MA741	Mathematics IV	4		1	1	0	e.	Incory	Lab	CIE	SEE	Tota
2	H55421	Introduction to Economics	T	t	+	1	-		6	0	50	50	100
	H\$\$422	Soft Skill for Engineers	12	0	10		1	3	· 2 ·	· 0	50	50	100
1	EEE43	Electro Magnetic Field Theory	4	0	0	t	0	4		+	-		-
	EEE44	Measurements &	3	2	10	t	1		4	٥	50	50	100
1	EEE45	Microprocessor and	1		1	E	+	2	5	э	75	75	150
E	EE46	Electrical Machines -	-	-	0	10	-	5	5	3	75	75	150
	To	tal	3	2	0	0		5	5	3	75	75	150
			19/1	0	1	1	1	27	27	0	10		150

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Other Plans Source Statements Other Plans Found, Bellandur Post, Dans Jore S60 103,

#### New Horizon College of Engineering Department of Electrical and Electronics Engineering Scheme of Fifth Semester 8.E Program

5. No	Course Code	Course	Credit Distribution		tion	Overail Credits	Contact Hours Weekly (Theory)	Contact Hours Weekly (Lab)		Mark		
			L	p	T	5				CIE	SEE	Total
uk –	LEES1	Digital Signal Processing	3	ø	1	0	4	5	0	50	50	100
1	ÉEE52	Electrical Machines - II	3	2	0	0	5	- 4	3	75	75	150
	EEE53	Linear Control Systems	-1	ż	0	0	5	4	3	75	75	150
*	EEE54	Electrical Machine Design & Drawing	3	2	0	Ð	5	4	3	75	75	150
8	EEESS	Generation, Transmission And Distribution	3	0	0	0	3	34	٥	50	50	100
4	EEE56X	Professional Elective I	3	0	0	1	4	4	0	50	so	100
τ.	EEE57	Mini Project I	n	I	ō	0	1	0	2	25	25	50
		TOTAL					27	25	11	400	400	800

Pr	ofessional Elective I
Course Code	Course
EEES61	Opamps and linear ICs
EEE562	Modern Communication Systems
EEE563	Advanced Micro Controller & Applications
EEE564	Object Oriented Programming with C++

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New Horizon College of Engineering	
epartment of Electrical and Electronics Engineerin	8
Scheme of Sixth Semester B.E Program	

5. No	Course Code	Course	Credit Distribution			Overall Credits	Contact Hours Weekly (Theory)	Contact Hours Weekly (Lab)		Mark	Ę	
			1	P	T	\$				CIE	SEE	Total
1	EEE61	Power System Analysis	1	0	1	0	4	4	0	50	50	100
2	EEF62	Power Electronics	3	2	0	0	5	4	3	75	75	150
3	EEE63	Relay and High voltage Engineering	3	2	0	ø	5	4	3	75	75	150
4	EFE 64	Power system protection	3	13	o	0	3	4	0	50	50	100
5	REERSK	Professional Elective – II	3	0	0	1	4	4	0	50	50	100
6	NHOPX	Open Bective - I	3	0	0	1	4	4	0	50	50	100
7	66667	Mini Project II	0	1	0	0	10	0	2	25	25	50
		26	24	8	375	375	750					

	Professional Elective I
Course Code	Course
EEE651	Operation Research
EEE652	VL57 Design
EEE653	Embedded System
EE£654	Special Electrical Machines
EEE655	Advanced Control Systems
EEE656	Industrial Automation

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S.NO	INDUSTRIAL OPEN ELECTIVE	OFFERING DEPARTMENT
1	Digital Experience Management using Adobe Experience Manager- 1	DCA
2	Digital Experience Management using Adobe Experience Manager- 2	DCA
3	Big Data Analytics with HP Vertica-1	CSE
	Big-Data Analytics with HP Vertica-2	CSE
5	Virtualization Essentials using Vmware-1	ISE
6	Virtualization Essentials using Vmwar#-2	ISE
0	SAP	ME
	Industry Automation/Building Automation-Schneider	EEE
_	Routing and Switching - CISCO	CSE
3 (	Jata Analytics	CSE,CIV

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#### New Horizon College of Engineering Department of Electrical and Electronics Engineering Scheme of Seventh Semester B.E Program

S. No	Course Code	Course	D	Cre istril	edit butic	'n	Overall Credits	Contact Hours Weekly (Theory)	Contact Hours Weekly (Lab)	Marks			
	_		L	T	P	s				CIE	SEE	Total	
1	EEE71	Computer Aided Power System Analysis	3	0	2	0	5	4	3	75	75	150	
2	EEE72	Advanced Industrial and Building Automation	3	0	2	0	5	4	3	75	75	150	
3	EEE73X	Professional Elective -III	3	o	0	0	3	4	0	50	50	100	
4	EEE74X	Professional Elective –IV	3	0	o	0	3	4	0	50	50	100	
5	NHOPX	Open Elective II	3	0	0	1	4	3	0	50	50	100	
6	EEE75	Project Phase I	0	0 0 2 0		2	0	-	50	50	100		
		TOTAL		22	19	06	350	350	700				

	Professional Elective III									
SI No	Course Code	Course								
1	EEE731	Electrical vehicles and Drives								
2	EEE732	FACTS & HVDC transmission								
3	EEE733	Testing and Commissioning of electrical equipment								
4	EEE734	Energy Auditing and Demand side Management								

	Professi	onal Elective IV
SI No	Course Code	Course
1	EEE741	Utilization of Electrical Energy
2	EEE742	Power System Operation and Control
3	EEE 743	Solar Electric Systems
4	EEE 744	Artificial Neural network and Fuzzy logic

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S. Course No Code		Course		Credit Distribution			Overall Credits	Contact Hours Weekly (Theory)	Contact Hours Weekly (Lab)	Marks		
		L	T	P	\$				CIE	SEE	Total	
1	EEE81X	Professional Elective V	3	0	0	0	3	4	0	50	50	100
2	EEE82X	Professional Elective – VI	3	0	0	1	4	4	0	50	50	100
3	EEE83	Internship	0	0	4	0	4			50	50	100
4	EEE84	Project Phase II	0	0	10	0	10	0		50	50	100
		TOTAL					21	8		200	200	400

#### New Horizon College of Engineering Department of Electrical and Electronics Engineering Scheme of Eighth Semester B.E Program

	P	rofessional Elective V
SI No	Course Code	Course
1	<b>EEE811</b>	Estimation & Costing of electrical systems
2	EEE812	Smart Grid
3	EEE813	Power Quality
4	EEE814	Integration of distributed generation

	P	rofessional Elective VI
SI No	Course Code	Course
1	EEE821	Solar Photo Voltaic Fundamentals, Technologies and Applications
2	EEE822	Simulation of Power Electronics
3	EEE823	Biomedical Instrumentation
4	EEE824	Applications of IOT in Electrical Engineering

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Principal New Horizon Collects of Engineering Outer Ring Road, Bellandur Post Ecologicore 566 103



Autonomous College Permanently Affiliated to VTU, Approved by AICTE & UGC Accredited by NAAC with 'A' Grade, Accredited by NBA

# DEPARTMENT OF MECHANICAL ENGINEERING

M.TECH (PG)

MACHINE DESIGN

SCHEME AND SYLLABUS FOR I, II, III & IV SEMESTER

## **FIRST SEMESTER**

				Credit				Overall	M		arks	
SI	Course		BoS	Distribution				Credits	Contact			
Ν	Code	Course		L	Ρ	Т	S		Hours	CIE	SEE	Total
0												
1	18MMD11	Advanced Mathematics	BS	4	0	0	0	4	4	50	50	100
2	18MMD12	Finite Element Methods	PSC	3	0	0	0	3	4	50	50	100
3		Theory of										
	101011015	Elasticity &	PSC	4	0	0	1	5	4	50	50	100
		Plasticity										
4	18MMD14	Experimental Stress Analysis	PSC	4	0	0	1	5	4	50	50	100
5	18MMD15 X	Core Elective-1	PSE	3	0	0	0	3	4	50	50	100
6	18MMD16	Research Methodology	PSC	2	0	0	0	2	2	50	50	100
7	18MMD17	Advanced FEM Lab	PSC	0	2	0	0	2	2	25	25	50
	Total	•		-	• •	-	• •	24	25	325	325	650

Sub Code	Core Electives 1 (PSE)
18MMD151	Rapid Prototyping
18MMD152	Computer Applications in
	Design
18MMD153	Design for Manufacturing
18MMD154	Advanced Materials Technology

# SECOND SEMESTER

				Credit								
SI.	Course		BoS	Dist	tribu	utio	n	Overall Contact		Marks		
Ν	Code	Course		L	Ρ	Т	S	Credits	Hours	CIE	SEE	Total
0												
1	18MMD21	Mechanics of Composite Materials	PSC	4	0	0	0	4	4	50	50	100
2	18MMD22	Dynamics and Mechanism Design	PSC	3	0	0	0	3	4	50	50	100
3	18MMD23	Advanced Machine Design	PSC	4	0	0	1	5	4	50	50	100
4	18MMD24	Advanced Theory of Vibrations	PSC	4	0	0	1	5	4	50	50	100
5	18MMD25X	Core Elective-1	PSE	3	0	0	0	3	4	50	50	100
6	18MMD26	Seminar	PSC	0	0	0	2	2		50	50	100
7	18MMD27	Dynamics and Mechanism Design Lab	PSC	0	2	0	0	2	3	25	25	50
		Total						24	23	325	325	650

Sub Code	Core Electives 2 (PSE)					
18MMD251	Mechatronics System Design					
191410252	Advanced Manufacturing					
101011010252	Planning and Control					
18MMD253	Design Optimization					
18MMD254	Fatigue, Creep & Fracture					
	Mechanics					

## THIRD SEMESTER

SI. No	Course Code	Course	BoS	D	Credit Distribution			Overall Credits	Contact Hours		Mar ks	/lar s	
				L	Ρ	Т	S			CIE	SEE	Total	
1	18MMD31	Tribology and Bearing Design	PSC	4	0	0	0	4	4	50	50	100	
2	18MMD32X	Core Elective-3	PSE	3	0	0	1	4	4	50	50	100	
3	18MMD33Y	Core Elective-4	PSE	3	0	0	1	4	4	50	50	100	
4	18MMD34	Internship/Mini Project	PSC	0	0	0	6	6		50	50	100	
5	18MMD35	Project Phase – I	PSC	0	0	0	2	2		50	50	100	
Total								20	12	250	250	500	

Sub Code	Core Electives 3 (PSE)
18MMD321	Applications of Smart Materials
18MMD322	Robust Design
18MMD323	Simulation Process for Manufacturing

Sub Code	Core Electives 4 (PSE)
18MMD331	Advanced Mechanics of Solids
18MMD332	Bio and Nanomaterials
18MMD333	Advanced Non- Traditional Machining

# FOURTH SEMESTER

				Credit Distribution		<b>a</b> "						
SI.	Course		BoS	D	Distribution		Overall	Conta		Marl	<b>KS</b>	
No	Code	Course		L	Ρ	Т	S	Credits	ct	CIE	SEE	Total
									Hours			
1	18MMD41	Project Phase - II	PSC	0	0	0	1	1		50	50	100
2	18MMD42	Project Phase - III	PSC	0	0	0	1	1		50	50	100
3	18MMD43	Evaluation of Project	PSC	0	0	0	18	18		100	100	200
	Total					20		200	200	400		



Academic Year 2019-20

List of Courses and Scheme

for

**Master of Technology** 

# In

**Cyber Forensics & Information Security** 

1<sup>st</sup> & 2<sup>nd</sup> semester: Autonomous scheme (88 Credits)

3<sup>rd</sup> & 4<sup>th</sup> semester: Autonomous Scheme (88 credits)

# DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

# **Master of Technology**

# In Cyber Forensics & Information Security

SI.N o			Credit Distribution Overall Hours			Marks					
	Course Code	Course	BOS	L	Т	Р			CIE	SEE	TOTAL
1	19SFC11	Ethical Hacking	ISE	3	0	0	3	3	50	50	100
2	19SFC12	Number Theory and Cryptology	ISE	3	0	0	3	3	50	50	100
3	19SFC13	Information Security and Computer Networking	ISE	3	0	0	3	3	50	50	100
4	19SFC14	Cyber Crime and Cyber Forensics	ISE	3	0	0	3	3	50	50	100
5	19SFC15	Research Methodology	ISE	2	0	0	2	2	25	25	50
6	19SFC16X	Professional Elective-1	ISE	4	0	0	4	4	50	50	100
7	19SFCL17	Ethical Hacking lab	ISE	0	0	2	2	4	25	25	50
8	19SFCL18	Number Theory and Cryptology lab	ISE	0	0	2	2	4	25	25	50
9	19SFC19	Mini Project	ISE	0	0	3	3	0	50	50	100
	TOTAL							26	375	375	750

First Semester M. Tech Program–Scheme

Professional Elective – 1									
<b>Course Code</b>	Course Name								
19SFC161	Access control and Identity Management System								
19SFC162	Cloud Security								
19SFC163	Advanced Cryptography								
19SFC164	Application and Web Security								

SI No	~ ~ ~ ~		DOG	Di	Cred strib	lit ution	Overall	tact urs	Marks			
SI.No	Course Code	Course	BOS	L	Т	Р	Credits	Con Hot	CIE	SEE	TOTAL	
1	19SFC21	Preserving and Recovering Digital Evidence	ISE	4	0	0	4	4	50	50	100	
2	19SFC22	Operating System Security	ISE	4	0	0	4	4	50	50	100	
3	19SFC23	Secured Programming	ISE	4	0	0	4	4	50	50	100	
4	19SFC24	Cyber Laws and Ethics	ISE	4	0	0	4	4	50	50	100	
5	19SFC25X	Professional Elective-2	ISE	4	0	0	4	4	50	50	100	
6	19SFC26	Technical Seminar	ISE	0	2	0	2	0	25	25	50	
7	19SFC27	Mini Project	ISE	0	0	3	3	0	50	50	100	
TOTAL							25	20	325	325	650	

### Second Semester M. Tech Program-Scheme

Professional Elective – 2									
<b>Course Code</b>	Course Name								
19SFC251	Biometric Security								
19SFC252	Trust Management in E-Commerce								
19SFC253	Information Security Policies in Industry								
19SFC254	Database Security								

SI.N o.	Course Code	Course	BOS	Dis	Credit stributio	on	Overall Credits	Contact Hours		Marks		
				L	Т	Р			CIE	Marks   SE TO   E A   50 50 10   50 50 10   50 50 10   50 50 10   50 50 10   50 50 10   50 50 10   50 50 10   50 200 200 4	TOT AL	
1	20SFC31	File System Forensic Analysis	ISE	4	0	0	4	4	50	50	100	
2	20SFC32X	Professional Elective-3	ISE	3	1	0	4	4	50	50	100	
3	20SFC33	Field work on cyber issues	ISE	0	0	4	4	-	50	50	100	
4	20SFC34	Evaluation of Project Phase-I	ISE	0	0	6	6	-	50	50	100	
	TOTAL							8	200	200	400	

## Third Semester M. Tech Program–Scheme

Professional Elective – 3							
Course Code Course Name							
20SFC321 Security Architecture Design							
20SFC322 Steganography And Digital Watermarking							
20SFC323 Mobile Device Forensics							
20SFC324 Security Assessment and Verification							

# Fourth Semester M. Tech Program-Scheme

CL NL	Course	Course C Doc Overa	Overall	tact urs	Marks						
<b>51.</b> 1NO	Code	Course	BOS	L	Т	Р	Credits	Con Hoi	CI E	SEE	TOTAL
1	20SFC41	Internship	ISE	-	-	-	5	0	0	50	50
2	20SFC42	Evaluation of Project and Viva- Voce	ISE	-	-	-	15	0	0	100	100
		TOTAL		•			20	0	0	150	150

## NEW HORIZON COLLEGE OF ENGINEERING M.TECH COMPUTER SCIENCE AND ENGINEERING SCHEME FOR FIRST SEMESTER- AY 2019-2020

	FIRST SEMESTER-COMPUTER SCIENCE AND ENGINEERING											
S.	Course	course	BOS	Credit		Overall Contact		Marks				
NO	code			C	aistribution		credits	Hours				
				L	Ρ	T	S			CIE	SEE	TOTAL
1	18SCS11	ADVANCED OPERATING SYSTEMS	CSE	3	0	0	0	3	4	50	50	100
2	18SCS12	ARTIFICIAL INTELLIGENCE	CSE	4	0	0	0	4	4	50	50	100
3	18SCS13	ADVANCED COMPUTER NETWORKS&SECUR ITY	CSE	3	0	0	0	3	4	50	50	100
4	18SCS14x	SPECIALIZATION ELECTIVE-1	CSE	3	0	0	1	4	4	50	50	100
5	18SCS15	HUMAN COMPUTER INTERACTION	CSE	4	0	0	0	4	4	50	50	100
6	18SCS16	MINI PROJECT IN ACN	CSE	-	-	-	-	2	-	50	50	100
7	18SCL17	ADVANCED OPERATING SYSTEMS LAB	CSE	0	2	0	0	2	3	25	25	50
Total								22	23	325	325	650

Specialization Elective - 1							
Course code	course						
18SCS141	OBJECT ORIENTED SOFTWARE ENGINEERING						
18SCS142	MULTI CORE ARCHITECTURE AND PROGRAMMING						
18SCS143	DATAWAREHOUSING AND DATAMINING						

18SCS144	PATTERN RECOGNITION AND IMAGE
	PROCESSING

## M.TECH COMPUTER SCIENCE AND ENGINEERING SCHEME FOR SECOND SEMESTER

	SECOND SEMESTER-COMPUTER SCIENCE AND ENGINEERING													
S. No	Course code	course	BOS	Credit distribution		Credit distribution		Credit distribution		Overall credits	Contact Hours	N	/larks	
				L	Р	Т	S			CIE	SEE	TOT AL		
1	18SCS21	ADVANCED ALGORITHMS	CSE	3	0	0	0	3	4	50	50	100		
2	18SCS22	CLOUD COMPUTING	CSE	3	0	0	0	3	4	50	50	100		
3	18SCS23	BIG DATA ANALYTICS	CSE	4	0	0	0	4	4	50	50	100		
4	18SCS24x	SPECIALIZATION ELECTIVE-2	CSE	3	0	0	1	4	4	50	50	100		
5	18SCS25	MACHINE LEARNING	CSE	4	0	0	0	4	4	50	50	100		
6	18SCS26	MINI PROJECT ON CLOUD COMPUTING	CSE					2	-	50	50	100		
7	18SCL27	ADVANCED ALGORITHMS LAB	CSE	0	2	0	0	2	3	25	25	50		
Total							22	23	325	325	650			

Specialization Elective							
Course code	course						
18SCS241	SOFTWARE TESTING AUTOMATION						
18SCS242	MIDDLEWARE TECHNOLOGIES IN WEB AND MOBILE DOMAIN						
18SCS243	SERVICE ORIENTED ARCHITECTURE						
18SCS244	PARALLEL ALGORITHMS						
## NEW HORIZON COLLEGE OF ENGINEERING M.TECH COMPUTER SCIENCE AND ENGINEERING SCHEME FOR THIRD SEMESTER- AY 2019-2020

THIRD SEMESTER-COMPUTER SCIENCE AND ENGINEERING												
S. No	Course code	course	BOS	Credit distribution			CreditOverallContactMarksdistributioncreditsHours			5		
				I D T C								
				L	Г		ר			CIE	JEE	TOTAL
1	19SCS31x	SPECIALIZATION	CSE	3	0	0	1	4	4	50	50	100
		ELECTIVE										
2	19SCS32	INTERNSHIP	CSE	0	2	0	0	2	-	50	50	100
3	19SCS33	SEMINAR	CSE	0	0	0	2	2	-	50	50	100
4	19SCS34	PROJECT PHASE-1	CSE	0	14	0	0	14	-	50	50	100
Total								22	4	200	200	400

Specialization Elective							
Course code	course						
19SCS311	INTERNET OF THINGS						
19SCS312	MOBILE APPLICATION						
	DEVELOPMENT						
19SCS313	COMPUTER SYSTEMS-						
	PERFORMANCE ANALYSIS						
19SCS314	NATURAL LANGUAGE						
	PROCESSING						

## NEW HORIZON COLLEGE OF ENGINEERING M.TECH COMPUTER SCIENCE AND ENGINEERING SCHEME FOR FOURTH SEMESTER

FOURTH SEMESTER-COMPUTER SCIENCE AND ENGINEERING												
S. No	Course code	course	BOS	Credit distributio			Credit Overall distribution credits		Contact Hours	Marks		
				L	Ρ	Т	S			CIE	SEE	TOTAL
1	19SCS41x	SPECIALIZATION ELECTIVE	CSE	3	0	0	1	4	4	50	50	100
2	19SCS42	RESEARCH METHODOLOGY & IPR	CSE	2	0	0	0	2	2	25	25	50
3	19SCS43	INTERNSHIP	CSE	0	2	0	0	2	-	50	50	100
4	19SCS44	SEMINAR	CSE	0	0	0	2	2	-	50	50	100
5	19SCS45	PROJECT PHASE-2	CSE	0	12	0	0	12	-	50	50	100
Total								22	6	225	225	450

Specialization Elective							
Course code	course						
19SCS411	AGILE TECHNOLOGIES						
19SCS412	WEB INTELLIGENCE						
19SCS413	ADVANCES IN COMPUTATIONAL SECURITY						
19SCS414	HIGH PERFORMANCE COMPUTING						