SCHEME OF INSTRUCTION & EXAMINATION
B.E. (Information Technology) III – SEMESTER

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	
Theory Courses										
1	HS 104 EG	Effective Technical Communication in English	3	-	-	3	30	70	3	3
2	HS 105 CM	Finance and Accounting	3	1	-	3	30	70	3	3
3	BS 207 MT	Mathematics III (Probability &Statistics)	3	1	-	3	30	70	3	3
4	ES 306 EC	Basic Electronics	3	-	-	3	30	70	3	3
5	ES 303 EC	Digital Electronics	3	1	-	3	30	70	3	3
6	PC 301 IT	Data Structures	3	-	-	3	30	70	3	3
7	PC 302 IT	Mathematical Foundations of Information Technology	3	-	-	3	30	70	3	3
Practical/ Laboratory Courses										
8	ES 351EC	Basic Electronics Lab	-	-	2	2	25	50	3	1
9	PC 351 IT	Data Structures Lab	-	-	2	2	25	50	3	1
10	PC 352 IT	IT Workshop Lab	-	-	2	2	25	50	3	1
			21	**3**	**06**	**30**	**285**	**640**		**24**

SCHEME OF INSTRUCTION & EXAMINATION

B.E. (Information Technology) IV – SEMESTER

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	
Theory Courses										
1	HS 103 ME	Operations Research	3	1	-	3	30	70	3	3
2	ES 305EC	Signals and Systems	3	1	-	3	30	70	3	3
3	PC 401 IT	JAVA Programming	3	1	-	3	30	70	3	3
4	PC 402 IT	Database Systems	3	1	-	3	30	70	3	3
5	PC 403 IT	Computer Organization and Microprocessor	3	1	-	3	30	70	3	3
6	PC 404 IT	Data Communications	3	1	-	3	30	70	3	3
Practical/ Laboratory Courses										
7	PC 451 IT	Microprocessor Lab	-	-	2	2	25	50	3	1
8	PC 452 IT	JAVA Programming Lab	-	-	2	2	25	50	3	1
9	PC 453 IT	Database Systems Lab	-	-	2	2	25	50	3	1
			18	**06**	**06**	**30**	**255**	**570**		**21**

SCHEME OF INSTRUCTION & EXAMINATION
B.E (INFORMATION TECHNOLOGY)

V Semester

S. No.	CourseCode	Course Title	Scheme of Instruction — Periods Per week			Contact Hrs / Week	Scheme of Examination — MaximumMarks		Duration in Hrs	Credits
			L	T	D/P		CIE	SEE		
Theory Course										
1.	PC501IT	Automata Theory	3	1	-	4	30	70	3	3
2.	PC502IT	Operating Systems	3	1	-	4	30	70	3	3
3.	PC503IT	Artificial Intelligence	3	1	-	4	30	70	3	3
4.	PC504IT	Computer Networks	3	1	-	4	30	70	3	3
5.	PC505IT	Software Engineering	3	-	-	3	30	70	3	3
6.	PE-1	Professional Elective–I	3	-	-	3	30	70	3	3
Practical/Laboratory Courses										
7.	PC551IT	Computer Networks and Operating System Lab	-	-	3	3	25	50	3	1.5
8.	PC552IT	Artificial Intelligence Lab	-	-	2	2	25	50	3	1
9.	PC553IT	Web Application Development Lab	-	-	2	2	25	50	3	1
		Total	18	04	07	32	255	570	-	21.5

PC: Professional Core; **PE**: Professional Elective; **HS**: Humanities and social Science ;

MC: Mandatory ; **L**:Lecture; **T**:Tutorial ; **P**:Practical

CIE: Continuous Internal Evaluation ; **SEE**: Semester End Examination(Univ.Exam)

Note:

1. Each contact hour is one clock hour.

    2. The duration of practical class is two hours , however it can be extended whenever necessary to enable the students to complete the program.

Profession Elective – I	
Course Code	**Course Title**
PE 511 IT	Object oriented Analysis and Design
PE 512 IT	Mobile Computing
PE 513 IT	Distributed Systems
PE 514 IT	Data Mining
PE 515 IT	Computer Graphics

SCHEME OF INSTRUCTION & EXAMINATION
B.E (INFORMATION TECHNOLOGY)
VI Semester

S.No	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	D/P	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	
Theory Course										
1.	PC601IT	Embedded Systems	3	1	-	4	30	70	3	3
2.	PC602IT	Design and Analysis of Algorithms	3	1	-	4	30	70	3	3
3.	PC603IT	Machine Learning	3	1	-	4	30	70	3	3
4.	PC604IT	Network Security and cryptography	3	-	-	3	30	70	3	3
5	OE-1	Open Elective-1	3	-	-	3	30	70	3	3
6.	PE-II	Professional Elective-II	3	-	-	3	30	70	3	3
Practical/Laboratory Course										
7.	PC651IT	Embedded Systems Lab	-	-	2	2	25	50	3	1
8.	PC652IT	Machine Learning Lab	-	-	2	2	25	50	3	1
9.	PC653IT	Mobile Application Development Lab	-	-	2	2	25	50	3	1
8.	PW654IT	Mini Project-I	-	-	2	2	25	50	3	1
		Total	18	03	8	29	280	620	-	22

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Profession Elective – II	
Course Code	**Course Title**
PE 621 IT	Software Testing and Quality Assurance
PE 622 IT	Adhoc Sensor Networks
PE 623 IT	Cloud Computing
PE 624 IT	Data Science
PE 625 IT	Information Storage and Management

Open Elective 1		
Sl.No	**Code**	**Name of Subject**
1	**OE601 EE**	Electrical Energy Conservation and Safety (Not for EEE & EIE Students)
2	**OE602 EE**	Reliability Engineering (Not for EEE & EIE Students)
3	**OE611 AE**	Basics of Automobile Engineering (Not for Mech./Prod./Automobile Engg. students)
4	**OE611 ME**	Industrial Robotics (Not for Mech./Prod./Automobile Engg. students)
5	**OE601 EG**	Soft Skills & Interpersonal Skills
6	**OE602 MB**	Human Resource Development and Organizational Behaviour
7	**OE601 LW**	Cyber Law and Ethics
8	**OE601 CS**	OOP using Java (Not for CSE, IT, AD, AM, DS and CB Students)
9	**OE602 CS**	Data Structures & Algorithms (Not for CSE, IT, AD, AM, DS and CB Students)
10	**OE601 IT**	Operating Systems (Not for CSE, IT, AD, AM, DS and CB Students)
11	**OE601 AD**	Principles of Artificial Intelligence (Not for CSE, IT, AD, AM, DS and CB Students)
12	**OE601 AM**	Principles of Machine Learning (Not for CSE, IT, AD, AM, DS and CB Students)
13	**OE601 DS**	Data Science (Not for CSE, IT, AD, AM, DS and CB Students)
14	**OE601 CB**	Principles of IOT (Not for CSE, IT, AD, AM, DS and CB Students)
15	**OE601 CE**	Disaster Mitigation (Not for Civil Engg. Students)
16	**OE601 EC**	Principles of Electronic Communication (Not for ECE students)
17	**OE602 EC**	Digital system design using verilog HDL (Not for ECE students)

AD- *Artificial Intelligence & Data Science*

AE- *Automobile Engineering*

AM-*Artificial Intelligence & Machine Learning*

CB- *IoT, Cyber Security & Block Chain*

CE-*Civil Engineering*

CS-*Computer Science*

DS- *Data Science*

EC-*Electronics and Communication Engg.*

EE- *Electrical Engineering*

EG-*English*

IT-*Information Technology*

LW-*Law*

MB-*Business Management*

ME-*Mechanical Engineering*

SCHEME OF INSTRUCTION & EXAMINATION
B.E (INFORMATION TECHNOLOGY)
VII Semester

S. No.	Course Code	Course Title	L	T	D/P	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	Credits
			\multicolumn{4}{c}{Scheme of Instruction}		\multicolumn{3}{c}{Scheme of Examination}		
**Theory Course**										
1.	PC701IT	Internet of Things	3	-	-	3	30	70	3	3
2.	PC702IT	Big Data Analytics	3	-	-	3	30	70	3	3
3	OE-II	Open Elective II	3	-	-	3	30	70	3	3
4.	PE-III	Professional Elective-III	3	-	-	3	30	70	3	3
5.	PE-IV	Professional Elective IV	3	-	-	3	30	70	3	3
**Practical/Laboratory Courses**										
5	PC751IT	Internet Of Things Lab	-	-	2	2	25	50	3	1
6	PW752IT	Project Work–I	-	-	6	6	50	-	-	3
7	SI651IT	Summer Internship	`	-	-	-	50	-	-	2
\multicolumn{3}{c}{Total}	15	-	08	23	275	400	18	21

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Note:

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Open Elective – II	
Course Code	**Course Title**
OE701IT	Principles of Cyber Security

Profession Elective – III	
Course Code	**Course Title**
PE 731 IT	Software Reuse Techniques
PE 732 IT	Cyber Security
PE 733 IT	Scalable Architectures for Large Applications
PE 734 IT	Natural Language Processing
PE 735 IT	Real Time Systems

Profession Elective – IV	
Course Code	**Course Title**
PE 741 IT	Software Project Management
PE 742 IT	Digital Forensics
PE 743 IT	Blockchain Technologies
PE 744 IT	Deep Learning
PE 745 IT	Augmented and virtual Reality

SCHEME OF INSTRUCTION & EXAMINATION
B.E (INFORMATION TECHNOLOGY)
VIII Semester

S.No.	Course Code	Course Title	L	T	D/P	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	Credits
			Scheme of Instruction				Scheme of Examination			
Theory Course										
1.	PE-V	Professional Elective–V	3	-	-	3	30	70	3	3
2.	OE-III	Open Elective–III	3	-	-	3	30	70	3	3
Practical/Laboratory Courses										
3.	PW861IT	Project Work–II	-	-	16	16	50	100	-	8
	Total		06	-	16	22	110	240	06	14

PC: Professional Core; **PE**: Professional Elective; **HS**: Humanities and social Science;
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Open Elective – III	
Course Code	**Course Title**
OE 801 IT	Mobile Computing

Profession Elective – V	
Course Code	**Course Title**
PE 851 IT	Agile Software Development
PE 852 IT	Information Security
PE 853 IT	DevOp sand Kubernetes
PE 854 IT	Computational Intelligence
PE 855 IT	Quantum Computing