



### AICTE MANDATORY DISCLOSURE

#### NAME AND ADDRESS OF THE INSTITUTION

<b>Name</b>	<b>VIVEKANANDA INSTITUTE OF TECHNOLOGY</b>
<b>Address</b>	GUDIMAVU, KENGERI HOBLI, KUMBALAGODU
<b>City</b>	BENGALURU
<b>State</b>	KARNATAKA
<b>Website</b>	www.vitb.ac.in
<b>PhoneNo</b>	+918028437036, 7625013435
<b>FaxNo</b>	080-28437944
<b>Email</b>	vkitprincipal@gmail.com
<b>AICTE Permanent ID</b>	1-12176161
<b>Date</b>	16.07.2023
<b>Period of Last Approval</b>	2023-24
<b>Longitude &amp; Latitude</b>	77.45407128020378, 12.857224027622449
<b>College hours</b>	8.30 AM to 4.30 PM

#### NAME AND ADDRESS OF THE TRUST/SOCIETY/COMPANY AND THE TRUSTEES

<b>Name</b>	JANATHA EDUCATION SOCIETY
<b>Address</b>	Vivekananda College Premises, Next to Orion Mall, Dr. Rajkumar Road, Rajajinagar II Stage
<b>City</b>	Bangalore-560055.
<b>State</b>	KARNATAKA
<b>PhoneNo</b>	08023371952
<b>Email</b>	jesmanager@gmail.com

**Janatha Education Society  
Details of Trustees**

<b>Sl. No.</b>	<b>NameoftheTrustee&amp;Address</b>	<b>Designation</b>	<b>Mobile No.</b>	<b>Email</b>
1	<b>Sri. BALAKRISHNA H. C</b> AmmaNilaya,No.21,(22) 1st Cross, 1st Stage MIG KHB Colony, BasaveshwaraNagara Bengaluru-560079	President	9448066939 9448050192 9663146939	jesmanager@gmail.com
2	<b>Sri. S.T.NarayanaGowda</b> No.463/1, 7th Cross 12 <sup>th</sup> MainRoad, RMV Extension SadashivaNagar Bengaluru-560080.	Vice- President	9845165280	jesmanager@gmail.com
3	<b>Sri. H.G.Balagopal</b> ShobhaShree,No.893, West of Chord Road, II Stage, Bengaluru-560086	Secretary	9845047495	hgbalagopal@gmail.com
4	<b>Sri I Narayana Reddy</b> No.23/1, 1 <sup>st</sup> 'A'Main Road 5th Cross, Yeshwanthpur Bengaluru - 560 022	Joint Secretary	9342868296	-
5	<b>Sri. N.Nagaraj</b> #.19/7,MysoreDeviationRoad Gopalapuram Magadi Road, Bengaluru-560032	Treasurer	7338081732	-
6	<b>Sri. Harish Appa Reddy</b> #. K5/2,10thCross RMVExtension,LakeRoad Sadashiva Nagar Bengaluru-560080	Internal Auditor	9845042747	<a href="mailto:haagindia@gmail.com">haagindia@gmail.com</a>
7	<b>Sri C.N.Manche Gowda</b> No.51,HIG,1st'A'MainRoad 1st Stage, KHB Colony Basaveshwara Nagar Bengaluru-560079	Member MC	9972017176	manche1938@gmail.com
8	<b>Sri. K.Shyamaraju</b> No.150/B, 10 <sup>th</sup> Main Road, RajmahalVilasExtension Sadashivanagara Bengaluru-560080,	Member	9844013391	-

9	<b>Sri. M. R.Lakshmi Manohar</b> No.169, 1st Floor LowerPalaceOrchard Bengaluru - 560 003	Member	7829748937	Lmanohar26@gmail.com
10	<b>Sri. K.L Avinash</b> 31/8, 16th Cross, 6th Main Narayanappa Farm, Sanjayanagar, R.M.V2 <sup>nd</sup> Stage Bengaluru-560094	Member	9845153715	-
11	<b>Sri. K.P.Manju</b> No.95,1 <sup>st</sup> Floor, 4 <sup>th</sup> Cross,2 <sup>nd</sup> Stage AGB Layout, Mahalaksmipuram Bengaluru-560096	Member	9844565861	-
12	<b>Sri. G.V.Anil</b> No11,1 <sup>st</sup> Floor 1 <sup>st</sup> Cross, "Shanthivana" SahakarnagaraPost Bengaluru 560092	Member	9448663752	-
13	<b>Smt. B.H. Pankaja</b> No.38,9thCross,8thMain, 1 <sup>st</sup> Floor S.B.M. Colony, Brundavan Nagar Mathikere Extension Bengaluru-560054	Member	9742818256	-
14	<b>Prof. G.K. Narayana Reddy</b> No.622/93, Dr.Rajkumar Road Rajajinagar,2 <sup>nd</sup> Block, Bengaluru - 560 010	Mentor	9448713712	<a href="mailto:kn_reddy@hotmail.com">kn_reddy@hotmail.com</a>
15	<b>Dr. A.C Raghuram</b> # 98, 5A Cross Dollar's Colony, RMV 2 <sup>nd</sup> Stage Bengaluru-560094	Advisor	9945560104	<a href="mailto:raghuram@scientist.com">raghuram@scientist.com</a>
16	<b>Sri. K.P.Muthaiah</b> No.12, 1st Main, 3rd Stage, Vinayaka Layout Vijayanagar, Bengaluru-560040	Invitee	9902144188	<a href="mailto:muthaiah@yahoo.com">muthaiah@yahoo.com</a>
17	<b>Sri. H.TNarayana</b> 20,3 <sup>rd</sup> CrossRoad Srirampuram Bengaluru-560021	Invitee	-	-
18	<b>Sri. A.M.Umashankar</b> #5/106,SriRamaNilaya	Invitee		<a href="mailto:ammresidency@gmail.com">ammresidency@gmail.com</a>

	10thMain,11thACross Malleshwaram Bengaluru-560003		9845017319	
19	<b>Smt. Indira Gopala Krishna</b> #474, Jalvayu Towers NGEF Layout, Sadananda Nagara Indiranagara, post Bengaluru-560038	Invitee	9845666495	<a href="mailto:Indira1411@yahoo.com">Indira1411@yahoo.com</a>
20	<b>Sri. G.K. Sathyakeerthi</b> No.402/1, First Floor 13th Cross, Sadashivanagar, Bengaluru -560 080	Invitee	9986577036	-
21	<b>Sri K. B. Jayaram</b> No.33,6th.MainRoad Malleshwaram Bengaluru - 560 003	Special Invite	9880195274	21
22	<b>Smt. H.R Aruna Kumari</b> No. 222, 8 <sup>th</sup> Cross, 3 <sup>rd</sup> Block D Group Employee Layout Andhrahalli Main Road Vishwanidam Post, Bengaluru -560091	Special Invite	9945079877	22
23	<b>Dr. R Ravindra</b> Chairman-Suguna Hospital 1A/87, Dr. Rajkumar Rd, 4 <sup>th</sup> 'N' Block, Udayam Nagar, Rajajinagar, Bengaluru-560010	Special Invite	9845034546	23

#### NAMEAND ADDRESS OF THE PRINCIPAL

<b>Name</b>	<b>Dr. K.M. Ravikumar</b> Principal
<b>Address</b>	GUDIMAVU,KENGERIHOBLI
<b>City</b>	BENGALURU
<b>State</b>	KARNATAKA
<b>Website</b>	www.vitb.ac.in
<b>PhoneNo</b>	080-28437696,7625013435
<b>FaxNo</b>	080-28437696
<b>Email</b>	vkitprincipal@gmail.com

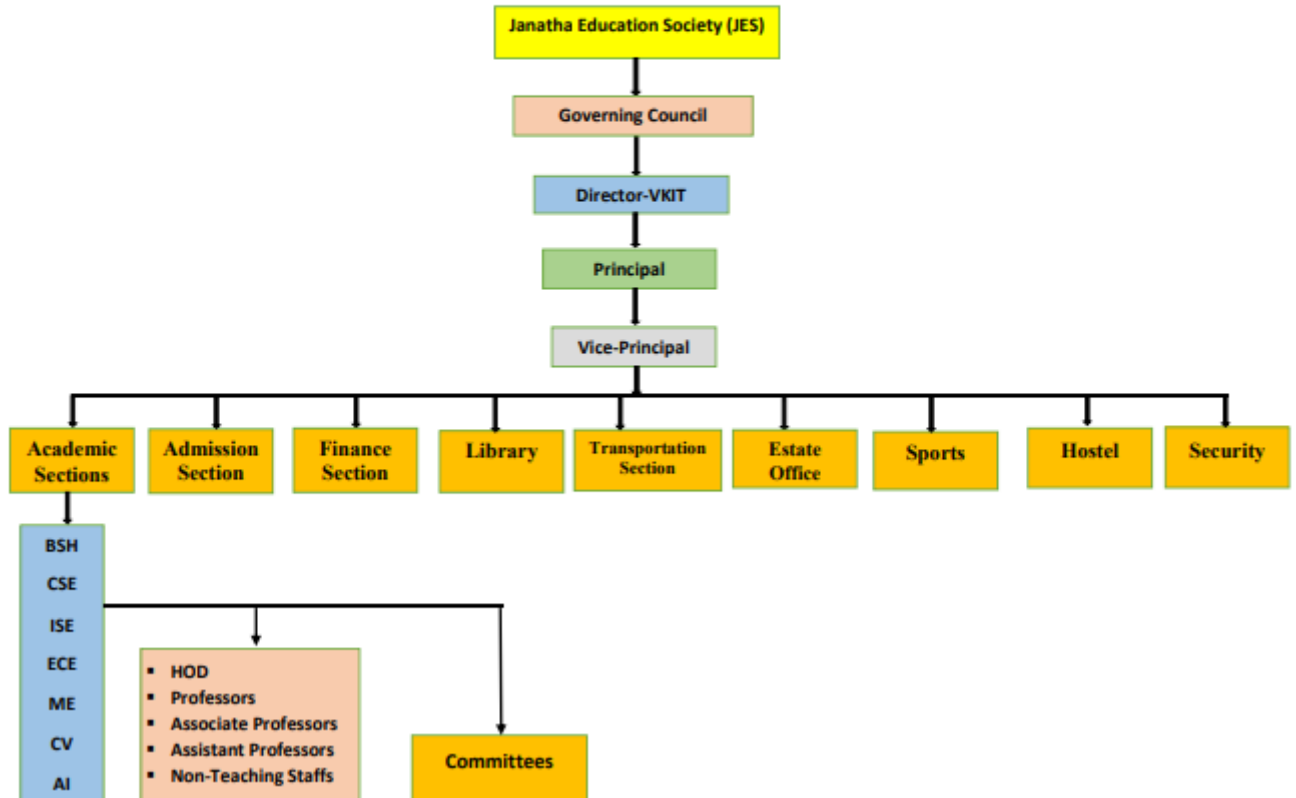
**NAME OF THE AFFILIATING UNIVERSITY**

<b>Name of the University</b>	Visvesvaraya Technological University, Belagavi-590 018, Karnataka
<b>Name of Registrar</b>	Dr. B. E. Rangaswamy
<b>Address</b>	Jnana Sangama, Belagavi, Karnataka-590018
<b>City</b>	Belagavi,
<b>State</b>	Karnataka
<b>Website</b>	<a href="https://vtu.ac.in">https://vtu.ac.in</a>
<b>Phone No</b>	0831-2498100
<b>Fax No</b>	0831-2405467
<b>Email</b>	registrar@vtu.ac.in

# GOVERNANCE

## ORGANIZATIONAL CHART AND PROCESSES

### Organization Chart (Organogram) Vivekananda Institute of Technology



### Establishment of Anti-Ragging Committee

Sl. No.	Committee Members	Designation	Phone No's
1	Dr. K.M. Ravikumar Principal	President	9880373629
2	Dr. D.V.Chandrasekhar, Vice-Principal, Professor & HOD	Member	9448394326
3	Dr. Vidya A Professor & HOD, Dept. of CSE	Member	9986011084
4	Dr. Bhagyalakshmi N Professor & HOD, Dept. of ECE	Member	9480261129
5	Dr. Vanajakshi P Prof & HOD, Dept. of ISE	Member	8884050005
6	Dr. Shaila K Professor & HOD, Dept. of AI & ML	Member	9964579958
7	Dr. Shivaraj B.W. Associate Professor & HOD, ME	Member	7338614265
8	Prof. Harish T S Professor&HOD,CE	Member	8197942065
9	Mrs. Rekha H P (PED)	Member	
10	Jyothi Girls Hostel Warden	Member	9901641513
11	Mr. Girish Boys Hostel Warden	Member	6363481767
13	Police Sub Inspector, Kaggalipura Kanakpura Road, Bangalore	Member	080-28435250
<b>Student Members</b>			
14	Mr. Hemanth D.P. V Sem ECE	Member	6363610472
15	Miss. Bhoomika R V Sem AI & ML	Member	8073086624
16	Mr. Akash M V Sem ME	Member	9845702287
17	Mr. Deepak, VII Sem CSE	Member	9353146340
18	Miss. Niharika P, V Sem ISE	Member	6362711022
19	Mr. Manoj G.N., VI Sem ISE	Member	7411841511
20	Mr. Dev Bupendra, V Sem ISE	Member	8884014759

21	Mr. Nithin Gowda M.S. V Sem AI & ML	Member	8310790963
22	Mr. Sumukh R, VII Sem CSE	Member	9036731099
23	Miss. Meghana R, VII Sem CSE	Member	9353168362

### **Grievance Redressal Committee**

<b>Sl. No</b>	<b>Name</b>	<b>Designation</b>
1.	Dr.K.M. Ravikumar Principal	Chairman
2.	Dr.D.V. Chandrashekar Vice-Principal	Vice-Chairman
3	Dr. VidyaA, Prof. & Head, Dept. of CSE	Member(Female)
4.	Prof. Anisha Asst. Prof.Dept. of ECE	Member(OBC)
5.	Prof.Anitha Asst.Prof.Dept.of ISE	Member
6.	Nithin Gowda M.S Third year AI & ML	Student member

### **Establishment of Online Grievance Redressal Mechanism**

Online link for grievances of staff and Students:

[grievancesvkit@gmail.com](mailto:grievancesvkit@gmail.com)



### Internal Complaint Committee

Sl. No	Position	Position in CICC	Gender	Mobile Number and E-Mail ID	Official Number
1	Dr.P Vanajakshi Prof. Dept. of ISE	Chairperson	F	8884050005 <a href="mailto:vpgowda.cpt@gmail.com">vpgowda.cpt@gmail.com</a>	080- 28437696/ 28437036
2	Prof. PavitraS Assistant Prof. Dept. of Civil	Faculty Member	F	8344330879 pavithracivilian@gmail.com	
3	Prof. B.V.Shilpa Assistant Prof. Dept. of BSH	Faculty Member	F	9945959777 <a href="mailto:shilpabv@gmail.com">shilpabv@gmail.com</a>	
4	Prof.Sathyavathi E.V Assistant Prof. Dept. of AI&ML	Faculty Member	F	7899589186 <a href="mailto:sathyavathievs727@gmail.com">sathyavathievs727@gmail.com</a>	
5	Mrs. Sunitha SDA-Office	Non-Teaching Member	F	9886659442 <a href="mailto:anandsunitha2004@gmail.com">anandsunitha2004@gmail.com</a>	
6	Mrs. Ramya S Account Assistant- Office	Non-Teaching Member	F	7338262882 <a href="mailto:ramya.gagamna05@gmail.com">ramya.gagamna05@gmail.com</a>	
7	Kavana C.V. Dept. of ISE	Student	F	8050186545 <a href="mailto:kavanacv21@gmail.com">kavanacv21@gmail.com</a>	
8	Samridhi Raj Lakshmi Dept. of ISE	Student	F	7858063043 <a href="mailto:samridhirajlakshmi@gmail.com">samridhirajlakshmi@gmail.com</a>	
9	Srusti S Deshmukh, Dept. of AI & ML	Student	F	9113226365 <a href="mailto:srustipurana321@gmail.com">srustipurana321@gmail.com</a>	
10	Radhika, Dept. of ISE	Student	F	8073277175 <a href="mailto:radhikakumavat666@gmail.com">radhikakumavat666@gmail.com</a>	
11	Kusuma L Dept. of ECE	Student	F	7625028082 <a href="mailto:kusumanjali151@gmail.com">kusumanjali151@gmail.com</a>	
12	Smt.Dr.Padmakshi Lokesh	NGO Member	F	9901926919 drpadmakshi@gmail.com	

### SC/ST Committee

SL No	Name	Designation
1	SiddarajuN	Chairman
2	Gangadharaiah H.N	Member
3	Mohan Babu V	Member
4	Suresh Kadenayankanahalli	Member

### 6. Programs

#### Name of the Programs approved by AICTE Under Graduate Programs

Sl. No	Course	Year of Est.	Approval Intake for the year (2024-25)
1	Electronics & Communication Engineering	1997	120
2	Computer Science and Engineering	1997	180
3	Information Science and Engineering	1998	120
4	Mechanical Engineering	2013	30
5	Civil Engineering	2013	30
6	Artificial Intelligence and Machine Learning	2020	90
<b>Total Intake</b>			<b>570</b>

## Name of the Programs Accredited by NBA Under Graduate Programs

-NIL-

## ACCREDITATION STATUS OF VARIOUS COURSES

### Under Graduate Programs

Sl. No	Name of the Department	Accreditation Status			
		NBA		NAAC	
		From	To	From	To
1	Electronics & Communication Engineering	No		NAAC Accreditation B+	
2	Computer Science and Engineering				
3	Information Science and Engineering				
4	Mechanical Engineering				
5	Civil Engineering				
6	Artificial Intelligence & Machine Learning				

**For each Programs the following details are to be given Under Graduate Programs**

Sl. No.	Course	Intake	Duration (Years)	Cut off marks/rank of admission during the last three years			Fees (As Approved by state Govt.)
				2024-25	2023-24	2022-23	
1	Electronics & Communication Engineering	60	4	L-52959 H-185095	L-58833 H-158760	L-49491 H-203584	As per the Norms of State Government
2	Computer Science and Engineering	90	4	L-33376 H-162917	L-34233 H-109691	L-21694 H-142792	
3	Information Science and Engineering	60	4	L-62118 H-154990	L-45801 H-134039	L-41765 H-158755	
4	Mechanical Engineering	30	4	L-518907 H-268642	L- H-197111	L-11423 H-131760	
5	Civil Engineering	60	4	L-199971 H-271117	L- H-202830	L-98970 H-136476	
6	Artificial Intelligence & Machine Learning	60	4	L-51980 H-271336	L-40443 H-133301	L-44960 H-173047	

**Placement Details for Last Academic Year**

Year	Name of student who has been placed	Program graduated from	Year of graduation	Name of the employer with contact details	Pay package at appointment (In INR per annum)
2023-24	Akshatha H.V.	B.E.	2024	NTT Data	8 L
2023-24	Manjunath R Gowda	B.E.	2024	N Uvento Systems Pvt. Ltd.	3
2023-24	Jhanavi	B.E	2024	TCS	3.35LPA
2023-24	Prajwal	B.E	2024	Appmox Pvt. Ltd.	3
2023-24	Rohan	B.E	2024	TCS	3.36
2023-24	Aariz N Asser	B.E	2024	Glow Touch	3.2
2023-24	Amruth M	B.E	2024	Glow Touch	3.2
2023-24	Ramya	B.E	2024	Glow Touch	3.2
2023-24	Deekshitha R	B.E	2024	SKF India Ltd.	3.35
2023-24	Deshwanth	B.E	2024	SAP PI	3
2023-24	Gunasheela S	B.E	2024	SKF India Ltd.	3.35
2023-24	Keerthana C.L.	B.E	2024	SKF India Ltd.	3.35
2023-24	Nayana V	B.E	2024	SKF India Ltd.	3.35
2023-24	Lavanya M	B.E	2024	Voya Global Services Pvt. Ltd.	3.2
2023-24	Jaidev Singh	B.E	2024	TCS	3.36
2023-24	Kavya B.R	B.E	2024	Keylynk Business Consulting Pvt. Ltd.	1.8
2023-24	Gopi A.K.	B.E	2024	Keylynk Business Consulting Pvt. Ltd	1.8
2023-24	Bhagyamma	B.E	2024	Fox Conn	2.97
2023-24	Likith K	B.E	2024	Fox Conn	2.97
2023-24	Sahana Baby	B.E	2024	Fox Conn	2.97
2023-24	Inchara	B.E	2024	Max Eye	3
2023-24	Sumanth	B.E	2024	Fox Con	2.97
2023-24	Usha	B.E	2024	TCS	3.36
2023-24	Bhagavi	B.E	2024	Siterio	5

**Name and duration of Program(s)having Twinning and Collaboration with Foreign University(s) and being run in the same Campus along with the status of their AICTE approval.**

<b>Sl. No.</b>	<b>Name of the University</b>	<b>Address</b>	<b>Website</b>	<b>Accreditation status of the University in its Home Country</b>	<b>Ranking of the University in the Home Country</b>	<b>Whether the degree offered is equivalent to an Indian Degree</b>	<b>Nature of Collaboration</b>	<b>Conditions of Collaboration</b>	<b>Complete details of payment a student has to make to get the full benefit of Collaboration</b>
1	NIL								

FACULTY

**VIVEKANANDA INSTITUTE OF TECHNOLOGY, BANGALORE - 74.**

<b>Faculty list-2024</b>				
<b>Department of Electronics and Communication Engineering</b>				
<b>Sl. No</b>	<b>Name of the Faculty</b>	<b>Designation</b>	<b>D O J</b>	<b>Mobile Number</b>
1	Dr.K.M.Ravikumar	Prof & Principal	19.10.2023	7625013435
2	Dr.Bhagyalakshmi. N	Prof & HOD	10.10.2002	9480261129
3	Dr.Kishoremohan K. B	Porfessor	19.08.2024	7010755452
4	Dr. N.Udaya Kumar	Asst. Prof	06.10.2023	9849858667
5	Kavitha. K .S	Asst. Prof	16.10.2023	9964614067
6	Mamatha. M	Asst. Prof	16.10.2023	8971555340
7	Monica. N.P	Asst. Prof	30.10.2023	01.03.1991
8	NaveenKumar. N	Asst. Prof	08.04.2024	8073914632
9	Arpitha. K.S	Asst. Prof	22.04.2024	8884357785
10	Anisha A.	Asst. Prof	19.08.2024	7411743121
<b>Department of Computer Science and Engineering</b>				
1	Dr.Vidya. A	Prof & HOD	22.09.2003	9986011084
2	Dr.Harshawardhan. D	Professor	27.08.2024	9480104221
3	Sijin. P	Asst. Prof	13.06.2022	9535610990
4	Deepthi. T.K	Asst. Prof	06.02.2023	9591376119
5	Vishwanath. P	Asst. Prof	23.03.2023	7989727205
6	Hanumantharayappa. T.A	Asst. Prof	26.06.2023	9448722407
7	Sowmya. M.Y	Asst. Prof	05.07.2023	8971995109
9	Shalaja. S	Asst. Prof	26.02.2024	9591029162
10	Mamatha C. G.	Asst. Prof	07.10.2024	9591989440
11	Harshitha H.S	Asst. Prof	07.10.2024	9845680510
12	Kathyaini L.V	Asst. Prof	23.10.24	7892776182
<b>Artificial Intelligence and Machine Learning ( AI &amp; ML )</b>				
1	Dr.Shaila. K	Prof & HOD	22.09.2003	9964579958
2	Dr.Shalesh. M.L	Assoc Prof	14.03.2024	9886414140
3	Jamuna. H.G	Asst. Prof	04.11.2022	9591981924
4	Sathyavathi. E.V	Asst. Prof	01.09.2023	7899589186
5	Bhanumathi H.P	Asst. Prof	05.04.2024	8123436408

6	Anushree M.K	Asst. Prof	01.08.2024	9535985590
7	Darshan T.G	Asst. Prof	23.09.2024	7337739913
8	Vachana C	Asst. Prof	23.09.2024	9738684667
8	Girija R.	Asst. Prof	27.09.2024	8095043026

<b>Department of Information Science Engineering</b>				
1	Dr.P.Vanajakshi	Prof & HOD	<b>08.07.2000</b>	<b>8884050005</b>
2	Anitha. K .R	Asst. Prof	01.06.2023	8722933859
3	Bharathi.L .Rathod	Asst. Prof	05.09.2024	9743996000
4	Basvaraju. B.C	Asst. Prof	25.03.2024	9902599484
5	Suma N.	Asst. Prof	03.10.2024	9611091144
6	Rahul. J	Asst. Prof	21.11.2024	9535816505
7	Vidyashree K	Asst. Prof	03.12.2024	7090609386

<b>Department of Mechanical Engineering</b>				
1	Dr.Shivaraj. B.W	Assoc Prof & HOD	05.01.2024	7338614265`
2	Suresh M.P	Professor R&D	08.07.2024	9886756991
3	Dr.Manjunatha. R	Asst. Prof	25.07.2016	8123675064
4	Harsha.R .N	Asst. Prof	10.08.2015	9742023715
5	Devaraju. G.P	Asst. Prof	11.09.2017	9741260625
6	Sudindra. S	Asst. Prof	23.11.2021	9894562301

<b>Department of Civil Engineering</b>				
1	T.S.Harish	Asst. Prof	21.07.2014	8197942065
2	Siddaraju.N	Asst. Prof	18.08.2015	9742254612
3	Pavithra. S	Asst. Prof	02.12.2021	8344330879
4	SoubhagyaS.Bagoji koppa	Asst. Prof	18.12.2023	7022635777

<b>Department of Basic Science and Humanities</b>				
1	Dr. D.V.Chandrashekar	Prof & HOD/ Vice-Principal	24.11.1997	9448394326
2	Dr.Shilpa. B.V	Asst. Prof	30.07.2010	9945959777
3	Dr.MohanBabu. V	Asst. Prof	02.02.2015	9902441286
4	Lakshmikantha.D.B	Asst. Prof	08.09.2014	8746898129
5	Dr.H.G .Bheemanna	Professor	05.12.1997	9353260804



6	DevikaSundar	Asst .Prof	28.09.2015	8105975619
7	Pooja. D.N	Asst .Prof	10.11.2023	990252283
8	Thrjaswini. R	Asst .Prof	01.12.2023	9880759685
9	Sangeetha. A.N	Asst Prof	29.04.2024	9380994072
10	Nishcitha . S	Asst Prof	29.04.2024	8197954468

<b>Details of Non-Teaching Staff ( Dept - Wise) 2024</b>				
<b>Administrative &amp; Accounts</b>				
<b>Sl- No</b>	<b>Name of the Staff</b>	<b>Designation</b>	<b>D.O.J</b>	<b>Mobile Number</b>
1	Basavaraj Irappa Patted	Senior Accountant	01.06.2023	9902792912
2	Sunitha . H	S D A	22.11.2004	9886659442
4	Govindaraju. B	S D A	01.12.2015	8095281839
5	Gangadharaiah. H.N	Cashier	20.06.2017	9538550373
6	Suma. Y	S D A	11.01.2023	7019049975
7	Ramya. S	Accounts Assistant	01.01.2024	9844088997
8	Kamala . T.H	Sweeper	10.10.2002	9900477028
10	Narasimha R	Office Asst.	05.08.2024	6362124410
<b>Department of Electronics &amp; Communication Engineering</b>				
1	Rajanna. H. M	Foreman	01.02.2000	9242088985
2	Madhu H.D	Lab Instructor	05.08.2024	8073274267
3	HaripriyaRai.N	Lab Instructor	08.08.2024	9481611391
4	Jaikumar . B	Lab Asst	04.09.2014	9538541825
5	M .Prashanth	Office Asst	21.06.2014	8050527267
<b>Department of Computer Science &amp; Engineering</b>				
1	Suresh. K	Programmer	09.07.2007	8050209126
2	Manjunatha. B.M	System .Analyst	21.06.2021	7338388754
3	Lakshmi NarayanaGowda. M.D	Lab Asst	11.10.2023	9742181232

Sl- No	Name of the Staff	Designation	D.O.J	Mobile Number
4	Puneeth. D.J	Lab Instructor	25.10.2023	8123425552
5	Shweta S Swami	Lab Instructor	05.08.2024	9986063335
<b>Department of Information Science Engineering</b>				
1	Govardhan . G. R	Lab Instructor	03.02.1999	9611345358
2	Krishanaveni	Lab Instructor	04.10.2024	7349390430
3	Babyschalini D	Lab Instructor	11.11.2024	7899426094
<b>Department of AI&amp;ML</b>				
1	Ravi Kumar.Reddy V	Lab Instructor	01.07.2024	9632272182
2	PushpaS.Gotagunaki	Lab Instructor	16.10.2023	9980474100
<b>Department of Mechanical Engineering</b>				
1	D .Mohan Kumar	Lab Instructor	21.07.2014	9663042889
2	K Kumar	Lab Asst.	23.01.1998	9380946088
3	K C. Chandrashekar	Lab Asst.	06.06.2019	9901039904
4	Nikhil Kumar. B	Asst. Instructor	01.09.2015	81977533625
5	Shivamma G	Sweeper	03.05.1999	-
<b>Department of Civil Engineering</b>				
1	Arun . M	Asst. Instructor	03.08.2015	9916420173
2	Shivappa. H.T	Lab Asst.	05.08.2015	8050904967
3	Rajmudi . B. P	Helper	02.12.2004	9900230702
<b>Basic Science &amp; Humanities</b>				
1	PuttaswamyGowda. A.B	Lab Instructor	27.04.2021	92422058214
2	Shrunga. H.V	Lab Instructor	12.09.2022	9380642495
3	Kumar R.	Lab Technician	05.03.1998	9036143708

<b>Library &amp; Information Centre</b>				
<b>Sl. No</b>	<b>Name of the Staff</b>	<b>Designation</b>	<b>D.O.J</b>	<b>Mobile Number</b>
1	Narayana. R.E	Librarian	25.09.1998	9538282067
2	Dr.Manjunatha. N	Asst Librarian	12.08.2009	9620209206
3	Gayathri. M	Library Asst	01.09.2004	984444463200
4	Manjunatha. B	Helper	23.12.2004	9902146971
5	Sarojamma .K . M	Sweeper	16.09.2003	-
<b>Physical Education</b>				
1	Rekha H. P.	PED	01.10.2024	9591385924
<b>Boys Hostel - Girls hostel/placement</b>				
<b>1</b>	Girish H.N	Warden	01.03.2024	6363481767
2	Jyothi J.V	Warden	18.06.2024	8618864809
3	Kavya N	Asst. Placement officer	02.12.2024	6362127931
<b>Estate Office</b>				
1	Sudarshan Singh. R	Junior Engineer	16.06.2023	8722697945
2	Dinakara K	Asst. Engineer	25.11.2024	9845404649
3	KapaneGowda K.B	Electrician	12.04.2003	9241693617
3	Guruprasad. S	Electrician	28.05.2018	9739189569
4	Ramesha. T	Horticulture Supervisor	15.09.2004	9242996607
5	Venkatachlamurthy. T. H	Helper	11.09.2004	9880884979
6	KrishnaMurthy. C.K	Attender	26.03.2005	9986830867
7	Mahalingaiah	Scavenger	10.04.2004	9972495564
8	Ramu	Gardener	07.12.2023	9900323602

## Transportation

<b>Sl. No</b>	<b>Name of the Staff</b>	<b>Designation</b>	<b>D.O.J</b>	<b>Mobile Number</b>
1	Channaiah G Hiremath	Driver	20.08.2003	8553528952
2	Ramalinge Gowda R P	Driver	27.08.1999	9845823894
3	Raju K	Driver	31.07.2008	8073380028
4	Prakasha	Driver	12.03.2010	9972033910
5	Dinesha. V	Driver	06.10.2010	9620453379
6	Natesha M M	Driver	11.10.2010	9901780886
7	Putte Gowda	Driver	30.05.2012	8095859790
8	Govinda D	Driver	11.02.2016	9845208519
9	Gudda Chennaiah	Driver	05.03.2018	9880081896
10	Rangappa	Driver	21.12.2018	9591545028
11	Somashekara M	Driver	23.11.2019	9844839599
12	Ravi K	Driver	16.02.2023	9448215099
13	Krishanamurthy N	Driver	02.05.2024	7676110977

## PERMANENT FACULTY: STUDENT-RATIO

SL NO.	Department	No. of Faculty	No. Of Students (II,III,IV Year)	Ratio
1	Electronics & Communication Engineering	10	151	1:11
2	Computer Science and Engineering	12	287	1:26
3	Information Science and Engineering	7	188	1:39
4	Mechanical Engineering	6	14	1:4
5	Civil Engineering	4	15	1:5
6	Artificial Intelligence and Machine Learning	9	28	1:51
7	Physics	3	-	
8	Chemistry	2	-	
9	Mathematics	5	-	
Total		58	791	

### Profile of Principal

<b>Name</b>	Dr. K.M. Ravikumar
<b>DateofBirth</b>	19-06-1975
<b>UniqueID</b>	1SJEC0003124
<b>WorkingExperience</b>	Teaching:24yrs Research Industry
<b>Others</b>	-
<b>AreaofSpecialization</b>	Electronics & Communication Engg.
<b>Courses taught at Diploma/ Post Diploma/Under Graduate/Post Graduate/PostGraduateDiploma Level</b>	Digital Signal Processing Microprocessor Digital Communication Signals & Systems
<b>ResearchGuidance(No.OfStudents):</b>	10Students
<b>No. OfPaperspublished:inNational /International/Journals/Conferences</b>	Journal National : 23 InternationalConferences-23 NationalConferences-8
<b>No.OfBooksPublishedwithdetails (Name of the Book, Publisher with ISBN, Year of Publication Etc.</b>	Automatic Detection of Syllable Repetition in Read Speech for Objective Assessment of Stuttered Disfluencies”, PWASET, International Journal on Signal Processing, Vol.36, October 2008, pp. 270-273. “An Approach for Objective Assessment of Stuttered Speech Using MFCC Features”, ICGST, International Journal on Digital Signal Processing, Vol.9, June 2009, Issue.1, pp.19-24. “Temporal Dynamics of Repetitions during the Early Stage of Stuttering: An Acoustic Study” International Journal on Advanced Networking and Applications, IJANA, Vol.02, November 2010, Issue: 04, pp. 784-787. “Comparison of Multidimensional MFCC Feature Vectors forObjective Assessment of StutteredDisfluencies”InternationalJournalon Advanced Networking and Applications, IJANA, Vol.02, April2011, Issue:05, pp.854-860.  “Stuttered Speech: An Acoustic Study” International Journal of Computer

Engineering Science, IJCES, Vol.02, March 2012, Issue:01, pp.17-23, ISSN:2250:3439.

“Analysis of infant cry signal: Basic approach”, Midas Touch International Journal of Commerce, Management and Technology, Volume 2, No. 1, January- 2014, pp.56-61, ISSN:2320-7787.

“Stuttered speech analysis using classification for objective assessment of early stutter”, Midas Touch International Journal of Commerce, Management and Technology, Volume 2, No. 1, January-2014, pp.62-66, ISSN:2320 -7787.

“Efficient Comparator based Sum of Absolute Differences Architecture for Digital Image Processing Applications”, International Journal of Computer Applications, Volume 96, No. 4, June 2014, pp.16781-6365, ISSN:973-93-80882-24-0.

“Acoustic Noise Classification and Characterization Using Statistical Properties”, International journal of Emerging Technology and Advanced Engg., ISSN 2250-2459, ISO9001:2008, vol. 4 , Issue 6, June 2014 .

“Intelligibility Of Speech Using Short Time Fourier Transform Phase Spectrum“ International Journal of Applied Engineering Research ISSN 0973-4562 Volume 10, Number 18 , pp 39550-39557 , 2015 (Scopus Indexed Journal ).

“EEG Based Patient Monitoring System for Mental Alertness Using Adaptive Neuro- Fuzzy Approach,” Journal of Medical and Bioengineering, Vol.4, No.1, pp.59-66, February 2015. Doi:10.12720/jomb.4.1.59-66.

“Effect of 0 dB and 20 dB Vehicle Noise on

**Stuttered Speech: A Study,”***International Journal of Computer Application*, 2015(1):19-23, May 2015.  
<http://www.ijcaonline.org/proceedings/icctac2015/number1/20920-2007>

**“Decoding Baby Talk: Basic Approach for Normal Classification of Infant Cry Signal,”***International Journal of Computer Application*, 2015(1): 24-26, May 2015.  
<http://www.ijcaonline.org/proceedings/icctac2015/number1/20921-2008>

**“Energy Efficient VLSI Architecture for Image Enhancement Application”**  
International Journal of Applied Engineering Research ISSN0973-4562 Volume10, Number 20 (2015) pp 41413-41418 © Research India Publications.  
<http://www.ripublication.com>, IJAER, SCOPUS INDEXED JOURNAL.

**“IMAGE TRANSMISSION IN OFDM USING M-ARY PSK MODULATION SCHEMES – A COMPARITIVE STUDY,”**  
International Journal of Research in Engineering and Technology, e-ISSN 2319-1163,

**“ EEG Based Emotion Recognition Using Wavelets and Neural Networks Classifier”,**  
In: Cognitive Science and Artificial Intelligence. Springer Briefs in Applied Sciences and Technology. Springer, Singapore, 23 December 2017 .PP 101 -112  
[https://link.springer.com/chapter/10.1007/978-981-10-6698-6\\_10](https://link.springer.com/chapter/10.1007/978-981-10-6698-6_10)

**“ An Algorithm to Detect Emotion States and Stress Levels Using EEG Signals”,**  
International Journal of Latest Research in Engineering and Technology (IJLRET) ISSN:2454-5031 www.ijlret.com | PP.05-12,



	<p><b>December 2017.</b></p> <p><a href="http://www.ijlret.com/Papers/NC3PS2017/2.pdf">http://www.ijlret.com/Papers/NC3PS2017/2.pdf</a></p> <p><b>“Region of interest based selective medical image encryption using multichaotic system”</b> International Conference on Electrical, Electronics, Communication, Computer Technologies and Optimization Techniques (ICEECCOT-2017) in association with IEEE Bangalore section organized by GSSS Institute of Engineering Technology for Women, Mysuru held on 15<sup>th</sup>-16<sup>th</sup> December 2017.</p> <p><b>“Detection of Human emotions using features based on discrete wavelet transform of EEG signals”</b> International Conference on Emerging Trends in Science &amp; Technologies for Engineering Systems, Dept. of ECE/TCE/EEE, SJGIT, Chickballapur, 11<sup>th</sup> &amp; 12<sup>th</sup> January 2018. <b>(Scopus Indexed Journal)</b></p> <p><b>“Impulse Noise Cancellation in an OFDM system transmitting Medical Images using dual transform &amp; geometric adaptive filter”</b> International Conference on Emerging Trends in Science &amp; Technologies for Engineering Systems (IJARTET) held on 11<sup>th</sup> &amp; 12<sup>th</sup> January 2018.</p> <p><b>“Real Time implementation of Alertin and Tracking System for Chain Snatching”</b> Published in e-journal-International Journal for Science and Advance Research in Technology (IJSART), May 2019.</p> <p><b>“Student risk identification learning model using machine learning approach”</b> Published in International Journal of Electrical and Computer Engineering, October 2019.</p> <p><b>“Student Risk Identification Model Using Random Forest Algorithm”</b> Published in European Journal of Molecular &amp; Clinical Medicine (ISSN 2515-8260 Volume 07, Issue 08) December 2020</p>
Master	Completed
Ph.D	Completed

Projects Carried Out	01
Patents(Filled &Granted)	01
Technology Transfer	-

**FEE**

**DETAILS OF FEE, AS APPROVED BY STATE FEE COMMITTEE, FOR THE INSTITUTION**

Time schedule for payment of Fee for the entire Programme

<b>A.Y</b>	<b>Duration(In months)</b>
2024-25	Course Duration: 4 years , 8 Semesters (Fee will be collected every year during starting of Academic year. Permissible to pay within one month of starting of Academic year in special cases)
2023-24	Course Duration: 4 years , 8 Semesters (Fee will be collected every year during starting of Academic year. Permissible to pay within one month of starting of Academic year in special cases)
2022-23	Course Duration : 4 years , 8 Semesters (Fee will be collected every year during starting of Academic year. Permissible to pay within one month of starting of Academic year in special cases)
2021-22	Course Duration 4 years , 8 Semesters (Fee will be collected every year during starting of Academic year. Permissible to pay within one month of starting of Academic year in special cases)

No. of Fee waivers granted with amount and name of students

<b>A.Y</b>	<b>No. Of Students</b>	<b>Sanctioned Amount</b>
<b>2020-21</b>	24	2,35,000
<b>2021-22</b>	11	1,40,000
<b>2022-23</b>	20	1,40,000/-
<b>2023-24</b>	23	2,84,000/-

**Academic Year:2020-21**

Sl. No.	NameoftheStudent	USN	Total demand	Concession Amount	Concession Given by
1	SRIVATSAR	1VK20CV017	55000	10000	JES
2	NITHIND	1VK20CV011	75000	10000	JES
3	ARCHANAB	1VK20AI004	90000	10000	JES
4	JAHNAVIGOWDAAM	1VK20AI012	80000	10000	JES
5	GRACEMARYBK	1VK20AI008	80000	10000	JES
6	INCHARA P	1VK20AI010	80000	10000	JES
7	DEEPASHREE R	1VK20IS010	80000	10,000	JES
8	ABHILASHAC	1VK20CS003	80000	10000	JES
9	TEJASV	1VK20EC015	90000	10000	JES
10	VINUTHAV	1VK20IS039	90000	10000	JES
11	SUNILBK	1VK20EC023	90000	10000	JES
12	SAHANAN	1VK19CS040	90000	10,000	JES
13	GAGAN N	1VK19CS017	115000	10,000	JES
14	DARSHANC GOWDA	1VK19CS013	115000	10000	JES
15	UDAYHS	1VK18CS054	90000	10000	JES
16	KEERTHIBHATM	1VK20CV400	95340	10,000	JES
17	SAGARN	1VK16EC401	61000	10,000	JES
18	PAVANRV	1VK16ME027	71000	10000	JES
19	ANILKUMARSK	1VK17CS004	101000	10,000	JES
20	HARSHITHAH N	1VK17CS018	81000	10,000	JES
21	SUMA KS	1VK17CS062	91000	10,000	JES
22	NITISHREDDY	1VK16CS045	102000	10000	JES
23	SHASHANKBSHETTY	1VK16ME037	75000	5000	JES
24	POOJABR	1VK16CS050	100000	10000	JES
<b>Total</b>				<b>235000</b>	

**Academic Year:2021-22**

<b>Sl. No.</b>	<b>Name of the Student</b>	<b>USN</b>	<b>Total demand</b>	<b>Concession Amount</b>	<b>Concession Given by</b>
1	HARSHITHKUMARH	1VK21EC012	80000	10000	JES
2	VARSHINIBN	1VK21EC023	90000	10000	JES
3	VARUNV	1VK21CS087	140000	40000	JES
4	KUSHALV	1VK21CS035	140000	10000	JES
5	MANOJV	1VK21IS025	110000	10000	JES
6	AMRUTHAS	1VK21CS003	90000	10000	JES
7	ARCHANAB	1VK20AI004	100000	10000	JES
8	DEEPASHREE R	1VK20IS010	100000	10000	JES
9	SAHANAN	1VK19CS040	90000	10000	JES
10	DARSHANC GOWDA	1VK19CS013	115000	10000	JES
11	SONUKCHRISTY	1VK18CS048	101500	10000	JES
<b>Total</b>				<b>1,40,000/-</b>	

**Academic Year: 2022-23**

<b>Sl. No.</b>	<b>Name of the Student</b>	<b>USN</b>	<b>Total demand</b>	<b>Concession Amount</b>	<b>Concession Given by</b>
1	SHALINITR	1VK22EC043	80000	10000	JES
2	SOWMYASJIDAGI	1VK22EC047	80000	10000	JES
3	GAGANAKEERTHIG	1VK22CS024	170000	10000	JES
4	TEJASGOWDAM	1VK22IS057	70000	10000	JES
5	JAYANTHBV	1VK22IS021	150000	10000	JES
6	NIHARIKA P	1VK22IS038	150000	10000	JES
7	KEERTHANAKR	1VK22IS026	150000	10000	JES
8	NITHINGOWDAMS	1VK22AI025	120000	10000	JES
9	GOWTHAMS	1VK22AI013	120000	10000	JES
10	NAGENDRAM	1VK22ME005	55000	10000	JES
11	AKASHMP	1VK22ME004	55000	10000	JES
12	VARSHINIBN	1VK21EC023	80000	10000	JES
13	KUSHALV	1VK21CS035	140000	10000	JES
14	PALLAVIR	1VK21IS032	110000	10000	JES
<b>Total</b>				<b>140000</b>	

<b>AcademicYear:2023-24</b>					
<b>Sl. No.</b>	<b>Name of the Student</b>	<b>USN</b>	<b>Total demand</b>	<b>Concession Amount</b>	<b>Concession Given by</b>
1	ANANDA B H	1VK23EC005	120000	10000	SECRETARY, JES
2	ARJUN P	1VK23EC009 (CET)	123265	10000	SECRETARY, JES
3	ANUSHA V	1VK23CS008	210000	10000	PRINCIPAL
4	ANANYA H	1VK23CS006 (CET)	123265	19000	JES
5	SHASHANK K N	1VK23IS047	175000	10000	PRINCIPAL
6	YASHASHWINI R	1VK23IS062	175000	10000	PRINCIPAL
7	MANASA N	1VK23IS029	160000	10000	PRESIDENT, JES
8	KISHORE S	1VK23IS026	160000	10000	SECRETARY, JES
9	HEMANTH ARADHYA	1VK23IS018	160000	10000	SECRETARY, JES
10	VARSHINI M C	1VK23IS059 (CET)	123265	10000	PRINCIPAL
11	NISARGA P	1VK23AI035	130000	10000	PRINCIPAL
12	POOJITHA U	1VK23AI037	130000	10000	PRINCIPAL
13	ULLAS R GOWDA	1VK23AI056	130000	10000	SECRETARY, JES
14	HARIDRA A V	1VK23AI013	150000	10000	PRINCIPAL
15	SHALINI T R	1VK22EC043	80000	10000	PRESIDENT, JES
16	SOWMYA S JIDAGI	1VK22EC047	80000	10000	PRESIDENT, JES
17	NIRANJAN N	1VK22CS049	180000	10000	PRESIDENT, JES
18	HARSHITHA K C	1VK22IS018	150000	10000	PRESIDENT, JES
19	KUSHAL V	1VK21CS035	140000	10000	SECRETARY, JES
20	VARUN V	1VK21CS087	100000	50000	SECRETARY, JES
21	PALLAVI R	1VK21IS032	100000	10000	SECRETARY, JES
22	SUNIL N	1VK18CV021	91500	5000	SECRETARY, JES
23	ARCHANA B	1VK20AI004	101500	20000	SECRETARY, JES
	<b>TOTAL in Rs.</b>			<b>2,84,000</b>	

Number of scholarships offered by the Institution, duration and amount

A.Y	Number of Scholarship offered	Duration(In Years)	Amount(Rs)
2020-21	-	-	-
2021-22	21	1	3,15,000/-
2022-23	20	1	3,15,000/-
2023-24	26	1	3,90,000/-

**Estimated cost of boarding and Lodging in Hostels**

A.Y	Estimated cost of boarding and Lodging (Rs)
2021-22	Boy's Hostel-Rs.60,000/-P.A Girl's Hostel-Rs.55,000/P.A
2022-23	Boy's Hostel -Rs. 65,000/-P.A Girl's Hostel-Rs. 60,000/ P.A
2023-24	Boy's Hostel -Rs. 65,000/-P.A Girl's Hostel-Rs. 60,000/ P.A
2024-25	Boy's Hostel -Rs. 85,000/-P.A Girl's Hostel-Rs. 65,000/ P.A

## Admission

Number of seats sanctioned with the year of approval & No. of Students admitted under various Categories each year in the last three years

Programme Level	Name of Programme/ Course	No. Of Seats Sanctioned For 2023-24	No. of students admitted		
			2024-25	2023-24	2022-23
UG	Electronics & Communication Engineering	60	57+06	57+1(SNQ)	58+1(SNQ)
	Computer Science and Engineering	90	115+08	75+4(SNQ)	90+4(SNQ)
	Information Science and Engineering	60	44+06	59+3(SNQ)	60+3(SNQ)
	Mechanical Engineering	30	07+01	3+1(SNQ)	4+2(SNQ)
	Civil Engineering	60	06+01	1+2(SNQ)	-
	Artificial Intelligence & Machine Learning	60	75+05	58+3(SNQ)	41+3(SNQ)
	Total	360	304+27	267	266
Ph.D	Electronics & Communication Engineering			0	0
	Computer Science and Engineering	-		-	2
	Mechanical Engineering	-		-	1
	Civil Engineering	-		-	-
	Mathematics	-		-	-
	Chemistry	-		-	-



## Number of applications received during last year for admission under Management Quota and Number of Students admitted

Application Received: 85

Admitted: 71

### Admission Procedure

Mention the admission test being followed, name and address of the Test Agency/State Admission Authorities and its URL (website).

Admission test Name	Address	URL
KEA/CET	Karnataka Examination Authority, Sampige Road, 18 <sup>th</sup> Cross, Malleshwaram, Bengaluru - 560 012 Phone No. 080 - 23460460	<a href="https://cetonline.karnataka.gov.in/kea/">https://cetonline.karnataka.gov.in/kea/</a>
COMED-K	#132, Second Floor, 11 <sup>th</sup> Main, 17 <sup>th</sup> Cross, Malleshwaram, Bangalore-560 055	<a href="https://www.comedk.org/">https://www.comedk.org/</a>

No. Of Students allotted different Test qualified Candidate separately (AIEEE/JEE/CET/State Conducted Test/University Test (CMAT)/Association conducted Test etc.

### Admissions Current Academic year 2024-25

Branch	KEA	Comed-K	Total
Electronics & Communication Engineering	46	-	46
Computer Science & Engineering	111	-	111
Information Science & Engineering	29	-	29
Artificial Intelligence & Machine Learning	40	-	40
Civil Engineering	04	-	04
Mechanical Engineering	02	-	02
<b>Total</b>	<b>232</b>	<b>-</b>	<b>232</b>

Calendar for admission against Management Quota Seats

**The probable date is from July to October (Based on the Availability of Seats)**

Last Date of Request for Applications

**21-10-2024(As per AICTE) for the year 2024-25**

Last Date for Submission of applicants

**21-10-2023(As Per AICTE) for the year 2024-25**

Dates for announcing final results – As per the prescribed date announced from **Competent Authority**

Release of admission list: **Main list and waiting list shall be announced on the same day**

Date of Acceptance by the candidate - **As per date announced by Approval authorities from time to time.**

**Last date for Closing of Admission: As Prescribed by AICTE/VTU/GOK starting of the academic session: As Prescribed by AICTE/ VTU**

### **Criteria and Weightages for Admission**

**Describe each criterion with its respective weightage i.e. Admission Test, marks in qualifying examination, etc.,**

As per Govt. Norms

**Mention the minimum Level of Acceptance, if any**

As per Govt. Norms

**Results of Admission under Management Seats/Vacant Seats**

**List of Candidates who have been offered admission**

### **Electronics & Communication Engineering**

1	AHMED PASHA
2	AKASH N
3	AKSHAY KUMAR S
4	ARCHANA R J
5	B VISHNU
6	DHANUSHREE B V
7	HARSHA V
8	HINDHUJA K
9	KARTHIKEYA G U

10	KIRAN M N
11	KUSHVANTH M G
12	M BHAGYASHREE
13	MINCHANA B A
14	NANDINI K
15	PAVITRA K V
16	RAJESH VISHWANATH HEGDE
17	SUMUKH R
18	HINDHUJA K
19	KARTHIKEYA G U
20	KIRAN M N

### **Computer Science & Engineering**

1	CHANDAN GOWDA
2	CHANDANA H R
3	CHANDRIKA G
4	DEEPAK
5	ESHAN GOWDA C
6	GANESHA N
7	NANJUNDA SWAMY
8	NAVEEN KUMAR
9	PRAGATHI N D
10	VISHWAS KILERI E
11	VYSHANVI P
12	YEDOTI VAMSI KRISHNA

## Information Science & Engineering

1	ABHILASH M S
2	AISHWARYA J S
3	ANKITHA G K
4	BADARI BATI
5	BHAGYASHREE
6	BHOOMIKA B S
7	CHINMAYEE M
8	GAUTHAM D DIXITH
9	HITHA S
10	JEEVAN S
11	LIKHITH M A
12	NAVYA P
13	NITHIN H S
14	PRAJWAL C M
15	PRIYADARSHINI R
16	RADHIKA KUMAWAT
17	RAJESHWARI S
18	SUKANTH M
19	SWAROOP
20	TARUN KUMAR M
21	VARSHINI M L
22	ABHILASH M S

## Artificial Intelligence & Machine Learning

1	ADARSH R
2	ANUGRAHA JAYARAJ
3	BHARATH M
4	BHAVANA S G

5	BHUMESH RATHORE
6	DIVYA K S
7	GAGAN G Y
8	GAUTHAMI BHARADWAJ N
9	HAMSINI K N
10	HANSIKA JHA
11	HARRY JOSHUA R
12	HARSHITH BABU
13	JEESHNU Y
14	KARANAM LATHEESH
15	KEERTHANA R
16	KRISHNA PRASAD K G
17	KUSHAL SHANKAR U
18	M R ANUSHA
19	MAHENDRA SINGH D
20	MANUSHREE R
21	MEGHASHYAM V BHARADHWAJ
22	NAYANA H S
23	NIHARIKA H L
24	NIVEDHA S
25	PAVAN B J
26	PRAJWAL M IYER
27	PRANAV CHANDRA P
28	PUNEETH M
29	RAKESH G
30	ROHITH Y P
31	S RAKSHITHA
32	SAHANA H S

33	SANJANA S
34	SHIVASHANKAR C N
35	SINCHANA S
36	SREENIVASAA R
37	SWAPNA A M
38	THRISHA A
39	VENKATESH R
40	VIJAY D

### Mechanical Engineering

Sl. No	Name of the Student
1	CHETAN K
2	DHUSHYANTH R REDDY
3	MAHADEVA PRASAD M
4	NIKHIL GOWDA N R
5	PAVAN NAIK C R

### Civil Engineering

Sl. No	Name of the Student
1	DHANUSHREE R
2	SAMARTH N S
3	SANJANA

### Information on Infrastructure and Other Resources Available No.Of Class Rooms, Laboratories, Tutorial Rooms, Drawing hall with carpet Area

Sl. No	Block	Floor	Room No	BLOCK	Area	Description
			1	ADMINISTRATIONBLOCK	653	ADMN
			2	LIBRARYBLOCK	523	LIB
			3	SEMINARHALL	245	SMH

			4	ELECTRONICS ENGINEERINGBLOCK	1396	EC
			5	TELECOMMUNICATION ENGINEERING BLOCK	586	TE
			6	COMPUTER SCIENCE ENGINEERINGBLOCK	3356	CS
			7	CIVILENGINEERINGBLOCK	1686	CV
			8	MECHANICAL ENGINEERING BLOCK	2077	ME
			9	SPORTSCOMPLEX	464.68	SC

			10	ESTATEOFFICE	87	EO
			11	GUESTHOUSE	174	GH
			12	BOYSHOSTEL	13.31	BYH
			13	CANTEEN	307.47	CAN
			14	SECURITY	3	SE
Sl No	Bloc k	Floor	Room no	DESCRIPTION	Type	CARPET AREA SQM
		FIRST	ADM-101	HALL-1	INSTRUCTIONAL	281
			ADM-102	HALL-2	INSTRUCTIONAL	294
			ADM-103	PLACEMENTOFFICE	INSTRUCTIONAL	87
			ADM-104	INTERVIEWCHAMBERS	INSTRUCTIONAL	50
		SECOND	ADM-201	PHYSICSLAB	INSTRUCTIONAL	160
			ADM-202	CHEMISTRYLAB	INSTRUCTIONAL	140
			ADM-203	ROOMR.DCENTER	INSTRUCTIONAL	20
			ADM-204	LECTURERHALL	INSTRUCTIONAL	66
			ADM-205	LECTURERHALL	INSTRUCTIONAL	66
			ADM-206	LECTURERHALL	INSTRUCTIONAL	66
			ADM-207	LECTURERHALL	INSTRUCTIONAL	86
			LIB-002	ACQUISITION /ISSUE COUNTER	INSTRUCTIONAL	22



			LIB-003	BOOK STORE	INSTRUCTIONAL	264
			LIB-004	DIGITALLIBRARY	INSTRUCTIONAL	86
			LIB-006	READINGROOM	INSTRUCTIONAL	62
			LIB-102	HALL-3	INSTRUCTIONAL	351
			LIB -102A	ROOM	INSTRUCTIONAL	45
			LIB-101	TECHNICALJOURNALS	INSTRUCTIONAL	86
			LIB-203	LECTURERHALL	INSTRUCTIONAL	88
			LIB-204	LECTURERHALL	INSTRUCTIONAL	70
			LIB-205	LECTURERHALL	INSTRUCTIONAL	70
			LIB-202	LANGUAGELAB	INSTRUCTIONAL	70
		First	SMH-101	CADDLAB	INSTRUCTIONAL	123
			SMH-102	CCP/COMPUTERCENTER	INSTRUCTIONAL	123
			SMH-201	LECTURERHALL	INSTRUCTIONAL	66
			SMH-202	LECTURERHALL	INSTRUCTIONAL	66
			SMH-204	LECTURERHALL	INSTRUCTIONAL	66
			SMH-205	LECTURERHALL	INSTRUCTIONAL	66
ECE	Ground		EC-001	LECTURERHALL	INSTRUCTIONAL	66

			EC-002	LECTURERHALL	INSTRUCTIONAL	66
			EC-005	LECTURERHALL	INSTRUCTIONAL	66
			EC-006	LECTURERHALL	INSTRUCTIONAL	66
			EC-103	ANALOG ELECTRONIC CIRCUIT/LOGIC DESIGN LAB	INSTRUCTIONAL	200
		Second	EC-202	LECTURERHALL	INSTRUCTIONAL	66
			EC-203	HDL/EMBEDDEDLAB	INSTRUCTIONAL	100
			EC - 203A	VLSI/CCNLAB	INSTRUCTIONAL	100
		Third	EC-302	LECTURERHALL	INSTRUCTIONAL	66
			EC-303	LECTURERHALL	INSTRUCTIONAL	66
			EC-304	LECTURERHALL	INSTRUCTIONAL	90
			EC-305	LECTURERHALL	INSTRUCTIONAL	66
TE	Basement		TE-B-003	LAB	INSTRUCTIONAL	130
			TE - B002	LAB	INSTRUCTIONAL	66
		Ground	TE-001	LECTURERHALL	INSTRUCTIONAL	66
			TE-002	LECTURERHALL	INSTRUCTIONAL	66
			TE-005	LECTURERHALL	INSTRUCTIONAL	66
			TE-006	LECTURERHALL	INSTRUCTIONAL	66

		First	TE-104	DSP/MPLAB	INSTRUCTIONAL	66
			TE-102	LECTURERHALL	INSTRUCTIONAL	66
			TE-103	LECTURERHALL	INSTRUCTIONAL	66
			TE-104	LECTURERHALL	INSTRUCTIONAL	90
		Second	TE-202	LECTURERHALL	INSTRUCTIONAL	66
			TE-203	LAB	INSTRUCTIONAL	225
		Third	TE-302	LECTURERHALL	INSTRUCTIONAL	66
			TE-303	LECTURERHALL	INSTRUCTIONAL	66
			TE-304	LECTURERHALL	INSTRUCTIONAL	90
			TE-305	LECTURERHALL	INSTRUCTIONAL	66
			CS-004	MACHINE LEARNING / SYSTEM SOFTWARE AND OPERATINGSYSTEMLAB	INSTRUCTIONAL	85
			CS - 004A	COMPUTER NETWORK/ DESIGN AND ANALYSIS OF ALGORITHM LAB	INSTRUCTIONAL	85
			CS-006	WEB TECHNOLOGY/COMPUTER GRAPHICS LAB	INSTRUCTIONAL	85
			CS - 006A	DBMS/SOFTWARE TESTING LAB	INSTRUCTIONAL	85
			CS-007	DATASTRUCTURE/MPLAB	INSTRUCTIONAL	85
			CS - 007A	FS/PROJECTLAB	INSTRUCTIONAL	85

			CS-008	LECTURERHALL	INSTRUCTIONAL	66
		First	CS-101	LECTURERHALL	INSTRUCTIONAL	66
			CS-102	LECTURERHALL	INSTRUCTIONAL	66
			CS-103	TUTORIALROOM	INSTRUCTIONAL	33
			CS-104	LECTURERHALL	INSTRUCTIONAL	66
			CS-106	RESEARCHCENTER	INSTRUCTIONAL	170
			CS-107	VGSTLAB	INSTRUCTIONAL	170
			CS-108	ANALOG AND DIGITAL ELECTRONICS LAB	INSTRUCTIONAL	170
			CS-111	LECTURERHALL	INSTRUCTIONAL	66
			CS-112	LECTURERHALL	INSTRUCTIONAL	66
		Second	CS-201	LECTURERHALL	INSTRUCTIONAL	66
			CS-203	LECTURERHALL	INSTRUCTIONAL	66
			CS-204	LECTURERHALL	INSTRUCTIONAL	66
			CS-202	LADIESTOILETS	INSTRUCTIONAL	40
			CS-207	LECTURERHALL	INSTRUCTIONAL	85
			CS-208	EDUSAT	INSTRUCTIONAL	170
			CS-209	DEPARTMENTLIBRARY	INSTRUCTIONAL	85

			CS-211	LECTURERHALL	INSTRUCTIONAL	66
			CS-213	LECTURERHALL	INSTRUCTIONAL	66
			CS-214	LECTURERHALL	INSTRUCTIONAL	66
	CV	Basement	CV - B001	CADLAB	INSTRUCTIONAL	126
			CV - B002	FLUIDMECHANICSLAB	INSTRUCTIONAL	176
			CV - B003	CONCRETELAB	INSTRUCTIONAL	107
			CV - B004	HIGHWAYLAB	INSTRUCTIONAL	107
		Ground	CV-001	GEOLOGYLAB	INSTRUCTIONAL	83
			CV - 001A	SURVEYSTORE	INSTRUCTIONAL	83
			CV-002	ENVIRONMENTAL ENGG. LAB	INSTRUCTIONAL	126
			CV-003	GEOTECHLAB	INSTRUCTIONAL	126
			CV-102	DRAWINGHALL	INSTRUCTIONAL	136
			CV-103	LECTURERHALL	INSTRUCTIONAL	126
			CV-105	LECTURERHALL	INSTRUCTIONAL	78
			CV-106	LECTURERHALL	INSTRUCTIONAL	78
	ME	Basement	ME - B001	MATERIALTESTINGLAB	INSTRUCTIONAL	230
		Ground	ME-003	MACHINESHOP	INSTRUCTIONAL	210

			ME-001	ENERGYCIVERSIONLAB	INSTRUCTIONAL	110
			ME-004	LECTURER HALL/RESEARCH CENTER	INSTRUCTIONAL	72
		First	ME-101	LAB	INSTRUCTIONAL	160
			ME-103	LECTURERHALL	INSTRUCTIONAL	72
			ME-105	LECTURERHALL	INSTRUCTIONAL	72
		Second	ME-201	CADLAB	INSTRUCTIONAL	130
			ME-202	LAB	INSTRUCTIONAL	72
			ME - 202A	LAB	INSTRUCTIONAL	72
			ME - 202B	LAB	INSTRUCTIONAL	72
	Work shop		ME-005	WORKSHOPBLOCK	INSTRUCTIONAL	200
			ME-006	FOUNDROY & FORGING LAB BLOCK	INSTRUCTIONAL	200

**Central Examination facility-Number of rooms and capacity of each Room with 30 Capacity**

Online examination facility - Available - No. Of Nodes - 200, Internet Band Width etc. - **300 Mbps**

Barrier free Built Environment for disabled and elderly persons - **Available** Fire

and Safety Certificate - Not Available

Hostel facilities - **Hostel Available for both Girls & Boys within campus List**

**of Major Equipment /Facilities in each Laboratory/Workshop List of**

**Experimental Setup in each Laboratory**

**Computing Facilities: Available**

**Internet Bandwidth: 300 MBPS**

**Innovation Cell: Available**

**Social Media Cell: Available**

**Compliance of the National Academic Depository (NAD), applicable to PGCM/PGDM Institution and University Dept.**

**Games & Sports facilities - Available**

Information of Infrastructure and Library:

● Number of Library books/Titles/Journals available (Programme-wise)

<b>SL. No.</b>	<b>Branch</b>	<b>No. Books</b>	<b>No. Of Titles</b>	<b>No. Of Journals</b>
<b>1</b>	E&CE	9824	2188	<b>Subscribed VTU Consortium 11261+</b>
<b>2</b>	CS&E	5456	1551	
<b>3</b>	IS&E	4135	946	
<b>4</b>	ME	1181	393	
<b>5</b>	CE	1564	427	
<b>6</b>	AI&ML	491	234	
<b>7</b>	BSH	3263	751	
<b>Total</b>		<b>27190</b>	<b>6490</b>	

- List of online National/International Journals subscribed-

Through Subscribed VTU Consortium

- E-Library facilities

Yes, E-Library facilities available in VKIT library through K-Nimbus Digital library platform (Subscribed VTU Consortium)

VTU - Consortium

https://www.knimbus.com/vtu.html

google.com New folder TV9 Kannada Live St... Gmail YouTube Maps Phone obfuscation...

Visvesvaraya Technological University

HOME VTU WEBSITE VTU E-LEARNING E-SHIKSHANA QUESTION PAPERS ENQUIRY

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5,831 Cumulative Views, Searches & Downloads Past 30 days

Users Overview

44 Active Users Past 30 days

799 Total Registered Users Lifetime

Real-Time Logins

1 Web Users Active

0 Mobile App Users Active

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VIVEKANANDA INSTITUTE OF TECHNOLOGY

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**Janatha Education Society (Regd.)**  
**VIVEKANANDA INSTITUTE OF TECHNOLOGY**  
(Approved by AICTE, New Delhi and Affiliated to V.T.U., Belgaum)  
Gudimavu, Kumbalagodu Post, Kengeri Hobli, Bangalore - 560 074  
Web: [www.vitb.ac.in](http://www.vitb.ac.in) E-mail: [vkitprincipal@gmail.com](mailto:vkitprincipal@gmail.com)

Tel: 080-28437696  
28437036  
Fax: 080-28437944

To, Director

REG NO: VKIT/EST/29/21-22

Date : 08.04.2021

NDLI CLUB (M.O.E)

2nd Floor IIT Kharagpur Kolkata Campus  
HC Block, Sector - III Salt Lake City  
Kolkata - 700106.

Subject : NDLI Club Registration Request.

Dear Sir, on behalf of VIVEKANANDA INSTITUTE OF TECHNOLOGY, I am requesting to create NDLI club for our institute VIVEKANANDA INSTITUTE OF TECHNOLOGY.

I have read NDLI club terms and conditions before applying.

Here is the list of Authority of our club VIVEKANANDA INSTITUTE OF TECHNOLOGY.

Club Patron - Dr. D V Chandrashekar

Club President - Dr. Shaila K

Club secretary - Dr. Manjunatha N

Executive Member - Prof. Dinesh S D

Awaiting your Approval for Same.

Thanks & Regards,

Manjunatha N

Principal Name : Dr. D.V. Chandrashekar

Date : 08.04.21

Director/Principal Signature :

PRINCIPAL

Director/Principal Stamp

Vivekananda Institute of Techno  
Gudimavu, Kumbalagodu, Kengeri Hobli,  
BANGALORE - 560 074.

4/10/2021

Gmail - Congratulations! Your Institute VIVEKANANDA INSTITUTE OF TECHNOLOGY is now an NDLI Club.



Dr. Manjunatha Gowda N <manjulibn@gmail.com>

**Congratulations! Your Institute VIVEKANANDA INSTITUTE OF TECHNOLOGY is now an NDLI Club.**

2 messages

NDLI CLUB <ndl.club@iitkgp.ac.in>

To: Manjunatha N <manjulibn@gmail.com>, club-support@ndli.gov.in

Fri, Apr 9, 2021 at 5:14 PM



NDLI Club

## Your Institute VIVEKANANDA INSTITUTE OF TECHNOLOGY is now is now a part of the NDLI Club

Dear Manjunatha N,

The request of VIVEKANANDA INSTITUTE OF TECHNOLOGY to set up NDLI Club at the institute has been approved. All interested students, faculty members and employees of VIVEKANANDA INSTITUTE OF TECHNOLOGY can now enroll themselves as members of VIVEKANANDA INSTITUTE OF TECHNOLOGY NDLI Club, using the passkey given below:

Passkey: -- **1d3345de-f940-4292-88f6-6c3f82bc8bab**

Club Registration Number: **INKANC5OWKJ2YXO**

You are requested to share the Passkey with all your students, faculty members and employees via e-mail and advise them to visit <https://club.ndli.iitkgp.ac.in/sign-up> to enroll themselves as member of the NDLI Club using their e-mail id and the Passkey. You may also take a printout of the enclosed document and paste it on the notice boards of VIVEKANANDA INSTITUTE OF TECHNOLOGY so that the students, faculty members and employees can view the details about the NDLI Club and enroll themselves as members of the Club by scanning the QR Code indicated in the page.

You will be able to download a Certificate of Registration for NDLI Club of VIVEKANANDA INSTITUTE OF TECHNOLOGY from the NDLI Club portal [club url](#) once you conduct 1st event of your NDLI Club (which may be NDLI User Awareness Session) within the next 30 days and that is attended by at least 100 members of the NDLI Club of VIVEKANANDA INSTITUTE OF TECHNOLOGY.

This NDLI Club Certificate of Registration is valid for 12 Month and will be renewed every 12 Month, subject to the NDLI Club of VIVEKANANDA INSTITUTE OF TECHNOLOGY conducting at least 6 reading/knowledge related Events and 4 Global Events conducted by others online within the next 12 months and at least 100 members of your Club attending .

The best performing NDLI Clubs at District/ State/ National level will be recognized appropriately.

We look forward to your continued support.

To verify your Club role, please [Click Here](#). In case of any difficulty in accessing the above link please click on the url below

**Not Applicable**

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*Sh*  
10/11/2021

## 15.2 Laboratory and Workshop

### List of Major Equipment/Facilities in each Laboratory/Workshop

Sl. No.	Department	Laboratory Name	Equipment/Facilities Details	Remarks
1	CSE	<b>Machine Learning/ System Software &amp; operating System Laboratory</b>	HPDX2480 Model Intel Core-2 Duo 2.67 GHz, 160 GB HDD, 1 G B RAM with Keyboard & Mouse (25 No's) HP Laserjet 1020 Printer (01 No's) External LG DVD Sata (01 No's) LG DVD R/W (01 No's) Emerson UPS 6KVA (01 No's) 42Ah/12V Batteries (16 No's)	<b>LAB:008</b>
2		<b>Computer Networks / Design and Analysis of Algorithms Laboratory</b>	HPDX2480 Model Intel Core-2 Duo 2.67 GHz, 160 GB HDD, 1 G B RAM with Keyboard & Mouse (25 No's) External LG DVD Sata (01 No's) CCTV Camera (01 No's) Emerson UPS 6KVA (01 No's) 42 Ah/12 V Batteries (16 No's)	<b>LAB:008</b>
3		<b>WEB TECHNOLOGY LABORATORY WITH MINI PROJECT / COMPUTER GRAPHICS LABORATORY WITH MINI PROJECT / PROJECT WORK LAB</b>	DELL Desktop OptiPlex 3050, Intel processor 3GHz up to 3.5 GHz , 500GB 7200 rpm Sata Hard Disk 8 GB (2X4 GB) Intel Hd Graphics 630, network interface wlan 802.1 N wireless network card ,18.5" LED monitor USB key Board and optical mouse with Keyboard <b>30</b> Numbers. (25 Numbers CPU +Led Monitor Key Board +Mouse). Emerson UPS 6KVA (01 No's ) 42Ah/12V Batteries (16 No's)	<b>LAB:009</b>
			<b>Total:30</b>	

4	<p align="center"><b>DBMS LABORATORY WITH MINI PROJECTS/ SOFTWARE TESTING LABORATORY</b></p>	<p align="center">DELL Desktop VOSTRO3670(C15/8THG/8GB/1TB/DVD/DO S)</p> <p>LED monitor USB key Board and opticalmouse with Keyboard <b>30</b> Numbers. (30 NumbersCPU+LedMonitorKeyBoard +Mouse). EmersonUPS6KVA(01No's) 42Ah/12VBatteries(16No's) <b>Total:30</b></p>	<p align="center"><b>LAB:009</b></p>
5	<p align="center"><b>COMPUTER PROGRAMMING LABORATORY</b></p>	<p align="center">DELL Desktop VOSTRO3670(C15/8THG/8GB/1TB/DVD/DO S)</p> <p>LED monitor USB key Board and opticalmouse with Keyboard <b>30</b> Numbers. (30 NumbersCPU+LedMonitorKeyBoard +Mouse). EmersonUPS6KVA(01No's) 42Ah/12VBatteries(16No's) <b>Total:30</b></p>	<p align="center"><b>LAB:009</b></p>
6	<p align="center"><b>Analog &amp;Digital Electronics Laboratory</b></p>	<p>HPDx2000Intel Pentium4,3.0GHz,80 GBHDD,512RAMwithKeyboard&amp; Mouse(10No's) AnalogCRO – 30 MHZ(4No's) Analog&amp;DigitalICTester(01No's) DualPowerSupply–30V/2Amps(04 No's),Millimeter(02No's) DigitalTrainerKitUDT-4002(4mm)(05 No's) FixedPowerSupply(15-0-15)V,1Amp(04 No's)</p> <p>Servocontrolvoltagestabilizer(3KVA)(01 No's) Functiongenerator1MHZ(04No's) EmersonUPS 6KVA(01No's) 42Ah/12VBatteries(16 No's)</p>	<p align="center"><b>LAB:108</b></p>
7	<p align="center"><b>Research Center</b></p>	<p>HP Dx2000 Intel Pentium 4, 3.0 GHz, 80 GB HDD, 512 RAM with Keyboard &amp; Mouse (10 No's) EmersonUPS 6KVA(01No's) 42Ah/12 VBatteries(16 No's)</p>	<p align="center"><b>LAB:106</b></p>

Sl. No.	Department	LaboratoryName	Equipment/FacilitiesDetails	Remarks
	CIVIL ENGINEERING	BUILDING MATERIALS TESTING LAB	Universal Testing Machine–100 Tonne Capacity, Impact Testing Machine, Torsion Testing Machine, Brinnell’s Hardness Testing Machine, Vicker’s Hardness Testing Machine, Rockwell’s Hardness Testing Machine, Tiles Testing Machine, Sieve Shaker, Digital Oven, Fine Sieves Made of Brass 200mm dia (1 Set), Coarse Sieves of 300mm dia made of GI (3 Set), Pycnometer (8 No's), Graduated Cylinders (50ml, 100ml, 500ml, 1000ml), Metal Cylinder (3 No's), Tamping Rod (3 No's), Vernier Calipers (5 No's), Strain gauge (1 No.), Deflectometer (6 No's), Metal Wire basket (5 No's), Polythene Wash Bottle (2 No's), Weighing Balance (6kg–2 No's, 10kg–2 no's, 15kg– 2 No's)	
		SURVEY LAB	Dumpy Level model DL-9 with stand (8 No's), Auto Level with stand (8 No's), Vernier Theodolite with stand (8 No's), Pentax Total station R-205NE with with Accessories (2 No's), Electronic Measurement Device (1 No.), Digital Planimeter (2 No's), Open crossstaff (8 No's), Optical Square (8 No's), Prism square (2 No's), Ceylon Ghat tracer (5 No's), Hand Level (1 No.), Surveyor Compass with stand (1 No.), Clinometer Compass with stand (1 No.), Invar tape-15mt. (1 No.), Synthetic tape (1 No.), Tape-30 mt. (12 No's), Metric Chain-30mt. (12 No's), Engineer's Chain (1 No.), Gunter	



			chain-10mt. (1 No.), Revenue chain-20mt. (1 No.), Cloth tape (2 No's), Levelling Staff-5mt. (10 No's), Steel band tape-20mt. (6 No's), Metallictape-15mt.(1No.), Peg(20No's),Boxsextant(1No.), Pantagraph (1 No.), Plane table (8 No's), Ranging rod (40 No's), Arrows(120No's)	
		<b>APPLIED ENGINEERING GEOLOGYLAB</b>	Rock & Mineral samples (80 No's), Geologicalhammers(5No's), Moh's scale of hardness kit (10 No's), Pocket knife (10 No's), Pocket lense (10 No's), Pocket Magnet (5 No's), streak plates (20 No's), Compass clinometer (2 No's), Streak Plates (20 No's), Geological and Mineral Atlas of India(1No.)	
		<b>HYDRAULICS &amp;HYDRAULIC MACHINERYLAB</b>	Pelton wheel turbine (1 No.), Francis Turbine (1 No.), Kaplan turbine (1 No.), Venturiflume (1 No.), Venturimeter (1 No.), Jet vanes(1 No.), Nozzle Meter (1 No.), Pipe Friction Apparatus (1 No.),Reciprocatingpump(1No.), Multi stage centrifugal pump (1 No.), Notches, Major and minor losses Apparatus (1 No.), Bernoulli's theorem verification apparatus(1No.),Verticalorifice meter(1No.)	
		<b>COMPUTER AIDEDDESIGN LAB</b>	DELL Desktop Computer (25 No's), Dell T20 Edge Server (1 No.), Laserjet Printer (1 No.), MultifunctionPrinter-Scanner(1 No.), AutoCAD Software (25 No's),STAADProV8iSoftware (25No's),EmersonLiebertmake GXTMTSeries10KVAUPS (1 No.)withLeochmakeBatteries-12V, 65AH (20 No's), Epson Projector X18 (1 No.), Prolitewallmount ProjectionScreen-6'x4'	

			(1 No.)	
		<b>GEOTECHNICAL ENGINEERING LAB</b>	Triaxial Shear Apparatus (1 No.), Liquid Limit Device (Motorized) (3 No's), Shrinkage Limit Apparatus (3 No's), Direct Shear Apparatus (Motorised) (1 No.), Unconfined Compression Test Apparatus (Motorised) (1 No.), Fine Sieves Made of Brass 200mm dia (1 Set), Coarse Sieves of 300mm dia made of GI (1 Set), Pycnometer (5 No's), Consolidation Apparatus (Single Gang) (1 No.), Universal Permeability Apparatus (1 No.), Vane Shear Apparatus (Motorised) (1 No.), Compaction Apparatus (2 No's), Sand Pouring Cylinder (Small) (3 No's), Soil Extruder (Rack Type) (2 No's), CBR Apparatus (Motorised) with 10kN Proving Ring and Dial Gauge (1 No.), Proctor Penetrometer (Spring Type) (2 No's), Swell Test Apparatus (1 No.), Thin Walled Sampling Tubes (2 No's), Digital Sieve Shaker (1 No.), Permeability Apparatus (Variable Head) (1 No.), Soil Cone Penetrometer (3 No's), Plastic Limit Device (3 No's)	
		<b>CONCRETE AND HIGHWAY MATERIALS LAB</b>	Vicat needle apparatus (3 No's), Le-chartier's mould (1 No's), Cement autoclave (1 No.), Flexure testing M/C (1 No.), Blaine's air permeability apparatus (2 No's), Slump test apparatus (3 No's), Compacting factor apparatus (1 No.), Vee Bee consistometer (1 No.), Permeability apparatus (1 No's), Vibrating table (1 No.), Vibrating machine (1 No.), Laboratory concrete mixer (1 No's), Accelerated curing tank (1 No.), Cube moulds (36 No's), Beam mould (12 No's), Cylinder moulds	



			(6No's),Measuringcylinders(12 No's),Densitybottle(6No's),Le-chatlierflask(10No's),Spatula(9 No's), Trowels (9 No's), Shovels(9 No's), Bowls(9 No's), Toolkit(2No's),GItray(12No's), Cylindrical metal measure (3 No's), CBR Apparatus(1 No's), AggregateCrushingTest(3No's), Los Angeles Abrasion Machine (1No.), Aggregate Impact Value Apparatus (1 No.), Length Gauge(2No's),ThicknessGauge (2 No's), IS Sieves ( Price Each Size Sieve)(3 No's), Wire Basket(3 No's), Specific gravity bottle for Bitumen (5 No's), Automatic Penetrometer (1 No.), Ductility Testing Apparatus (1 No.),RingAndBallApparatus(1 No.), Flash And Fire Point Test Apparatus (2 No's), Tar Viscometer (1 No.), Oven Universal (1 No.), Electrical coil stoves(1No.),HotPlate(1No.).	
		<b>ENVIRONMENTAL ENGINEERING LAB</b>	Aerator(1 No.), Jar Test apparatus(1No.), pH meter Digital(1No.), pH meter (1No.), Electronic weighing balance(1 No.),Imhoffsettlingcone(2No's), Digitalconductivitymeter(1No.), Digitaldirectreadingconductivity meter(1No.),Magnetic stirrer (1No.),Magnetic stirrer digital (1No.), Stop watch(1No.), Nessler's cylinder (1No.), Desicator plain(1No.),Water bath Digital(1No.), Nephelometer (1No.),Spectrophotometer (1No.), Bunsen burner with stand (15 No's), Test tube handler(15 No's),Spatula (20 No's), Distilledwaterplant(1No.),Glass fiber filter disc(1No.),Conical Flask(120No's),Burette(60No's),	

			Pipette(40 No's), Beaker (90 No's), Test tube rim(150 No's), Funnel (30 No's), BuretteStand(30 No's), Glass Rod(40N0's), Reagent Bottles(30 No's), BOD Bottles(20 No's), Reflux Flask (15 No's), Heating Mantle (15 No's), Nessler's tube (30 No's), Fermentation Tube(3 No's), Platinum Loop holder(6 No's), Wash bottle(30 No's), Durham's Tubes (1No.), Muffle Furnace(1No.),MeasuringJar(45 No's),Evaporating Dishes(20 No's), Basin Evaporating(1No's), BODIncubator (1No.), Hot Air Oven(1No.),DOMeter(1No.),Dig Flame Photometer(1No.), Petri dish(10No.).	
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Sl. No.	Department	Laboratory Name	Equipment/FacilitiesDetails	Remarks
01	Mechanical	Design lab	BifilarSuspension	
			CompoundPendulum	
			SpringMassSystem	
			TorsionalVibrationsetwithSingleRotorSystem	
			TorsionalVibrationsetwithDoubleRotorSystem	
			ForcedVibrationSystem	
			SingleDegreeVibrationsystem	
			JournalBearingTestRig	
			WhirlingOfRotatingShaftTestRig	
			Gyroscope	

		CombinedPolarizedscope	
		BalancingofRotars	
		Porter,Prorell,WattHartnerGovernor	
		StrainGaugeCurved beam	
		SimpleGeartrainWithHousing Bearing	
		EpicyclicGearBoxwithHousing	
		Modeltesting WithAccessories	
	Energy Conversion lab	AbleFlash&FirepointApparatus	
		PenskyMartinFlash&FireApparatus	
		RedwoodVisco meter	
		SayBoltviscometer	
		DigitalBombcalorimeter	
		BoysGas calorimeter	
		Planimeter	
		ValvetimingDiagram	
		PorttimingDiagram	
		4strokesinglecylinderKirloskarMakeNew Diesel Engine Test Rig	
		2strokesinglecylinderpetrolEngineTestRig	
		4strokesinglecylinderHONDApetrolEngineTest Rig	
		MulticylinderpetrolEngineofAmbassadorcar Test Rig	
		TorsionViscometer	

			TwostrokeTVSsecondHandBike	
			RingspannersetTAPARIA	
			Doubleendedspannersetandcuttingplier	
		F&FLab	Sheartestattachment	
			Sieveanalysisieatsetup	
			Rapiddrier	
			Singlepiecepatternsteppedpulley(AL)	
			Splitpatterngroovedpattern(AL)	
			flatters	
			Universalsandtesting M/C	
			Permeabilitytester	
			Corehardnesstester	
			Mouldhardnesstester	
			Claycontenttester	
			Moisturecontenttester	
			Sandrammerwithcoreboxes	
			Digitalweighingbalance	
			Mouldingboxes12*12*4	
			Doublesplitpattern(AL)	
			Matchplatepattern	
			Toolkit	
			shovels	

			Swageblock50kg	
			Sledgehammer6LB	
			Sledgehammer8LB	
			Anvil 100kg	
			poker	
			Greensand(bentonite+coaldustmixed)	
			Bentonitepowder	
			Roundtong	
			Flattong	
			Bendtong	
			Greensand	
			Swagetop 1/4''MShandle	
			Swagebottom1/4''MS handle	
			Hotchisel	
			Coldchisel	
			Teakwoodleveler	
			Hammerdoublehead3LB	
			ABCcoreoil	
			Pullertopandbottom	
			Bearingselfcorepattern	
			Peltonwheelcup	
			GIbucket20ltr	

			Bandy	
			Dusttrowelmetal	
			Plasticbucket5ltr	
		HMTLab	DeterminationofThermalConductivityofa Metal Rod.	
			Determinationofoverallheattransfer coefficient of a composite wall.	
			Determinationofeffectivenessonametallc fin.	
			DeterminationofHeatTransferCoefficientin a Free Convection on a vertical tube heat	
			DeterminationofHeatTransferCoefficientin a Forced Convection.	
			DeterminationofEmissivityofaSurface.	
			DeterminationofsteffenBoltzmannconstant.	
			DeterminationofLMDTandeffectivenessina parallel Flow and counter flow Heat Exchanger.	
			ExperimentsonBoilingofLiquidand condensation of vapour.	
			PerformanceTestonVapourcompression Refrigeration.	
			ExperimentonTransientconductionHeat Transfer.	
			PerformanceTestonAirconditioner.	
		Machine shopLab	Hicut3503allgearedheadstocklathe,ABC- 1000mm	
			Hicut3503allgearedheadstocklathe,ABC- 600mm	
			Revolvingcentre MT-3	
			Drillchuck $\frac{1}{2}$ "	

			Powerhacksawblade	
			Centregauge60°	
			½”diewithhand	
			divider	
			divider	
			Ringspanner set	
			Doubleendedspannerset	
			HSS drill bits Size:4,6,8,10,12,14,16,18,20,22,25mmdia	
			HSSdrill bits Size:4,6,8,10,12mmdia	
			HSSdrill bits Size:14,16,18,20,22,25mmdia	
			Drillsleeve	
			DrillsleeveMT2-3	
			Centrebit	
			Boringbar5/16”	
			Allenkeyset1.5mm-10mm	
			Allenkeyset1/16” to3/18”	
			Pipewrench-18”	
			Screwspanner10”	
			Ballpeenhammer 800gms	
			Nylonhammer	
			LetterPunch6mm	
			Numberpunch6mm	

			Centre punch	
			Adjustable surface gauge 12"	
			2046 S dial gauge	
			Dial stand	
			Surface plate	
			Vee-Block	
			Try-square-6"	
			Micrometer-0-25mm	
			Vernier Calliper 0-150mm	
			Screw pitch gauge	
			Stand for surface plate-18" plate	
			Turning tool-RH	
			Side and face milling cutter dia-100*10*25.4	
			Vernier height gauge 300mm	
			Safety goggles	
			Radial drilling machine	
			8" power hacksaw machine	
			12" shaping machine	
			Universal milling machine 26"*8"	
			Bench grinder	
			Straight nose tool	
			Turning tool right hand	



			HSS tool bits: 5/16" * 5/16" * 4"	
			HSS tool bits: 5/16" * 5/16" * 6"	
			Grinding wheel 200mm Dia Smooth rough	
			HI-cut 3503 all geared lathe ABC-1000mm	
			HI-cut 3503 all geared lathe ABC-600mm	
			HI-cut 3503 all geared lathe ABC-600mm	
			HI-cut 3503 all geared lathe ABC-600mm	
		MMMLab	Pressure Gauge	
			Thermocouple	
			LVDT	
			Load Cell	
			Strain Gauge	
			Stroboscope	
			Profile Projector	
			Sine Centre	
			Sine Bar	
			Taper Gauge Plain	
			Angle Block Universal	
			Angle Gauges	
			Lathe Tool Dynamometer	
			Drill Tool Dynamometer	
		Slip Gauge Box		

			MechanicalComparator,Indianmake	
			OpticalFlats	
			GearToothVernier	
			GearToothMicrometer	
			ScrewThread(FloatingCarriageMeter)	
			MechanicalComparator	
			MagneticStandWithDialGauge	
			V-Block2''	
			VernierCaliper	
			Micrometer	
			GraniteSurfacePlate	
			DialIndicator	
			Bore Gauges	
			PrecisionSpritLevel	
			TaperPlugGauge	
			TaperRingGauge	
			PlainPlug Gauge	
			PlainRingGauge	
			FeelerGauge	
			PitchGauge	
			Radius Gauge	
			VernierHeightGauge	

			Roller Set	
			SnapGauge	
			i)0-6mm	
			ii)6-13mm	
			iii)13-19mm	
			SurfacePlate-CI	
			BevelProtractor	
		MT Lab	SingleDiscpolishingMachine	
			RectangularMuffleFurnace	
			WearTestingMachine	
			UltrasonicFlawDetector	
			Magneticcrack Detector	
			DyepenetratedApparatus	
			DigitalweighingBalanceLc:0.001 gm	
			ImpactTestingMachine	
			RockwellHardnessTestingMachinewithstd specimens	
			BinocularMicroscopewithTwostandard specimens(HCS & HSS specimen)	
			BrinellHardnessTestingMachinewithstd specimens	
			UniversalTestingMachineUTN-100knwith standard attachments of Tension test, shear test, Bending test & compression test	
			TorsiontestingMachine cap100Nm	

			Vickers Hardness testing Machine with std specimens	
			Pycnometer	
			Sieve shaker	
			Digital oven	
			Tile testing machine	
			Strain gauge indicator	
			Sieve for coarse aggregate	
			Sieve for fine aggregate	
			Bulk density for coarse aggregate	
			Bulk density of soil	
			Weighing Balance 3kg	
			Weighing Balance 5kg	
			Weighing Balance 15kg	
			Vernier caliper	
			Measuring Cylinder	
			Deplectometer 0-25      LC-0.01	
			Deplectometer 0-25      LC-0.01	
			Deplectometer 0-50      LC-0.01	
		Workshop Lab	Welding Transformer	
			Welding Hand Shield	
			Tongs	
			Hand Gloves	

			C-clamp	
			ElectrodeHolder	
			WeldingCable	
			WeldingGlass	
			ChippingHammer	
			PlainGoggles	
			Apron	
			Wire Brush	
			EarthingClamp	
			Lugs	
			MeasuringSteeltape	
			BenchVice	
			WeldingTable	
			Weldingplainglass	
			Cuttingplier	
			Powerhacksawmachine	
			Ballpeinhammer	
			BenchVice	
			PipeVice	
			Surface Plate	
			VernierHeightGauge	
			Hacksaw Frame	

			SurfaceGauge	
			FlatFile(Rough)	
			FlatFile(Smooth)	
			Square File(Rough)	
			Square File(Smooth)	
			RoundFile(Rough)	
			RoundFile(Smooth)	
			HalfRoundFile(Rough)	
			HalfRoundFile(Smooth)	
			Triangularfilerough	
			Triangularfilesmooth	
			Knifeedgefilerough	
			Ballpeinhammer	
			Flatcoldchisel	
			Crosscutchisel	
			Coldchisel	
			Crosscutdiamondchisel	
			Trysquare	
			Outsidecaliper	
			Insidecaliper	
			Dividers	
			VernierCaliper	

			Micrometer	
			DrillingMachine	
			Grindingmachine	
			Tappingsets 6mm,8mm,10mm	
			Tapwrench10mm	
			Dieset 6mm,8mm,10mm	
			Diestock	
			Angleplate	
			Parallelbars	
			Scribers	
			Scrapers	
			Sledgehammer	
			Vblock	
			Cuttingpliers	
			SteelScale6inch	
			SteelScale12inch	
			Drillbits 6dia,5dia,8dia,10dia 12dia,14dia	
			Centerpunch	
			Drillvise	

			Numberpunch	
			Letterpunch	
			AdjustablewrenchBrush	
			SteelTape	
			Screwdriver	
			Spannerset	
			Oilcan	
			Jemper	
			Grindingwheeldresser	
			Legwise	
			Anvil	

Sl. No.	Department	Laboratory Name	Equipment/FacilitiesDetails				Remarks
1	ECE	Electronic Devices and Instrumentation Lab	<b>EQUIPMENT SNAME</b>	<b>MAKE</b>	<b>SPECIFICATION</b>	<b>QTY (NOS)</b>	
			Analog Ammeters		0-15-30mA	10	
			Analog Ammeters		0-100-200mA	10	
			Analog Ammeters		0-100-200micro A	05	
			Analog Ammeters		0-500microA	05	
			Powersupply	Unitron	0-30v/2ASingle	10	



			<b>Powersupply</b>	<b>Unitron</b>	<b>0-30v/2A dual</b>	<b>10</b>		
			<b>Powersupply</b>	<b>Unitron</b>	<b>0-300v/1ASingle</b>	<b>02</b>		
			<b>Powersupply</b>	<b>Unitron</b>	<b>+/-12v or +/-15v</b>	<b>10</b>		
			<b>Digital multimeter</b>	<b>Motwane</b>		<b>06</b>		
			<b>Digital multimeter</b>	<b>Motwane</b>		<b>02</b>		
			<b>Digital Auto range multimeter</b>	<b>Fluke</b>		<b>01</b>		
			<b>Analog Oscilloscope</b>	<b>scientific</b>		<b>14</b>		
			<b>LCRQ Bridge</b>	<b>scientific</b>		<b>01</b>		
			<b>Function generator</b>	<b>Tektronic</b>		<b>12</b>		
			<b>Digital multimeter</b>	<b>Tektronic</b>		<b>10</b>		
			<b>Function generator</b>	<b>scientific</b>		<b>05</b>		
			<b>5kv voltage stablizer</b>			<b>01</b>		
			<b>DRB</b>			<b>10</b>		
			<b>DIB</b>			<b>10</b>		
			<b>DCB</b>			<b>10</b>		
			<b>Digital voltmeter</b>		<b>0-2v-20v bench type</b>	<b>08</b>		
			<b>Digital voltmeter</b>		<b>0-20v-200v</b>	<b>08</b>		
			<b>Digital Ammeter</b>		<b>0-200microA-2000microA</b>	<b>08</b>		
			<b>Digital</b>		<b>0-20mA-200mA</b>	<b>08</b>		

			Ammeter				
			Digital Ammeter		0-200mA-2000 mA		08
			Powersupply	Uday	0-30v/2ASingle		10
			Powersupply	Uday	0-30v/2Adual		05
			Fixedsupply	Uday	+/-12vor+/-15v		10
			Digital & Analog IC Tester				01
			Digital storage oscilloscope	Akademik			07
2		DSD lab	EQUIPMENT NAME	MAKE	SPECIFICATION		QTY (NOS)
			Digital IC trainerKit	Model4002			10
			Analog IC trainerKit	Model5002			04
			DRB		6 dials		05
			DCB		5dials		05
			DIB		5 dials		05
			Digital multimeter	Motwane			05
			Digital IC trainerKit				14
			MPBased Analog IC Tester				01
			MPBased Digital IC Tester				01
			Function generator	scientific			05

			Pulse generator			02		
			Fixeddc supply		+/-12vor +/-15v	10		
			Voltage stablizer		5KVA	01		
			DcPower supply		0-30v/2A	02		
			Fixedsupply		+/-12vor +/-15v	02		
			Digital IC trainerKit			12		
			Linear/Analog IC trainer kit			05		
			Digital IC Tester (Handled)			01		
			Digital Multimeter	Meco		03		
			DRB		6dials	04		
			DCB		6dials	04		
			DIB		6dials	04		
			Function generator	systronics		01		
			Singlepulse generator			01		
			computer	Dellvastro3268		10		
3		VLSI lab	<b>EQUIPMEN TSNAME</b>	<b>MAKE</b>	<b>SPECIFICA TION</b>	<b>QTY (NOS)</b>		
			Singlechip MCUTrainer	ESAMCB52		10		
			Powersupply	ESA psm2		10		
			Stepper motorwith			05		

			interfacelF-STEP					
			DCMotorl/F				05	
			Elevatorl/F				05	
			Dualdacl/F				05	
			Lcdi/f				05	
			CalculatorKB				05	
			TSDR Interface				05	
			Microwind software				50users	
			PCI Based MSP430KITS				20	
			Cadence software				20users	
			ONLineUPS 5 KV				01	
			HP ProlientML10 0server				01	
			HPDesktop system Mtpc3330				20	
			DellOptiplex380				04	
			ALS –SDA ARMCTXM3 KIT	ALS			15	
			UPS6KVA	Emersion			01	
4		HDL Lab	<b>EQUIPMENTS NAME</b>	<b>MAKE</b>	<b>SPECIFICATION</b>	<b>QTY (NOS)</b>		
			Xilinxsoftware			01		
			Labview7.1			01		

			software				
			TMS320C6713 DSPKits	TMS 320C6713			10
			FPGA&CPLDKits				15
			Patterngenerator & logic analyzer				15
			32bitALU	32bit			01
			Spartern 6 daughtercard				10
			USBCablesforkits				10
			TMS320c6713DSP kits	TMS 320c6713			05
			Overhead projector				01
			Plasticprojection screen 5*5				01
			Vacuumcleaner				01
			Overhead projector				01
			Plasticprojection screen 5*5				01
			HPLaptop	hp			01
			Smartboard				01
			Multimedia projector				01
			Wallmountfor Multimedia projector				01
			E-podium				01
			Hitachiprojector	CP-X3021MN			01

			CP-X3021MN				
			HPcompaxdx2000 computers	HPcompax dx 2000			12
			WiproLQDSI5235 printer	WiproLQDSI 5235			02
			6Kva UPS	Emerson			01
			HPDX2480Model computer	HPDX2480 Model			30
			Sparten6daughter card				05
			USBCableforkits				05
			TpLINKN -300 Router	TpLINKN-300			01
			FPGAMother board				01
5		Advanced Communication lab	<b>EQUIPMENTS NAME</b>	<b>MAKE</b>	<b>SPECIFICATION</b>	<b>QTY (NOS)</b>	
			Analog Signal sampling & Reconstruction unit	Kaushik enterprises			01
			Time division multiplexing Trainer	Kaushik enterprises			01
			Spectrum Analyzers	HAMEG	0.15MHZ TO 1050 MHZ		01
			AutoLCRQText	systronics			01
			Function Generator	systronics	10MHz		02
			Controlled Stabilizer	Powertronics	Powertronics 5 KVA		01
			Variable DC Regulated Power	Uday Engineers	0-30v/2A		04

			<b>Supply</b>				
			<b>DualPowerSupply</b>	<b>Uday Engineers</b>	<b>0-30v/1A</b>		<b>03</b>
			<b>Analog Multimeter(Hung Chang)</b>	<b>Hung Chang</b>			<b>05</b>
			<b>DesktopDigital Multimeter</b>	<b>Meco</b>	<b>45p Multimeter</b>		<b>01</b>
			<b>DigitalMultimeter</b>	<b>Meco</b>			<b>02</b>
			<b>DecadeInductance Box</b>	<b>Uday</b>	<b>6Dials</b>		<b>06</b>
			<b>DecadeResistance Box</b>	<b>Uday</b>	<b>6Dials</b>		<b>06</b>
			<b>DecadeCapacitance</b>	<b>Uday</b>	<b>6Dials</b>		<b>06</b>
			<b>BandPass Modulator /Demodulator</b>	<b>FALCON</b>			<b>01SET</b>
			<b>Dual trace oscilloscope</b>	<b>Analog HM605 SCIENTIFI</b>	<b>60MHZ</b>		<b>03</b>
			<b>Analog pulse ModulatorTrainer</b>	<b>Digitronix</b>			<b>01</b>
			<b>AM/FM Transmittertrainer</b>	<b>Digitronix</b>			<b>01</b>
			<b>AM/FMReceiver Trainer</b>	<b>Digitronix</b>			<b>01</b>
			<b>FrequencyCounter</b>	<b>SCIENTIFI</b>	<b>1GHZ</b>		<b>01</b>
			<b>TDSDigital Oscilloscope</b>	<b>Tektronix</b>			<b>06</b>
			<b>AnalogICTrainer kit</b>	<b>UDAY</b>			<b>03</b>
			<b>DigitalICTrainer</b>	<b>UDAY</b>			<b>03</b>

			<b>kit</b>				
			<b>PatternGenerator</b>	<b>Electronics &amp; Electronics product</b>			<b>01</b>
			<b>DecadeInductance Box</b>	<b>SIMS</b>	<b>6Dials</b>		<b>05</b>
			<b>DecadeResistance Box</b>	<b>SIMS</b>	<b>6Dials</b>		<b>05</b>
			<b>DecadeCapacitance Box</b>	<b>SIMS</b>	<b>6Dials</b>		<b>05</b>
			<b>Twentyfourtypes of antennas</b>				<b>24</b>
			<b>MultioutputPower Supply</b>	<b>Power Vision</b>	<b>+/- 5,12,15,v/</b>		<b>03</b>
			<b>MultiOutputPower Supply(Individual</b>	<b>Power Vision</b>	<b>+/-12,v</b>		<b>02</b>
			<b>DcRegulatedPower Supply</b>	<b>Power Vision</b>	<b>30v1 Amp Dual</b>		<b>06</b>
			<b>DcRegulatedPower Supply 3</b>	<b>Power Vision</b>	<b>30v2 Amp</b>		<b>06</b>
			<b>TDM Kit</b>	<b>scientech</b>	<b>ST (2102)</b>		<b>01</b>
			<b>ACAmmeter (Desktop)</b>	<b>EIC</b>	<b>0-50,100 ma</b>		<b>05</b>
			<b>DCAmmeter (Desktop)</b>	<b>EIC</b>	<b>0-25,250 ma</b>		<b>04</b>
			<b>Microprocessor basedICtester</b>	<b>TESTEL</b>	<b>DA40</b>		<b>01</b>
			<b>CRO</b>	<b>Scientific HM 203</b>			<b>04</b>
			<b>FiberOpticKit</b>	<b>scientech</b>	<b>ST2502</b>		<b>01</b>
			<b>Data Communicationand LANtrainer kit</b>	<b>Falcon</b>			<b>01</b>



			<b>SinglePulse Generator</b>	<b>Systronic s</b>		<b>03</b>	
			<b>OpenRacksize5½ x 3 x12</b>			<b>02</b>	
			<b>Tablewithoutdraw</b>			<b>02</b>	
			<b>AnalogOscilloscope</b>	<b>LG5020</b>	<b>20MHz</b>	<b>05</b>	
			<b>100MHz Oscilloscope</b>	<b>LG5100</b>	<b>100MHz</b>	<b>02</b>	
			<b>1:1&amp;10:1 combination compensatedprobe</b>			<b>08</b>	
			<b>DigitalMultimeter</b>	<b>meco</b>	<b>603</b>	<b>10</b>	
			<b>OFCKit(Link-B)</b>	<b>Falcon</b>		<b>01</b>	
			<b>DPSKKit</b>	<b>TETCOS</b>		<b>01</b>	
			<b>QPSKKit</b>	<b>TETCOS</b>		<b>01</b>	
			<b>NoiseGenerator</b>	<b>TETCOS</b>		<b>01</b>	
			<b>Bit Error MeasurementUnit</b>	<b>TETCOS</b>		<b>01</b>	
			<b>FunctionGenerator</b>	<b>FG806</b>	<b>(2MHz)</b>	<b>06</b>	
			<b>FunctionGenerator</b>	<b>FG811</b>	<b>(Am/FM)</b>	<b>03</b>	
			<b>SineWave Generator</b>	<b>HM5032</b>	<b>20MHz</b>	<b>02</b>	
			<b>DecadeResistance Box</b>	<b>PAN Electronic</b>	<b>5Dials</b>	<b>10</b>	
			<b>DecadeCapacitance Box</b>	<b>PAN Electronic</b>	<b>5Dials</b>	<b>10</b>	
			<b>DecadeInductance Box</b>	<b>PAN Electronic</b>	<b>5Dials</b>	<b>10</b>	
			<b>AnalogOscilloscope</b>	<b>EZ</b>	<b>HM5060 60MHZ</b>	<b>10</b>	
			<b>PulseGenerator</b>	<b>ST4063</b>		<b>13</b>	

			<b>OFC Kit</b>	<b>Scientech</b>		<b>01</b>		
			<b>DPSKKit</b>	<b>TETCOS</b>		<b>03</b>		
			<b>QPSKKit</b>	<b>TETCOS</b>		<b>03</b>		
			<b>PowerSupply</b>	<b>Power vision</b>	(+/- <b>12V/*2A)</b> +/- <b>15V/2A+/-</b> <b>-5V/2A</b>	<b>14</b>		
			<b>ElectronicProject Boards</b>			<b>10</b>		
			<b>SignalGenerator (Signal source)</b>			<b>02</b>		
			<b>Electronic IntegratedCircuit Kit</b>					
			<b>a) Coupled Directional Coupler</b>			<b>02</b>		
			<b>b) Ring Resonator</b>			<b>02</b>		
			<b>c) PowerDivider</b>			<b>01 EACH</b>		
			<b>d) AttenuatorPads- 3db,6db,10db</b>			<b>02</b>		
			<b>e) AdapterSMA(F) -N(M)</b>			<b>02</b>		
			<b>f) BNCCables</b>			<b>02</b>		
			<b>g) SMACables 1m&amp; 45cms.</b>			<b>02</b>		
			<b>h) CoaxialMatch Load</b>			<b>02</b>		
			<b>i) Detector</b>					
			<b>Antennawith Accessories</b>			<b>02</b>		

			<p>a)Printed Dipole Antenna</p> <p>b) Rectangular Patched Antenna</p> <p>c)Ported Yagi Antenna</p> <p>d) Rotatable Antenna Stand</p> <p>e)Fixed Antenna stand</p> <p>f)VSWR</p>			02		
			UPSPB6000Batch: 01106VM0066UPS	EMERSON	6KVA	01		
			Batteries	EXIDE	42AH/12V	16		
			HitachiProjector cp-x3021	HITACHI	cp-x3021	01		
			Digitaloscilloscope	Scientific SMO 502	50MHZ	05		
			Signalgenerator	Physitech PHY-103 FAR	2MHZ	05		
6		DSP lab	<b>EQUIPMENTS NAME</b>	<b>MAKE</b>	<b>SPECIFICATION</b>	<b>QTY (NOS)</b>		
			UPSAdapt6KVA (1TA)	UPS System ITA Model	Batch: 210/20046 1211C010 0286KVA Single Phase of Single Phase	01		

			<b>Battery</b> <b>RackwithLinks(</b> <b>Battery Stand)</b>	<b>Rocket</b> <b>Make</b>	<b>26Ah/</b> <b>12V</b>  <b>12V/ 65</b> <b>AH/</b>	<b>16</b>  <b>01</b>		
			<b>COMPUTERS</b>	<b>DELL</b>	<b>Dell</b> <b>Optiplex(J</b> <b>M)380DT-</b> <b>N Series</b> <b>BaseIntel</b> <b>( R) core</b> <b>™-2DUO</b> <b>Processor</b> <b>E 7500</b> <b>(2.93GHz)</b> <b>1066FSB/</b> <b>3M2</b> <b>Cache.</b> <b>Integrated</b> <b>Broadcom</b> <b>(CBCM577</b> <b>80)GB LAN</b> <b>10/100/10</b> <b>00,2GB(1</b> <b>x 2GB)</b> <b>Non</b> <b>ECCDDR3</b> <b>1333MHz</b> <b>SD RAM</b> <b>Memory</b> <b>320 GB</b> <b>7200 RPM</b> <b>35" SATA</b> <b>Hard</b> <b>drive,16x</b> <b>Max</b> <b>DVD+1 –</b> <b>RW with</b> <b>duallayer</b> <b>write</b> <b>capable-</b> <b>ties for</b> <b>MT&amp;DT,</b>	<b>07</b>		

					<b>DELLE 1912, 18.5"W HD Monitor with WLED , DELL™ MS111US BOptical Mouse, DELL™ KB212-B USBEntry 6-ness Keyboard (ENGLISH)</b>		
			<b>ROUTER</b>	<b>DIGISOL E</b>	<b>sl.no 003 YS CA000788 Mac :00177C1 F 27DA</b>	<b>01</b>	
			<b>Microprocessor Kit</b>	<b>ALS</b>	<b>8085 µp</b>	<b>10</b>	
			<b>Microprocessor</b>	<b>ALS</b>	<b>8086 µP</b>	<b>01</b>	
			<b>PowerSupply</b>	<b>ALS</b>	<b>(+12v,- 12v,+5v,+2 6v)</b>	<b>11</b>	
			<b>LogicController Interface Card</b>	<b>ALS</b>		<b>01</b>	
			<b>DualDAC&amp;I/O InterfaceCard</b>	<b>ALS</b>		<b>01</b>	
			<b>ElevatorInterface Card</b>	<b>ALS</b>		<b>01</b>	
			<b>Keyboard/Display Interface Card</b>	<b>ALS</b>		<b>01</b>	

			<b>EPROM Programmer</b>	<b>ALS</b>		<b>01</b>		
			<b>InterfaceCard</b>					
			<b>8BitADCInterface Card</b>	<b>ALS</b>		<b>01</b>		
			<b>StepperMotor InterfaceCard</b>	<b>ALS</b>		<b>01</b>		
			<b>Basic Universal MicroprocessorKit</b>	<b>ALS</b>	<b>SDA-UNI - 01</b>	<b>10</b>		
			<b>PowerSupply</b>	<b>ALS</b>	<b>5v,1.5A</b>	<b>10</b>		
			<b>CPUCARD</b>	<b>ALS</b>	<b>UNI-85-8085</b>	<b>10</b>		
			<b>UNI-86-8086CPU Card</b>	<b>ALS</b>	<b>[UNI-31/51 8031/51 CPUCard (Inbuilt-8085 sl.No.13)]</b>	<b>10</b>		
			<b>StepperMotor Interface</b>	<b>ALS</b>	<b>ALS-NIFC - 01A</b>	<b>02</b>		
			<b>PowerSupply</b>	<b>ALS</b>	<b>5A,1A NIFC-01A-OPT-01</b>	<b>02</b>		
			<b>8Bit ADC</b>	<b>ALS</b>	<b>ALS - NIFC-07A</b>	<b>02</b>		
			<b>ElevatorInterface Card</b>	<b>ALS</b>	<b>ALS - NIFC-17</b>	<b>02</b>		
			<b>Keyboard/7 SegmentDisplay/ Display Interface</b>	<b>ALS</b>	<b>ALS-NIFC -09</b>	<b>07</b>		
			<b>LogicController Interface</b>	<b>ALS</b>	<b>ALS-NIFC -05A</b>	<b>07</b>		

			<b>StepperMotor Interface</b>	<b>ALS</b>	<b>ALS-NIFC-01A</b>	<b>06</b>	
			<b>StudyCard</b>	<b>ALS</b>	<b>ALS-</b>	<b>05</b>	
			<b>(USARI/Timer Interface)</b>		<b>NIFC-21 8251/8253</b>		
			<b>DualDACInterface</b>	<b>ALS</b>	<b>ALS-NIFC-06A</b>	<b>02</b>	
			<b>Microprocessor Trainer Kit</b>	<b>ALS</b>	<b>ALS-SDA-85</b>	<b>20</b>	
			<b>PowerSupply</b>	<b>ALS</b>	<b>5v,1.5A, +/- 12v,100 ma</b>	<b>20</b>	
			<b>KeyboardInterface Card</b>	<b>ALS</b>		<b>01</b>	
			<b>ElevatorInterface Card</b>	<b>ALS</b>		<b>01</b>	
			<b>LogicController Interface Card</b>	<b>ALS</b>		<b>01</b>	
			<b>StepperMotor InterfaceCard</b>	<b>ALS</b>		<b>01</b>	
			<b>PowerSupplyfor above Interface</b>	<b>ALS</b>		<b>01</b>	
			<b>DualDACInterface Card</b>	<b>ALS</b>		<b>01</b>	
			<b>24linesDigitalI/O Card with Timer (INSIDE-Dell Optiplex(JM) 380DT-NSeries SYSTEMS</b>	<b>ALS</b>	<b>ALS-PCI-07A</b>	<b>06</b>	

			<b>Desktop computers HpDX2480Intel core2 Duo</b>	<b>ALS</b>	<b>HpDX2480 Intelcore2 Duo</b>	<b>15</b>	
<b>7</b>	<b>Elect</b>	<b>EQUIPMENTS</b>	<b>MAKE</b>	<b>SPECIFICATI</b>	<b>QTY</b>		
	<b>rical lab</b>	<b>NAME</b>		<b>ON</b>	<b>(NOS )</b>		
		<b>Measurement of current,power andpower factorof incandescent lamp,fluoresce ntlampand LEDlamp</b>	<b>Pragna</b>		<b>02</b>		
		<b>Measurement ofResistance and inductanceof achokecoil using 3voltmeter method</b>	<b>Pragna</b>		<b>02</b>		
		<b>Determination ofphaseand linequantities inthree phase staranddelta connected load</b>	<b>Pragna</b>		<b>02</b>		
		<b>Measurement ofthree phase powerusing twowattmeter method</b>	<b>Pragna</b>		<b>02</b>		
		<b>2wayand3 waycontrolof lamp</b>	<b>Pragna</b>		<b>02</b>		
		<b>Measurement</b>	<b>Pragna</b>				



			<b>of earth resistance</b>			<b>02</b>		
			<b>Study of effect of open and short circuit in</b>	<b>Pragna</b>		<b>02</b>		
			<b>simple circuit</b>					
			<b>Wheat stone bridge KCL &amp; KVL</b>	<b>Pragna</b>		<b>04</b>		

Sl. No.	Department	Laboratory Name	Equipment/Facilities Details	Remarks
1	AIML	Data Structure Lab	30 Computer Systems	
2	AIML	Microcontroller Lab	30 Computer Systems, Microcontroller KITS	
3	AIML	Machine Learning Lab	30 Computer Systems	
Sl. No.	Department	Laboratory Name	Equipment/Facilities Details	Remarks
1	ISE	Data Structure Lab	30 Computer Systems	
2	ISE	Microcontroller Lab	30 Computer Systems, Microcontroller KITS	

3	ISE	File Structure Lab	30ComputerSystems	
4	ISE	Software TestingLab	30ComputerSystems	
5	ISE	Analysisand	30ComputerSystems	
		Design Lab		
6	ISE	Web Programming Lab	30ComputerSystems	
7	ISE	Machine LearningLab	30ComputerSystems	
8	ISE	Mobile Application Development	30ComputerSystems	
	ChemistryLab		Conductivity meter	
			DigitalCond.Meter	
			PHMeter	
			BunsenBurner	
			ElectricWaterBath-6hole	
			Photoelectriccolorimeter	
			Calorimeterset	
			BunsenBurnerwithSC	
			DigitalCond.Meter	
			CentrifugeMechine	
			Vaccumpump	
			Heatingmantle250ml	
			Heatingmantle500ml	
			Heatingmantle1000ml	
		Micromagneticstirrer		

	Waterbath electrical 6holes	
	Single pan adjustable weight	
	Melting point apparatus Elec.	

		StopClock ESAL	
		Electricalbalancesingle pan	
		Flaskshaker	
		ThermostatWaterbath	
		Electricalhot plate	
		Hotairoven18"x18"	
		Deionizer50ltrcapacitywithanalog conductivity meter	
		FGL613DigitalPHmeter	
		FGCL157DigitalColorimeter	
		BunsenBurnor,Taps,rubbertube	
		Fireextinguisher(3.2 kg)	
		DigitalPotentiometer	
		FGL16133EDig.PHmeter	
		DigitalFlamePhotometer	
		DigitalConductivity	
		DigitalPHmeter	
		Colorimeter	

●List of Experimental Setup in each Laboratory/Workshop

Sl.No.	Department	Laboratory Name	ListofExperiments	Remarks
1		<b>Electronic Devices and Instrumentation Lab</b>	<b>Electronic Devices and InstrumentationLab(Third semester)</b> <b>PARTA:Experimentsusing</b>	

	ECE		<p><b>Discrete components</b></p> <ol style="list-style-type: none"> <li>1. Conduct experiment to test diode clipping (single/double ended) and clamping circuits (positive/negative).</li> <li>2. Half wave rectifier and Full wave rectifier with and without filter and measure the ripple factor.</li> <li>3. Characteristics of Zener diode and design a Simple Zener voltage regulator to determine line and load regulation.</li> <li>4. Characteristics of LDR and Photodiode and turn on an LED using LDR</li> <li>5. Static characteristics of SCR.</li> <li>6. SCR Controlled HWR and FWR using RC triggering circuit</li> <li>7. Conduct an experiment to measure temperature in terms of current/voltage using a temperature sensor bridge.</li> <li>8. Measurement of Resistance using Wheatstone and Kelvin's bridge.</li> </ol> <p><b>PART-B: Simulation using EDA software</b></p> <p>(EDWinXP, PSpice, MultiSim, Proteus, Circuit Lab or any equivalent tool)</p> <ol style="list-style-type: none"> <li>1. Input and Output characteristics of BJT Common emitter configuration and</li> </ol>	
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			<p>evaluation of parameters.</p> <p>2. Transfer and drain characteristics of a JFET and MOSFET.</p> <p>3. UJT triggering circuit for Controlled Fullwave Rectifier.</p> <p>4. Design and simulation of Regulated power supply.</p>	
2		<b>DSDlab</b>	<p><b>DSDlab (Third semester)</b></p> <p>1. Verify</p> <p>(i) Demorgan's Theorem for 2 variables.</p> <p>(ii) The sum-of-product and product-of-sum expressions using universal gates. L1, L2, L3</p> <p>2. Design and implement</p> <p>(i) Half Adder &amp; Full Adder using i) basic gates. ii) NAND gates</p> <p>(ii) Half subtractor &amp; Full subtractor using i) basic gates ii) NAND gates L3, L4</p> <p>3. Design and implement</p> <p>(i) 4-bit Parallel Adder/Subtractor using IC 7483.</p> <p>(ii) BCD to Excess-3 code conversion and vice-versa. L3, L4</p> <p>4. Design and Implementation of</p> <p>(i) 1-bit Comparator</p>	

			<p>(ii) 5-bit Magnitude Comparator using IC 7485. L3, L4</p> <p>5. Realize</p> <p>(i) Adder &amp; Subtractor using IC 74153.</p> <p>(ii) 4-variable function using IC 74151 (8:1 MUX). L2, L3, L4</p> <p>6. Realize</p> <p>(i) Adder &amp; Subtractor using IC 74139.</p> <p>(ii) Binary to Gray code conversion &amp; vice-versa (74139) L2, L3, L4</p> <p>7. Realize the following flip-flops using NAND Gates. Master-Slave JK, D &amp; T Flip-Flop. L2, L3</p> <p>8. Realize the following shift registers using IC 7474/7495</p> <p>(i) SISO (ii) SIPO (iii) PISO (iv) PIPO (v) Ring (vi) Johnson counter L2, L3</p> <p>9. Realize (i) Design Mod – N Synchronous Up Counter &amp; Down Counter using 7476 JK Flip-flop</p> <p>(ii) Mod-N Counter using IC 7490/7476</p> <p>(iii) Synchronous counter using IC 74192 L2, L3</p> <p>10. Design Pseudo Random Sequence generator using 7495. L2, L3</p> <p>11. Design Serial Adder with</p>	
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			Accumulator and Simulate using Simulation tool. L2, L3, L4  12. Design Binary Multiplier and Simulate using Simulation tool. L2, L3, L4	
3		VLSI lab	<p>VLSI lab (Seventh semester)</p> <p><b>Part-A</b></p> <p><b>Analog Design</b></p> <p>Use any VLSI design tool to carry out the experiments, use library files and technology files below 180 nm.</p> <p>i.a) Capture the schematic of CMOS inverter with load capacitance of 0.1 pF and set the widths of inverter with <math>W_n = W_p</math>, <math>W_n = 2W_p</math>, <math>W_n = W_p/2</math> and length at selected technology. Carry out the following:</p> <p>i Set the input signal to a pulse with rise time, fall time of 1 ns and pulse width of 10 ns and time period of 20 ns and plot the input voltage and output voltage of designed inverter?</p> <p>ii. From the simulation results compute <math>t_{pHL}</math>, <math>t_{pLH}</math> and <math>t_d</math> for all three geometrical settings of width?</p> <p>iii Tabulate the results of delay and find the best geometry for minimum delay for CMOS inverter?</p> <p>1.b) Draw layout of inverter with</p>	



			<p>Wp/Wn =40/20, use optimum layout methods. Verify for DRC and LVS, extract parasitic and perform post layout simulations, compare the results with pre-layout simulations. Record the observations.</p> <p>2.a) Capture the schematic of 2-input CMOS NAND gate having similar delay as that of CMOS inverter computed in experiment</p> <p>1. Verify the functionality of NAND gate and also find out the delay <math>t_d</math> for all four possible combinations of input vectors. Table the results. Increase the drive strength to 2X and 4X and tabulate the results.</p> <p>2. b) Draw layout of NAND with Wp/Wn=40/20, use optimum layout methods. Verify for DRC and LVS, extract parasitic and perform post layout simulations, compare the results with pre- layout simulations. Record the observations.</p> <p>3. a) Capture schematic of Common Source Amplifier with PMOS Current Mirror Load and find its transient response and AC response? Measure the Unity Gain Bandwidth (UGB), amplification factor by varying transistor geometries, study the impact of variation in width to UGB.</p> <p>3. b) Draw layout of common source amplifier, use optimum layout methods. Verify for DRC and LVS, extract parasitic and</p>	
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			<p>perform post layout simulations, compare the results with pre-layout simulations. Record the observations.</p> <p>4.a) Capture schematic of two-stage operational amplifier and measure the following:</p> <ul style="list-style-type: none"> <li>i. UGB</li> <li>ii. dB bandwidth</li> <li>iii. Gain margin and phase margin with and without coupling capacitance</li> <li>iv. Use the op-amp in the inverting and non-inverting configuration and verify its functionality</li> <li>v. Study the UGB, 3dB bandwidth, gain and power requirement in op-amp by varying the stage wise transistor geometries and record the observations.</li> </ul> <p>4.b) Draw layout of two-stage operational amplifier with minimum transistor width set to 300 (in 180/90/45 nm technology), choose appropriate transistor geometries as per the results obtained in 4.a. Use optimum layout methods. Verify for DRC and LVS, extract parasitic and perform post layout simulations, compare the results with pre-layout simulations. Record the observations.</p>	
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			<p><b>Part -</b></p> <p><b>BDigitalDesig</b></p> <p><b>n</b></p> <p>Carryouttheexperimentsusing semicustomdesignfloworASIC design flow, use technology library180/90/45nmandbelow</p> <p>Note: The experiments can also becarriedoutusingFPGA design flow, it is required to set appropriate constraints in FPGA advanced synthesis options</p> <p>1. Writeverilogcodefor4-bit up/downasynchronousreset counter and carry out the following:</p> <p>a. Veritythefunctionalityusing test bench</p> <p>b. Synthesizethedesignbysetting areaandtimingconstraint. Obtain the gate level netlist, find the critical path and maximum frequency of operation. Record the area requirement in terms of number of cells required and propertiesofeach cell interms of driving strength, power and area requirement.</p> <p>c. Perform the above for 32-bit up/downcounterandidentitythe criticalpath,delayofcriticalpath, and maximum frequency of operation, total number of cells required and total area.</p> <p>2. Write verilog code for 4-bit adderandverityitsfunctionality usingtestbench.Synthesizethe design by setting proper</p>	
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			<p>constraints and obtain the netlist. From the report generated identify critical path, maximum delay, total number of cells, power requirement and total area required. Change the constraints and obtain optimum synthesis results.</p> <p>3. Write verilog code for UART and carry out the following:</p> <p>a. Perform functional verification using test bench</p> <p>b. Synthesize the design targeting suitable library and by setting area and timing constraints</p> <p>c. For various constraints set, tabulate the area, power and delay for the synthesized netlist</p> <p>d. Identify the critical path and set the constraints to obtain optimum gate level netlist with suitable constraints</p> <p>4. Write verilog code for 32-bit ALU supporting four logical and four arithmetic operations, use case statement and if statement for ALU behavioral modeling.</p> <p>a. Perform functional verification using test bench</p> <p>b. Synthesize the design targeting suitable library by setting area and timing constraints</p> <p>c. For various constraints set, tabulate the area, power and delay for the synthesized netlist</p>	
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			<p>d Identify the critical path and set the constraints to obtain optimum gate level netlist with suitable constraints. Compare the synthesis results of ALU modeled using IF and CASE statements. 5. Write verilog code for Latch and Flip-flop, Synthesize the design and compare the synthesis report (D, SR, JK).</p> <p>6. For the synthesized netlist carry out the following for any two above experiments:</p> <p>a Floor planning (automatic), identify the placement of pads</p> <p>b. Placement and Routing, record the parameters such as no. of layers used for routing, flip method for placement of standard cells, placement of standard cells, routes of power and ground, and routing of standard cells</p> <p>c. Physical verification and record the LVS and DRC reports</p> <p>d Perform Backannotation and verify the functionality of the design</p> <p>e. Generate GDSII and record the number of masks and its color composition</p>	
4		HDL Lab	<p>Microcontroller lab (Fourth semester)</p> <p><b>I. PROGRAMMING</b></p> <p>1. Data Transfer: Block Move,</p>	

			<p>Exchange, Sorting, Finding largest element in an array.</p> <p>2. Arithmetic Instructions - Addition/subtraction, multiplication and division, square, Cube – (16 bits Arithmetic operations – bit addressable).</p> <p>3. Counters.</p> <p>4. Boolean &amp; Logical Instructions (Bit manipulations).</p> <p>5. Conditional CALL &amp; RETURN.</p> <p>6. Code conversion: BCD – ASCII; ASCII – Decimal; Decimal – ASCII; HEX-Decimal and Decimal-HEX.</p> <p>7. Programs to generate delay, Programs using serial port and on-Chip timer/counter.</p> <p><b>II. INTERFACING</b></p> <p>1. Interface a simple toggle switch to 8051 and write an ALP to generate an interrupt which switches on an LED</p> <p>(i) continuously as long as switch is on and</p> <p>(ii) only once for a small time when the switch is turned on.</p> <p>2. Write a C program to</p> <p>(i) transmit and</p> <p>(ii) to receive a set of characters serially by interfacing 8051 to a terminal.</p>	
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			<p>3. Write ALPs to generate waveforms using ADC interface.</p> <p>4. Write ALP to interface an LCD display and to display a message on it.</p> <p>5. Write ALP to interface a Stepper Motor to 8051 to rotate the motor.</p> <p>6. Write ALP to interface ADC-0804 and convert an analog input connected to it.</p>	
			<p><b>HDL Lab (Fifth semester)</b></p> <p><b>PART A: Programming</b></p> <p>1. Write Verilog program for the following combinational design along with test bench to verify the design:</p> <ol style="list-style-type: none"> <li>2 to 4 decoder realization using NAND gates only (structural model)</li> <li>8 to 3 encoder with priority and without priority (behavioural model)</li> <li>8 to 1 multiplexer using case statement and if statements</li> <li>4-bit binary to gray converter using 1-bit gray to binary converter, 1-bit adder and subtractor</li> </ol> <p>2. Model in Verilog for a full adder and add functionality to perform logical operations of XOR, XNOR, AND and OR gates. Write test bench with appropriate input patterns to verify the modeled behavior.</p> <p>3. Verilog 32-bit ALU shown in figure below and verify the functionality of ALU by selecting appropriate test patterns. The functionality of the ALU is presented in Table 1.</p> <ol style="list-style-type: none"> <li>Write test bench to verify the functionality of the ALU considering all possible input patterns</li> <li>The enable signal will set the output to required functions if enabled, if disabled all the outputs are set to tri-state</li> <li>The acknowledge signal is set high after every operation is completed</li> </ol>	

			<p>Result[32:0]</p> <p>4. Write Verilog code for SR, D and JK and verify the flip flop.</p> <p>5. Write Verilog code for 4-bit BCD synchronous counter.</p> <p>6. Write Verilog code for counter with given input clock and check whether it works as clock divider performing division of clock by 2, 4, 8 and 16. Verify the functionality of the code.</p> <p><b><u>PART-B: Interfacing and Debugging</u></b>  <b>(EDWinXP, PSpice, MultiSim, Proteus, CircuitLab or any other equivalent tool can be used)</b></p> <p>1. Write a Verilog code to design a clock divider circuit that generates 1/2, 1/3rd and 1/4th clock from a given input clock. Port the design to FPGA and validate the functionality through oscilloscope.</p> <p>2. Interface a DC motor to FPGA and write Verilog code to change its speed and direction.</p> <p>3. Interface a Stepper motor to FPGA and write Verilog code to control the Stepper motor rotation which in turn may control a Robotic Arm. External switches to be used for different controls like rotate the Stepper motor (i) +N steps if Switch no.1 of a Dip switch is closed (ii) +N/2 steps if Switch no. 2 of a Dip switch is closed (iii) -N steps if Switch no. 3 of a Dip switch is closed etc.</p>	
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			<p>4. Interface a DAC to FPGA and write Verilog code to generate Sine wave of frequency F KHz (eg. 200 KHz) frequency. Modify the code to down sample the frequency to F/2KHz. Display the Original and Down sampled signals by connecting them to an oscilloscope.</p> <p>5. Write Verilog code using FSM to simulate elevator operation.</p> <p>6. Write Verilog code to convert an analog input of a sensor to digital form and to display the same on a suitable display like set of simple LEDs, 7-segment display digit or LCD display.</p>	
			<p>Embedded Systems lab (Sixth semester)</p> <p><b>PART A:</b></p> <ol style="list-style-type: none"> <li>1. ALP to multiply two 16 bit binary numbers.</li> <li>2. ALP to find the sum of first 10 integer numbers.</li> <li>3. ALP to find the number of 0's and 1's in a 32 bit data</li> <li>4. ALP to find determine whether the given 16 bit is even or odd</li> <li>5. ALP to write data to RAM</li> </ol> <p><b>PART B:</b></p> <ol style="list-style-type: none"> <li>6. Display "Hello world" message using internal UART</li> <li>7. Interface and Control the speed</li> </ol>	

			<p>of a DC Motor.</p> <p>8. Interface a Stepper motor and rotate it in clockwise and anti-clockwise direction.</p> <p>9. Interface a DAC and generate Triangular and Square waveforms.</p> <p>10. Interface a 4x4 keyboard and display the key code on an LCD.</p> <p>11. Demonstrate the use of an external interrupt to toggle an LED On/Off.</p> <p>12. Display the Hex digits 0 to F on a 7-segment LED interface, with an appropriate delay.</p> <p>13. Measure Ambient temperature using a sensor and SPI ADC IC.</p>	
5		Advanced Communication lab	<p>Analog circuits lab (Fourth semester)</p> <p><b>PART A: Hardware Experiments</b></p> <p>1. Design and set up the Common Source JFET/MOSFET amplifier and plot the frequency response.</p> <p>2. Design and set up the BJT common emitter voltage amplifier with and without feedback and determine the gain-bandwidth product, input and output impedances.</p> <p>3. Design and set-up BJT/FET i) Colpitts Oscillator, and ii) Crystal Oscillator</p>	

			<p>4. Design active second order Butterworth low pass and high pass filters.</p> <p>5. Design Adder, Integrator and Differentiator circuits using Op-Amp</p> <p>6. Test a comparator circuit and design a Schmitt trigger for the given UTP and LTP values and obtain the hysteresis.</p> <p>7. Design 4-bit R-2R Op-Amp Digital to Analog Converter (i) using 4-bit binary input from toggle switches and (ii) by generating digital inputs using mod-16 counter.</p> <p>8. Design Monostable and a stable Multivibrator using 555 Timer.</p> <p><b>PART-B: Simulation using EDA software</b> (EDWinXP, PSpice, MultiSim, Proteus, CircuitLab or any other equivalent tool can be used)</p> <p>1. RC Phase shift oscillator and Hartley oscillator</p> <p>2. Narrow Band-pass Filter and Narrow band-reject filter</p> <p>3. Precision Half and full wave rectifier</p> <p>4. Monostable and A stable Multivibrator using 555 Timer.</p>	
Communication lab (Sixth semester)			<b>PART-A: Expt. 1 to Expt. 5 have to</b>	

			<p><b>beperformed using discrete components.</b></p> <ol style="list-style-type: none"> <li>1. Amplitude Modulation and Demodulation: i) Standard AM, ii) DSBSC (LM741 and LF398 ICs can be used)</li> <li>2. Frequency modulation and demodulation (IC8038/2206 can be used)</li> <li>3. Pulse sampling, flat top sampling and reconstruction</li> <li>4. Time Division Multiplexing and Demultiplexing of two band limited signals.</li> <li>5. FSK and PSK generation and detection</li> <li>6. Measurement of frequency, guide wavelength, power, VSWR and attenuation in microwave test bench.</li> <li>7. Obtain the Radiation Pattern and Measurement of directivity and gain of microstrip dipole and Yagi antennas.</li> <li>8. Determination of       <ol style="list-style-type: none"> <li>a. Coupling and isolation characteristics of microstrip directional coupler.</li> <li>b. Resonance characteristics of microstrip ring resonator and computation of dielectric constant of the substrate.</li> <li>c. Power division and isolation of</li> </ol> </li> </ol>	
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			<p>microstrippowerdivider.</p> <p><b>PART-B: Simulation Experiments using SCILAB/MATLAB/Simulinkor LabVIEW</b></p> <p>1. To Simulate NRZ, RZ, half-sinusoid&amp;raisedcosinepulses and generate eye diagram for binary polar signaling.</p> <p>2Pulsecodemodulationand demodulation system.</p> <p>3. ComputationsoftheProbability ofbit error for coherent binary ASK, FSK and PSK for an AWGN Channel and compare them with their performance curves.</p> <p>4. DigitalModulationSchemesi) DPSK Transmitter and Receiver, ii)QPSKTransmitterandReceiver.</p>	
6		DSPlab	<p>DSP lab(Fifthsemester)</p> <p>FollowingExperimentstobedone using MATLAB/ SCILAB/OCTAVE orequivalent:</p> <p>1. Verification of sampling theorem(useinterpolation function).</p> <p>2Linearandcircularconvolution of two given sequences, Commutative, distributive and associative property of convolution.</p> <p>3. Auto and cross correlation of twosequencesandverificationof their properties</p> <p>4. Solvingagivendifference</p>	

			<p>equation.</p> <p>5. Computation of N-point DFT of a given sequence and to plot magnitude and phase spectrum (using DFT equation and verify it by built-in routine).</p> <p>6. (i) Verification of DFT properties (like Linearity and Parseval's theorem, etc.) (ii) DFT computation of square pulse and Sinc function etc.</p> <p>7. Design and implementation of Lowpass and High pass FIR filter to meet the desired specifications (using different window techniques) and test the filter with an audio file. Plot the spectrum of audio signal before and after filtering.</p> <p>8. Design and implementation of a digital IIR filter (Low pass and High pass) to meet given specifications and test with an audio file. Plot the spectrum of audio signal before and after filtering.</p> <p><b>Following Experiment to be done using DSP kit</b></p> <p>9. Obtain the Linear convolution of two sequences.</p> <p>10. Compute Circular convolution of two sequences.</p> <p>11. Compute the N-point DFT of a given sequence.</p> <p>12 Determine the Impulse response of first order and second</p>	
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			<p>ordersystem.</p> <p>13.Generationofsinewaveand standard test signals</p>	
			<p>CCNlab(Seventhsemester)</p> <p><b>PART-A: Simulation experimentsusingNS2/NS3/ OPNET/ NCTUNS/ NetSim/QuaiNetoranyother equivalent tool</b></p> <p>1. Implement a point to point network with four nodes and duplex links between them. Analyzethenetworkperformance by setting the queue size and varying the bandwidth.</p> <p>2. Implementafournodepointto point network with links n0-n2, n1-n2andn2-n3.ApplyTCPagent betweenenn0-n3andUDPbetween n1-n3.Applyrelevantapplications over TCP and UDP agents changing the parameter and determinethenumberofpackets sent by TCP/UDP.</p> <p>3. ImplementEthernetLANusing n (6-10) nodes. Compare the throughputbychangingtheerror rate and data rate.</p> <p>4. ImplementEthernetLANusing n nodes and assign multiple traffic to the nodes and obtain congestion window for different sources/ destinations.</p> <p>5. Implement ESS with transmission nodes in Wireless LANandobtaintheperformance parameters.</p>	

			<p>6. Implementation of Linkstate routing algorithm.</p> <p><b>PART-B: Implement the following in C/C++</b></p> <p>1. Write a program for a HDLC frame to perform the following.</p> <p>i) Bitstuffing</p> <p>ii) Characterstuffing.</p> <p>2 Write a program for distance vector algorithm to find suitable path for transmission.</p> <p>3. Implement Dijkstra's algorithm to compute the shortest routing path.</p> <p>4. For the given data, use CRC-CCITT polynomial to obtain CRC code. Verify the program for the cases</p> <p>a) Without error</p> <p>b) With error</p> <p>5. Implementation of Stop and Wait Protocol and Sliding Window Protocol</p> <p>6. Write a program for congestion control using leaky bucket algorithm</p>	
7		Electrical lab	<p>Basic Electrical Engineering lab (First and second semester)</p> <p>1 Verification of KCL and KVL for DC circuits</p> <p>2 Verification of maximum power</p>	



			<p>theorem.</p> <p>3 Measurement of Current, Power, and Power Factor of Incandescent Lamp, Fluorescent Lamp and LED Lamp.</p> <p>4 Measurement of Resistance and Inductance of a Choke coil using three voltmeter method.</p> <p>5 Determination of Phase and Line quantities in three-phase star and delta connected loads.</p> <p>6 Measurement of 3-phase Power using Two Wattmeter Method.</p> <p>7 Determination of efficiency of a single-phase transformer by direct load test.</p> <p>8 Two Way and Three-Way Control of Lamp and Formation of Truth Table.</p> <p>9 Measurement of Earth Resistance</p> <p>10 Study of the effect of Open and Short circuits in simple circuits</p>	
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Sl. No.	Department	Laboratory Name	List of Experiments	Remarks
	CIVIL ENGINEERING	COMPUTER AIDED BUILDING PLANNING AND DRAWING	<p>Drawings Related to Different Building Elements:</p> <p>Following drawings are to be prepared for the data given using CAD Software</p> <p>a) Cross section of Foundation, masonry wall, RCC columns with isolated &amp; combined footings.</p> <p>b) Different types of bonds in brick</p>	

			<p>masonry.</p> <p>c) Different types of staircases – Dog legged, Open well.</p> <p>d) Lintel and chajja.</p> <p>e) RCC slabs and beams.</p> <p>f) Cross section of pavement.</p> <p>g) Septic Tank and sedimentation Tank.</p> <p>h) Layout plan of Rainwater recharging and harvesting system.</p> <p>i) Cross sectional detail of a road for a Residential area with provision for all services.</p> <p>j) Steel truss (connections Bolted).</p> <p>Building Drawings: Principles of planning, Planning regulations and building bye-laws, factors affecting site selection, Functional planning of residential and public buildings, design aspects for different public buildings. Recommendations of NBC.</p> <p>Drawing of Plan, elevation and sectional elevation including electrical, plumbing and sanitary services using CAD software for:</p> <ol style="list-style-type: none"> <li>1. Single and double story residential building.</li> <li>2. Hostel building.</li> <li>3. Hospital building.</li> <li>4. School building.</li> </ol>	
		<p><b>BUILDING MATERIALS TESTING LABORATORY</b></p>	<ol style="list-style-type: none"> <li>1. Tension test on mild steel and HYSD bars.</li> <li>2. Compression test on mild steel, cast iron and wood.</li> <li>3. Torsion test on mild steel circular sections.</li> <li>4. Bending Test on Wood Under two point loading.</li> <li>5. Shear Test on Mild steel - single and double shear.</li> <li>6. Impact test on Mild Steel (Charpy &amp; Izod).</li> <li>7. Hardness test on ferrous and non-ferrous metals - Brinell's, Rockwell</li> </ol>	

			<p>and Vicker's.</p> <p>8. Tests on Bricks, Tiles and Concrete Blocks.</p> <p>9. Tests on Fine aggregates-Moisture content, Specific gravity, Bulk density, Sieve analysis and Bulking.</p> <p>10. Tests on Coarse aggregates-Absorption, Moisture content, specific gravity, Bulk density and Sieve analysis.</p> <p>11. Demonstration of Strain gauges and Strain indicators.</p>	
		<p><b>ENGINEERING GEOLOGY LABORATORY</b></p>	<p>1. Physical properties of minerals: Identification of</p> <p>i. Rock Forming minerals - Quartz group, Feldspar group, Garnet group, Mica group &amp; Talc, Chlorite, Olivine, Asbestos, Calcite, Gypsum, etc</p> <p>ii. Ore forming minerals- Magnetite, Hematite, Pyrite, Pyralusite, Graphite, Chromite, etc</p> <p>2. Engineering Properties of Rocks: Identification of</p> <p>i. Igneous rocks- Types of Granites, Dolerite, Granite Porphyry, Basalt, Pumice etc</p> <p>ii. Sedimentary rocks- Sandstone, Limestone, Shale, Laterite, Breccia etc</p> <p>iii. Metamorphic rocks- Gneiss, Slate, Schist, Marble, Quartzite etc</p> <p>3. Borehole problems: Determination of subsurface behavior of rocks, their attitude related to foundation, tunnels, reservoirs and mining. Triangular and Square methods. (2 methods)</p> <p>4. Dip and Strike problems. Determine Apparent dip and True dip. (2 methods)</p> <p>5. Calculation of Vertical, True thickness and width of the outcrops. (3 methods)</p> <p>6. Study of Toposheets and Interpretation, Extraction of Drainage</p>	

			<p>Basin and its Morphometric Analysis. (3 Toposheets)</p> <p>7. Interpretation and drawing of sections for geological maps showing tilted beds, faults, unconformities etc. (10 Maps)</p> <p>8. Interpretation of Satellite Images. (2 Satellite images)</p> <p>9. Field work – To identify Minerals, Rocks, Geomorphology and Structural features with related to the Civil Engineering projects.</p>	
		<p>FLUID MECHANICS AND HYDRAULIC MACHINES LABORATORY</p>	<ol style="list-style-type: none"> <li>1. Verification of Bernoulli's equation.</li> <li>2. Determination of Cd for Venturimeter and Orificemeter.</li> <li>3. Determination of hydraulic coefficient of small vertical orifice.</li> <li>4. Determination of Cd for Rectangular and Triangular notch</li> <li>5. Determination of Cd for Ogee and Broad crested weir</li> <li>6. Determination of Cd for Venturiflume</li> <li>7. Determination of force exerted by a jet on flat and curved vanes.</li> <li>8. Determination of efficiency of Pelton wheel turbine</li> <li>9. Determination of efficiency of Francis turbine</li> <li>10. Determination of efficiency of Kaplan turbine</li> <li>11. Determination of efficiency of centrifugal pump</li> <li>12. Determination of Major Loss in Pipes</li> <li>13. Determination of Minor losses in pipe due to sudden enlargement, sudden contraction and bend.</li> </ol>	
		<p>SURVEYING PRACTICE</p>	<ol style="list-style-type: none"> <li>1. a) Measurements of distances using tape along with horizontal planes and slopes, direct ranging.</li> <li>b) Setting out perpendiculars. Use of cross staff, optical square.</li> <li>2. Measurements of bearings / directions using prismatic compass,</li> </ol>	

			<p>setting of geometrical figures using prismatic compass.</p> <p>3. Determination of distance between two inaccessible points using compass</p> <p>4. Determination of reduced level of points using dumpy level/auto level (simple leveling)</p> <p>5. Determination of reduced level of points using dumpy level/auto level (differential leveling and inverted leveling).</p> <p>6. To determine the difference in elevation between two points using Reciprocal leveling and to determine the collimation error.</p> <p>7. To conduct profile leveling, cross sectioning and block leveling. Plotting profile and cross sectioning in excel. Block contour on graph paper to scale.</p> <p>8. Measurement of horizontal angle by repetition and reiteration methods and Measurement of vertical angles using theodolite.</p> <p>9. Determination of horizontal distance and vertical height to a base in accessible object using theodolite by single plane and double plane method.</p> <p>10. To determine distance and elevation using tachometric surveying with horizontal and inclined line of sight.</p> <p>11. Closed traverse surveying using Theodolite and applying corrections for error of closure by transit rule and Bowditch rule.</p> <p>12. To locate the points using Radiation and Intersection method of Plane table surveying.</p> <p>13. To solve three point problem in plane table using Bessel's graphical solution.</p> <p>14. Demonstration of Minor instruments like Clinometer, Ceylon Ghat tracer, Box sextant, Hand level, Planimeter, nautical sextant and Penta</p>	
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			graph.	
		CONCRETE AND HIGHWAY MATERIALS LABORATORY	Part A: Concrete Lab 1. Tests on Cement: a. Normal Consistency b. Setting time c. Compressive strength d. fineness by air permeability test e. specific gravity 2. Tests on Concrete: a. Design of concrete mix as per IS-10262 b. Tests on fresh concrete: i. slump, ii. compaction factor and iii. Vee Bee test c. Tests on hardened concrete: i. compressive strength test, ii. split tensile strength test, iii. flexural strength test d. NDT tests by rebound hammer and pulse velocity test. 3. Tests on Self Compacting Concrete: a. Design of self compacting concrete, As per IS 10262:2019 b. slump flow test, c. V-funnel test, d. J-Ring test, e. U-Box test and f. L-Box test Part B: Highway materials Lab 1. Tests on Aggregates a. Aggregate crushing value b. Los Angeles abrasion test c. Aggregate impact test d. Aggregate shape tests (combined index and angularity number) 2. Tests on Bituminous Materials a. Penetration test b. Ductility test c. Softening point test d. Specific gravity test e. Viscosity test by tar viscometer f. Bituminous Mix Design by Marshall Method (Demonstration only) 3. Tests on Soil	

			<ul style="list-style-type: none"> <li>a. Wetsieve analysis</li> <li>b. CBR test</li> </ul>	
		<p><b>SOFTWARE APPLICATION LABORATORY</b></p>	<p>Module-1</p> <p>Use of civil engineering software's:</p> <p>Use of software's for:</p> <ul style="list-style-type: none"> <li>1. Analysis of plane trusses, continuous beams, portal frames.</li> <li>2. 3D analysis of multistoried frame structures.</li> </ul> <p>Module-2</p> <ul style="list-style-type: none"> <li>1. Project Management-Exercise on Project planning and scheduling of a building project using any project management software: <ul style="list-style-type: none"> <li>a. Understanding basic features of Project management software</li> <li>b. Constructing Project: create WBS, Activities, and tasks and Computation Time using Excel spread sheet and transferring the same to Project management software.</li> <li>c. Identification of Predecessor and Successor activities with constrain</li> <li>d. Constructing Network diagram (AON Diagram) and analyzing for Critical path, Critical activities and Other non Critical paths, Project duration, Floats.</li> <li>e. Study on various View options available</li> <li>f. Basic understanding about Resource Creation and allocation</li> <li>g. Understanding about Splitting the activity, Linking multiple activity, assigning Constrains, Merging Multiple projects, Creating Baseline Project</li> </ul> </li> <li>1. GIS applications using open source software: <ul style="list-style-type: none"> <li>a. To create shape files for point, line and polygon features with a map as reference.</li> <li>b. To create decision maps for specific purpose.</li> </ul> </li> </ul> <p>Module-3</p>	

			Use of EXCEL spreadsheets: Design of singly reinforced and doubly reinforced rectangular beams, design of one way and two way slabs, computation of earthwork, Design of horizontal curve by offset method, Design of superelevation.	
		ENVIRONMENTAL ENGINEERING LABORATORY	<ol style="list-style-type: none"> <li>1. Preparation chemical solutions required for analysis and sampling methodologies</li> <li>2. Determination of pH, Conductivity, TDS and Turbidity.</li> <li>3. Determination of Acidity and Alkalinity</li> <li>4. Determination of Calcium, Magnesium and Total Hardness.</li> <li>5. Determination of Dissolved Oxygen</li> <li>6. Determination of BOD.</li> <li>7. Determination of Chlorides</li> <li>8. Determination of percentage of % of available chlorine in bleaching powder sample, Determination of Residual Chlorine and chlorine demand.</li> <li>9. Determination of Solids in Sewage: <ol style="list-style-type: none"> <li>i) Total Solids, ii) Suspended Solids, iii) Dissolved Solids, iv) Volatile Solids, Fixed Solids v) Settleable Solids.</li> </ol> </li> <li>10. Determination of optimum coagulant dosage using Jar test apparatus.</li> <li>11. Determination of Nitrates and Iron by spectrophotometer</li> <li>12. Determination of COD (Demonstration)</li> <li>13. Air Quality Monitoring (Demonstration)</li> <li>14. Determination of Sound by Sound level meter at different locations (Demonstration)</li> </ol>	
		COMPUTER AIDED DETAILING OF STRUCTURES	<p>Module-1 Detailing of RCC Structures</p> <ul style="list-style-type: none"> <li>· Beams – Simply supported, Cantilever and Continuous.</li> </ul>	



			<ul style="list-style-type: none"> <li>· Slab–Oneway, Twoway and One-way continuous.</li> <li>· Staircase–Doglegged</li> <li>· Cantilever Retaining wall</li> <li>· Counter Fort Retaining wall</li> <li>· Circular Water Tank, Rectangular Water Tank.</li> </ul> <p>Module-2 Detailing of Steel Structures</p> <ol style="list-style-type: none"> <li>1. Connections–Beam to beam, Beam to Column by Bolted and Welded Connections.</li> <li>2. Built-up Columns with lacings and battens</li> <li>3. Column bases and Gusseted bases with bolted and welded connections.</li> <li>4. Roof Truss–Welded and Bolted</li> <li>5. Welded Plate girder</li> <li>6. Gantry Girder</li> </ol>	
		<b>GEOTECHNICAL ENGINEERING LABORATORY</b>	<ol style="list-style-type: none"> <li>1. Field identification of soil, Specific gravity test (pycnometer and density bottle method). Water content determination by oven drying and Pycnometer method, rapid moisture meter method.</li> <li>2. Grainsize analysis <ol style="list-style-type: none"> <li>i. Sieve analysis</li> <li>ii. Hydrometer analysis</li> </ol> </li> <li>3. In-situ density tests <ol style="list-style-type: none"> <li>i. Core-cutter method</li> <li>ii. Sand replacement method</li> </ol> </li> <li>4. Consistency limits <ol style="list-style-type: none"> <li>i. Liquid limit test (by Casagrande's sand cone penetration method)</li> <li>ii. Plastic limit test</li> <li>iii. Shrinkage limit test</li> </ol> </li> <li>5. Standard compaction test (light and heavy compaction)</li> <li>6. Co-efficient of permeability test <ol style="list-style-type: none"> <li>i. Constant head test</li> <li>ii. Variable head test</li> </ol> </li> <li>7. Shear strength tests <ol style="list-style-type: none"> <li>i. Unconfined compression test</li> <li>ii. Direct shear test</li> <li>iii. Triaxial test (unconsolidated</li> </ol> </li> </ol>	

			<p>undrained test only)</p> <p>8. Consolidation test: To determine pre consolidation pressure only (half an hour per loading-test).</p> <p>9. Laboratory vane shear test</p> <p>10. Demonstration of Swell pressure test, Standard penetration test and boring equipment</p>	
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Sl. No.	Department	Laboratory Name	List of Experiments	Remarks
	Mechanical Engineering	Material Testing lab	<p>1 Preparation of specimen for Metallographic examination of different engineering materials.</p> <p>To report microstructures of plain carbon steel, tool steel, gray C.I, SG iron, Brass, Bronze &amp; composites.</p> <p>2 Heat treatment: Annealing, normalizing, hardening and tempering of steel.</p> <p>Metallographic specimens of heat treated components to be supplied and students should report microstructures of furnace cooled, water cooled, air cooled, tempered steel. Students should be able to distinguish the phase changes in a heat treated specimen compared to untreated specimen.</p> <p>3 Brinell, Rockwell and Vickers's Hardness tests on untreated and heat treated specimens.</p> <p>4 To study the defects of Cast and Welded components using Non-destructive tests like:</p> <p>a) Ultrasonic flaw detection</p> <p>b) Magnetic crack detection</p> <p>c) Dye penetration testing.</p>	

			<p>PART B</p> <p>5 Tensile, shear and compression tests of steel, aluminum and cast iron specimens using Universal Testing Machine</p> <p>6 Torsion Test on steel bar.</p> <p>7 Bending Test on steel and wood specimens.</p> <p>8 Izod and Charpy Test on Mild steel and C.I Specimen.</p> <p>9 To study the wear characteristics of ferrous and non-ferrous materials under different parameters.</p> <p>10 Tensile, shear and compression tests of steel, aluminum and cast iron specimens using Universal Testing Machine</p> <p>11 Fatigue Test (demonstration only)</p>	
		<p>Mechanical Measurements and Metrology lab</p>	<p>1 Calibration of Pressure Gauge</p> <p>2 Calibration of Thermocouple</p> <p>3 Calibration of LVDT</p> <p>4 Calibration of Load cell</p> <p>5 Determination of modulus of elasticity of a mild steel specimen using strain gauges.</p> <p>PART B</p> <p>6 Measurements using Optical Projector/Tool makers' Microscope.</p> <p>7 Measurement of angle using Sine Centre/Sine bar / bevel protractor</p>	

		<p>8 Measurement of alignment using Autocollimator / Rollerset</p> <p>9 Measurement of cutting tool forces using: Lathe tool Dynamometer</p> <p>10 Measurement of Screw thread parameters using two wire or three -wire methods.</p> <p>11 Measurement of surface roughness using Tally Surf/Mechanical Comparator</p> <p>12 Measurement of gear tooth profile using gear tooth Vernier/Gear tooth micrometer</p> <p>13 Calibration of Micrometer using slip gauges</p> <p>14 Measurement using Optical Flats</p>	
	<p>Workshop and Machine Shop Practice (Consists of Fitting, and Machining )</p>	<p>1 Preparation of at least two fitting joint models by proficient handling and application of hand tools- V block, marking gauge, files, hacksaw drill setc. PART B</p> <p>2 Preparation of three models on lathe involving- Plain turning, Taper turning, Step turning, Thread cutting, Facing, Knurling, Drilling, Boring, Internal Thread cutting and Eccentric turning. Exercises should include selection of cutting parameters and cutting time estimation.</p> <p>PART C</p>	

			<p>3 Cutting of V Groove/dovetail/Rectangular groove using a shaper.</p> <p>Cutting of Gear Teeth using Milling Machine.</p> <p>Exercises should include selection of cutting parameters and cutting time estimation.</p>	
	Foundry, Forging and Welding lab	<p>PART A</p> <p>Testing of Molding sand and Core sand.</p> <p>Preparation of sand specimens and conduction of the following tests:</p> <ol style="list-style-type: none"> <li>1. Compression, Shear and Tensile test on Universal Sand Testing Machine.</li> <li>2. Permeability test</li> <li>3. Sieve Analysis to find Grain Fineness Number (GFN) of Base Sand</li> <li>4. Clay content determination on Base Sand.</li> </ol> <p>Welding Practice:</p> <p>Use of Arc welding tools and welding equipment</p> <p>Preparation of welded joints using Arc Welding equipment</p> <p>L-Joint, T-Joint, Butt joint, V-Joint, Lap joints on M.S. flats</p> <p>PART B</p> <p>Foundry Practice:</p> <p>Use of foundry tools and other equipment for</p>		

			<p>Preparation of moldings and mixture.</p> <p>Preparation of green sand molds kept ready for pouring in the following cases:</p> <ol style="list-style-type: none"> <li>1. Using two molding boxes (handcut molds).</li> <li>2. Using patterns (Single piece pattern and Split pattern).</li> <li>3. Incorporating core in the mold. (Core boxes).</li> <li>4. Preparation of one casting (Aluminium or cast iron - Demonstration only)</li> </ol> <p>PART C</p> <p>Forging Operations: Use of forging tools and other forging equipment.</p> <ul style="list-style-type: none"> <li>• Calculation of length of the raw material required to prepare the model considering scale loss.</li> <li>• Preparing minimum three forged models involving upsetting, drawing and bending operations.</li> </ul>	
		<p>FLUID MECHANICS AND MACHINES LAB</p>	<p>PART A</p> <ol style="list-style-type: none"> <li>1 Lab layout, calibration of instruments and standards to be discussed</li> <li>2 Determination of coefficient of friction of flow in a pipe.</li> <li>3 Determination of minor losses in flow through pipes.</li> <li>4 Application of momentum equation for determination of coefficient of impact of jet on</li> </ol>	

			<p>flat and curved blades</p> <p>5 Calibration of flow measuring devices.</p> <p>PART B</p> <p>6 Performance on hydraulic Turbines a. Pelton wheel b. Francis Turbine c. Kaplan Turbines</p> <p>7 Performance hydraulic Pumps d. Single stage and Multi stage centrifugal pumps e. Reciprocating pump.</p> <p>8 Performance test on a two stage Reciprocating Air Compressor.</p> <p>9 Performance test on an Air Blower.</p> <p>PART C (OPTIONAL)</p> <p>10 Visit to Hydraulic Power station / Municipal Water Pump House and Case Studies</p> <p>11 Demonstration of cut section model of Hydraulic turbines and Pumps.</p>	
		<p>ENERGY CONVERSION LABORATORY</p>	<p>PART A</p> <p>1 Lab layout, calibration of instruments and standards to be discussed</p> <p>2 Determination of Flash point and Fire point of lubricating oil using Abel Pensky and Marten's (closed) / Cleveland's (Open Cup) Apparatus.</p> <p>3 Determination of Calorific value of solid, liquid and gaseous fuels.</p> <p>4 Determination of Viscosity of lubricating oil using Redwoods, Saybolt and Torsion</p>	

			<p>Viscometers.</p> <p>5 Valve Timing/port opening diagram of an I.C. Engine.</p> <p>PART B</p> <p>6 Performance Tests on I.C. Engines, Calculations of IP, BP, Thermal efficiency, Volumetric efficiency, Mechanical efficiency, SFC, FP, A:F Ratio, heat balance sheet for</p> <p>a. Four stroke Diesel Engine</p> <p>b. Four stroke Petrol Engine</p> <p>c. Multi Cylinder Diesel/Petrol Engine, (Morse test)</p> <p>d. Two stroke Petrol Engine</p> <p>Variable Compression Ratio I.C. Engine.</p> <p>7 Measurements of Exhaust Emissions of Petrol engine.</p> <p>8 Measurements of Exhaust Emissions of Diesel engine.</p> <p>PART C (OPTIONAL)</p> <p>9 Visit to Automobile Industry/service stations.</p> <p>10 Demonstration of <math>p</math>-<math>\theta</math>, <math>p</math>-<math>V</math> plots using Computerized IC engine test rig</p>	
		COMPUTER AIDED	<p>PART A</p> <p>1 Study of a FEA package and modeling and</p>	



		<p>MODELLING AND ANALYSIS LAB</p>	<p>stress analysis of:</p> <ul style="list-style-type: none"> <li>a. Bars of constant cross section area, tapered cross section area and stepped bar</li> <li>b. Trusses—(Minimum 2 exercises of different types)</li> <li>c. Beams—Simply supported, cantilever, beams with point load, UDL, beams with varying load etc. (Minimum 6 exercises)</li> <li>d. Stress analysis of a rectangular plate with a circular hole.</li> </ul> <p>PART B</p> <p>2 Thermal Analysis—1D &amp; 2D problem with conduction and convection boundary conditions (Minimum 4 exercises of different types) 3</p> <p>Dynamic Analysis to find:</p> <ul style="list-style-type: none"> <li>a) Natural frequency of beam with fixed–fixed end condition</li> <li>b) Response of beam with fixed–fixed end conditions subjected to forcing function</li> <li>c) Response of Bars subjected to forcing functions</li> </ul> <p>PART C (only for demo)</p> <p>4a. Demonstrate the use of graphics standards (IGES, STEP etc) to import the model from modeler to solver.</p>	
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			<p>b. Demonstrate one example of contact analysis to learn the procedure to carry out contact analysis.</p> <p>c. Demonstrate at least two different types of example to model and analyze bars or plates made from composite material.</p>	
		HEAT TRANSFER LAB	<p>PART A</p> <p>1 Determination of Thermal Conductivity of a Metal Rod.</p> <p>2 Determination of Overall Heat Transfer Coefficient of a Composite wall.</p> <p>3 Determination of Effectiveness on a Metallic fin.</p> <p>4 Determination of Heat Transfer Coefficient in free Convection</p> <p>5 Determination of Heat Transfer Coefficient in a Forced Convection</p> <p>6 Determination of Emissivity of a Surface.</p> <p>PART B</p> <p>7 Determination of Stefan Boltzmann Constant.</p> <p>8 Determination of LMDT and Effectiveness in a Parallel Flow and Counter Flow Heat Exchangers.</p> <p>9 Experiment on Boiling of Liquid and Condensation of Vapour.</p>	

		<p>10 Performance Test on a Vapour Compression Refrigeration.</p> <p>11 Performance Test on a Vapour Compression Air – Conditioner.</p> <p>12 Experiment on Transient Conduction Heat Transfer.</p> <p>PART C (OPTIONAL)</p> <p>13 Analysis of steady and transient heat conduction, temperature distribution of plane wall and cylinder using Numerical approach (ANSYS/CFD package).</p> <p>14 Determination of temperature distribution along a rectangular and circular fins subjected to heat loss through convection using Numerical approach (ANSYS/CFD package).</p>	
	<p>COMPUTER AIDED MANUFACTURING LAB</p>	<p>PART - A</p> <p>1 Manual CNC part programming using ISO Format G/M codes for 2 turning and 2 milling parts. Selection and assignment of tools, correction of syntax and logical errors, and verification of tool path using CNC program verification software. PART</p> <p>- B</p> <p>2 CNC part programming using CAM packages.</p>	

		<p>Simulation of Turning, Drilling, Milling operations.</p> <p>3 typical simulations to be carried out using simulation packages like: CademCAMLab-Pro, Master</p> <p>CAM. Program generation using software. Optimizes spindle power, torque utilization, and cycle time. Generation and printing of shop documents like process and cycle time sheets, tool list, and tool layouts. Cut the part in single block and auto mode and measure the virtual part on screen. Postprocessing of CNC programs for standard CNC control systems like FANUC, SINUMERIC and MISTUBISHI.</p> <p>PART - C</p> <p>3 (Only for Demo/Vivavoce)</p> <p>FMS (Flexible Manufacturing System): Programming of Automatic storage and Retrieval system (ASRS)</p> <p>and linear shuttle conveyor Interfacing CNC lathe, milling with loading/unloading arm and ASRS to be carried out on simple components.</p> <p>Robot programming: Using Teach Pendant &amp; Offline programming to perform pick and place, stacking of objects (2 programs).</p> <p>Pneumatics and Hydraulics, Electro-Pneumatics: 3 typical experiments on Basics of these topics to be conducted.</p>	
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		<p>DESIGN LAB</p>	<p>PART - A</p> <p>1 Determination of natural frequency, logarithmic decrement, damping ratio and damping coefficient in a single degree of freedom vibrating systems (longitudinal and torsional).</p> <p>2 Balancing of rotating masses</p> <p>3 Determination of critical speed of a rotating shaft</p> <p>4 Determination of equilibrium speed, sensitiveness, power and effort of Porter/Proell/Hartnell Governor.</p> <p>PART - B</p> <p>5 Determination of Fringe constant of Photo-elastic material using.</p> <p>a) Circular disc subjected to diametral compression.</p> <p>b) Pure bending specimen (four-point bending).</p> <p>6 Determination of stress concentration using Photo-elasticity for simple components like plate with a hole under tension or bending, circular disk with circular hole under compression, 2D Crane hook</p> <p>7 Determination of Pressure distribution in Journal bearing</p> <p>8 Determination of Principal Stresses and strains in a member subjected to combined loading</p>	
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			using Strain rosettes. 9 Determination of stresses in Curved beam using strain gauge	
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Sl. No.	Department	Laboratory Name	List of Experiments	Remarks
1	AIML	Data Structure Lab	<a href="https://vtu.ac.in/pdf/2018syll/is.pdf">https://vtu.ac.in/pdf/2018syll/is.pdf</a>	
2	AIML	Microcontroller Lab		
3	AIML	Mobile Application Development		
4	CSE		<a href="#">2018scheme-labexperiments</a> <a href="#">2021scheme-labexperiments</a>	
Sl. No.	Department	Laboratory Name	List of Experiments	Remarks
1	ISE	Data Structure Lab	<a href="https://vtu.ac.in/pdf/2018syll/is.pdf">https://vtu.ac.in/pdf/2018syll/is.pdf</a>	
2	ISE	Microcontroller Lab		
3	ISE	File Structure Lab		
4	ISE	Software Testing Lab		

5	ISE	Analysis and Design Lab		
6	ISE	Web Programming Lab		
7	ISE	Machine Learning Lab		
8	ISE	Mobile Application Development		
Sl. No.	Department	Laboratory Name	List of Experiments	Remarks
1	ISE	Data Structure Lab	<a href="https://vtu.ac.in/pdf/2018syll/is.pdf">https://vtu.ac.in/pdf/2018syll/is.pdf</a>	
2	ISE	Microcontroller Lab		
3	ISE	File Structure Lab		
4	ISE	Software Testing Lab		
5	ISE	Analysis and Design Lab		
6	ISE	Web Programming Lab		
7	ISE	Machine Learning Lab		
8	ISE	Mobile Application Development		

### 15.3 ComputingFacilities

- InternetBandwidth:300MBPS
- NumberandconfigurationofSystem:
- Totalnumber of systemsconnectedbyLAN:
- Totalnumberofsystem connectedbyWAN:
- Majorsoftwarepackagesavailable:
- Special purpose facilities available (Conduct of online Meetings/Webinars/Workshops, etc.)
- Facilitiesforconductofclasses/coursesinonlinemode(Theory&Practical)
- InnovationCell
- SocialMediaCell-

### 15.4 ComplianceoftheNationalAcademicDepository(NAD),applicableto PGCM/ PGDM Institutions and University Departments

### 15.5 Listoffacilitiesavailable

#### ● Games and Sports Facilities SPORTSINFRASTRUCTURE

Facility	Quantity (No's)	Area/size(mx m) includeextraspaces	Yearof establishment
Playground	3	16187sqm	1997
Basketballcourt	1	32X19	1997
Volleyballcourt	1	24X15	1997
Handball	1	40X20	1997
Throwballcourt	1	22X15	1997
Kabaddicourt	2	30X24	1997
Kho-kho	1	30X30	1997
Netball	1	40X25	1997
Cricketground	1	60mts5acers	1997



Footballground	1	110X70	1997
Athletictrack200m	1	5acers	1997
Indoor		Multi-purpose Indoorstadium	2008
Multi gym	1	50sqm	2008
Shuttlebadmintoncourt	2	446sqm	2008
Chess	5		1997
Tabletennis	1		2008
Caroms	1		2008

## +5.5Listoffacilitiesavailable

### ● Games and Sports Facilities +Description

#### SPORTSINFRASTRUCTURE

Facility	Quantity (No's)	Area/size(mx m) include extra space	Year of establishment
Playground	3	16187sqm	1997
Basketballcourt	1	32X19	1997
Volleyballcourt	1	24X15	1997
Handball	1	40X20	1997
Throwballcourt	1	22X15	1997
Kabaddicourt	2	30X24	1997
Kho-kho	1	30X30	1997
Netball	1	40X25	1997
Cricketground	1	60mts5acers	1997
Footballground	1	110X70	1997
Athletictrack200m	1	5acers	1997
Indoor		Multi-purpose Indoorstadium	2008
Multi gym	1	50sqm	2008
Shuttlebadmintoncourt	2	446sqm	2008
Chess	5		1997
Tabletennis	1		2008
Caroms	1		2008







● Extra-Curricular Activities: Yoga center



## Teaching Learning Process (TLP)

●Curriculum and syllabus for each of the Programmes as approved by the University

Sl. No.	BRANCH	Scheme	Link
1	Electronics & Communication Engineering	2018	<a href="https://vtu.ac.in/pdf/2018syll/is.pdf">https://vtu.ac.in/pdf/2018syll/is.pdf</a>  2018SCHEMESYLLABUS.pdf
		2021	<a href="https://vtu.ac.in/pdf/2021syll/isesch.pdf">https://vtu.ac.in/pdf/2021syll/isesch.pdf</a>  2021SYLLABUS.pdf
		2022	<a href="https://vtu.ac.in/pdf/2022_3to8/2ecesyll.pdf">https://vtu.ac.in/pdf/2022_3to8/2ecesyll.pdf</a>
2	Computer Science & Engineering	2018	<a href="https://vtu.ac.in/pdf/2018syll/cs.pdf">https://vtu.ac.in/pdf/2018syll/cs.pdf</a>
		2021	<a href="https://vtu.ac.in/pdf/2021syll/csesch.pdf">https://vtu.ac.in/pdf/2021syll/csesch.pdf</a>
		2022	<a href="https://vtu.ac.in/pdf/2022_3to8/2csesyll.pdf">https://vtu.ac.in/pdf/2022_3to8/2csesyll.pdf</a> <a href="https://vtu.ac.in/pdf/2022_3to8/3csesyll.pdf">https://vtu.ac.in/pdf/2022_3to8/3csesyll.pdf</a> <a href="https://vtu.ac.in/pdf/2022_3to8/6csesyll.pdf">https://vtu.ac.in/pdf/2022_3to8/6csesyll.pdf</a> <a href="https://vtu.ac.in/pdf/2022_3to8/7csesyll.pdf">https://vtu.ac.in/pdf/2022_3to8/7csesyll.pdf</a>
3	Information Science & Engineering	2018	<a href="https://vtu.ac.in/pdf/2018syll/is.pdf">https://vtu.ac.in/pdf/2018syll/is.pdf</a>
		2021	<a href="https://vtu.ac.in/pdf/2021syll/isesch.pdf">https://vtu.ac.in/pdf/2021syll/isesch.pdf</a>
		2022	<a href="https://vtu.ac.in/pdf/2022_3to8/2issyll.pdf">https://vtu.ac.in/pdf/2022_3to8/2issyll.pdf</a> <a href="https://vtu.ac.in/pdf/2022_3to8/3issyll.pdf">https://vtu.ac.in/pdf/2022_3to8/3issyll.pdf</a> <a href="https://vtu.ac.in/pdf/2022_3to8/6issyll.pdf">https://vtu.ac.in/pdf/2022_3to8/6issyll.pdf</a> <a href="https://vtu.ac.in/pdf/2022_3to8/7issyll.pdf">https://vtu.ac.in/pdf/2022_3to8/7issyll.pdf</a>
4	Artificial Intelligence & Machine Learning	2018	<a href="https://vtu.ac.in/pdf/2018syll/me.pdf">https://vtu.ac.in/pdf/2018syll/me.pdf</a>
		2021	<a href="https://vtu.ac.in/pdf/2021syll/mesch.pdf">https://vtu.ac.in/pdf/2021syll/mesch.pdf</a>
		2022	<a href="https://vtu.ac.in/pdf/2022_3to8/2aimlsyll.pdf">https://vtu.ac.in/pdf/2022_3to8/2aimlsyll.pdf</a> <a href="https://vtu.ac.in/pdf/2022_3to8/3aimlsyll.pdf">https://vtu.ac.in/pdf/2022_3to8/3aimlsyll.pdf</a> <a href="https://vtu.ac.in/pdf/2022_3to8/7aimlsyll.pdf">https://vtu.ac.in/pdf/2022_3to8/7aimlsyll.pdf</a>
5	Mechanical Engineering	2018	<a href="https://vtu.ac.in/pdf/2018syll/cv.pdf">https://vtu.ac.in/pdf/2018syll/cv.pdf</a>
		2021	<a href="https://vtu.ac.in/pdf/2021syll/cvsch.pdf">https://vtu.ac.in/pdf/2021syll/cvsch.pdf</a>
		2022	<a href="https://vtu.ac.in/pdf/2022_3to8/2mecsyll.pdf">https://vtu.ac.in/pdf/2022_3to8/2mecsyll.pdf</a> <a href="https://vtu.ac.in/pdf/2022_3to8/3mecsyll.pdf">https://vtu.ac.in/pdf/2022_3to8/3mecsyll.pdf</a> <a href="https://vtu.ac.in/pdf/2022_3to8/4mecsyll.pdf">https://vtu.ac.in/pdf/2022_3to8/4mecsyll.pdf</a>
6	Civil Engineering	2018	<a href="https://vtu.ac.in/pdf/2018syll/ai.pdf">https://vtu.ac.in/pdf/2018syll/ai.pdf</a>
		2021	<a href="https://vtu.ac.in/pdf/2021syll/aisch.pdf">https://vtu.ac.in/pdf/2021syll/aisch.pdf</a>
		2022	<a href="https://vtu.ac.in/pdf/2022_3to8/civs sch.pdf">https://vtu.ac.in/pdf/2022_3to8/civs sch.pdf</a> <a href="https://vtu.ac.in/pdf/2022_3to8/58civs sch.pdf">https://vtu.ac.in/pdf/2022_3to8/58civs sch.pdf</a> <a href="https://vtu.ac.in/pdf/2022_3to8/2civs syll.pdf">https://vtu.ac.in/pdf/2022_3to8/2civs syll.pdf</a> <a href="https://vtu.ac.in/pdf/2022_3to8/3civs syll.pdf">https://vtu.ac.in/pdf/2022_3to8/3civs syll.pdf</a> <a href="https://vtu.ac.in/pdf/2022_3to8/4civs syll.pdf">https://vtu.ac.in/pdf/2022_3to8/4civs syll.pdf</a>

For each Post Graduate Course give the following:

● Title of the Course

-NA-

● Curricula and Syllabi

-NA-

● Laboratory facilities exclusive to the Post Graduate Course

-NA-

### 15.8 Special Purpose

● Software, all design tools in case

- Cadence

● Academic Calendar and framework