

2.3.2 - Teachers use ICT-enabled tools including online resources for effective teaching and learning

Teaching Methodologies

Following is the summary of teaching aids used by several faculty members for teaching-learning process.

1. Black Board-BB
2. Liquid Crystal Display-LCD
3. NPTEL Videos- NV
4. CHART-C
5. Student Seminar-SS
6. Guest Lecture-GL
7. Power point presentation-PPT
8. Massive Open Online Course-MOOC
9. Industrial visit

Teaching Modes

Subject name	BB	LCD/ D	NV	C	SS	GL	PPT	MOOC	IV
PTSP	√	√					√		
DLD	√	√	√		√		√		
EDC	√	√	√	√			√		√
SS	√	√	√				√	√	
ECA	√	√					√		
EMTL	√	√	√				√	√	
AWP	√	√	√		√	√	√	√	√
ADC	√	√		√		√	√		
LDIC	√	√			√		√		
CS	√	√					√		
COOS	√	√	√	√					
DCN	√	√	√		√		√		
VLSI	√		√			√	√		√
MPMC	√	√	√	√	√		√		
DSP	√	√	√		√	√	√		
MWE	√					√	√		
ESD	√					√	√	√	
CMC	√					√	√	√	√
DIP	√	√	√	√		√	√	√	
SC	√	√					√		
RS	√	√			√		√		
WCN	√					√	√		√

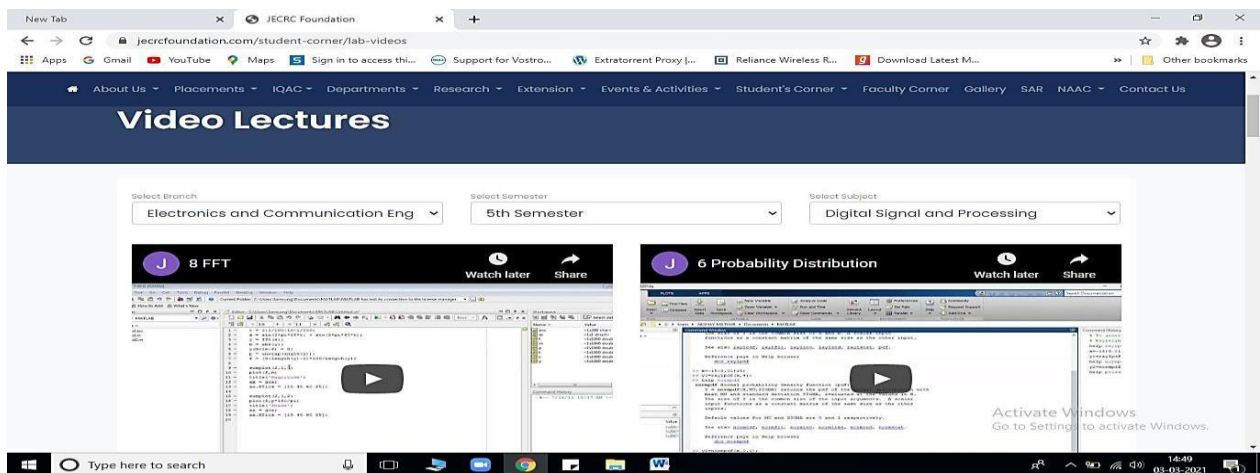
Table 2.27 : Teaching Methodologies

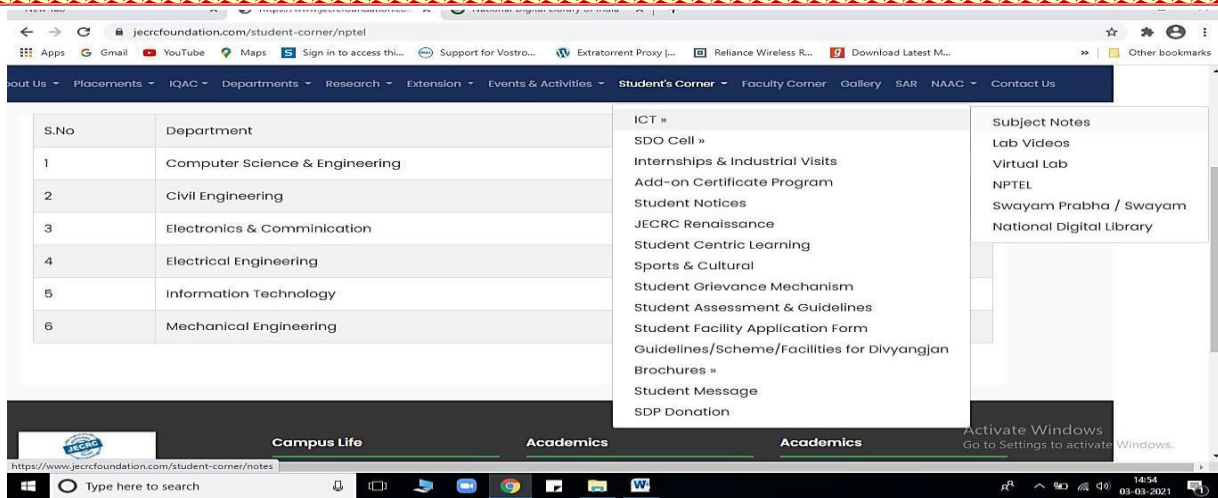
ACADEMIC YEAR	MODE OF TEACHING		PERCENTAGE
2021-2022	Black Board Teaching		50
	ICT BASED TEACHING	NPTEL LECTURES	10
		DIGITAL TEACHING THROUGH PPT	5
		BLOG SPOT	5
		ONLINE TEACHING THROUGH ZOOM OR GOOGLE MEET	20
		TECHNICAL QUIZ	5
ROLEPLAY	5		
2020-21	Black Board Teaching		10
	ICT BASED TEACHING	NPTEL LECTURES	15
		DIGITAL TEACHING THROUGH PPT	10
		BLOG SPOT	5
		ONLINE TEACHING THROUGH ZOOM OR GOOGLE MEET	60
2019-20	Black Board Teaching		65
	ICT BASED TEACHING	NPTEL LECTURES	10
		DIGITAL TEACHING THROUGH PPT	10
		BLOG SPOT	5
		ONLINE TEACHING THROUGH ZOOM OR GOOGLE MEET	10

ICT METHOD:

ICT enabled tools used for student’s development in the following manner:

- Attending classes through Google classroom, Google-meet, zoom, etc.
- Studying via videos provided by the faculty members (provided in the below screen shots)





- Company – Specific Training and placement Drive.
- Industry Institution Interaction.
- Swayam- NPTEL and MOOC videos.

● **The faculty members used ICT facilities for the following Purposes**

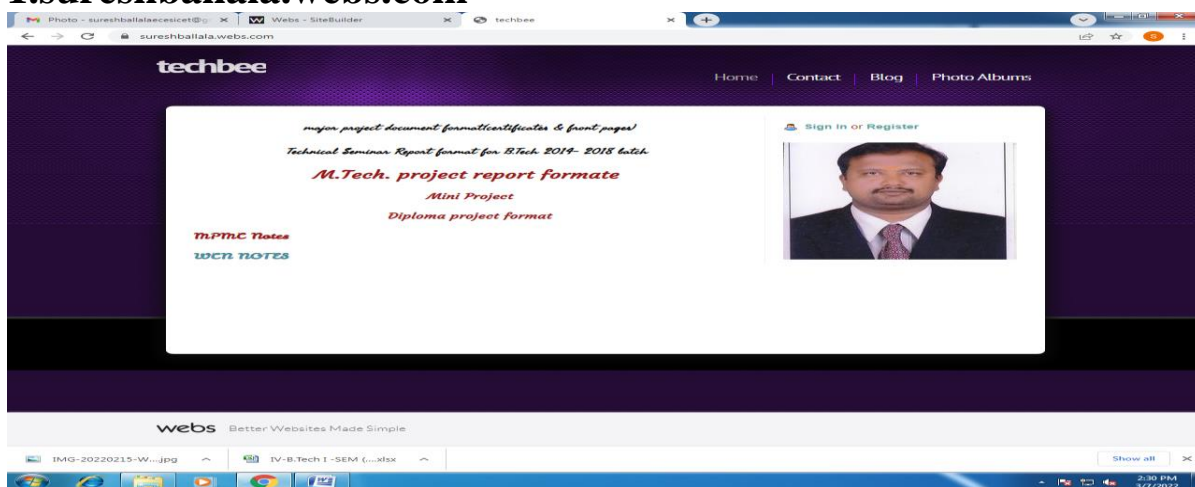
- Swayam-NPTEL and MOOC videos.
- Dissemination of video lecturers, video labs/ virtual labs.
- Industry-Institute Interaction (FDP/Conferences/ Webinars).
- For continuous assessment (For assignments/tutorial etc.,).
- Faculty members have uploaded their Lecture notes, videos, lab – practical on their websites and shared the links among the students.

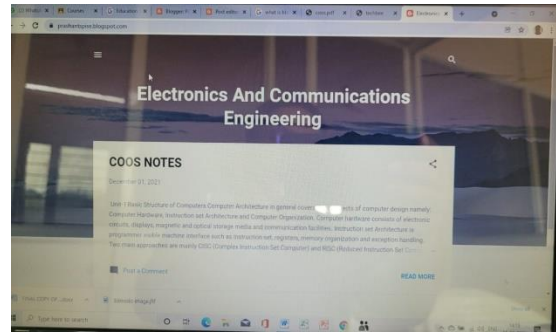
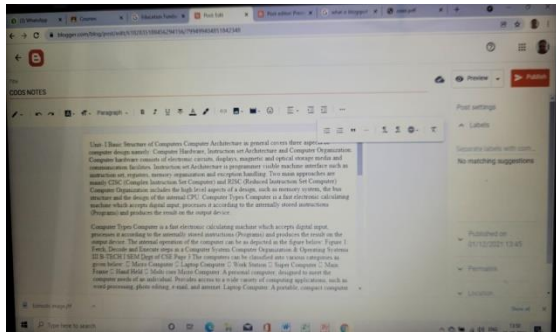
BLOG SPOT:

Each faculty members created a blog and uploaded their technical notes to share the knowledge among the students.

Few Faculty members sample Blog Spot details:

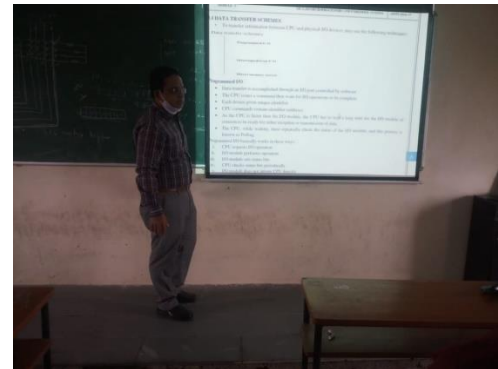
1.sureshballala.webs.com





Audio-Visual Presentations:

In many subjects (wherever necessary) audio-visual aids are used. It is a proved fact that audio-visual presentations in the classrooms are more effective in capturing the attention of students.



Digital Teaching:

Every classroom is provided with LED projector. The faculty member can use black board, LED projector judiciously during the lecture delivery.

SRI INDU COLLEGE OF ENGINEERING & TECHNOLOGY
 (An Autonomous Institution under UGC, New Delhi)
 Recognized under 2(D) and 12 (B) of UGC Act 1956
 Approved by AICTE and Permanently Affiliated to JNTU, Hyderabad.
 Sheriguda(V), Ibrahimpatnam(M), R.R.D.

ELECTRONICS AND COMMUNICATION ENGINEERING CENTRAL LIBRARY DETAILS

- 1. Total Volumes : 1
- 2. Total Titles : 1
- 3. Print Journals : 30
- National Journals : 18
- International Journals : 12

SELF LEARNING MATERIALS/E-RESOURCES

- 4. E-Journals : 402
- DELNET - National Journals- 31 International Journals- 10
- J-Gate - National Journals-247 International Journals- 114
- 5. NPTEL (National Programme on Technology and Enhanced Learning)
- No. of Courses : 44
- No. of Video Lectures : 1739
- No. of Text of Video Lectures : 1474
- No. of PDF Lectures (web courses): 8
- 6. SONET (Society for Networking for Excellence in Technical Education)
- No. of Courses : 7
- No. of Video Lectures : 128
- 7. EKEEDA Resources
- No. of Subject : 27
- No. of Courses : 3406
- 8. E-Books (eshodhinsindu N-List) : 2926
- 9. NDLI National Digital Library of India

DEPARTMENTAL LIBRARY

- 1. Total Volumes : 1
- 2. Total Titles : 1

SRI INDU COLLEGE OF ENGINEERING & TECHNOLOGY
 (An Autonomous Institution under UGC, New Delhi)
 Recognized under 2(D) and 12 (B) of UGC Act 1956
 Approved by AICTE and Permanently Affiliated to JNTU, Hyderabad.
 Sheriguda(V), Ibrahimpatnam(M), R.R.D.

DIGITAL LIBRARY

The Digital Library provides online resources for students and faculty. Digital Library is a library in which collections are stored in digital formats and accessible by computers. The digital content may be stored in CDs/DVDs locally, or accessed remotely via computer networks. A digital library is a type of information retrieval system with 40 computers of 100 Mbps speed internet. NPTEL Video Lectures and Text of video lectures in PDF format from IITs and IISc, SONET Lectures, EKEEDA Digital Library Videos, E-content and E-books are maintaining by DSpace and Calibre E-Book Management software in the digital library.

DSpace Institutional Digital Repository/LMS: The aim of this digital repository is to provide free service to Staff and students. It is a digital service that collects, preserves, distributes rare digital material and provides resource links. Users can access self learning e-content like E-journals from J-Gate and DELNET, E-books from eshoshindu NLIST, Calibre E-book management software, NPTEL Videos, MIT Videos, Open source content and other digital information. DSpace URL: <http://192.168.8.220/jspui/>

E-RESOURCES

S.No	Details	No. of E-Resources
1	E-Journals	402
	National: 1643+670	2313
	International: 788+120	908
2	E-Books (N-List and Calibre)	2753
3	EKEEDA Digital Library Videos	171
	No. of Subject	20099
4	NPTEL Video Lectures	5287
5	NPTEL Text of Video Lectures	8403
6	NPTEL PDF Materials	88
7	SONET Videos	264
8	Multimedia CD and DVDs	2403
9	LMS/Institutional Repository	DSpace
10	Databases	DELNET
11	E-Resources	J-Gate Engineering & Technology DELNET INFUBNET N-LIST e-shodhinsindu EKEEDA Video Lectures National Digital Library (NDLI) NPTEL E-Resources
12	MOOCs (Massive Open Online Courses)	SWAYAM NPTEL Online Courses Coursera Online Courses Swayamprabha DTH Channel

SELF LEARNING/REMOTE ACCESS E-RESOURCES

S.No	Resource Name	Website Address
1	Eshodhsindu N-List	https://nlist.inflibnet.ac.in/veresources.php
2	J-Gate Engineering & Technology	https://jgateplus.com/search/login/
3	DELNET	http://164.100.247.26/
4	EKEEDA Video Courses	https://ekeeda.com/catalog/academic
Remote Access Facilities (For Login and Password contact Librarian)		
5	Library website	https://sriindu.ac.in/library
6	Library OPAC	http://192.168.8.117:8080/newgenlibcbxt/
7	DSpace Institutional Repository/LMS	http://192.168.8.220/jspui/

REMOTE ACCESS - CREDENTIALS

- Eshodhsindu N-List :**
User Name : sriinducentrallibrary@gmail.com
Pass Word : library
- J-Gate Engineering & Technology:** <https://jgateplus.com/>
User Name : induuser
Password : induuser1468156003
- DELNET:** <http://164.100.247.26/> or <https://delnet.in>
User Name : tgsicet
Password : sic8382
- EKEEDA :** <https://ekeeda.com/catalog/academic>
For Login and Password contact Librarian

NPTEL Lectures:

To promote self learning and share knowledge among students.

To enhance the quality of engineering education, on tip compatibility and resources for beyond curriculum.

**NPTEL - SELF LEARNING MATERIAL
VIDEO LECTURES -ECE**

S. No.	Course Name	Author/Coordinator	Institute	No. of Lectures
1	CMOS Analog VLSI Design	Prof. A.N. Chandorkar	IIT Bombay	29
2	Adaptive Signal Processing	Prof. Mrityunjay Chakraborty	IIT Kharagpur	8
3	Adv. Digital Signal Processing - Multirate and wavelets	Prof. V.M. Gadre	IIT Bombay	50
4	Advanced 3G and 4G Wireless Mobile Communications	Prof. Aditya K. Jagannatham	IIT Kanpur	41
5	Advanced Optical Communication	Prof. R.K. Shevgaonkar	IIT Bombay	37
6	Analog Circuits and Systems 1	Prof. K. Radhakrishna Rao	Prof (Retd.) IIT Madras, Texas Instruments, India	38
7	Analog IC Design	Dr. Nagendra Krishnapura	IIT Madras	57
8	Basic Electrical Circuits	Dr. Nagendra Krishnapura	IIT Madras	22
9	Basic Electronics	Prof. Chitralekha Mahanta	IIT Guwahati	28
10	Basic Electronics	Prof. Natarajan	IIT Madras	40
11	Broadband Networks: Concepts and Technology	Prof. Abhay Karandikar	IIT Bombay	29
12	Circuits for Analog System Design	Prof. M.K. Gunasekaran	ISE Bangalore	25
13	Coding Theory	Dr. Andrew Thangaraj	IIT Madras	33
14	Communication Engineering	Prof. Surendra Prasad	IIT Delhi	27
15	Digital Circuits and Systems	Prof. S. Srinivasan	IIT Madras	37
16	Digital Communication	Prof. Bikash Kumar Dey	IIT Bombay	32
17	Digital Computer Organization	Prof. P.K. Biswas	IIT Kharagpur	26
18	Digital Image Processing	Prof. P.K. Biswas	IIT Kharagpur	25
19	Digital Signal Processing	Prof. S.C. Datta Roy	IIT Delhi	43
20	Digital Switching	Prof. Yatindra N Singh	IIT Kanpur	37

**NPTEL TEXT OF VIDEO LECTURES (PDF format)
ECE**

S.No.	Name of the Course	No. of Lectures
1	Adaptive Signal Processing	41
2	Adv. Digital Signal Processing - Multirate and wavelets	31
3	Advanced 3G and 4G Wireless Mobile Communications	40
4	Advanced Optical Communication	41
5	Analog IC Design	60
6	Basic Electrical Circuits	21
7	Basic Electronics	33
8	Broad Networks Concepts & Technology	32
9	Circuits for Analog System Design	29
10	Coding Theory	38
11	Communication Engineering	41
12	Digital Circuits and Systems	40
13	Digital Communication	32
14	Digital Computer Organization	28
15	Digital Image Processing	40
16	Digital Signal Processing	43
17	Digital Switching	35
18	Digital Systems Design	39
19	Digital Voice Picture Communications	33
20	Electronics for Analog Signal Processing - II	39
21	Electronics for Analog Signal Processing-I	38
22	Error Correcting Codes	42
23	High Speed Devices and Circuits	41
24	Information Theory and Coding	41
25	MEMS and Microsystems	32
26	MEMS and Microsystems	32
27	Neural Networks and Applications	37
28	Pattern Recognition	42
29	Pattern Recognition and Application	39
30	Probability and Random Processes	40
31	RF Integrated Circuits	39
32	Signals and Systems	45
33	Solid State Devices	42
34	Transmission Lines and EM Waves	59
35	VLSI Circuits	55
36	VLSI Data Conversion Circuits	60
37	VLSI Technology	25
38	Wireless Communications	38

**NPTEL PDF LECTURES (Web Courses)
ECE**

S. No	Name of the Course
1	Digital image processing
2	Digital signal processing
3	Embedded systems
4	Microcontrollers
5	Microprocessors & microcontrollers
6	Principles of communication
7	Semiconductor devices

**SONET VIDEO LECTURES
(Society for Networking For Excellence in Technical Education)
ECE**

S. No	Course Name	No. of Lectures
1	Electronics devices and circuits	30
2	Power electronics	8
3	Switching theory and logic design	30
4	Linear and digital ic applications	24
5	Digital signal processing	8
6	Communication theory	24
7	Solid state physics	4
TOTAL		128

21	Digital System design with PLDs and FPGAs	Prof. Kuruvilla Varghese	ISE Bangalore	43
22	Digital Systems Design	Prof. D. Raghunathary	IIT Kharagpur	40
23	Digital Voice & Picture Communication	Prof. Somnath Sengupta	IIT Kharagpur	40
24	Digital VLSI Systems Design	Prof. Ramachandran	IIT Madras	55
25	Electronics for Analog Signal Processing - I	Prof. K. Radhakrishna Rao	Prof (Retd.) IIT Madras, Texas Instruments, India	37
26	Electronics for Analog Signal Processing - II	Prof. K. Radhakrishna Rao	Prof (Retd.) IIT Madras, Texas Instruments, India	40
27	Embedded Software Testing	MADRIKESHWARA H M	HCL	45
28	Error Correcting Codes	Prof. P. Vijay Kumar	ISE Bangalore	40
29	High Speed Devices and Circuits	Prof. K.N. Bhat	IIT Madras	39
30	Information Theory and Coding	Prof. S.N. Merchant	IIT Bombay	36
31	Linux Programming & Scripting	Anand Iyer	Calypto Design Systems	43
32	MEMS and Microsystems	Prof. Sautiram Kal	IIT Kharagpur	32
33	Neural Networks and Applications	Prof. Somnath Sengupta	IIT Kharagpur	35
34	NOC: Basic Electrical Circuits	Dr. Nagendra Krishnapura	IIT Madras	143
35	NOC: Digital Circuits and Systems	Prof. Shankar Balachandran	IIT Madras	53
36	Probability and Random Processes	Prof. Mrityunjay Chakraborty	IIT Kharagpur	33
37	RF Integrated Circuits (CMOS RF Integrated Circuits)	Dr. Shoubhata Chatterjee	IIT Delhi	40
38	Semiconductor Device Modeling	Prof. S. Karmalkar	IIT Madras	38
39	Signals and Systems	Prof. K.S. Venkatesh	IIT Kanpur	35
40	Solid State Devices	Prof. S. Karmalkar	IIT Madras	42
41	Transmission Lines and EM Waves	Prof. R.K. Shevgaonkar	IIT Bombay	45
42	VLSI Data Conversion Circuits	Dr. Shashi Pavan	IIT Madras	62
43	VLSI Technology/VLSI Design	Dr. Nandita Dasgupta	IIT Madras	30
44	Wireless Communication	Prof. Ranjan Bose	IIT Delhi	29

**EKEEDA Digital Library Video Lectures
Self Learning Courses
Branch: ECE**

S.No.	Course Name	No. of Videos
1	Electronic Instruments and Measurements	156
2	Digital System Design	247
3	Electronic Devices and Circuits 2	121
4	Microprocessors	95
5	Electromagnetic Engineering	259
6	Microcontroller	68
7	Computer Organization and Architecture	149
8	Microwave Engineering	290
9	Signals and Systems	352
10	VLSI Design	44
11	Digital Signal Processing	124
12	Computer Communication and Networks	57
13	Biomedical Instrumentation	49
14	Power Electronics	55
15	Linear Control System	138
16	Design with Linear Integrated Circuits	98
17	Database Management System	153
18	Embedded System and RTOS	65
19	Analog and Mixed VLSI Design	164
20	Internet of Things	77
21	Microprocessor and its Application	60
22	Principles of Communication Engineering	51
23	Microprocessors and Peripherals Interfacing	55
24	Data Structures Using C	150
25	Advanced Digital Signal Processing	170
26	Microcontroller and its Application	51
27	Basic Electronics	108
TOTAL		3406

**DELNET E-JOURNALS
NATIONAL**

S.No.	ECE
1	AIMS Electronics and Electrical Engineering
2	EAI Endorsed Transactions on Industrial Networks and Intelligent Systems
3	Electrical, Control and Communication Engineering
4	Electronics
5	Electronics Letters
6	Facts Universitatis, Series: Electronics and Energetics
7	ICTACT Journal on Communication Technology
8	IEEE Open Journal of Power Electronics
9	IEEE Open Journal of the Communications Society
10	IEEE Open Journal of the Industrial Electronics Society
11	IET Communications
12	IET Optoelectronics
13	IET Power Electronics
14	IET Quantum Communication
15	IOSR Journal of Electronics and Communication Engineering(IOSR-JECE)
16	ISEL Academic Journal of Electronics, Telecommunications and Computers
17	ITB Journal of Information and Communication Technology
18	Journal of Computer Systems, Networks, and Communications
19	Journal of Electronics and Information Science
20	Journal of Electronics, Electromedical Engineering, and Medical Informatics
21	Journal of ICT
22	Journal of Information Systems and Telecommunication
23	Journal of Internet Services and Applications
24	Journal of Low Power Electronics and Applications
25	npj Flexible Electronics
26	Power Electronics and Drives
27	Research Briefs on Information & Communication Technology Evolution
28	Semiconductor Physics, Quantum Electronics & Optoelectronics
29	Solid State Electronics Letters
30	The African Journal of Information and Communication
31	University of Sindh Journal of Information and Communication Technology

INTERNATIONAL

S.No.	ECE
1	American Journal of Electrical and Electronic Engineering
2	American Journal of Embedded Systems and Application
3	Iranian Journal of Electrical and Electronic Engineering
4	International Journal of Computer and Communication Engineering
5	International Journal of Computers Communications & Control
6	International Journal of Electrical and Electronic Engineering & Telecommunication
7	International Journal of Electrical, Electronics and Data Communication(IJEEEDC)
8	International Journal of Electronics and Telecommunications
9	International Journal of Engineering Research in Electronics and Communication Engineering
10	International Journal of Wireless & Mobile Network (IJWMN)

**ECE- J-Gate Journals
NATIONAL**

S.No.	JOURNAL NAME
1	Journal of Analog and Digital Communications
2	Journal of Analog and Digital Devices
3	Journal of Biotechnology and Nanotechnology
4	Journal of Communication and Information Technology
5	Journal of Communication Engineering and its Innovations
6	Journal of Communication Technology and Human Behaviors
7	Journal of Communication, Navigation, Sensing and Services
8	Journal of Communications
9	Journal of Control and Instrumentation Engineering
10	Journal of Control Engineering and Technology
11	Journal of Control Science and Engineering
12	Journal of Control Systems and Control Instrumentation
13	Journal of Control System and Control Instrumentation
14	Journal of Controller and Converters
15	Journal of Design Communication
16	Journal of Digital Integrated Circuits in Electrical Devices
17	Journal of Electronic Design Engineering
18	Journal of Electronic Publishing
19	Journal of Electronic Research and Application
20	Journal of Electronic Science and Technology
21	Journal of Electronics

22	Journal of Electronics and Communication Engineering and Technology
23	Journal of Electronics and Communication Engineering Research
24	Journal of Electronics and Communication Engineering Research
25	Journal of Electronics and Communication Systems
26	Journal of Electronics and Information Science
27	Journal of Electronics, Communication and Instrumentation Engineering Research
28	Journal of Embedded Systems
29	Journal of Embedded Systems and Processing
30	Journal of Engineering
31	Journal of Engineering and Technology
32	Journal of Engineering Research
33	Journal of ICT Research and Applications
34	Journal of IHMEK
35	Journal of Image and Signal Processing
36	Journal of Image Processing Theory and Applications
37	Journal of Information and Communication Convergence Engineering
38	Journal of Information and Communication Technology
39	Journal of Information and Telecommunication
40	Journal of Information Systems and Communication
41	Journal of Information Systems and Telecommunication
42	Journal of Instrumentation and Innovation Sciences
43	Journal of Media and Communication Studies
44	Journal of Microwaves, Optoelectronics and Electromagnetic Applications
45	Journal of Mobile Technologies, Knowledge and Society
46	Journal of Modeling, Simulation, Identification and Control
47	Journal of Multi-Disciplinary Engineering Technologies
48	Journal of Optical Fibre Communications
49	Journal of Optoelectronics Engineering
50	Journal of Programmable Devices, Circuits, and Systems
51	Journal of Radio and Television Broadcast
52	Journal of Sensor and Actuator Networks
53	Journal of Sensor Science and Technology
54	Journal of Sensor Technology
55	Journal of Sensors
56	Journal of Sensors and Instrumentation
57	Journal of Signal and Image Processing
58	Journal of Signal and Information Processing
59	Journal of Signal Processing
60	Journal of Signal Processing
61	Journal of Signal Processing and Wireless Networks
62	Journal of Signal Processing Theory and Applications
63	Journal of Switching Hub
64	Journal of Technological Advances and Scientific Research
65	Journal of Telecommunication Study
66	Journal of Telecommunications and Information Technology

67	Journal of Telecommunications System and Management
68	Journal of the Institute of Electronics and Information Engineers
69	Journal of the Korea Institute of Information and Communication Engineering
70	Journal of Theoretical and Applied Electronic Commerce Research
71	Journal of VLSI Design and Signal Processing
72	Journal of Wireless Mobile Networks, Ubiquitous Computing, and Dependable Applications
73	Journal of Wireless Networking and Communications
74	ABC Journal of Advanced Research
75	Acta Electrotechnica et Informatica
76	Active and Passive Electronic Components
77	Advanced Signal Processing
78	Advances in Electronics
79	Advances in Image and Video Processing
80	Advances in Microelectronic Engineering
81	Advances in Microwave and Wireless Technologies
82	Advances in Networks
83	Advances in Nonlinear Optics
84	Advances in Optical Technologies
85	Advances in Radio Science
86	Advances in Signal Processing
87	Advances in Wireless Communications and Networks
88	American Communication Journal
89	American Journal of Circuits, Systems and Signal Processing
90	American Journal of Circuits, Systems and Signal Processing
91	American Journal of Electromagnetics and Applications
92	American Journal of Embedded Systems and Applications
93	American Journal of Engineering and Technology Management
94	American Journal of Mobile Systems, Applications and Services
95	American Journal of Networks and Communications
96	American Journal of Sensor Technology
97	American Journal of Signal Processing
98	American Journal of Vehicle Design
99	American Research Journal of Electronics and Communication Engineering
100	Application of Information and Communication Technology
101	APSPA Transactions on Signal and Information Processing
102	Automatika Journal for Control, Measurement, Electronics, Computing and Communications
103	Bahria University Journal of Information and Communication Technologies
104	BREEL Journal
105	BIOINFORM Sensor Networks
106	Bonifring International Journal of Advances in Image Processing
107	Bonifring International Journal of Research in Communication Engineering
108	CEED - Communications Engineering and Design
109	Cell Signalling and Trafficking
110	Circuits and Systems
111	Circuits and Systems: An International Journal

112	CLEI Electronic Journal
113	Communication Theory and Research
114	Communications
115	Communications and Network
116	Communications and Strategies
117	Communications Engineering Journal
118	Communications in Control Science and Engineering
119	Communications in Information and Systems
120	Communications in Mobile Computing
121	Communications News
122	Communications of the IMA
123	Communications Today
124	Computing, Performance and Communication Systems
125	Control Theory and Informatics
126	CSI Communications
127	CSIR News
128	Defense Science Journal
129	Defense Electronics
130	Digital Communications and Networks
131	DJ Journal of Advances in Electronics and Communication Engineering
132	EHD Journal of Engineering, Technology and Innovative Research
133	Electrical Engineering and Electromechanics
134	Electronic Communications of the EAEST
135	Electronic Journal of Information Systems in Developing Countries
136	Electronic Research Announcements (ERA-MS)
137	Electronics
138	Electronics
139	Electronics and Power
140	Electronics Weekly
141	ELK Asia Pacific Journal of Electronics and Communication Technology
142	Embedded Selforganising Systems
143	Engineering Systems
144	Engineering and Technology
145	Engineering Letters
146	Engineering Science and Technology
147	EURASIP Journal on Advances in Signal Processing
148	EURASIP Journal on Embedded Systems
149	EURASIP Journal on Image and Video Processing
150	EURASIP Journal on Wireless Communications and Networking
151	Facts Universitatis Series: Electronics and Energetics
152	Flexible and Printed Electronics
153	Global Journal of Control Engineering and Technology
154	Global Journal of Engineering Research
155	Greener Journal of Electronics and Communication
156	Hans Journal of Wireless Communications

157	ICT Express
158	ICTACT Journal on Communication Technology
159	ICTACT Journal on Image and Video Processing
160	IEEE Journal on Exploratory Solid-State Computational Devices and Circuits
161	IEEE Photonics Journal
162	IEEE Solid-State Circuits Letters
163	IEEE Technical Committee on Learning Technology
164	IEESE International Journal of Science and Technology
165	IEICE Electronics Express
166	Image Processing on Line
167	Indian Journal of Science Communication
168	Industrial Safety News
169	Information Research: An International Electronic Journal
170	Information Systems and Signal Processing Journal
171	Information Systems Electronic Journal
172	Instrumentation and Equipments
173	Instruments
174	Interactive Multimedia Electronic Journal of Computer-Enhanced Learning
175	KOMU: International Journal of Pure Communication Inquiry
176	Majlesi Journal of Telecommunication Devices
177	Media and Communication
178	Micro
179	MIT International Journal of Electronics and Communication Engineering
180	Mobile Information Systems
181	Modern Electronic Technology
182	Nano Vision
183	Natural Products and Resources Repository
184	Nature Electronics
185	Network and Communication Technologies
186	Northwestern Journal of Technology and Intellectual Property
187	Offshore Engineer
188	Open Journal of Circuits and Systems
189	Open Signal Processing Journal
190	Palaeontologia Electronica
191	Pepperdine Journal of Communication Research
192	Printed Circuit Design and Manufacture
193	Printed Circuit Fabrication
194	Progress in Electromagnetics Research
195	Progress in Electromagnetics Research B
196	Progress in Electromagnetics Research C
197	Progress in Electromagnetics Research Letters
198	Progress in Electromagnetics Research M
199	Radio Electronics, Computer Science, Control
200	RCR Wireless News
201	Recent Advances in Communications and Networking Technology

202	Recent Patents on Signal Processing
203	Research Journal of Modeling and Simulation
204	Research Letters in Electronics
205	Research Letters in Signal Processing
206	Research Open Journal of Wireless Networks and Applications
207	Revista Electrónica Tecceen
208	Scholarly and Research Communication
209	Science Journal of Circuits, Systems and Signal Processing
210	Scientific Bulletin of the Politehnica University of Timisoara : Transactions on Electronics and Communications
211	Scientific Journal of Control Engineering
212	Scientific Review
213	Security and Communication Networks
214	Sensors
215	Sensors and Transducers Journal
216	Signal and Image Processing
217	Signal Processing : An International Journal
218	Signal Processing Research
219	Sound and Video Contractor
220	SSRG International Journal of Electronics and Communication Engineering
221	SSRG International Journal of VLSI and Signal Processing
222	Telecommunications and Electronics
223	Television
224	This Week in Consumer Electronics
225	Turkish Journal of Fuzzy Systems
226	Universal Journal of Communications and Network
227	Universal Journal of Control and Automation
228	Universal Journal of Engineering Science
229	Vehicle Engineering
230	VLSI Design
231	Voice and Data
232	Wireless and Mobile Technologies
233	Wireless Communications and Mobile Computing
234	Wireless Engineering and Technology
235	Wireless Sensor Network
236	Wireless Week
237	World Journal Control Science and Engineering
238	World Research Journal of Telecommunications Systems
239	World Scientific Research
240	WSEAS Transactions on Circuits and Systems
241	WSEAS Transactions on Signal Processing
242	IOSR Journal of Electronics and Communication Engineering
243	IOSR Journal of VLSI and Signal Processing
244	ISRN Communications and Networking
245	ISRN Electronics

246	ISRN Sensor Networks
247	ISRN Signal Processing

INTERNATIONAL JOURNALS	
1	International Journal for Research in Electronics and Communication Engineering
2	International Journal for Research in Electronics and Electrical Engineering
3	International Journal for Research in Science Engineering and Technology
4	International Journal of ACM Jordan
5	International Journal of Ad hoc, Sensor and Ubiquitous Computing
6	International Journal of Advanced Electronics and Communication Engineering
7	International Journal of Advanced Information in Engineering and Technology
8	International Journal of Advanced Research in Electronics, Communication and Instrumentation Engineering and Development
9	International Journal of Advanced Scientific and Technical Research
10	International Journal of Advanced Scientific Research
11	International Journal of Advances in Electronics and Computer Science
12	International Journal of Advances in Embedded Systems
13	International Journal of Advances in Engineering and Scientific Research
14	International Journal of Advances in Signal and Image Sciences
15	International Journal of Advances in Telecommunications, Electrotechnics, Signals and Systems
16	International Journal of Applied Electronics in Physics and Robotics
17	International Journal of Applied Engineering Research, Dindigul
18	International Journal of Chaos, Control, Modelling and Simulation
19	International Journal of Circuits and Electronics
20	International Journal of Circuits, Systems and Signal Processing
21	International Journal of Communication and Signal Processing
22	International Journal of Communication Network and Security
23	International Journal of Communication Networks and Information Security
24	International Journal of Communication Technology for Social Networking Services
25	International Journal of Communications
26	International Journal of Communications
27	International Journal of Communications
28	International Journal of Communications, Network and System Sciences
29	International Journal of Control and Automation
30	International Journal of Control Systems and Robotics
31	International Journal of Current Research in Embedded System and VLSI Technology
32	International Journal of Design, Analysis and Tools for Integrated Circuits and Systems
33	International Journal of Digital Communication and Networks
34	International Journal of Electrical, Electronics and Computer Systems
35	International Journal of Electrical, Electronics and Data Communication
36	International Journal of Electronic Engineering and Computer Science

37	International Journal of Electronics and Communication Engineering and Technology
38	International Journal of Electronics and Communication Engineering Research and Development
39	International Journal of Electronics and Telecommunications
40	International Journal of Electronics Communication and Computer Engineering
41	International Journal of Electronics Communication and Computer Technology
42	International Journal of Electron Signals and Systems
43	International Journal of Electronics, Communication and Instrumentation Engineering Research and Development
44	International Journal of Electronics, Communication and Soft Computing Science and Engineering
45	International Journal of Embedded Systems and Applications
46	International Journal of Emerging Trends in Engineering and Development
47	International Journal of Engineering and Applied Sciences
48	International Journal of Engineering and Technical Research
49	International Journal of Engineering and Technology
50	International Journal of Engineering and Technology
51	International Journal of Engineering Research
52	International Journal of Engineering Research and Science
53	International Journal of Engineering Research in Electronics and Communication Engineering
54	International Journal of Image, Graphics and Signal Processing
55	International Journal of Image Processing and Vision Sciences
56	International Journal of Image Processing and Visual Communication
57	International Journal of Informatics and Communication Technology
58	International Journal of Informatics and Communication Technology Research
59	International Journal of Information and Electronics Engineering
60	International Journal of Information Engineering and Electronic Business
61	International Journal of Information Engineering and Electronic Business
62	International Journal of Innovations in Engineering and Technology
63	International Journal of Innovative Research in Electronics and Communications
64	International Journal of Innovative Technology and Creative Engineering
65	International Journal of Instrumentation and Control Systems
66	International Journal of Instrumentation and Measurement
67	International Journal of Instrumentation Science
68	International Journal of Instrumentation, Control and Automation
69	International Journal of Interactive Mobile Technologies
70	International Journal of Latest Trends in Engineering and Technology
71	International Journal of Managing Public Sector Information and Communication Technologies
72	International Journal of Massive Parallel Processing and Grid Computing
73	International Journal of Microwave Science and Technology
74	International Journal of Mobile Network Communications and Telematics
75	International Journal of Modern Communication Technologies and Research
76	International Journal of Nano Device, Sensor and Systems
77	International Journal of Network and Communication Research

78	International Journal of Networks and Communications
79	International Journal of Novel Research in Electronics and Communication
80	International Journal of Optoelectronic Engineering
81	International Journal of Radio Frequency Identification and Wireless Sensor Networks
82	International Journal of Recent Advances in Signal and Image Processing
83	International Journal of Recent Trends in Engineering
84	International Journal of Reconfigurable and Embedded Systems
85	International Journal of Research in Electronics and Communication Technology
86	International Journal of Research in Modern Engineering and Emerging Technology
87	International Journal of Review in Electronics and Communication Engineering
88	International Journal of Scientific and Engineering Research
89	International Journal of Scientific Engineering and Technology
90	International Journal of Scientific Research and Reviews
91	International Journal of Scientific Research Engineering and Technology
92	International Journal of Sensor and Its Applications for Control Systems
93	International Journal of Sensor Networks and Data Communications
94	International Journal of Sensors and Sensor Networks
95	International Journal of Signal Processing
96	International Journal of Signal Processing-Image Processing
97	International Journal of Smart Sensors and Ad Hoc Networks
98	International Journal of Vehicular Technology
99	International Journal of Video and Image Processing and Network Security
100	International Journal of VLSI Design and Communication Systems
101	International Journal of Wireless and Microwave Technologies
102	International Journal of Wireless and Mobile Networks
103	International Journal of Wireless Communication
104	International Journal of Wireless Communications and Mobile Computing
105	International Journal of Wireless Communications, Networking and Mobile Computing
106	International Journal on Ad-Hoc, Networking System
107	International Journal on Applications in Information and Communication Engineering
108	International Journal on Emerging Trends in Electronics and Communication Engineering
109	International Journal on Recent Advances in Industrial Electronics and Electrical Engineering
110	International Journal on Recent Innovation in Instrumentation and Control Engineering
111	International Journal on Wireless, Networking and Mobile Communication Innovations
112	International Research Journal of Electronics and Computer Engineering
113	International Research Journal of Telecommunications and Information Technology
114	International Transactions on Electronics and Communication Engineering

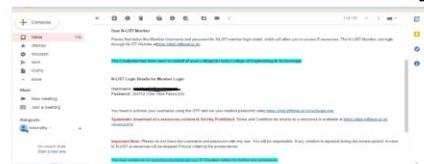
REMOTE ACCESS RESOURCES

Eshodshindu N-List

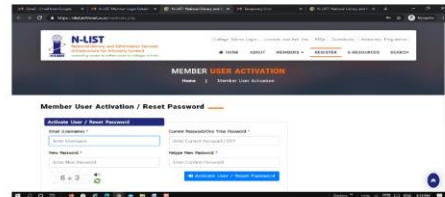
To access e-books through NLIST, fill the following Google Form https://docs.google.com/forms/d/1T129BCnzbGna_hinU0STeHfGjZ_AwAcFvipeDYVW5E or scan QR Code



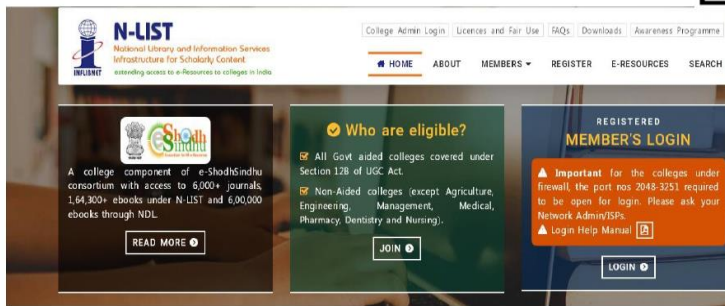
1. After filling Google form you will receive mail from NLIST



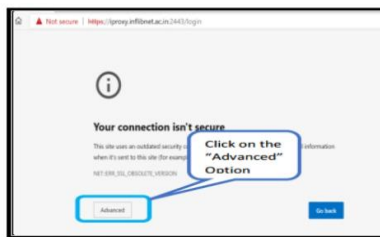
2. The user must activate with their credential



3.Type URL: <https://nlist.inflibnet.ac.in/> or Scan QR Code



4.Once click on member's login, the below screenshot will open and shows that 'your connection isn't secure'. Please click on Advanced button to proceed the next step and click on Continue to iproxy.inflibnet.ac.in(unsafe) link to get member's login webpage. It will show only for one time while using latest version browser of Chrome, Firefox or Microsoft edge etc.



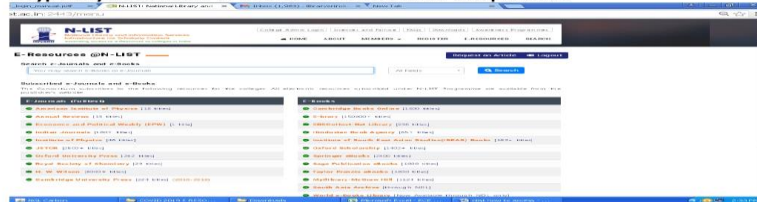
5.Please enter the username and password to access the N-List e-resources.

(username is your e mail id, for password please check your mail received from NLIST)



6.After Login you will get the list of e-Resources available.

7.Type any book name or author name on search box provided



If already Registered in NLIST, but forgotten password

1. Type URL: <https://nlist.inflibnet.ac.in/>

2. click on Member's Login

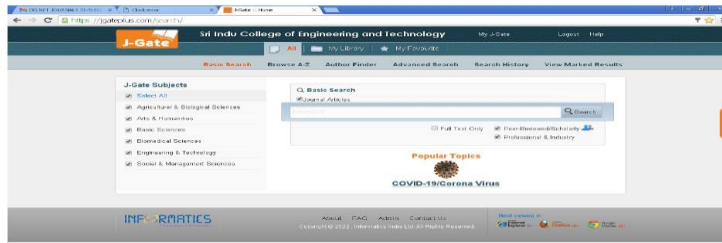
3. Click on forgot Password



4.Type your mail id and click on send OTP to Email and check your mail

HOW TO ACCESS J-GATE FULL TEXT JOURNALS

1. Login with URL <http://www.jgateplus.com> and click on go button



2. Click on **Journal Finder** and **Type any Journal Name** on the following screen, **Click Search button**
3. Click on **Journal** and select any article

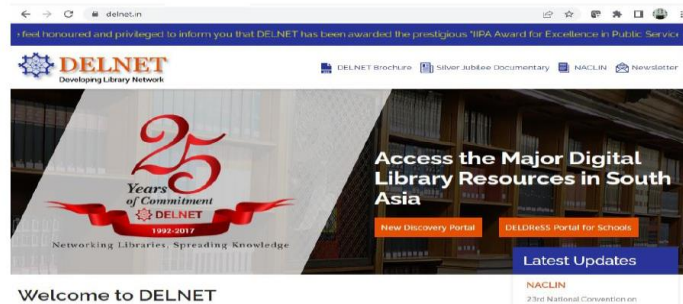


4. Click on **Basic search** for article search and type article name, click search button.

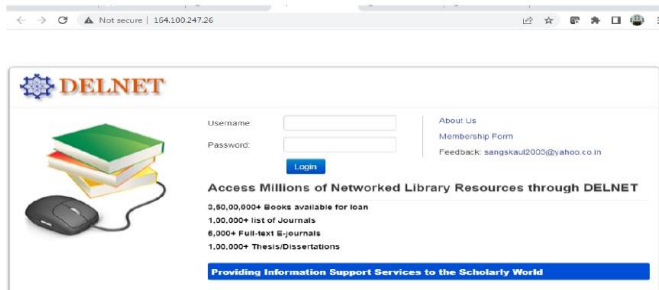


How to Access DELNET Online

1. Type url <http://delnet.in>
2. Click on **New Discovery Portal**



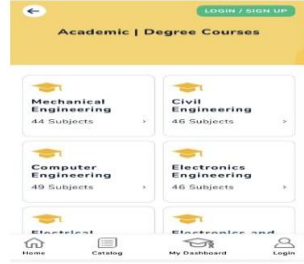
3. Type User Name: **tgsicet**
4. Type Password : **sic8382**



EKEEDA DIGITAL LIBRARY **Steps to activate Ekeeda Digital Library**

Step 1: Open the link : <https://ekeeda.com/catalog/academic>

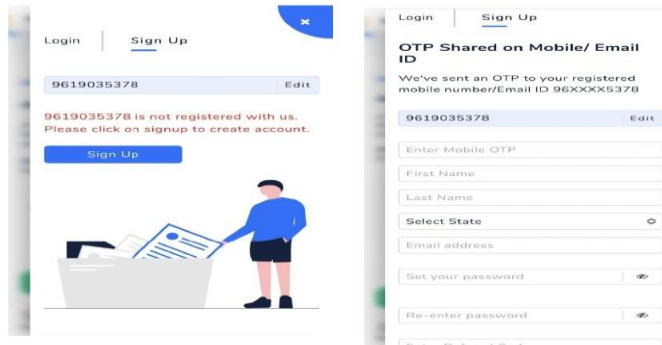
Step 2: Select your Branch



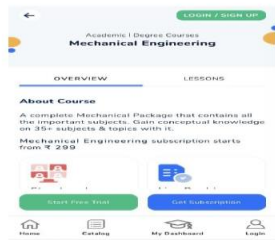
Step 3: Click on 'Get Subscription'



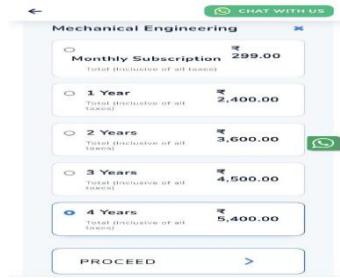
Step 4: Click on Signup and create your account. Use Referral Code - **EAPSR122**



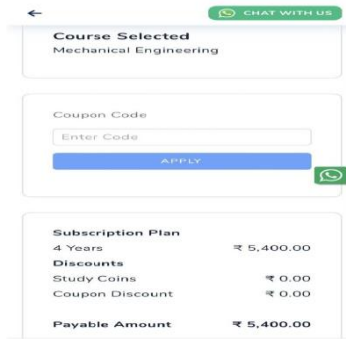
Step 5: Click on 'Get Subscription' and you will be redirected to Subscription Plans page



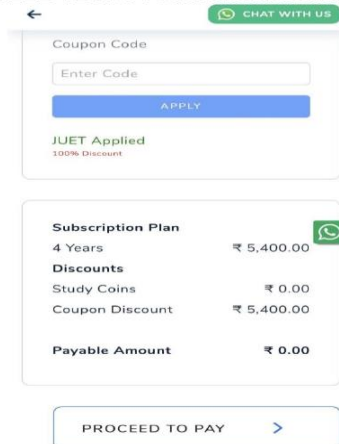
Step 6: Select the subscription plan which you want and click on 'PROCEED'



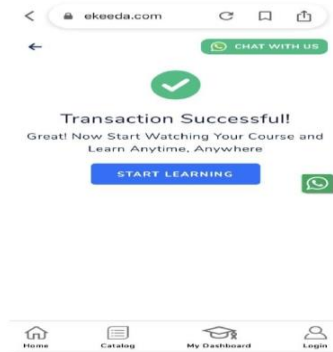
Step 7: Enter Coupon Code **SRINDU** click on Apply button



Step 8: Now Click on 'PROCEED TO PAY'. Your course will be activated.



Step 9: Now click on 'START LEARNING' and enjoy learning with Ekeeda



HOW TO ACCESS DSpace/LMS

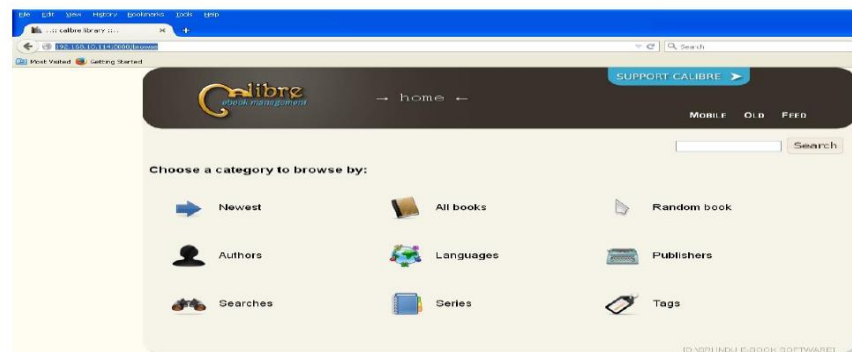
1. Type URL : <http://192.168.8.220/jspui>
2. Select any one e-resource from side bar and click on e-resource



HOW TO SEARCH E-BOOKS

FROM CALIBRE E-BOOK MANAGEMENT SOFTWARE

1. Login with URL <http://192.168.8.114:8080/browse>
2. Type Book Title or Author on the search bar and press enter
3. For Branch wise books - Click Series button on the following screen
4. For Subject wise books – Click Tag button on the following Screen



Charts

* LINEAR AND DIGITAL IC APPLICATIONS *

Integrated Circuits - It is a miniature low cost electronic circuit consisting of active and passive elements that are fabricated on the single chip and a chip is called Integrated Circuits (IC)

Types of IC

Linear IC is also called analog IC
 In linear IC the i/p signal are the analog signal which change the signal smoothly and continuously over the range values like max and minimum.

Digital IC Input signal are digital signal that have only two values i.e. 0
 These contains circuit such as the logic gates.

Classification of Logic Families

Bipolar Logic Family
 Saturated TTL, unsaturated TTL
 RTL, DTL, TTL, RTL, RTL, TTL

Unipolar Logic Family
 PMOS (1-channel MOSFET), NMOS (1-channel MOSFET), CMOS (complementary MOSFET)

IC Interfacing - Sometimes necessary to connect i/p of 1 circuit to connected to input of another i/c.

IC Interfacing are two types
 - TTL driving CMOS
 - CMOS driving TTL

TTL Driving CMOS -

TTL i/p profile
 High Logical, Intermediate, Logic 0 (Low)

CMOS i/p profile
 High, Logic 0 (Low)

IC Packages

- Flat Pack
- Metal Can
- Quad In Line Package

An operational amplifier is a DC coupled high gain electronic voltage amplifier with a differential input and usually a single ended output. It is an operational amplifier circuit.

Pin Diagram of IC 741

IC Specifications

- i/p voltage range
- output voltage range
- output current
- Switching frequency
- opt temperature range

LINEAR & DIGITAL INTEGRATED CIRCUITS APPLICATIONS

INTEGRATED CIRCUITS:-

An Array of components electrical circuits and sub-circuits which are fabricated on a single chip.
 - Jack Kilby invented 1st "Integrated Circuits" in 1960

LINEAR IC

Metal Can IC **Ceramic flat pack IC** **Pin Dual In line Package (DIP)** **DIP Surface**

IC 741:-
 effect, Non-inverting input, ve supply -vee, Non-connection, +vee vcc supply, output, effect null

IC 555 timer
 GND, Trigger, +vee, output, threshold, control

IC 565 timer
 -vee, Input, Input, vcc o/p, phase detector, vcc input, Divisor

OPERATIONAL AMPLIFIER
 inverting input, vcc, vcc o/p, vee

DATA CONVERTER:- An Analog signal is a time varying signal that has any number of values for a given time slot.
 An Digital signal varies suddenly from one to another level and will have only finite number of values for given time slot.

Types of Data Converters:-
 A to D converters

BLOCK Diagram:-

```

    graph LR
        A[Analogizing filter] --> B[SHA Circuit]
        B --> C[ADC]
        C --> D[DSP]
        D --> E[Smoothing filter]
        E --> F[Vo]
        C --> G[DAC]
        G --> H[Amplifier]
    
```

LCD SEVEN SEGEMENT DISPLAY
 LCD (Liquid Crystal Display)
 - The system requires display also made up of other ICs.
 - These are interconnected in a way to form numbers and characters by displaying an individual combination of different segments.

Electromagnetic Wave

An electromagnetic wave is radiated by an accelerated charge as coupled electric and magnetic field oscillating perpendicular to each other and also to the direction of propagation of the wave.

Properties

- Do not carry any charge.
- Do not deflect by electric and magnetic field.
- Travel with speed of light in vacuum.
- Transverse in nature.
- Do not require any material medium for propagation.

Electromagnetic Spectrum
 The orderly distribution of electromagnetic waves in accordance with their wavelength or frequency.

Maxwell's Equations

- $\oint_S \vec{E} \cdot d\vec{s} = \frac{q}{\epsilon_0}$
- $\oint_S \vec{B} \cdot d\vec{s} = 0$
- $\oint_S \vec{E} \cdot d\vec{l} = -\frac{d\phi_B}{dt} = -\int_S \vec{v} \cdot d\vec{s}$
- $\oint_S \vec{B} \cdot d\vec{l} = \mu_0 (ic + i_0) = \mu_0 (ic + \epsilon_0 \frac{d}{dt} \int_S \vec{E} \cdot d\vec{s})$

Modified Ampere's law
 $\oint_S \vec{B} \cdot d\vec{l} = \mu_0 (ic + i_0)$

Displacement Current
 $i_D = \epsilon_0 \frac{d\phi_E}{dt}$

Radio Waves: Used to send communication.
Infrared: Useful for elucidating molecular structure.
Visible light: Detected by stimulating nerve endings of human retina.
Ultra violet: Can cause many chemical reactions eg. the tanning of human skin.
X-rays: Penetrate matter eg. ionize gases (eg. Radio Graphs)
Gamma Rays: In the treatment of cancer and tumours.

Student Seminar

Subject Teacher is taking seminar on the covered topics from the students. Two times in a semester seminars are planned by the Faculty member. Each topic from the subject will allotted by the faculty member to the individual student.



Guest Lectures

Guest lecturers provide an important educational experience for students based on their real-world life experiences. Students get to see the insight and perspective of the guest lecturers' specific field. The format can enable students to interact with professionals in formal and informal settings.

Sri Indu College of Engineering Technology
(UGC AUTONOMOUS INSTITUTION)

**DEPARTMENT OF ELECTRONICS
& COMMUNICATION ENGINEERING**

Guest Lecture
by
Dr. SURENDRA KUMAR
Emerites Scientist - DRDO, Min of Def.
DRDL, Hyderabad.

On 21st Sep, 2019 (Saturday)



Virtual Classroom Supports and Video Conferencing using Zoom Meeting Demonstrative Mode :

Objective:

- The main objective is to increase the quality of Teaching – Learning Processing by incorporating ICT modes like, online classes and webinars.
- Zoom Meeting and Google Classroom that aims to simplify creating virtual classroom, interacting and distributing the materials in a paperless way.
- This practice is to share needy resources between teachers and students.

The Context:

- Virtual Classroom supports and video conferencing using zoom meeting impacts to increase the students learning.
- Teachers can schedule the task dynamically and have the option to attach files to the assignment which students can view, edit, or get an individual copy.
- Students can create their own study materials, Assignment reports and their innovations effectively.
- Teachers have the option to monitor the progress of each student. It allows the students to review the classes, assignments and other tasks for detailed understanding.
- Time Management, Evaluation, Assessment Report generation and remedial process become very easy with these types of ICT modes.

Evidence of Success:

- The method helped all students for referring of syllabus, topics covered, important questions in the theory exam, previous year's question papers etc.
- Students can access it from their home or where ever and whenever they are free.
- Progress will be monitored timely.

a) Digital Poster Presentation By Students :

Objective:

- To cultivate out of box thinking, such as inter-disciplinary thinking, synthesizing knowledge of different disciplines and to cope with complexity among students.
- To ensure the knowledge acquiring among the students community.
- To make them understand the emerging concepts from known concepts.
- To stimulate in-depth learning of the concepts and understanding of various topics.

The Context:

- This event is to provide an opportunity for the students to share their knowledge with the peer group members.
- The digital poster is prepared in advance with desired technical framework to share the knowledge on inter-disciplinary fields.
- This activity will lead to encourage the students to participate in symposia, technical presentation.

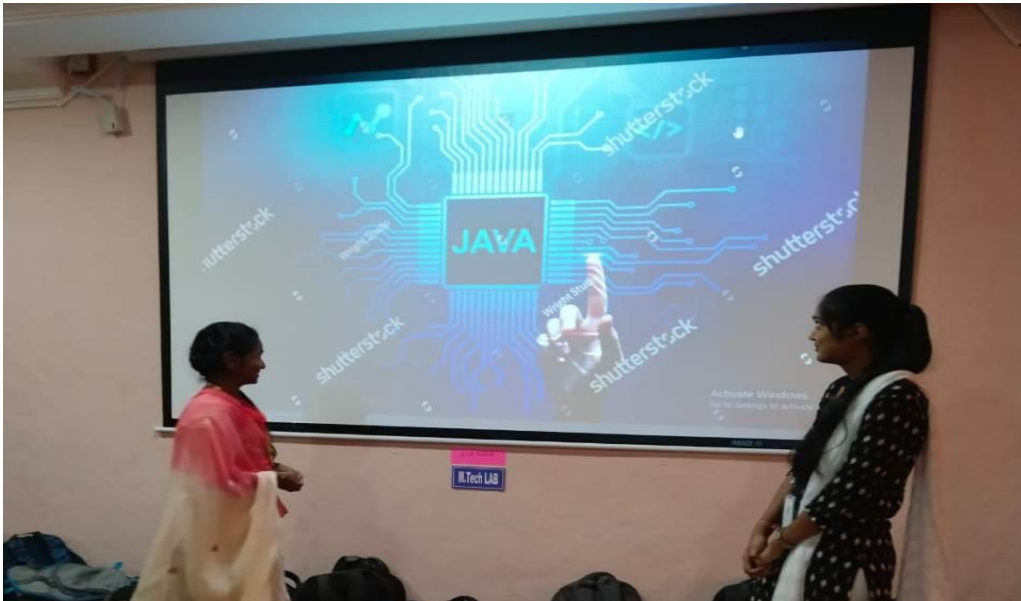
The Practice:

- The schedule is prepared and given to the faculty members to prepare and present the acquired
- This presentation is recorded for review and template for the other participants.

Evidence of Success:

Outcome of this practice enables the students to

- Participate in technical presentation
- Conferences
- Project Expo
- Participate in skill oriented competitions



Subject name: Java programming

Year: II year II semester



Subject name: Artificial Intelligence

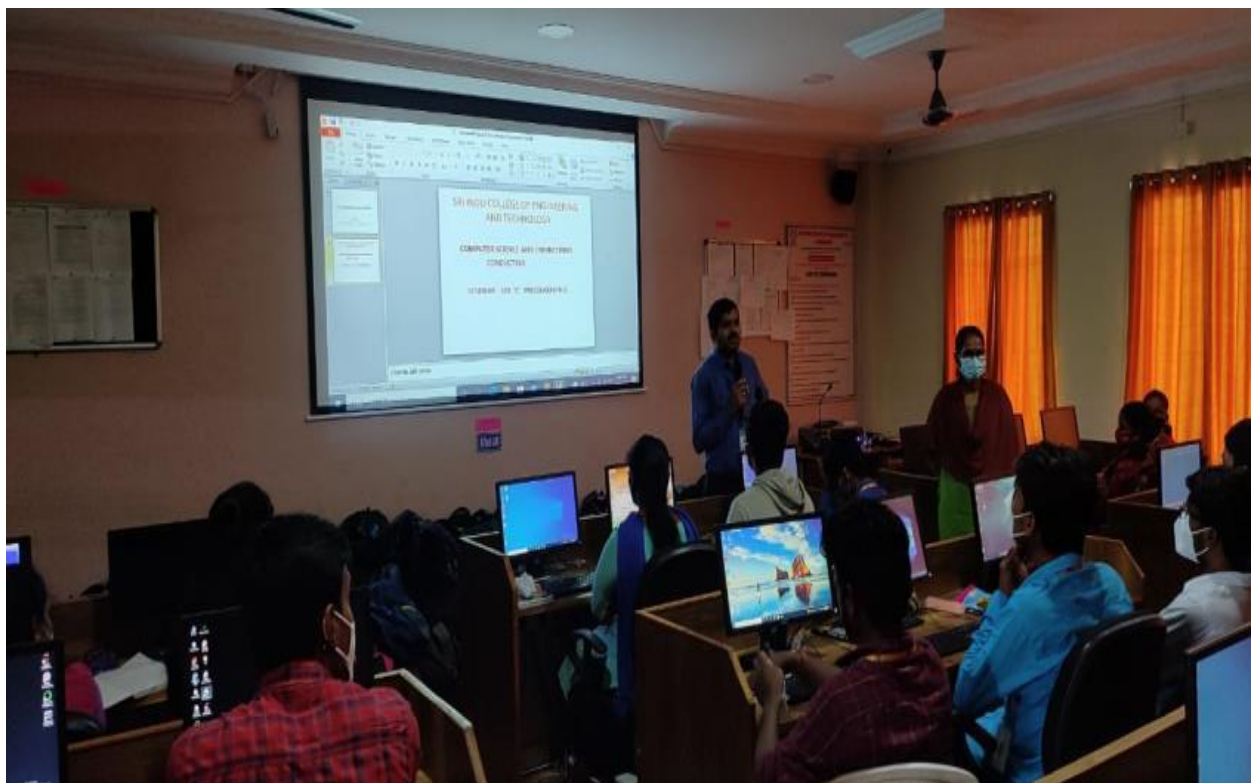
Year: III year I semester

b) Demonstrative Mode

Demonstration is a teaching method used to communicate an idea with the aid of visuals such as flip charts, posters, power point, etc. A demonstration is the process of teaching someone how to make or do something in a step-by-step process. As you show how, you “tell” what you are doing.

To achieve success in demonstration method the teacher need to do three things which are necessary for this method.

- The object displayed for demonstration should visible to all students
- The demonstrator should use clear language and step by step procedure so the students understand the concept of demonstration easily.
- The pupils should be given the chance to ask question from teachers to clear their concept and difficulties about the topic.



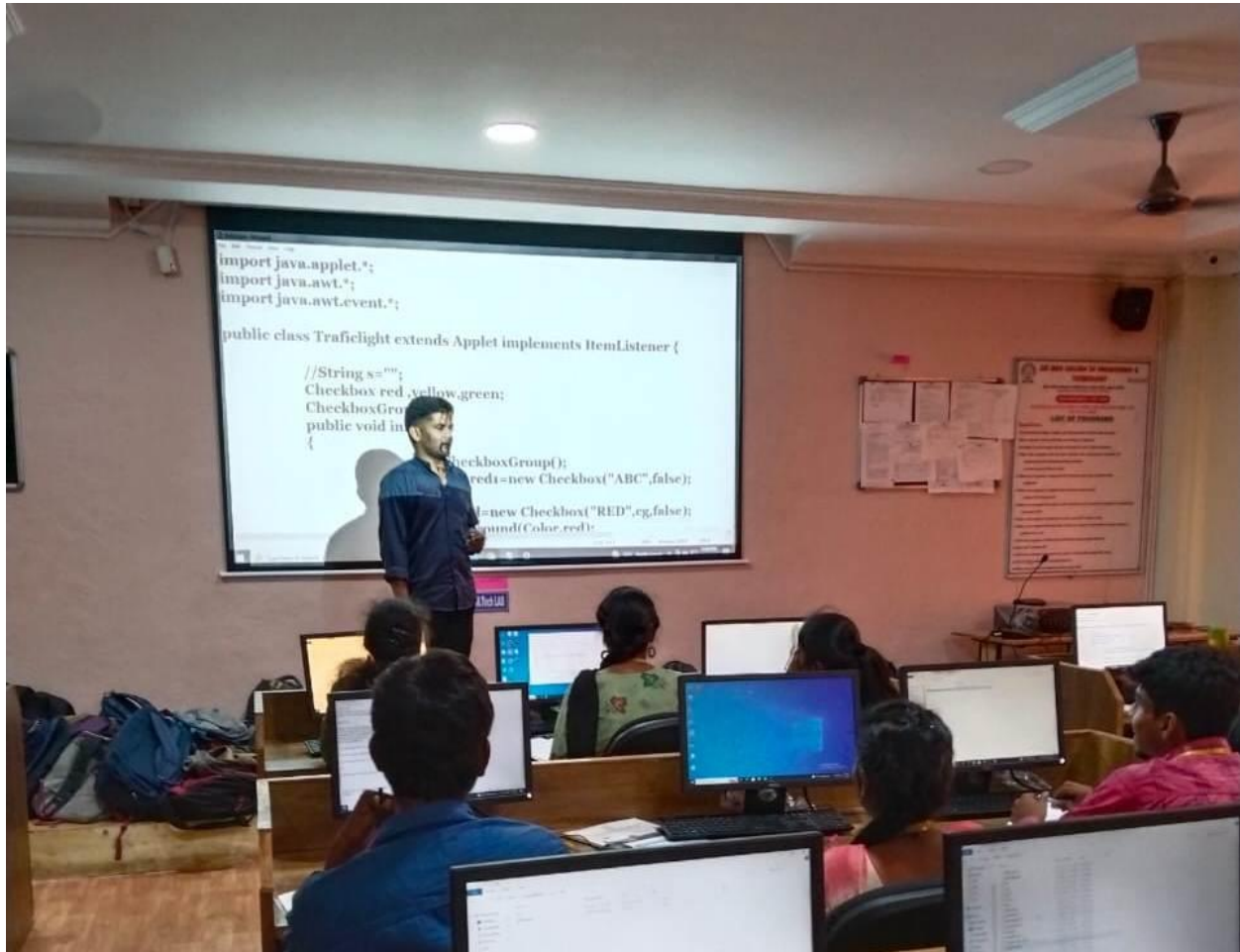
Subject Name: Java Programming
Year: II year II semester

c) Experimental Based Teaching

The experimental method is usually taken to be the most scientific of all methods, the 'method of choice'. The main problem with all the non-experimental methods is lack of control over the situation. The experimental method is a means of trying to overcome this problem. The experiment is sometimes described as the cornerstone of psychology: This is partly due to the central role experiments play in many of the physical sciences and also to psychology's historical

view of itself as a science. A considerable amount of psychological research uses the experimental method.

An experiment is a study of cause and effect. It differs from non-experimental methods in that it involves the deliberate manipulation of one variable, while trying to keep all other variables constant.



Subject name: Java Programming
Year: II year I semester

d) ICT Mode of Teaching-Learning

Information and Communications Technology (ICT) can impact student learning when teachers are digitally literate and understand how to integrate it into curriculum.

Colleges use a diverse set of ICT tools to communicate, create, disseminate, store, and manage information. ICT has also become integral to the teaching-learning interaction, through such approaches as replacing chalkboards with interactive digital whiteboards, using students' own smartphones or other devices for learning during class time, and the "flipped classroom" model

where students watch lectures at home on the computer and use classroom time for more interactive exercises.

Edmodo:

Using Edmodo, students and teachers can reach out to one another and connect by sharing ideas, problems, and helpful tips.

Name	Edmodo code	Blog address
Dr.C. Kotteeswaran	vn8ygg	kotteesscse.blogspot.com
A. Chitty	4wewvy	chittycse.blogspot.com
K. Raju	7zx59w	rajusci2516.blogspot.com
E. Pavithra	hwfzm6	pavithra6.blogspot.com
V. Kiranmai	h9w622	kiranmaivu.blogspot.com
A. Rangamma	zb82gy	ramyaaduri.blogspot.com
M. Sampoorna	atn82v	sampoorna6706.blogspot.com
R. Sowmya	dcxjdb	sowmyar1.blogspot.com
SNVASRK Prasad	3q5at5	snvasrkprasadb.blogspot.com
K. Mahesh Kumar	5tf n93	mahesh349.blogspot.com
K. Sandya	6pp8jc	sandyacse.blogspot.com
K. VijayaLakshmi	x8xs55	vijayalakshmi9.blogspot.com
C. Divya	7reeeb	divyachimtala19.blogspot.com
B. Navya	ctns23	navyabingi30.blogspot.com
R. Vinod Kumar	6awg59	vinodrathod9.blogspot.com
G. Akhila	a5ntr6	akilagouni94.blogspot.com
P. Chaithanya	3tmdhv	chaithanya1.blogspot.com
B. Sai Sree	bw2vfp	saisree12.blogspotcom
G. Swarnalatha	j7ge3q	gundalaswarna.blogspot.com
K. Naveen Chakkravarthy	s6ditq	naveen8906blogspot.com
P. Sneha	7b5rxx	snehap2.blogspot.com
P. Hymavathi	4p8acj	hymavathi1.blogspot.com
T. Pavan Kumar	29h6fk	pavancse522.blogspot.com
M. Swathi Reddy	f7bqnq	swathireddy5.blogspot.com

e) Modern Tools:

“The teaching method which focuses more on teaching the students for improving their intellect behavior by using various new and innovative ideas rather than making them recite the syllabus to clear the examination with the same old style is **Modern Teaching Methods** in simple words.”

Advantages of Modern Teaching Methods:

- Unlike traditional teaching methods, modern teaching methods are more interactive and keep students intact. It maintains the interest of students by animations and videos.
- The visual medium is way better than any other medium to give instructions. It helps to memorize the concept fast and for a more extended period than reading.
- Modern teaching methods are less time-consuming. Teachers take less time to cover the syllabus. Writing on the blackboard is not required.
- Blackboard explanation of content is less explanatory than a representation of videos and animations used in the modern teaching methods.

f) Think pair Share

Introduction:

Collaborative learning is an instructional method in which student's team together on an assignment. In this method, students can produce the individual parts of a larger assignment individually and then “assemble” the final work together, as a team. Whether for a semester-long project with several outcomes or a single question during class, collaborative learning can vary greatly in scope and objectives. Cooperative learning, sometimes confused with collaborative learning, describes a method where students work together in small groups on a structured activity. Students are individually accountable for their work but also for the work of the group as a whole, and both products are assessed.

Name of the Faculty: Dr. S. Kishore Verma	Designation: Assoc. Prof	Subject: Machine Learning
Year/Semester: III/II	Section: A	Topic: Decision Tree
Name of the activity: Think-Pair Share	Date: 18-04-2022	No. of students attended: 24

OBJECTIVE OF THE ACTIVITY:

To discuss the various functions of the decision tree and its functions.

- To understand how to construct the decision tree
- To make students understand complex concepts.
- To develop oral communication skills, Fosters and develops interpersonal relationships.

EXECUTION PLAN:

- Given higher-level questions about the topic to the students
- Gave sometime for thinking the answer for questions
- Now formed teams of team size2
- Gave sometime to share the ideas themselves
- They shared their ideas to whole class
- Finally 80% of the groups have completed the task successfully

Expected Outcomes:

The students can be able to

- Generate valid routings and invalid routings
- Analyze the different types of maintenance checks and maintenance hub
- Develops higher level thinking skills
- Builds self esteem in students

g) In-Class Teams

Introduction:

In Class Teams is anything course-related that all students in a class session are required to do, other than simply watching, listening and taking notes. Active Learning shifts focus from what the instructor should deliver to what the students should be able to do. Compared to students taught traditionally, students taught in a manner that incorporates small-group learning achieve higher grades, learn at a deeper level, retain information longer, are less likely to drop out of school, acquire greater communication and teamwork skills, and gain a better understanding of the environment in which they will be working as professionals.

NameoftheFaculty: Ms.R.Sowmya	Designation: Asst. Prof	Subject: Computer Networks
Year/Semester: III/I	Section: C	Topic: TCP/IP
Name of the activity: In Class Teams PeerEvaluation	Date: 21-08-2021	No.ofstudentsattended: 45

Objective of the activity:

1. Students will have an opportunity to discuss the concept of CSMA/CD team effectively.
2. To understand the concept of IEEE 802.11
3. To demonstrate the concept of domain name space.

EXECUTION PLAN:

Time management: Class time: 40min

- | | |
|---|---------|
| a. Summarized the TCP/IP concepts | 03min |
| b. Creating team with 4-6size | 01 min. |
| c. Distribution or announcement of Questions | 02min. |
| d. Student as brainstorms and solving by team | 10min. |
| e. Student Should solve final question | 04min |

Expected Outcomes:

The students can be able to

- Students can express their views and share knowledge
- It's an interactive session and teamwork.
- Students can gain more knowledge and improves the critical thinking on the concept

Assessment:

1. Assessment is carried out by peer evaluation.

The activity was reached 85% of the groups have completed the task successfully, the activity can be considered as successful.

h) Flipped Classroom:

Introduction:

Instructional environments that allow for students to be more actively engaged with course material are more likely to lead to greater learning gains. The literature in engineering and science education continues to encourage faculty and instructors to use class exercises that require students to be actively engaged in the course material, as opposed to being passive recipients of information.

Engineering students benefit from an active and interactive classroom environment where they can be guided through the problem solving process. Typically faculty members spend class time presenting the technical content required to solve problems, leaving students to apply this knowledge and problem solve on their own at home. There has recently been a surge of the flipped, or inverted, classroom where the technical content is delivered via online videos before class. Students then come to class prepared to actively apply this knowledge to solve problems or do other activities. In this paper, recommendations are made for applying this educational technique to large engineering classrooms.

Name of the Faculty: A.Rangamma	Designation: Asst.Prof	Subject: Data Structures
Year/Semester: II/I	Section: C	Topic: Binary Search Tree
Name of the activity: Flipped Class Room	Date: 9th Oct2021	No.ofstudents attended: 48

Objective of the activity:

- In order to motivate the students to learn the concepts thoroughly.
- Student learns the theories from the videos, can use the theories for discussions and assignments in class.

Execution Plan:

Time management: Class time: 20mins

- Students are provided with the learning material (Video Link, text book page numbers) of the topic to be covered and a time of 4days for their preparation for the activity.
- On the day of implementation of activity topics are given as per their seating in the class (it was observed students in a same desk are writing different topics) and 20 minutes is given to think and write about the topic.
- After 20minutes the scripts were collected in chronological order (rollnumber).

Plan of action:

Students were asked to go through the learning material and 2day's time was given for preparation. Every individual will be given a different question or numerical as per higher looms level and time of 15minutes is given to complete the task.

EXPECTED OUTCOMES:

It's be easier to get the points from videos than from lecture notes.

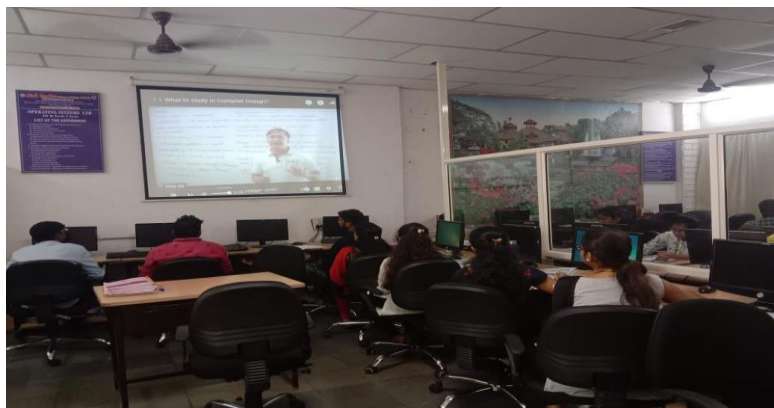
1. This method makes the subject more engaging than the regular method.
2. The flipped classroom method will increase the knowledge and understanding of the course area.

i) Group Writing Assignments

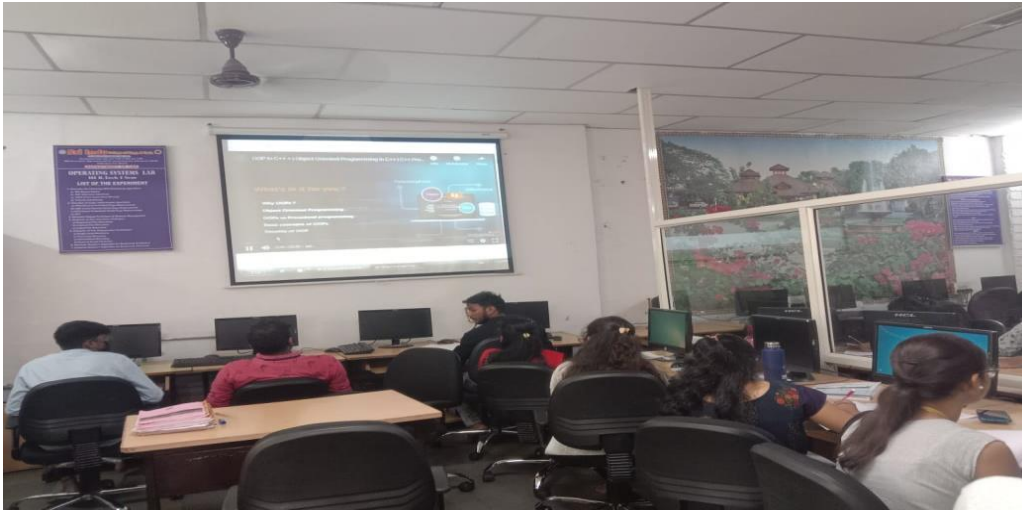
It would be truly surprising to find an author whose writing, even if it was completed independently, had not been influenced at some point by discussions with friends or colleagues. The range of possible collaboration varies from a group of co-authors who go through each portion of the writing process together, writing as a group with one voice, to a group with a primary author who does the majority of the work and then receives comments or edits from the co-author.

j) NPTEL Lectures:

- To promote self-learning and share knowledge among students.
- To enhance the quality of engineering education and resources for beyond curriculum.



Subject name: Compiler Design
Year: III year II semester



Subject name: OOPs Using C++
Year: II year I semester

k) Chart Work Presentation:

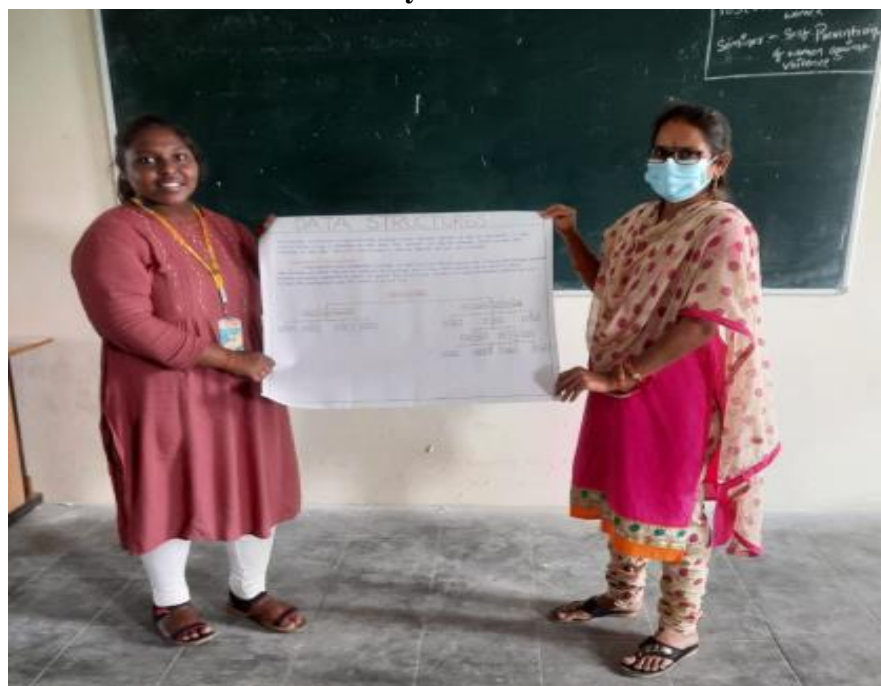
A common, effective teaching method is to use visual presentations in a classroom. Charts and diagrams are especially helpful, as they enable students to see ideas visually laid out in an organized way. Also, visual tools can help the students process content and to make connections more easily. Teachers can purchase or make charts to display around the room, or create a chart as part of a lesson. These tools are especially useful in elementary school, where children tend to have shorter attention spans.



Subject Name: Software Engineering
Year: III year I semester



Subject Name: Data Structure
Year: II year I semester



Subject name: Data structure
Year: II year I semester

l) Animation Video Of Lecture:

Animation occurs when images, drawings, or pictures are placed and played in sequence to create an illusion of movement. The use of animation in education is increasing in popularity with new trends in education. The fact that it eases the learning of complex concepts contributes to making it a popular choice among educators and learners. Animation brings learning to life and applies to nearly all subjects. Consequently, this allows educators to explain different concepts with the help of visual representations. Also, it is a fun learning approach that promotes experiential learning.



**Subject name: Machine Learning
Year: III year II semester**

m) Group Discursion:

A group discussion tests the teamwork and communication skills of candidates. A group discussion involves a discussion on a given topic with other candidates, usually with similar experience and educational qualifications. Performing well in a group discussion helps you to get noticed and practicing for one improves your public speaking skills.



**Subject name: Artificial Intelligence
Year: III year I semester**



Subject name: Internet of things