

# MANDATORY DISCLOSURE

## 1. Name of the Institution

DREAM INSTITUTE OF TECHNOLOGY,033-24980376,  
9830895486,9874155125  
dream\_institute\_of\_technology@hotmail.com

## 2. Name and address of the Trust and the Trustees

SARKAR TRUST, 187/1, Block-J, New Alipore, Kolkata-700 053. 9883936088  
LIST OF TRUSTEES:

- a. Mr.Sankar Prosad Sarkar, 109/E, Block-F, New Alipore, Kolkata-700053,  
9831192416,e.e.s.s@hotmail.com
- b. Mrs.Bithi Sarkar, 109/E, Block-F, New Alipore, Kolkata-700053,9903730979
- c. Dr.Dipankar Sarkar, 109/E, Block-F, New Alipore, Kolkata-700053,  
9830895486,drds2b@hotmail.com
- d. Miss Susmita Sarkar, 109/E, Block-F, New Alipore, Kolkata-700053,  
9874155125, sus\_sarkar@hotmail.com

## 3. Name and address of the Principal:

- Address including Telephone, Mobile, E-Mail  
Dr.Dipankar Sarkar, 109/E, Block-F, New Alipore, Kolkata-700053, 9830895486,  
Drds2b@hotmail.com

## 4. Name of the affiliating University

Maulana Abul Kalam Azad University of Technology

## 5. Governance

- Members of the Board and their brief background
- **Dr. Amalendu Basu,**  
Director of Technical Education,  
Govt. of West Bengal, Bikash Bhavan,  
East Block, 10<sup>th</sup> Floor, Salt Lake City,
- **Dr. Abhijit Majumdar**  
Deptt. of Physics, IEST Shibpur,  
Howrah – 711103. (Nominee of MAKAUT)  
B9, Narkel Bagan, Kamdahari, Garia, Kolkata – 700084.
- **The Regional Officer**  
Eastern Regional Office,  
A.I.C.T.E., College of Leather Technology Campus,  
Salt Lake City, Sector – III,  
Kolkata – 700 098.
- **State Government Nominee**
- **Mr. S. P. Sarkar**  
Chairman & Managing Trustee  
Sarkar Trust,  
187/1, Block – J, New Alipore,  
Kolkata – 700 053.

- **Dr. D. Sarkar**  
Principal & Member Secretary  
Dream Institute of Technology  
109E, Block – F, New Alipore,  
Kolkata – 700 053.
- **Ms. S. Sarkar**  
Trustee, Sarkar Trust  
109E, Block – F, New Alipore,  
Kolkata – 700 053.
- **Prof. (Dr.) P. B. Dutta Gupta**  
Nominated by the Trust  
Plot No.: 103 (Near Hijli Gramen Hospital More)  
P. O. – Hijli Co-operative Development Society,  
Kharagpur – 721 306.
- **Prof. (Dr.) Sabyasachi Sengupta**  
Ex-Vice Chancellor, MAKAUT, Nominated by the Trust  
Block-6, Flat-C, DREAM RESIDENCY (MANOR)  
Opp. BIG MART, Rajarhat Main Road,  
Salua Bazar, Kolkata – 700136.
- **Dr. Nikhil Chandra Das**  
Professor, ME Department  
Dream Institute of Technology  
Kolkata – 700 104.
- **Mr. Santosh Das**  
Asst. Prof., CSE Department  
Dream Institute of Technology  
Kolkata – 700 104.
- Members of Academic Advisory Body
- Frequently of the Board Meeting and Academic Advisory Body- Quarterly
- Organizational chart and processes
- Nature and Extent of involvement of Faculty and students in academic affairs/improvements
- Mechanism/Norms and Procedure for democratic/good Governance
- Student Feedback on Institutional Governance/Faculty performance
- Grievance Redressal mechanism for Faculty, staff and students
- Establishment of Anti Ragging Committee  
Dr.Dipankar Sarkar, Principal, 9830895486  
Dr.Sangita Choudhury, Professor, CE,9831820536  
Miss Susmita Sarkar, Assistant Professor, EE, 9874155125  
Dr.Partha Pratim Kundu, Assistant Professor, BS&H,7411294196  
Mr.Pradip Kumar Majumdar,9088362829-Representative of Parents

Miss Anamika Kumari,7044055968– Representative of students  
 Mr.Niranjan Prasad Singh,9934616933– Representative of Parents  
 Representatives of Civil Society – Dibyendu Ghosh, 9830409550  
 Representatives of Local Media-Sambhu Das,Colors Bangla,9830511001  
 Representatives from Non-Government Organizations involved in Youth activities :-Shuvendu Ghosh, 9433487028  
 Mr.Sandip Paul, Sub-Inspector,Bishnupur Police Station, 9674744890.

- Establishment of Online Grievance Redressal Mechanism
- Establishment of Grievance Redressal Committee in the Institution and Appointment of OMBUDSMAN by the University
  - Dr. Dipankar Sarkar - Principal
  - Dr.Nikhil Chandra Das - Professor & Head (Mechanical Engineering Dept.)
  - Dr.Arun Chandra Sen - Professor & Head (Basic Science & Humanities Dept.)
  - Dr.Ashis Kumar Kar - Professor (Basic Science & Humanities Dept.)
  - Mr. Gopinath Biswas - Administrative Officer
  - Mr.Niranjan Prasad Singh - Guardian’s Representative
  - Miss Anamika Kumari - Student’s Representative(4<sup>th</sup>Year Computer Science & Engineering)

OMBUDSMAN BY THE UNIVERSITY – YET TO RECEIVE NAME FROM THE UNIVERSITY

- Establishment of Internal Complaint Committee (ICC)

Sl. No.	Name	Designation	Position
1	Dr Dipankar Sarkar	Professor	Chairman
2	Ms. Susmita Sarkar	Registrar	Member
3	Mr. Gopinath Biswas	AO	Member

- Establishment of Committee for SC/ST
  1. Mr. Prithick Saha, A.P., (ECE Dept.) ---- Presiding Officer
  2. Mr.Ujjal Majhi, A.P., (ECE Dept.) ----Member
  3. Miss Susmita Sarkar, A.P., (EE Dept.) ----Member
  4. Mr.Uttiya Sarkar, A.P., (BS&H Dept.) ----Member
  5. Mr.Debasish Mondal, (Office Clerk) -----Member

- Internal Quality Assurance Cell

Sl. No.	Name	Designation	Position
1	Ms. Susmita Sarkar	A.P. (EE)	Advisor
2	Mr. Abhishek Saha	Asst. Professor.(ECE), & HOD	Convenor
4	Mr. Uttiya Sarkar	Asst. Professor.(HU)	Member, AIIRA
5	Mr. Pratik Sarkar	Asst. Professor (EE)	Member, NIRF
6	Mr. Arnob Som	Asst. Professor.(ECE)	Member, NAAC
7	Mrs. Paramita Kundu Maji	Asst. Professor. (CSE)	Member, NAAC
8	Mr. Santosh Das	Asst. Professor. (CSE)	Member, NBA
9	Mr. Tanmoy Rakshit	Asst. Professor. (CSE)	Member, NBA

**Broad functions:**

- To prepare an institutional archive of information
- To avoid replication /duplication of works by using the above archive for filling up all statutory information related to the Institution.
- To take responsibilities of filling up all affiliation / approval related documentation format.
- To prepare Pre-qualifier and Self Appraisal Report (SAR) for NBA program accreditation as instructed by the Higher Authority
- To prepare National Institute Ranking Framework (NIRF) document.
- To prepare Self Study Report (SSR) of NAAC as instructed by the Higher Authority
- To fill-up ACTE and MAKAUT Extension of Approval / Affiliation (EoA) documents
- To take part in any other accreditation / affiliation work as desired by the Authority from time to time
- To incorporate the relevant stakeholders (Student, Faculty, Staff, Guardian, Alumni etc..) in the entire process in a participatory mode.
- To ensure originality in documentation i.e. it shouldn't replicate other Institution /University.
- To be responsible for on-line submission and completion of procedures in all above
- To disseminate the information among relevant members and help them prepare prior to the accreditation visit.

## 6. Programmes

- Name of Programmes approved by AICTE  
B.Tech.:  
ELECTRICAL ENGINEERING -120 Seats  
ELECTRONICS & COMMUNICATION ENGINEERING -120 Seats  
MECHANICAL ENGINEERING -60Seats  
CIVIL ENGINEERING -60Seats  
COMPUTER SCIENCE & ENGINEERING -60Seats  
M.Tech.:  
POWER ELECTRONICS & DRIVES -18Seats  
MICROELECTRONICS & VLSI DESIGN -18Seats
- Name of Programmes Accredited by AICTE -NAAC APPLIED
- Status of Accreditation of the Courses
  - Total number of Courses  
0
  - No. of Courses for which applied for Accreditation  
0
  - Status of Accreditation-Preliminary/Applied for SAR and results awaited/Applied for SAR and visits completed/Results of the visits awaited/Rejected/Approved for.....Courses

- For each Programme the following details is given:
- Name: **ELECTRICAL ENGINEERING**
- Number of seats :120
- Duration : 4 Years
- Cut off marks/rank of admission during the last three years
- Fee: AS PER WEST BENGAL GOVERNMENT FEE STRUCTURE
- Placement Facilities;100%
- Campus placement in last three years with minimum salary, maximum salary and average salary

- Name: **ELECTRONICS & COMMUNICATION ENGINEERING**
  - Number of seats :120
  - Duration : 4 Years
  - Cut off marks/rank of admission during the last three years
  - Fee: AS PER WEST BENGAL GOVERNMENT FEE STRUCTURE
  - Placement Facilities;100%
  - Campus placement in last three years with minimum salary, maximum salary and average salary
- 
- Name: **MECHANICAL ENGINEERING**
  - Number of seats :60
  - Duration : 4 Years
  - Cut off marks/rank of admission during the last three years
  - Fee: AS PER WEST BENGAL GOVERNMENT FEE STRUCTURE
  - Placement Facilities;100%
  - Campus placement in last three years with minimum salary, maximum salary and average salary
- 
- Name: **CIVIL ENGINEERING**
  - Number of seats :60
  - Duration : 4 Years
  - Cut off marks/rank of admission during the last three years
  - Fee: AS PER WEST BENGAL GOVERNMENT FEE STRUCTURE
  - Placement Facilities;100%
  - Campus placement in last three years with minimum salary, maximum salary and average salary
- 
- Name: **COMPUTER SCIENCE & ENGINEERING**
  - Number of seats :60
  - Duration : 4 Years
  - Cut off marks/rank of admission during the last three years
  - Fee: AS PER WEST BENGAL GOVERNMENT FEE STRUCTURE
  - Placement Facilities;100%
  - Campus placement in last three years with minimum salary, maximum salary and average salary
- 
- Name and duration of programme(s) having Twinning and Collaboration with Foreign University(s) and being run in the same Campus along with status of their AICTE approval. If there is Foreign Collaboration, give the following details:  
 Details of the Foreign University
    - Name of the University
    - Address
    - Website
    - Accreditation status of the University in its Home Country
    - Ranking of the University in the Home Country

- Whether the degree offered is equivalent to an Indian Degree? If yes, the name of the agency which has approved equivalence. If no, implications for students in terms of pursuit of higher studies in India and abroad and job both within and outside the country
- Nature of Collaboration
- Conditions of Collaboration
- Complete details of payment a student has to make to get the full benefit of Collaboration
- For each Programme Collaborated provide the following:
  - Programme Focus
  - Number of Seats
  - Admission Procedure
  - Fee
  - Placement Facility
  - Placement Records for last three years with minimum salary, maximum salary and average salary
- Whether the Collaboration Programme is approved by AICTE? If not whether the Domestic/Foreign University has applied to AICTE for approval

**NOT APPLICABLE**

## 7. Faculty

- **Branch wise list Faculty Members:**

### Permanent Faculty

SL.No.	NAME	Designation
<b>Department of Electrical Engineering</b>		
1	Dr. DIPANKAR SARKAR	PROFESSOR
2	Ms. SUSMITA SARKAR	ASST. PROFESSOR
3	Mr. PRATIK SARKAR	ASST. PROFESSOR
4	Mr. BIKASH SHAW	ASST. PROFESSOR
5	Mr. ARVIND KUMAR	ASST. PROFESSOR
6	Mr. SUMAN BHOWMICK	ASST. PROFESSOR
7	Mr. ARINDAM MONDAL	ASST. PROFESSOR
8	Mr. SALIM MONDAL	ASST. PROFESSOR
9	Mr. JAHIR ABBAS MULLICK	ASST. PROFESSOR
10	Mrs. BARNALI DAS	ASST. PROFESSOR
11	Mr. ASHADUL MUNSI	ASST. PROFESSOR
12	Mr. SAYAK SARKAR	ASST. PROFESSOR
13	Mr. AMIT MUKHERJEE	ASST. PROFESSOR
14	Mrs. ANWESHA SENGUPTA	ASST. PROFESSOR
15	Ms. ASMITA PODDAR	ASST. PROFESSOR
16	Mr. CHANDAN BISWAS	ASST. PROFESSOR
17	Ms. PAROMITA CHAUDHURI	ASST. PROFESSOR
<b>Department of Electronics &amp; Communication Engineering</b>		
1	Dr. SAMIK CHAKRABORTY	PROFESSOR
2	Mr. ABHISHEK SAHA	ASST. PROFESSOR
3	Ms. DEBALINA ROY CHOUDHURY	ASST. PROFESSOR
4	Mr. ANIRBAN BASU	ASST. PROFESSOR
5	Mr. ARNAB SOM	ASST. PROFESSOR
6	Mr. SHASHANK SHEKHEAR	ASST. PROFESSOR
7	Ms. SHARMISTHA ROY	ASST. PROFESSOR

8	Mr. PRITHICK SAHA	ASST. PROFESSOR
9	Mr. DARAKHSHAN ZAFAR	ASST. PROFESSOR
10	Mr. SHARIAR RAHAMAN	ASST. PROFESSOR
11	Ms. PAYEL HALDER	ASST. PROFESSOR
12	Mr. SABIR AKHTAR MALLICK	ASST. PROFESSOR
13	Mrs. SUDESHNA DEY	ASST. PROFESSOR
14	Mr. AMIT GHOSH	ASST. PROFESSOR
15	MD MAHFUZ MOLLAH	ASST. PROFESSOR
16	MOHAMMAD RIZWAN	ASST. PROFESSOR
17	Ms. ANWESHA HALDER	ASST. PROFESSOR
18	Ms. PRIYANKA DEY	ASST. PROFESSOR
19	Mr. ABHISHEK KUMAR LALA	ASST. PROFESSOR
<b>Department of Computer Science Engineering</b>		
1	Dr. SOMSUBHRA GUPTA	PROFESSOR
2	Mr. SANTOSH DAS	ASST. PROFESSOR
3	Mrs. ANINDITA MUKHERJEE	ASST. PROFESSOR
4	Mr. SANDIP BOSE	ASST. PROFESSOR
5	Mr. RABINDRA NATH MONDAL	ASST. PROFESSOR
6	Mr. MAINAK CHAKRABORTY	ASST. PROFESSOR
7	Mrs. PUJA MUKHERJEE	ASST. PROFESSOR
8	Mr. IMAM MEHEMUD HASAN	ASST. PROFESSOR
9	Mr. SAYANTAN ACHARYA	ASST. PROFESSOR
10	Mrs. PARAMITA KUNDU MAJI	ASST. PROFESSOR
11	Ms. MAITREYEE GANGULY	ASST. PROFESSOR
12	Mr. SAYAN MAJUMDER	ASST. PROFESSOR
13	Mr. KOUSHIK BHATTACHARYYA	ASST. PROFESSOR
14	Mr. TANMOY RAKSHIT	ASST. PROFESSOR
15	Mr. MAINAK SARKAR	ASST. PROFESSOR
16	Ms. RIJITA MANDAL	ASST. PROFESSOR
17	Mr. SANJOY KUMAR MUKHERJEE	ASSOCIATE PROFESSOR
<b>Department of Civil Engineering</b>		
1	Dr. SANGITA CHOWDHURY	PROFESSOR
2	Mr. SAMIR BANDYOPADHYAY	ASST. PROFESSOR
3	Mr. DHRITIMAN MONDAL	ASST. PROFESSOR
4	Mr. WASIM MOLLA	ASST. PROFESSOR
5	Mr. PRASENJIT BHOWMICK	ASST. PROFESSOR
6	MD MAINUDDIN	ASST. PROFESSOR
7	Mr. SOURAV DUTTA	ASST. PROFESSOR
8	MD AFROZ	ASST. PROFESSOR
9	Mr. DEBU MUKHERJEE	ASST. PROFESSOR
10	Mr. AZHARUDDIN AHMED	ASST. PROFESSOR
11	Mr. SOURAV SARKHEL	ASST. PROFESSOR
12	Mr. AMIT KUMAR HALDER	ASST. PROFESSOR
<b>Department of Mechanical Engineering</b>		
1	Dr. NIKHIL CHANDRA DAS	PROFESSOR
2	Mr. SOURAV SAHA	ASST. PROFESSOR
3	Mr. SHAIBAL SAHOO	ASST. PROFESSOR
4	Mr. DEBASISH MAZUMDAR	ASST. PROFESSOR
5	Mrs. ANUJA SANTOSHRAO KOLHARIKAR	ASST. PROFESSOR
6	Mr. ASHOKE BHATTACHARJEE	ASST. PROFESSOR
<b>Department of Mathematics</b>		
1	Dr. PIJUSH BASAK	PROFESSOR
2	Mr. ARKA CHATTERJEE	ASST. PROFESSOR

Department of Physics		
1	Dr. ARUN CHANDRA SEN	PROFESSOR
2	Dr. ASHIS KUMAR KAR	PROFESSOR
3	Dr. PARTHA PRATIM KUNDU	ASSOCIATE PROFESSOR
Department of Chemistry		
1	Mr. SUSHOBHAN ROY	ASST. PROFESSOR
2	Mr. MEGHNA BISWAS	ASST. PROFESSOR
3	Mr. SAMARPITA DAS	ASST. PROFESSOR
Department of English		
1	Mr. UTTIYA SARKAR	ASST. PROFESSOR
2	Ms. ZENIFA ZARINE	ASST. PROFESSOR
3	Mr. SUDIP KUMAR CHATTOPADHYAY	ASST. PROFESSOR
Department of Economics		
1	SANJIB MAITY	ASST. PROFESSOR
2	UTPALENDU MONDAL	ASST. PROFESSOR

- **Adjunct Faculty:**

Sl. No.	Name	Branch
1	Mr. Mainak Banerjee	CE
2	Mr. Himadri Hazra	ME
3	Mr. Sourav Mukherjee	ECE
4	Mr. Sudipta Majumder	ME
5	Mr. Deboprashad Banerjee	ME
6	Mr. Ajay Dani	ECE
7	Mr. Krishnendu Ghosh	ECE
8	Mr. Goutam Roy	ECE

- **Permanent Faculty : Student Ratio**

1:20 for B.TECH

1:12 for M.TECH

- Permanent Faculty: Student Ratio:

**1:20 for B.TECH. & 1:12 for M.TECH.**

- Number of Faculty employed and left during the last three years

8. **Profile of Principal/Faculty**

For each Faculty give a page covering with Passport size photograph

- i. Name
- ii. Date of Birth
- iii. Unique id
- iv. Education Qualifications
- v. Work Experience
  - Teaching
  - Research
  - Industry
  - Others
- vi. Area of Specialization
- vii. Courses taught at Diploma/Post Diploma/Under Graduate/Post Graduate/Post Graduate



- viii. Diploma Level
  - Research guidance
    - No. of papers published in National/International Journals/Conferences
    - Master
    - Ph.D.
- ix. Projects Carried out
- x. Patents
- xi. Technology Transfer
- xii. Research Publications
- xiii. No. of Books published with details

**9. Fee**

- **Details of Fee, as approved by State Fee Committee, for the Institution**

1 <sup>st</sup> YEAR (2018-19)	Rs.80000.00
2 <sup>nd</sup> YEAR (2019-20)	Rs.82000.00
3 <sup>rd</sup> YEAR (2020-21)	Rs.84000.00
4 <sup>th</sup> YEAR (2021-22)	Rs.86000.00
Admission fee(One Time)	Rs.5000.00
Library-cum-Book-Bank Fee (For Four Years)	Rs.6000.00
Students Welfare, Sports & Games Fee (Annually)	Rs.1000.00
Caution Deposit	Rs.10000.00

- Time schedule for payment of fee for the entire programme:  
**SEMESTER WISE**
- No. of Fee waivers granted with amount and name of students:  
**NONE SINCE NO STUDENTS WERE ADMITTED UNDER MANAGEMENT QUOTA**
- Number of scholarship offered by the Institution, duration and amount

<b>Institutional Means Scholarship</b>		
<b>Name of Student</b>	<b>Duration</b>	<b>Amount</b>
Ardhendu Ghosh	4 yrs	70% of fee Waived Means
Tanmay das	4 yrs	45% of fee Waived Means
Bijan Roy	4 yrs	65% of fee Waived Means
Mrinmay Patra	4 yrs	50% of fee Waived Means
Raj Kumar Singha	4 yrs	80% of fee Waived Means
Samir Das	4 yrs	50% of fee Waived Means
Maheebub Rahman Sk	4 yrs	45% of fee Waived Means
Sanat Mondal	4 yrs	40% of fee Waived Means
Mrinmoy Das	4 yrs	45% of fee Waived Means
Sudip Maity	4 yrs	45% of fee Waived Means
Kaustav Paul	4 yrs	60% of fee Waived Means

- Criteria for fee waivers/scholarship:  
**SCHOLARSHIP IS AWARDED TO FINANCIALLY WEAKER STUDENTS**
- Estimated cost of Boarding and Lodging in Hostels:  
**Rs.28200.00 PER SEMESTER**

**10. Admission**

- Number of seats sanctioned with the year of approval: B.TECH.:420

& M.TECH.36

- Number of Students admitted under various categories each year in the last three years:

2018-19

2017-18

2016-2017

**B.TECH.**

**M.TECH.**

- Number of applications received during last two years for admission under Management Quota and number admitted: **NONE**

#### 11. **Admission Procedure**

- Mention the admission test being followed, name and address of the Test Agency and its URL (website) : JEE MAINS  
**National Testing Agency**  
Block C-20 1A/8 ,Sector- 62  
IITK Outreach Centre, Gautam Buddh Nagar  
Noida-201309, Uttar Pradesh (India)  
<https://nta.ac.in>  
WBJEE  
The West Bengal Joint Entrance Examinations Board  
AQ 13/1, AQ Block, Sector V, Bidhannagar, Kolkata, West Bengal 700091  
<https://wbjeeb.nic.in>
- Number of seats allotted to different Test Qualified candidate separately (AIEEE/CET (State conducted test/University tests/CMAT/GPAT)/Association conducted test)-100%
- Calendar for admission against vacant seats: July 2018
- Last date of request for applications :1<sup>st</sup> July 2018
- Last date of submission of applications:10<sup>th</sup> July 2018
- Dates for announcing final results:12<sup>th</sup> July 2018
- Release of admission list (main list and waiting list shall be announced on the same day):13<sup>th</sup> July 2018
- Date for acceptance by the candidate(time given shall in no case be less than 15 days):27<sup>th</sup> July 2018
- Last date for closing of admission:30<sup>th</sup> July 2018
- Starting of the Academic session:1<sup>st</sup> August 2018
- The waiting list shall be activated only on the expiry of date of main list
- The policy of refund of the fee, in case of withdrawal, shall be clearly notified:  
A candidate applying to the institute for Fee till June 30, 2019 should get the due amount of his/her fee refunded within 7 days from the date of submission of the Application at the college.

#### 12. **Criteria and Weightages for Admission**

- Describe each criterion with its respective weightages i.e. Admission Test, marks in qualifying examination etc.:Any Valid Rank in Qualifying Examination
- Mention the minimum level of acceptance, if any :45% of Marks in PCM in the Plus Two Exam
- Mention the cut-off levels of percentage and percentile score of the candidates in the admission test for the last three years
- Display marks scored in Test etc. and in aggregate for all candidates who were admitted

13. **List of Applicants**

- List of candidate whose applications have been received along with percentile/percentage score for each of the qualifying examination in separate categories for open seats. List of candidate who have applied along with percentage and percentile score for Management quota seats

14. **Results of Admission under Management seats/Vacant seats**

- Composition of selection team for admission under Management Quota with the brief profile of members (This information be made available in the public domain after the admission process is over)
- Score of the individual candidate admitted arranged in order of merit
- List of candidate who have been offered admission
- Waiting list of the candidate in order of merit to be operative from the last date of joining of the first list candidate

- List of the candidate who joined within the date, vacancy position in each category before operation of waiting list

15. **Information of Infrastructure and Other Resources Available**

- **Number of Class Rooms and size of each:**  
21 Nos. size 66sqm for UG  
04 Nos. size 33sqm for PG
- **Number of Tutorial rooms and size of each:**  
7 Nos. size 33sqm
- **Number of Laboratories and size of each:**  
44 Nos. size 66sqm
- **Number of Drawing Halls with capacity of each:**  
2 Nos. size 156 sqm
- **Number of Computer Centers with capacity of each:**  
Nos. Size 150 & 110 sqm
- **Central Examination Facility, Number of rooms and capacity of each:**  
EXAMINATION CONTROL: 1 No. 35sqm,  
FACULTY ROOM: 37 Nos. Total Size: 275sqm
- **Barrier Free Built Environment for disabled and elderly persons:**  
Available
- **Occupancy Certificate:**  
Available
- **Fire and Safety Certificate:**  
Available

- **Hostel Facilities:**  
FOR BOTH BOYS & GIRLS AVAILABLE
- **Library**

*Number of Library books/Titles/Journals available*

Total Numbers of Titles	2401
Total Numbers of Library books	30,483
Total Number of Journals available	59

*List of online National/International Journals subscribed*

National Journal	934
International Journal	3731

*E-Library facilities*

- NPTEL
- SWAYAM
- QEEE
- **Laboratory and Workshop**

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

<b>Name of Laboratory</b>	<b>Major Equipment/Facilities</b>
<b>Department of Electronics &amp; Communication Engineering (Under Graduate Programme)</b>	
ANALOG COMMUNICATION LABORATORY	AM FM MODULATOR & DEMODULATOR, FM MODULATOR & DEMODULATOR RLI
ANALOG ELECTRONICS LAB	CLIPPER AND CLAMPER RC COUPLED AMPLIFIER, CLASS-A AMPLIFIER PLISH PHU
BASIC ELECTRONICS LAB.	Semiconductor Diode Characteristics, Zener Diode Characteristics, Transistor Characteristics FET Ch.
DIGITAL COMMUNICATION LAB	PAM/PWM/PPM MODULATION/ DEMODULATION CODE
DIGITAL ELECTRONICS LABORATORY	SYNCHRONOUS UP DOWN COUNTER J_K/S_R/D FLIP FLOP TRAINER, ADDER CIRCUIT LOGIC IC
DIGITAL SIGNAL PROCESSING LAB	DSP Trainer Kit
DESIGN LABORATORY	DUAL POWER SUPPLY, FUNCTION GENERATOR, CRO. BREAD BOARD, ASSORTED COMPONENTS
ELECTRONICS CIRCUIT DESIGN LABORATORY	DUAL POWER SUPPLY, FUNCTION GENERATOR, CRO. BREAD BOARD, ASSORTED COMPONENTS
EM THEORY & TX LINE LABORATORY	Vector Network Analyzer, Directional Coupler, VSWR Meter Spectrum
MICROPROCESSOR & MICROCONTROLLER LAB	8085 Microprocessor Kit, ADC/DAC Converter, SMPS 8051 Microcontroller

	Stonner
PROJECT LABORATORY	DUAL POWER SUPPLY, FUNCTION GENERATOR, CRO. PIC PROGRAMMER, SPARTAN KIT EMBEDDED
RF AND MICROWAVE ENGINEERING LAB	Klystron, Frequency meter, Slotted Section, PIN Modulator Attenuator Phase
VLSI DESIGN LABORATORY	CPLD KIT, FPGA KIT, TRAFFIC LIGHT CONTROLLER, STEPPER MOTOR CONTROLLER ADC
<b>(Post Graduate Programme in Microelectronics &amp; VLSI Design)</b>	
CAD TOOLS FOR VLSI DESIGN	XLINX, SPARTAN, EDA Tools, FPGA system.
DESIGN LAB	MATLAB, SIMULINK, PSIM, PRC
<b>Department of Computer Science Engineering (Under Graduate Programme)</b>	
BASIC COMPUTATION LABORATORY	Desktop Computers, System Software Application
COMPUTER NETWORK	COMPUTER, GCC COMPILER
COMPUTER ORGANIZATION ARCHITECTURE LABORATORY	IC CHIPS- SN74LS151, SN 74LS157 etc. MODELSIM OF Mentor Graphics
DATA STRUCTURE & ALGORITHM LAB	DESKTOP PC, PRINTER, GCC COMPILIER
OOPS & DATA BASE LAB	DESKTOP COMPUTER, UPS(OOPS)JDK,(C++) GC++ COMPILIER,(DBMS) MYSQL
SOFTWARE ENGINEERING LABORATORY	RSA, RAD of IBM
<b>Department of Electrical Engineering (Under Graduate Programme)</b>	
BASIC ELECTRICAL LABORATORY	Network Theorems, Fluorescent Lamp Study Two wattmeter method.
CIRCUIT & NETWORK LAB	RC & LC Circuit, Response of Second Order System, High Pass Filter, Low Pass
CONTROL SYSTEM LAB	Process Control Simulator, DC Motor Position Control System, Tuning of
ELECTRIC DRIVES LABORATORY	THYRISTOR CONTROLLED DC DRIVE, CHOPPER FED DC DRIVE, AC SINGLE
ELECTRICAL MACHINE LABORATORY	DC SHUNT AND SERIES MOTOR, AC SQUIRREL CAGE MOTOR
ELECTRICAL MEASUREMENT LAB	LVDT module, Kelvin Double Bridge, Desauty's Bridge Anderson's
PHYSICS LABORATORY	Viscosity of Water by Capillary Flow, Fresnel's Biprism, Plank's
POWER SYSTEM LAB	Oil Testing Set, HV Test Set, Tan Delta Set, DC Network Analyser, Fuse Testing Kit
PROGRAMMING PRACTICE LABORATORY	PC.Head Phophoneone.Micr
THERMAL ENGINEERING LAB	Engine Models, Boiler Models, Petrol Engine Test Rig. Diesel EngineTest
WORKSHOP	Shaping Machine, Lathe Machine, Universal Milling Machine, Wood Turning
<b>(Post Graduate Programme in Power Electronics &amp; Drives)</b>	
DRIVES LAB	Intel 8096 Trainer, PIC 16C16X77X

	Trainer,8951 Microcontroller Trainer, LCD
POWER ELECTRONICS LAB-I	Power Diode, SCR,GTO, LASCR, RCT.B Phase converter, 3 phase
<b>Department of Mechanical Engineering (Under Graduate Programme)</b>	
ADVANCED MANUFACTURING LAB	CNC Lathe, CNC Milling machine, Robo, FMS System
AIR CONDITIONING & REFRIGERATION LAB	Refrigerator Test Rig, Window Type Air Conditioner Test Rig. Ice
FLUID MECHANICS & HYDRAULIC MACHINES LAB	Venturimeter, Orificemeter Test Rig. Bernouli's Theorem test Rig. Reynold's
IC ENGINE LAB	Bomb Calorimeter, ORSAT Apparatus, Valve Diesel engine, Petrol engine, MPFI
MACHINING & MACHINE TOOLS LAB	Surface roughness tester, lathe tool dynamometer, Drill tool
MANUFACTURING TECHNOLOGY	Smithy, Forging, TIG Machine, Sand Testing Machine
MATERIAL TESTING LAB	Impact Testing Machine, Fatigue Testing Machine, Izod & Charpy
MECHATRONICS LAB	Open Loop Position Control, Closed Loop Position Control, Analog & Digital
METROLOGY & MEASUREMENT LAB	Vernier gauge, Depth gauge, slip gauge, sine bar, profile projector
APPLIED MECHANICS LAB	Spring Testing Machine, Tensile Testing Machine, Torsion testing
APPLIED THERMODYNAMIC & HEAT TRANSFER LAB	Throtlling Calorimeter, Single acting reciprocating air
DYNAMICS OF MACHINE LAB	Whirling of shaft apparatus, Static & Dynamic balancing
<b>Department of Civil Engineering (Under Graduate Programme)</b>	
CAD LAB	Software
CONCRETE LAB	SLUMP TEST APPARATUS, VEE BEE CONSISTOMETER, FLEXURE
ENVIRONMENTAL ENGINEERING LABORATORY	TURBIDITYMETER, PH METER, BOD AND COD MEASURING
GEOLOGY LAB	Specimen of rocks, crystals and mineral MICROSCOPE
SOIL MECHANICS LAB-I	STANDARD PENETROMETER, TRIAXIAL TEST APPARATUS, VANE
SOLID MECHANICS LAB-II	Tension testing machine, Compression Testing Machine, Brinell and
SURVEY PRACTICE LAB	Measuring Chain, Plane Table, Total Station Theodolite
TRANSPORTATION LAB	FLASH POINT & FIRE POINT APPARATUS, MARSHAL STABILITY TEST

*List of Experimental Setup in each Laboratory/Workshop*

<b>Solid State Lab (EC-392)</b>
Ex 1: Study input characteristics of BJT in common-emitter configuration.
Ex 2: Study output characteristics of BJT in common-emitter configuration for different base currents and hence determine hybrid parameters.
Ex 3: Study output characteristics of BJT in common-emitter configuration and find performance parameters (Voltage Gain, Current Gain, Input Impedance, Output Impedance).
Ex 4: Study the variation of small-signal voltage gain with frequency of a common-emitter RC coupled amplifier.
Ex 5: Study of drain characteristics and transfer characteristics of a JFET and hence determine the FET parameters (drain resistance, transconductance )
Ex 6: Study of C-V characteristics of a Varactor diode by appropriate software.
Ex 7: Study of C-V characteristics of a MOS structure by appropriate software.
Ex8: Study of drain characteristics and transfer characteristics of a MOSFET and hence determine the FET parameters (drain resistance,
<b>Circuits and Networks Laboratory (EC-391)</b>
Ex. 1: Characteristics of Series & Parallel Resonant circuits
Ex. 2: Verification of Network Theorems
Ex. 3: Transient Response in R-L & R-C Networks ; simulation / hardware
Ex. 4: Transient Response in RLC Series & Parallel Circuits & Networks ; simulation / hardware
Ex. 5: Determination of Impedance (Z), and Admittance (Y) parameters of Two-port networks
Ex. 6: Generation of periodic, exponential, sinusoidal, damped sinusoidal, step, impulse, and ramp signals using MATLAB
Ex. 7: Representation of Poles and Zeros in s-plane, determination of partial fraction expansion in s-domain and cascade connection of second-order systems using MATLAB
Ex. 8: Determination of Laplace Transform, different time domain functions, and Inverse Laplace
Ex. 9: Transformation using MATLAB
<b>Signals and Systems Laboratory (EC-393)</b>
Ex. 1: To study Z- transform of: a) Sinusoidal signals b) Step functions.
Ex. 2: To compare Fourier and Laplace transformations of a signal.
Ex. 3: To study convolution theorem in time and frequency domain.
Ex. 4: To Study Signal Synthesis via sum of harmonics.
Ex. 5: To study LPF &HPF, band pass and reject filters using RC circuits.
Ex. 6: To demonstrate how analog signals are sampled and how different sampling rates affect the outputs.
Ex. 7: To study sampling theorem for low pass signals and band pass signals .
Ex. 8: To determine the components of: a) Square wave b) Clipped sine wave.
<b>Analog Electronic Circuits Laboratory (EC-394)</b>
Ex. 1: Study of Diode as clipper & clamper
Ex. 2: Study of Zener diode as a voltage regulator
Ex. 3: Study of ripple and regulation characteristics of full wave rectifier without and with capacitor filter
Ex. 4: Study of characteristics curves of B.J.T & F.E.T .
Ex. 5: Design a two-stage R-C coupled amplifier & study of it's gain & Bandwidth.
Ex. 6: Study of class A & class B power amplifiers.
Ex. 7: Study of class C & Push-Pull amplifiers.
Ex. 8: Realization of current mirror & level shifter circuit using Operational Amplifiers.
Ex. 9: Study of timer circuit using NE555 & configuration for monostable & astable multivibrator
Ex. 10: Design a Bistable multivibrator using NE 555.

Ex. 11: Study of Switched Mode Power Supply & construction of a linear voltage regulator using regulator IC chip.
Ex. 12: Design a simple function generator using IC.
Ex. 13: Realization of a V-to-I & I-to-V converter using Op-Amps
Ex. 14: Realization of a Phase Locked Loop using Voltage Controlled Oscillator (VCO).
Ex. 15: Study of D.A.C & A.D.C.
<b>Digital Electronic &amp; Integrated Circuits Laboratory (EC-492)</b>
Ex. 1: Realization of basic gates using Universal logic gates.
Ex. 2: Code conversion circuits- BCD to Excess-3 and vice-versa.
Ex. 3: Four-bit parity generator and comparator circuits.
Ex. 4: Construction of simple Decoder and Multiplexer circuits using logic gates.
Ex. 5: Design of combinational circuit for BCD to decimal conversion to drive 7-segment display using multiplexer.
Ex. 6: Construction of simple arithmetic circuits-Adder, Subtractor.
Ex. 7: Realization of RS-JK and D flip-flops using Universal logic gates.
Ex. 8: Realization of Universal Register using JK flip-flops and logic gates.
Ex. 9: Realization of Universal Register using multiplexer and flip-flops.
Ex. 10: Construction of Adder circuit using Shift Register and full Adder.
Ex. 11: Realization of Asynchronous Up/Down counter.
Ex. 12: Realization of Synchronous Up/Down counter.
Ex. 13: Design of Sequential Counter with irregular sequences.
Ex. 14: Realization of Ring counter and Johnson's counter.
Ex. 15: Construction of adder circuit using Shift Register and full Adder.
<b>Analog Communication Lab (EC-591)</b>
Ex. 1: Measurement of modulation index of an AM signal.
Ex. 2: measurement of output power with varying modulation index an AM signal(for both DSB- & SSB).
Ex. 3: Measurement of distortion of the demodulated output with varying modulation index of an AM signal (for both DSB-SC & SSB).
Ex. 4: Measurement of power of different frequency components of a frequency modulated signal & the measurement of the bandwidth.
Ex. 5: Design a PLL using VCO & to measure the lock frequency.
Ex. 6: Design a FM demodulator using PLL.
Ex. 7: Measurement of SNR of a RF amplifier.
Ex. 8: Measurement of selectivity , sensitivity, fidelity of a superhetrodyne receiver.
Ex. 9: Study of waveforms of various functional points (output of RF,IF & video) of a B/W TV receiver.
Ex. 10: Study of the vertical & horizontal sweep of the time base unit of a B/W TV.
<b>Microprocessors &amp; Microcontrollers Lab (EC-592)</b>
Ex.1: Study of prewritten programs on trainer kit using the basic instruction set (data transfer, Load/Store, Arithmetic, Logical) Assignments based on above.
Ex.2: Familiarization with 8085 & 8051 simulator on PC. Study of prewritten programs using basic instruction set (data transfer, Load/Store, Arithmetic, Logical) on the simulator. Assignments based on above
Ex.3: Programming using kit and simulator for: <ul style="list-style-type: none"> <li>i) Table look up</li> <li>ii) Copying a block of memory</li> <li>iii) Shifting a block of memory</li> <li>iv) Packing and unpacking of BCD numbers</li> <li>v) Addition of BCD numbers</li> <li>vi) Binary to ASCII conversion</li> <li>vii) String Matching, Multiplication using shift and add method and Booth's Algorithm</li> </ul>



Ex.4: Program using subroutine calls and IN/OUT instructions using 8255 PPI on the trainer kit e.g. subroutine for delay, reading switch state and glowing LEDs accordingly.
Ex.5: Study of timing diagram of an instruction on oscilloscope
Ex.6: Interfacing of 8255: Keyboard and Multi-digit Display with multiplexing using 8255
Ex.7: Study of 8051 Micro controller kit and writing programs as mentioned in S/L3. Write programs to interface of Keyboard, DAC and ADC using the kit.
Ex.8: Serial communication between two trainer kits
<b>Control System Lab (Ec-583)</b>
Ex.1: Familiarization with MATLAB Control System tool Box, MATLAB- SIMULINK tool box & pSPICE
Ex.2: Determination of step response for 1st order & 2nd order system with unity feedback on CRO & calculation of control system specifications for variations of system design.
Ex.3: Simulation of step response & impulse response for Type-I & Type-II system with unity feedback using MATLAB & pSPICE.
Ex.4: Determination of root locus, Bode-plot, Nyquist Plot, using MATLAB control system toolbox for a given 2nd order transfer function & determination of different control system specifications.
Ex.5: Determination of PI, PD, and PID controller action on 1st order simulated process.
Ex.6: Determination of approximate transfer function experimentally using Bode Plot.
Ex.7: Evaluation of steady-state error, setting time, percentage peak overshoots, gain margin, phase margin with addition of lead compensator in forward path transfer functions using MATLAB & pSPICE.
Ex.8: Study of position control system using servomotor.
Ex.9: Design and hardware implementation of a temperature controller using microprocessor/microcontroller.
<b>Electronic Measurement and Instrumentation (EC-695C)</b>
Ex.1: Study of Static Characteristics of a Measuring Instrument
Ex.2: Study of Dynamic Characteristics of a Measuring Instrument
Ex.3: Acquaintance with basic structure of DMM and measurement of different electrical parameters
Ex.4: Realization of Data Acquisition system
Ex.5: Wave and spectrum analysis using Q meter
Ex.6: Realization of a V-to-I & I-to-V converter.
Ex.7: Statistical analysis of errors in measurement.
Ex.8: Study of VCO (Voltage controlled oscillator) & PLL (Phase Locked Loop).
<b>VLSI Design Lab (EC-792)</b>
Ex.1: Familiarity with Spice simulation tool
Ex.2: Spice Simulation of Inverter, NAND , NOR Gates.
Ex.3: Familiarity with EDA tools for VLSI design /FPGA based system design
Ex.4: Layouts, Transistors and tools,.
Ex.5: Standards cell Design
Ex.6: Design of CMOS XOR/XNOR Gates.
Ex.7: Design of CMOS Full adder
Ex.8: Design of CMOS Flip flops ( R-S ,D , J-K)
Ex.9: Design of 8 bit synchronous Counter
Ex.10: Design of 8 bit bi-directional register with tri-stated input/output bus
Ex.11: Design of a 12 bit CPU with few instructions and implementation and validation on FPGA
<b>RF &amp; Microwave Engineering Lab (EC-793A)</b>
Ex.1: Determination of phase and group velocities in a waveguide carrying TE <sub>10</sub> Wave from Dispersion diagram [ $\omega$ - $\beta$ Plot].
Ex.2: Measurement of unknown impedance using shift in minima technique using a waveguide test bench/ Measurement of the susceptance of an inductive and or a capacitive

window using shift in minima technique using a waveguide test bench
Ex.3: Study of the characteristics of a Reflex Klystron oscillator
Ex.4: Study of Gunn-oscillator Characteristics using X-band waveguide test bench.
Ex.5: Measurement of coupling factor, Directivity, Insertion loss and Isolation of a Directional coupler using X-band waveguide test bench set up.
Ex.6: Scattering matrix of a magic tee / E-plane tee / H-plane tee using waveguide test bench at X-band.
Ex.7: Experimental/Simulation Study of filter (LPF, HPF,BPF) response.
Ex.8: Measuring of dielectric constant of a material using waveguide test bench at X-band.
<b>Department of Computer Science &amp; Engineering</b>
<b>Data Structure &amp; Algorithm (CS-392)</b>
Ex.1: Implementation of array operations:
Ex.2: Stacks and Queues: adding, deleting elements Circular Queue:
Ex.3: Adding & deleting elements Merging Problem :
Ex.4: Evaluation of expressions operations on Multiple stacks & queues :
Ex.5: Implementation of linked lists: inserting, deleting, and inverting a linked list. Implementation of stacks & queues using linked lists:
Ex.6: Polynomial addition, Polynomial multiplication
Ex.7: Sparse Matrices: Multiplication, addition.
Ex.8: Recursive and Nonrecursive traversal of Trees
Ex.9: Threaded binary tree traversal. AVL tree implementation
Ex.10: Application of Trees. Application of sorting and searching algorithms
Ex.11: Hash tables implementation: searching, inserting and deleting, searching & sorting techniques.
<b>Computer organization (CS-393)</b>
Ex.1: Familiarity with IC-chips, e.g. a) Multiplexer , b) Decoder, c) Encoder b) Comparator Truth Table verification and clarification from Data-book.
Ex.2: Design an Adder/Subtractor composite unit.
Ex.3: Design a BCD adder.
Ex.4: Design of a 'Carry-Look-Ahead' Adder circuit.
Ex.5: Use a multiplexer unit to design a composite ALU .
Ex.6: Use ALU chip for multibit arithmetic operation.
Ex.7: Implement read write operation using RAM IC.
Ex.8: (a) & (b) Cascade two RAM ICs for vertical and horizontal expansion.
<b>Computer Architecture (CS-492)</b>
1. HDL introduction
2. Basic digital logic base programming with HDL
3. 8-bit Addition, Multiplication, Division
4. 8-bit Register design
5. Memory unit design and perform memory operations.
6. 8-bit simple ALU design
7. 8-bit simple CPU design
8. Interfacing of CPU and Memory
<b>Database Management System Lab (CS-691)</b>
1. Creating Database Creating a Database , Creating a Table, Specifying Relational Data Types ,Specifying Constraints , Creating Indexes
2. Table and Record Handling. INSERT statement , Using SELECT and INSERT together, DELETE, UPDATE, TRUNCATE statements DROP, ALTER statements

3. Retrieving Data from a Database The SELECT statement, Using the WHERE clause , Using Logical Operators in the WHERE clause Using IN, BETWEEN, LIKE , ORDER BY, GROUP BY and HAVING Clause, Using Aggregate Functions , Combining Tables Using JOINS, Subqueries
4. Database Management Creating Views, Creating Column Aliases, Creating Database Users, Using GRANT and REVOKE
<b>Network Lab ( CS-692)</b>
Ex.1: IPC (Message queue)
Ex.2: NIC Installation & Configuration (Windows/Linux)
Ex.3: Familiarization with o Networking cables (CAT5, UTP) o Connectors (RJ45, T-connector) o Hubs, Switches
Ex.4: TCP/UDP Socket Programming
Ex.5: Multicast & Broadcast Sockets
Ex.6: Implementation of a Prototype Multithreaded Server
Ex.7: Implementation of o Data Link Layer Flow Control Mechanism (Stop & Wait, Sliding Window) o Data Link Layer Error Detection Mechanism (Cyclic Redundancy Check) o Data Link Layer Error Control Mechanism (Selective Repeat, Go Back N)
<b>Software Engineering Lab (CS-791)</b>
Ex.1: Preparation of requirement document for standard application problems in standard format.(e.g Library Management System, Railway Reservation system, Hospital management System, University Admission system)
Ex.2: Project Schedule preparation.
Ex.3: Use Case diagram, Class diagram, Sequence diagram and prepare Software Design Document using tools like Rational Rose.( For standard application problems)
Ex.4: Estimation of project size using Function Point (FP) for calculation.
Ex.5: Design Test Script/Test Plan (both Black box and White Box approach)
Ex.6: Compute Process and Product Metrics (e.g Defect Density, Defect Age, Productivity, Cost etc.)>Also by Cost Estimation models.
<b>OOP Lab (CS-594D)</b>
Ex.1: Assignments on class, constructor, overloading, inheritance, overriding
Ex.2: Assignments on wrapper class, arrays
Ex.3: Assignments on developing interfaces- multiple inheritance, extending interfaces
Ex.4: Assignments on creating and accessing packages
Ex.5: Assignments on multithreaded programming
Ex.6: Assignments on applet programming
<b>Department of Civil Engineering</b>
<b>Highway Engineering Lab ( CE-691)</b>
Ex.1: Tests on highway materials – Aggregates- Impact value, Los-Angeles Abrasion value water absorption , Elongation & Flakiness Index.
Ex.2: Bitumen & bituminous materials: Specific gravity, penetration value, softening point, loss on heating, Flash & Fire point test.
Ex.3: Stripping value test
Ex.4: Design of B.C. & S.D.B.C. Mix
Ex.5: CBR Test
Ex.6: Marshal Stability Test

Ex.7: Benkelman beam Test.
<b>Detailing of RCC &amp; steel structures (CE-692)</b>
<b>RCC Structure</b>
Ex.1: General considerations: Design principle of R.C.C. sections. Limit state method of design Loads and stresses to be Considered in the design as per I.S. code provision.
Ex.2: Design & detailing of a i) simply supported R.C.C Beam ii) Continuous T- Beam.
Ex.3: Design & Detailing of columns, isolated and combined footing
Ex.4: Design & detailing of a i) simply supported one way slabii) One way Continuous slab.
Ex.5: Design of different units: Slab, beam column, roofing and staircase from floor plan of a multistoried frame building, typical detailing of a two way floor slab
<b>Steel Structure</b>
Ex.1: Problems on general consideration and basic concepts
Ex.2: Discussion on different loads (i.e. wind load, Dead load, live load and others) as per IS875
Ex.3: Design & drawing of the following components of a roof truss: 1. Members of the roof truss. 2. Joints of the roof truss members 3. Purlins 4. Gable bracings 5. Column with bracings 6. Column base plate 7. Column foundation
<b>CAD Laboratory (CE-693)</b>
Ex.1: Introduction and important features of a software dealing with analysis and design of structures
Ex.2: Analysis and design of a multistoried building using software, Preparation of detailed drawings of different structural elements including ductility detailing
Ex.3: RCC Slab, beam, column and footing design
<b>Environmental Engineering Lab (CE-791)</b>
Ex.1: Determination of turbidity for a given sample of water Physical
Ex.2: Determination of color for a given sample of water
Ex.3: Determination of solids in a given sample of water: Total Solids, Suspended Solids and Dissolved Solids
Ex.4: Determination of pH for a given sample of water Chemical
Ex.5: Determination of concentration of Chlorides in a given sample of water
Ex.6: Determination of carbonate, bi-carbonate and hydroxide alkalinity for a given sample of water
Ex.7: Determination of hardness for a given sample of water
Ex.8: Determination of concentration of Fluorides in a given sample of water
Ex.9: Determination of concentration of Iron in a given sample of water
Ex.10: Determination of the Optimum Alum Dose for a given sample of water through Jar Test
Ex.11: Determination of the Residual Chlorine in a given sample of water
Ex.12: Determination of the Chlorine Demand for a given sample of water
Ex.13: Determination of the Available Chlorine Percentage in a given sample of bleaching powder
Ex.14: Determination of amount of Dissolved Oxygen (DO) in a given sample of water
Ex.15: Determination of the Biochemical Oxygen Demand (BOD) for a given sample of wastewater
Ex.16: Determination of the Chemical Oxygen Demand (COD) for a given sample of waste water
Ex.17: Determination of bacteriological quality of water: presumptive test, confirmative test

and Determination of MPN
<b>CIVIL ENGINEERING PRACTICE SESSIONAL (CE-792)</b>
<b>Ex.1: Foundation Engineering</b> Stability Analysis of Slopes, Preparation of typical soil test report, Estimation of bearing capacity and settlement of foundation from typical field data, Structural design and detailing of isolated rectangular footing and combined footing.
<b>Ex.2: Water Resource Engineering</b> Estimation of runoff, Field capacity and permanent wilting point Construction of hydrograph& S curve, efficient section of canal, Design of lined canals, Determination of yield of wells, flood routing
<b>Ex.3: Environmental Engineering</b> Population forecasting, Analysis and design of water distribution network, Hydraulic design of sewer
<b>Ex.4: Transportation Engineering</b> Determination of highway capacity, Highway geometric design, Design of flexible and rigid pavement, Traffic Signal Design
<b>Department of Electrical Engineering</b>
<b>Basic Electrical Laboratory (ES-EE191)</b>
Ex.1: First activity: Introduction to basic safety precautions and mentioning of the do's and Don'ts. Noting down list of experiments to be performed, and instruction for writing the laboratory reports by the students. Group formation. Students are to be informed about the modalities of evaluation.
Ex.2: Introduction and uses of following instruments :  (a) Voltmeter.                      (b) Ammeter.                      (c) Multimeter.                      (d) Oscilloscope Demonstration of real life resistors, capacitors with color code, inductors and autotransformer.
Ex.3: Demonstration of cut-out sections of machines: DC machine, Induction machine, Synchronous machine and single phase induction machine.
Ex.4: Calibration of ammeter and Wattmeter.
Ex.5: Determination of steady state and transient response of R-L, R-C and R-L-C circuit to a step change in voltage.
Ex.6: Determination of steady state response of R-L and R-C and R-L-C circuit and calculation of impedance and power factor.
Ex.7: Determination of resonance frequency and quality factor of series and parallel R-L-C circuit.
Ex.8: (a) Open circuit and short circuit test of a single-phase transformer (b) Load test of the transformer and determination of efficiency and regulation.
Ex.9: Demonstration of three phase transformer connections. Voltage and current relationship, phase shifts between the primary and secondary side.
Ex.10: Measurement of power in a three phase unbalanced circuit by two wattmeter method.
Ex.11: Determination of Torque –Speed characteristics of separately excited DC motor.

Ex.12: Determination of Torque speed characteristics and observation of direction reversal by change of phase sequence of connection of Induction motor.
Ex.13: Determination of operating characteristics of Synchronous generator.
Ex.14: Demonstration of operation of (a) DC-DC converter (b) DC-AC converter (c) DC-AC converter for speed control of an Induction motor.
Ex.15: Demonstration of components of LT switchgear.
<b>Electric Circuit Theory Lab (EE-391)</b>
Ex.1: Transient response of R-L and R-C network: simulation with PSPICE /Hardware.
Ex.2: Transient response of R-L-C series and parallel circuit: Simulation with PSPICE/ Hardware.
Ex.3: Determination of Impedance (Z) and Admittance (Y) parameter of two port network: Simulation /Hardware.
Ex.3: Frequency response of LP and HP filters: Simulation / Hardware.
Ex.4: Frequency response of BP and BR filters: Simulation /Hardware.
Ex.5: Generation of Periodic, Exponential, Sinusoidal, Damped Sinusoidal, Step, Impulse, Ramp signal using MATLAB in both discrete and analog form.
Ex.6: Determination of Laplace transform and Inverse Laplace transform using MATLAB.
Ex.7: Amplitude and Phase spectrum analysis of different signals using MATLAB.
Ex.8: Verification of Network theorem using SPICE.
<b>ELECTRIC MACHINE LABORATORY-I (EE-491)</b>
Ex.1: Study of the characteristics of a separately excited DC generator.
Ex.2: Study of the characteristics of a DC motor.
Ex.3: Study of methods of speed control of DC motor
Ex.4: Study of the characteristics of a compound DC generator (short shunt).
Ex.5: Measurement of speed of DC series motor as a function of load torque.
Ex.6: Study of equivalent circuit of a single phase transformer.
Ex.7: Polarity test on a single phase transformer & study of different connections of three phase transformer.
Ex.8: Study of equivalent circuit of three phase Induction motor by no load and blocked rotor test.
Ex.9: Study of performance of wound rotor Induction motor under load.
Ex.10: Study of performance of three phase squirrel- cage Induction motor –determination of iron-loss, friction & windage loss.
<b>ELECTRIC AND ELECTRONIC MEASUREMENT LABORATORY (EE-492)</b>
Ex.1: Instrument workshop- Observe the construction of PMMC, Dynamometer, Electro-thermal and Rectifier type of instruments, Oscilloscope and Digital multimeter.
Ex.1: Calibrate moving iron and electro-dynamometer type ammeter/voltmeter by potentiometer.
Ex.1: Calibrate dynamometer type wattmeter by potentiometer.
Ex.2: Calibrate AC energy meter.
Ex.3: Measurement of resistance using Kelvin double bridge.
Ex.4: Measurement of power using Instrument transformer.
Ex.5: Measurement of power in Polyphase circuits.
Ex.6: Measurement of frequency by Wien Bridge.
Ex.7: Measurement of Inductance by Anderson bridge
Ex.8: Measurement of capacitance by De Sauty Bridge.
Ex.9: Measurement of capacitance by Schering Bridge.
<b>ELECTRIC MACHINES-II LABORATORY (EE-591)</b>
Ex.1: Different methods of starting of a 3 phase Cage Induction Motor & their comparison

[DOL, Auto transformer & Star-Delta]
Ex.2: Speed control of 3 phase squirrel cage induction motor by different methods & their comparison [voltage control & frequency control].
Ex.3: Speed control of 3 phase slip ring Induction motor by rotor resistance control.
Ex.4: Determination of regulation of Synchronous machine by <ul style="list-style-type: none"> <li>• Potier reactance method.</li> <li>• Synchronous Impedance method.</li> </ul>
Ex.5: Determination of equivalent circuit parameters of a single phase Induction motor.
Ex.6: Load test on single phase Induction motor to obtain the performance characteristics.
Ex.8: To determine the direct axis resistance [Xd] & quadrature reactance [Xq] of a 3 phase synchronous machine by slip test.
Ex.9: Load test on wound rotor Induction motor to obtain the performance characteristics.
Ex.10: To make connection diagram to full pitch & fractional slot winding of 18 slot squirrel cage Induction motor for 6 poles & 4 pole operation.
Ex.11: To study the performance of Induction generator.
<b>POWER SYSTEM-I LABORATORY (EE-592)</b>
Ex.1: Determination of the generalized constants A,B, C, D of long transmission line.
Ex.2: Simulation of DC distribution by network analyzer.
Ex.3: Measurement of earth resistance by earth tester.
Ex.4: Dielectric strength test of insulating oil.
Ex.5: Determination of breakdown strength of solid insulating material.
Ex.6: Different parameter calculation by power circle diagram.
Ex.7: Study of different types of insulator.
Ex.8: Active and reactive power control of alternator.
Ex.9: Study and analysis of an electrical transmission line circuit with the help of PSPICE.
Ex.10: Dielectric constant, tan delta, resistivity test of transformer oil.
<b>CONTROL SYSTEM-I LABORATORY (EE-593)</b>
Ex.1: Familiarization with MAT-Lab control system tool box, MAT-Lab- simulink tool box & PSPICE.
Ex.2: Determination of Step response for first order & Second order system with unity feedback on CRO & calculation of control system specification like Time constant, % peak overshoot, settling time etc. from the response.
Ex.3: Simulation of Step response & Impulse response for type-0, type-1 & Type-2 system with unity feedback using MATLAB & PSPICE.
Ex.4: Determination of Root locus, Bode plot, Nyquist plot using MATLAB control system tool box for 2nd order system & determination of different control system specification from the plot.
Ex.5: Determination of PI, PD and PID controller action of first order simulated process.
Ex.6: Determination of approximate transfer functions experimentally from Bode plot.
Ex.7: Evaluation of steady state error, setting time, percentage peak overshoot, gain margin, phase margin with addition of Lead.
<b>CONTROL SYSTEM-II LABORATORY (EE-691)</b>
Ex.1: Study of a practical position control system obtaining closed step responses for gain setting corresponding to over-damped and under-damped responses. Determination of rise time and peak time using individualized components by simulation. Determination of un-damped natural frequency and damping ration from experimental data.
Ex.2: Tuning of P, PI and PID controller for first order plant with dead time using Z-N method. Process parameters (time constant and delay/lag) will be provided. The gain of the controller to be computed by using Z-N method. Steady state and transient performance of the closed loop plant to be noted with and without steady disturbances. The theoretical phase margin and gain margin to be calculated manually for each gain setting.
Ex.3: Design of Lead, Lag and Lead-Lag compensation circuit for the given plant transfer function. Analyze step response of the system by simulation.

Ex.4: Obtain Transfer Function of a given system from State Variable model and vice versa. State variable analysis of a physical system - obtain step response for the system by simulation.
Ex.5: State variable analysis using simulation tools. To obtain step response and initial condition response for a single input, two-output system in SV form by simulation.
Ex.6: Performance analysis of a discrete time system using simulation tools. Study of closed response of a continuous system with a digital controller and sample and hold circuit by simulation.
Ex.7: Study of the effects of nonlinearity in a feedback controlled system using time response. Determination of step response with a limiter nonlinearity introduced into the forward path of 2nd order unity feedback control systems. The open loop plant will have one pole at the origin and other pole will be in LHP or RHP. To verify that <ul style="list-style-type: none"> <li>I. With open loop stable pole, the response is slowed down for larger amplitude input.</li> <li>II. For unstable plant, the closed loop system may become oscillatory with large input amplitude by simulation.</li> </ul>
Ex.8: Study of effect of nonlinearity in a feedback controlled system using phase plane plots. Determination of phase plane trajectory and possibility of limit cycle of common nonlinearities.
<b>POWER SYSTEM-II LABORATORY (EE-692)</b>
Ex.1: Study of the characteristics of on delay relay and off delay relay.
Ex.2: Test to find out polarity, ratio and magnetization characteristics of CT and PT.
Ex.3: Test to find out characteristics of <ul style="list-style-type: none"> <li>I. Under voltage relay</li> <li>II. Earth fault relay.</li> </ul>
Ex.4: Study on DC load flow.
Ex.5: Study on AC load flow using Gauss-seidel method.
Ex.6: Study on AC load flow using Newton Raphson method.
Ex.7: Study on Economic load dispatch.
Ex.8: Study of different transformer protection schemes by simulation.
Ex.9: Study of different generator protection schemes by simulation.
Ex.10: Study of different motor protection schemes by simulation.
<b>POWER ELECTRONICS LABORATORY (EE-693)</b>
Ex.1: Study of the characteristics of an SCR.
Ex.2: Study of the characteristics of a Triac.
Ex.3: Study of different triggering circuits of an SCR.
Ex.4: Study of firing circuits suitable for triggering SCR in a single phase full controlled bridge.
Ex.5: Study of the operation of a single phase full controlled bridge converter with R and R-L load.
Ex.6: Study of performance of single phase half controlled symmetrical and asymmetrical bridge converters.
Ex.7: Study of performance of step down chopper with R and R-L load.
Ex.8: Study of performance of single phase controlled converter with and without source inductance (simulation)
Ex.9: Study of performance of step up and step down chopper with MOSFET, IGBT and GTO as switch (simulation).
Ex.10: Study of performance of single phase half controlled symmetrical and asymmetrical bridge converter.(simulation)
Ex.11: Study of performance of three phase controlled converter with R & R-L load. (simulation)
Ex.12: Study of performance of PWM bridge inverter using MOSFET as switch with R and R-L load.
Ex.13: Study of performance of three phase AC controller with R and R-L load (simulation)



Ex.14: Study of performance of a Dual converter. (simulation)
Ex.1:5 Study of performance of a Cyclo converter (simulation).
<b>ELECTRIC DRIVE (EE-791)</b>
Ex.1: Study of thyristor controlled DC Drive.
Ex.2: Study of Chopper fed DC Drive
Ex.3: Study of AC Single phase motor-speed control using TRIAC.
Ex.4: PWM Inverter fed 3 phase Induction Motor control using PSPICE / MATLAB / PSIM Software.
Ex.5: VSI / CSI fed Induction motor Drive analysis using MATLAB/DSPICE/PSIM Software.
Ex.6: Study of V/f control operation of 3F induction motor drive.
Ex.7: Study of permanent magnet synchronous motor drive fed by PWM Inverter using Software.
Ex.8: Regenerative / Dynamic braking operation for DC Motor - Study using software.
Ex.9: Regenerative / Dynamic braking operation of AC motor - Study using software.
<b>Department of Mechanical Engineering</b>
<b>ENGINEERING DRAWING &amp; COMPUTER GRAPHICS(GR-A/GRB) (ESME 191/291)</b>
Ex.1: INTRODUCTION TO LINES, LETTERING, DIMENSIONING, SCALES.
Ex.2: GEOMETRICAL CONSTRUCTION AND CURVES
Ex.3: PROJECTION OF POINTS, LINES AND SURFACES
Ex.4: PROJECTION OF SOLIDS
Ex.5: ISOMETRIC VIEWS
Ex.6: SECTIONAL VIEWS
Ex.7: DEVELOPMENT OF SURFACES
<b>WORKSHOP PRACTICE(GR-B/GRA) (ME192/ 292)</b>
EX1 TO MAKE A PIN FROM MILD STEEL.
EX.2: TO MAKE A RECTUNGULAR AND VEESLOT IN A BLOCK OF CAST IRON IN SHAPING AND MILLING MACHINE.
EX.3: TO MAKE A GAUGE FRONM MS PLATE
EX.4 :. TO AKE WOODDEN JOINT AND PATTERN.
EX.5: TO JOINT TWO 6MM PLATES BY MANUAL METAL ARC WELDING.
EX.6: TO JOIN TWO THIN M.S. PLATES BY GAS WELDING.
EX. 7: TO PREPARE A GREEN SAND MOULD AND DEMONSTRATION OF CASTING ON THE SAME.
EX. 8: TO MAKING OF SQURAE PRISM FROM ROUND ROD IN SMITY SHOP.
EX 9: MAKING OF PLASTIC COMPONENT BY PLASTIC MOULDING MACHINE.
EX.10 : TO MAKE A KALEIDOSCOPE BY CUTTING THREE RECTANGULAR GLASS PIECES.
EX.11: MAKING A VARIABVLE PPOWER SUPPLY (+5V). USING BRIDGE RECTIFIER IC AND IC 7805.
EX. 12 STAIRCASE WIRING
EX13. STUDY AND CONNECTION OF DIFFERENT TYPLES OF LAMPS.
<b>MACHINE DRAWING-I ( ME391)</b>
Ex.1: SCHEMATIC PRODUCT SYMBOLS FOR STANDARD COMPONENTS IN MECHANICAL, ELECTRICAL AND ELECTRONIC SYSTEMS, WELDING SYMBOLS AND PIPE JOINTS;
Ex.2: ORTHOGRAPHIC PROJECTIONS OF MACHINE ELEMENTS,
Ex.3: DIFFERENT SECTIONAL VIEWS- FULL, AUXILIARY SECTIONS
Ex.4: ISOMETRIC PROJECTION OF COMPONENTS;
Ex.5: ASSEMBLY AND DETAILED DRAWINGS OF A MECHANICAL COMPONENT.
<b>WORKSHOP PRACTICE II ( ME-392)</b>

EX1 : MANUFACTURING OF A WOODEN PATTREN FOR CASTING.
EX.2: MAKING A GREEN SAND MOULD FOR CASTING USING A PATTERN.
EX.3: MAKING A FUNNEL USING SHEET METAL WORKING.
EX.4 : MAKING A SQUARE FROM ROUND BAR BY USING FORGING.
EX.5: MAKING A BASE PLATE USING MANUAL METAL ARC WELDING
EX.6: MAKING A PERMANENT JOINT BETWEEN TWO PLATE USING GAS WELDING PROCESS.
EX. 7: MAKING A MULTI OPERATION JOB BY USING LATHE MACHINE
<b>APPLIED MECHANICS (ME-393)</b>
EX.1: DETERMINING SPRING STIFFNESS UNDER TENSION AND COMPRESSIVE LOADS; STRAIN GAUGE BASED STRAIN/ DEFLECTION/ FORCE MEASUREMENT OF A CANTILEVER BEAM;
EX.2: TENSION TEST AND COMPRESSION TEST OF DUCTILE AND BRITTLE MATERIALS
EX3. TORSION TEST
EX.4. HARDNESS TEST BRINNEL/ VICKERS AND ROCKWELL TEST, SHORE HARDNESS TEST
EX5 : EXPERIMENT ON FRICTION: DETERMINATION OF COEFFICIENT OF FRICTION
EX 6: EXPERIMENT TO OBSERVE SPEED RATION OBTAIN USING BELT PULLY AND GEARS AND TO EVALUATE TORQUE AND ENERGY REQUIRED.
EX. 7. VERIFICATION OF VARIGNON' THEOREM
EX 8 : BEND AND REBEND TEST OF FLAT TEST PIECES, DETERMINATION OF BENDING STRESS.
<b>FLUID MECHANICS &amp; HYDRAULIC MACHINES LAB (ME-491)</b>
Ex.1: DETERMINATION OF META CENTRIC HEIGHTS
Ex.2: CALIBRATION OF ORIFICE METER
Ex.3: MEASURE THE RATE OF FLOW THROUGH ORIFICE METER
Ex.4: MEASUREMENT OF FLOW THROUGH VENTURE METER
Ex.5: STUDY OF FLOW THROUGH V- NOTCH
Ex.6: DETERMINATION OF THE CO-EFFICIENT OF DISCHARGE CD OF WEIR.
Ex.7: DETERMINATION OF THE WATER BY THE HEP OF PITOT TUBE
Ex.8: STUDY OF LOSSES DUE TO FRICTION IN PIPE
Ex.9: DETERMINATION OF EFFICIENCY OF CENTRIFUGAL PUMP.
Ex.10: DETERMINATION OF EFFICIENCY OF RECIPROCATING PUMP.
Ex.11: DETERMINATION OF DISCHARGE THROUGH FRANCIS TURBINE.
Ex.12: DETERMINATION OF DISCHARGE THROUGH PELTON WHEEL TURBINE.
Ex.13: DETERMINATION OF EFFICIENCY OF HYDRAULIC PUMP.
Ex.14: PREPARATION OF DISCHARGE RATING CURVE FOR A SLUICE
<b>MANUFACTURING TECHNOLOGY (ME-492)</b>
Ex.1: PERMEABILITY TEST OF MOULDING SAND BY PERMEABILITY METER.
Ex.2: GRAIN FINENESS TEST OF MOULDING SAND.
Ex.3: MOISTURE CONTENT TEST OF MOULDING SAND BY RAPID MOISTURE TESTER
Ex.4: SHEAR STRENGTH TEST FOR MOULDING SAND.
Ex.5: CLAY CONTENT TEST OF MOULDING SAND BY CLAY WASHER
Ex.6: MOLD MAKING, CASTING AND POST- CASTING OPERATIONS.
Ex.7: ARG WELDING AND DYE- PENETRATE TEST ON WELDED JOINT.
Ex.8: FORGING OPERATION OF CARBON STEEL

r and configuration of System

- Total number of system connected by LAN

- Total number of system connected by WAN
- Major software packages available
- Special purpose facilities available
- Innovation Cell
- Social Media Cell
- Compliance of the National Academic Depository (NAD), applicable to PGCM/PGDM Institutions and University Departments
- **List of facilities available**

*Games and Sports Facilities*

<b>SL. No.</b>	<b>Games and Sports Facilities</b>
1	Cricket
2	Football
3	Volleyball
4	Badminton
5	Chess
6	Carom

*Extra-Curricular Activities*

<b>SL. No.</b>	<b>Extra-Curricular Activities</b>
1	Swachh Bharat Summer Internship Program
2	Unnat Bharat Abhiyaan (UBA) MHRD
3	Project Competition like Smart India Hackathon(SIH), TI & DST sponsored India Innovation Challenge Design Contest
4	Blood Donation Camps
5	Yoga Day Celebration
6	Workshop on Work place safety and Health Training Workshop
7	Traffic Awareness Program
8	E-Cell Activity

*Soft Skill Development Facilities*

<b>SL. No.</b>	<b>Soft Skill Development</b>
1	Vedic Math
2	Personal Counseling
3	Career Counseling
4	Workshop on soft skill development organized by Console Management System
5	Workshop on soft skill development organized by Indus Integrated Information Management Limited

- **Teaching Learning Process**

- *Academic Calendar of the University*



INTERIM ACADEMIC CALENDAR 2019

Even Semester	For continuing batch
1 Academic Programme commences	January 14, 2019
2 First Test Slot (following Continuous Evaluation)	within March 15, 2019
3 Second Test Slot (following Continuous Evaluation)	within May 10, 2019
4(a) Practical Examinations & Viva-Voce	May 13 to May 20, 2019
4(b) Theory Examinations	May 23 to June 12, 2019
5 Inter Semester Break (Summer)	June 13 to July 12, 2019
6(a) Publication of Result (Final Semester)	Results will be announced in the University website in July 2019
6(b) Publication of Result (Other than Final Semester)	Results will be announced in the University website in August 2019
During Inter-Semester-Break (Summer), Practical Training (where applicable) may be conducted.	

- Academic Time Table with the name of the Faculty members handling the Course (Attached as Annexure 15a)
- Teaching Load of each Faculty (Attached as 15b)
- **For each Post Graduate Courses give the following:**
- *Title of the Course*

Program Name (PG)	Courses
Microelectronics & VLSI Design	i)Advanced Engg Maths ii)VLSI Device & Modelling iii)Digital IC Design iv)Microelectronic Technology & IC Fabrication v) Embedded System Fundamental vi) CAD Tools for VLSI Design lab vii) Embedded Systems viii) Processor Architecture for VLSI ix) Digital Signal Processing & Applications x) Analog IC Design xi) Physical Design & Testing xii) Low Power VLSI Design
Power Electronics & Drives	i)Advanced Engineering Mathematics ii) Power Electronics- I iii) Electrical Machine Analysis iv) Advanced Control Systems v) Digital Signal Processing vi) Power Electronics- II vii) Electric Drives viii) Special Electrical machines

	ix) Generation of Non conventional Energy x) High Voltage DC Transmission
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16. **Enrollment of students in the last 3 years**
17. **List of Research Projects/Consultancy Works**
  - Number of Projects carried out, funding agency, Grant received
  - Publications (if any) out of research in last three years out of masters projects
  - Industry Linkage
  - MoUs with Industries (minimum 3)
18. **LoA and subsequent EoA till the Current Academic Year**
19. **Accounted audited statement for the last three years**
20. **Best Practices adopted, if any**