MANDATORY DISCLOSURE

CHANDIL POLYTECHNIC, CHANDIL

MANDATORY DISCLOSURE

AICTE PermanentID	1-3387108091
Date & Period of last approval	F.No. Eastern/1-4259508374/2019/EOA Date: 29-Apr-2019
Name of the Institution	CHANDIL POLYTECHNIC, CHANDIL
Address of the Institution	AT- Ghoranegi, PS- CHANDIL, DIST- Seraikela-Kharswan, Jharkhand- 832401
City & PIN Code	Chandil,832401
State	Jharkhand
Longitude & Latitude	22.9580° N, 86.0649° E
Phone number	+91-9470146439
Office hours at the Institution	9:30 AM –5:30PM
Academic hours at the Institution	10:00AM – 4:40PM
Email	chandilpolytechnic@gmail.com
Website	www.chandilpolytechnic.org

Nearest Railway Station (Dist. in Km)	Chandil Railway station (7 KM),
Nearest Airport (Dist. in Km)	Ranchi (approx 100KM)
Type of Institution	PPP
Name of the Organization running the Institute.	GURUNANAK POLYTECHNIC FOUNDATION
Type of the Organization	
Address of the Organization	Dwarka building 1st floor 1A, 7 Sarat bose Road, Kolkata, West Bengal-700020
Registered with	
Registration date	
Name of the affiliating University /Board	JHARKHAND UNIVERSITY OF TECHNOLOGY
Address of Board	Science & Technology Campus (In front of Military Campus, Tupudana Chowk Rd, Sirkha Toli, Namkum, Ranchi, Jharkhand 8340101
Website	www.sbtejharkhand.nic.in
Latest affiliation period	2018-19

Name of Principal/Director	Dr. Neeraj Priyadarshi
Exact Designation	Principal
Phone number	+91-9470226996
Email	Principal_gpf@jisgroup.org
Education Qualification	Ph. D (Electrical Engineering)
Work Experience	12 Years

Area of Specialization Power Electronics & Drives, Renewable Energy, Control Systems

Course Taught in Diploma/Post Diploma/UG/PG level : Power Electronics and Drives, Control Systems, Artificial Intelligence applications in Power Systems

Research Guidance : NA

Project Carried out

A. 19 DST Students Projects have been sanctioned for financial support by **Department of science and Technology (DST), Govt. of Rajasthan for the 2011- 12**.Research projects entitled are:

- Soft PLC Based Distributed Control System
- Implementation of Three Phase Appliance Protector
- Speed Checker for Highways
- Reuse of fuse tube light without chock and starter
- Implementation of Super capacitor with a Solar panel for charging the Solar cell
- Implementation of solar electric panels for multi uses
- OREVCS (On Road Electric Vehicle Charging System)
- Solar Speedway
- Fuel from water and carbon dioxide using Sunlight
- Microcontroller Based Power Theft Identification
- Fingerprint Based Security System for a restricted premises

- Mitigation of conducted Electromagnetic Interference in power converters using chaotic pwm.
- Simulation and Hardware Implementation of Voltage source active power filter, based on Multi-stage converter and ultra capacitor dclink
- Design and implementation of IPFC based current source converter topology
- Automatic room light control with bi directional visitor
- Mobile Phone controlled street lights monitoring and control system
- Smoke Detector Automatic Street Lights for saving electricity
- Electrical Bicycle

B.   3 DST students Projects have been sanctioned for financial support by **Department of science and Technology(DST),Govt.of Rajasthan for the 2012-13**.Research projects entitled are:

- Smart Card Prepaid EnergyMeter
- Mobile remote control operation of various loads on home appliances / irrigation system using DTMF technology
- Implementation of load management system in grid substation using programmable logic control

Research Publications:

- **IEEE Systems Journal**, "An Extensive Practical Investigation of FPSO based MPPT for Grid Integrated PV System under Variable Operating Conditions with Anti Islanding Protection", **SCI Indexed, Impact Factor 4.463,**

- **IEEE Systems Journal**" An Experimental Estimation of Hybrid ANFIS –PSO Employed MPPT for PV Grid Integration under Fluctuating Sun Irradiance" (**Accepted and in press**), **SCI Indexed, Impact Factor 4.463**

- **IEEE Systems Journal** "A Hybrid Photovoltaic-Fuel Cell based Single Stage Grid Integration with Lyapunov Control Scheme" (**Accepted and in press**), **SCI Indexed, Impact Factor 4.463**

- **IET Electric Power Applications**, "A Fuzzy SVPWM Based Inverter Control Realization of Grid Integrated PV-Wind System with FPSO MPPT Algorithm", **SCI Indexed, Impact Factor 3.051**

- **IET Power Electronics** "A Novel Continuous Mixed P-Norm Based Adaptive Asymmetrical Fuzzy Logic Controller for Single Stage Photovoltaic Grid Integration" (**Accepted for Publication**), **SCI Indexed, Impact Factor 2.839**

- *Electric Power Components and Systems (Taylor and Francis)* "A Luo Converter based Modified Firefly MPPT for PMSM Driven PV Pumping: Hardware Implementation and Investigation Analysis'(**Accepted and in press**), **SCI Indexed**

- **International transactions of Electrical Energy Systems (Wiley)**, "An Improved Hybrid PV-Wind Power System with MPPT for Water Pumping Applications" (**Accepted and in press**), **SCIE Indexed**

- **IEEE Access Journal**, "A Novel Modified Sine-Cosine Optimized MPPT Algorithm for Grid Integrated

PV System under Real Operating Conditions" **SCIE Indexed, Impact Factor 4.09**

☐ **IEEE Access Journal**, "A Hybrid Photovoltaic-Fuel Cell for Grid Integration with Jaya based Maximum Power Point Tracking: Experimental Performance Evaluation" **SCIE Indexed, Impact Factor 4.09**

☐ **IEEE Access Journal**, "A Hybrid ANFIS-ABC Based MPPT for PV System With Anti- Islanding Grid Protection Using dSPACE: An Experimental Stud**y", SCIE Indexed, Impact Factor 4.09**

☐ **Energies, MDPI "**A Hybrid ANFIS- Flower Pollination Algorithm based Optimized MPPT for Brushless DC motor driven PV Pumping: Practical Verification" , **SCIE Indexed, Impact Factor 2.707**

☐ **Energies, MDPI "**Hybrid PV-Wind, Micro-Grid Development Using Quasi-Z-Source Inverter Modeling and Control–Experimental Investigation" , **SCIE Indexed, Impact Factor 2.707**

☐ **Energies, MDPI** "An Ant Colony Optimized MPPT for Standalone Hybrid PV-Wind Power System with Single Cuk Converter" , **SCIE Indexed, Impact Factor 2.707**

☐ **Electronics, MDPI** "A Hybrid Moth-Flame Fuzzy Logic Controller Based Integrated Cuk Converter Fed Brushless DC Motor for Power Factor Correction" , **SCIE Indexed, Impact Factor 2.110**

☐ *International Journal of Renewable Energy Research "An Experimental Implementation and Testing of GA based Maximum Power Point Tracking for PV System under Varying Ambient Conditions Using dSPACE DS 1104 Controller", Vol. 7, no. 1,2017 (**Web of science/ Scopus/Thomson Reuter**). Impact Factor 3.12,*

☐ **International Journal of Renewable Energy Research** "A Hybrid Firefly- Asymmetrical Fuzzy Logic Controller based MPPT for PV-Wind-Fuel Grid Integration", Vol. 7, no. 4, pp. 1546-1560, 2017 (***Web of science/ Scopus/Thomson Reuter). Impact Factor 3.12.***

☐ **International Journal of Renewable Energy Research** "Practical Realization of an Improved Photovoltaic Grid Integration with MPPT", Vol. 7, no. 4, pp. 1880-1891, 2017 (***Web of science/ Scopus/Thomson Reuter). Impact Factor 3.12.***

☐ **Lecture Notes in Electrical Engineering** (Advances in Smart Grid and Renewable Energy) "An Experimental Realization of Grid Connected PV System with MPPT using dSPACE DS 1104 Control Board" Accepted **(Springer). DOI:** 10.1007/978-981-10- 4286-7_13

☐ **Handbook of distributed generation** (**Springer**) chapter entitled "An Experimental Study on Zeta buck- boost converter for Application in PV system". **DOI** 10.1007/978-3- 319-51343-0_13

☐ "**Experimental Investigation on Ground Source Heat Pump (GSHP) System**". Interdisciplinary Environmental Review (**Inderscience**), 2017 Vol.18, No.1, pp.55 – 66. **DOI**: 10.1504/IER.2017.10005055

☐ **International Journal of Engineering & Technology (Scopus Indexed)** "MATLAB/Simulink based Fault Analysis of PV Grid with Intelligent Fuzzy Logic Control MPPT" , **SCOPUS**

☐ **International Journal of Engineering & Technology (Scopus Indexed)** "A Practical performance

verification of AFLC based MPPT for standalone PV power system under varying weather condition" , **SCOPUS**

- **International Journal of Engineering & Technology (Scopus Indexed)** "A Particle Swarm Optimization based Fuzzy Logic Control for Photovoltaic System" , **SCOPUS**

- "Exergy analysis of double tube heat exchanger for parallel flow arrangement" **IOP Conf. Series: Materials Science and Engineering 377 (2018) 012112 doi:10.1088/1757-899X/377/1/012112** (Thomson Reuters, Web of Science)

- "An Artificial Fuzzy Logic Intelligent Controller based MPPT for PV Grid Utility " **Lecture Notes in Networks and Systems 46, https://doi.org/10.1007/978-981-13-1217- 5_88 Springer**

- Waste heat energy utilization in refrigeration and air-conditioning **Scopus Indexed proceeding: IOP conference series (Advances in Mechanical Engineering)**

- Assessment of fatigue crack length of rail steels **Scopus Indexed proceeding: IOP conference series (Advances in Mechanical Engineering)**

- Processing and characterization of Aluminium 2014-10Wt% SiC composite **Scopus Indexed proceeding: IOP conference series (Advances in Mechanical Engineering)**

- "A Hybrid Particle Swarm Optimization-Fuzzy Logic Controlled Photovoltaic Approach"

  , **2019 IEEE International Conference on Environment and Electrical Engineering and 2019 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe),** DOI: 10.1109/EEEIC.2019.8783872

- **"**An Adaptive Neuro- Fuzzy Inference System based Intelligent Grid Connected Photovoltaic Power Generation**" Advances in Intelligent Systems and Computing, DOI: 10.1007/978-981-13-8222-2_1 (https://doi.org/10.1007/978-981-13-8222-2_1)**

- N.Priyadarshi, P.Sanjeevikumar, A.Faroorque, M.S.Bhaskar, Viliam Fedák, Frede Blaabjerg, "An ANN-GA Controlled SEPIC Converter for Photovoltaic Grid Integration", **2019 IEEE 13th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG), Denmark. DOI:** 10.1109/CPE.2019.8862395

- N.Priyadarshi, P.Sanjeevikumar, A.Farooque, M.S.Bhaskar, Viliam Fedák, Dan M.Ionel, "An Adaptive Neuro-Fuzzy Inference System Employed Cuk Converter for Renewable Energy Applications", ", **2019 IEEE 13th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG), Denmark. DOI:** 10.1109/CPE.2019.8862398

- **"**An ANN Based Intelligent MPPT Control for Wind Water Pumping System**" 2018 2nd IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES)[ACCEPTED], DTU Delhi**

- **"An ANFIS Artificial Technique Based Maximum Power Tracker for Standalone PV Power Generation"** **2018 2nd IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES)[ACCEPTED], DTU Delhi**

- **Advances in Green Energy and Technology (SPRINGER),** "A Multilevel Inverter Controlled Photovoltaic Generation" (**ACCEPTED**)

- **Advances in Green Energy and Technology (SPRINGER),** "Dynamic Operation of Grid Connected Photovoltaic Power System" (ACCEPTED)

- **Advances in Green Energy and Technology (SPRINGER),** "A Proton Exchange Membrane based Fuel Cell Integrated Power System" (ACCEPTED)

- **Advances in Green Energy and Technology (SPRINGER),** "A Closed Loop Control of Fixed Pattern Rectifier for Renewable Energy Applications" (ACCEPTED)

- **Advances in Green Energy and Technology (SPRINGER),** "A Four switched Type Converter fed Improved Photovoltaic Power System" (ACCEPTED)

- **Advances in Green Energy and Technology (SPRINGER),** "Maximum Power Point Tracking for Wind Energy Conversion System" (ACCEPTED)

- **Advances in Green Energy and Technology (SPRINGER),** "Design of Wind Energy Conversion System Under different Fault Conditions" (ACCEPTED)

- **Advances in Green Energy and Technology (SPRINGER),** "A Fuzzy logic Control Based Vibration Control system for Renewable Application" (ACCEPTED)

- **Advances in Intelligent Systems and Computing (AISC Series Springer)** "An Efficient Fuzzy Logic Control Based Soft Computing Technique for Grid Tied Photovoltaic System"(**In Press**) **Advs in Intelligent Syst., Computing, Vol. 1040, Pradeep Kumar Mallick et al. (Eds): Cognitive Informatics and Soft Computing, 978-981-15-1450-0, 475706_1_En, (13)**

- **Advances in Intelligent Systems and Computing (AISC Series Springer)** "Performance Enhancement Using Asymmetrical Fuzzy Logic Control Based Soft Computing MPPT for Photovoltaic Power System" (**In Press**) **Advs in Intelligent Syst., Computing, Vol. 1040, Pradeep Kumar Mallick et al. (Eds): Cognitive Informatics and Soft Computing, 978-981-15-1450-0, 475706_1_En, (47)**

- **IET Power Electronics** " A Novel PSO Augmented Internet of Things Employed Modified Zeta Converter Based Photovoltaic Maximum Power Tracking System: Hardware Realization" (**Under Review**)

- **IET Power Electronics** "A New Cuk-SEPIC Converter Based Photovoltaic Power System with GSA-PSO algorithm Employing MPPT for Water Pumping Applications" (**Under review**)

- **Lecture Notes in Electrical Engineering, SPRINGER** "An Interleaved ZCS Supplied Switched Power Converter for Fuel Cell Based Electric Vehicle Propulsion System" (**Under review**)

- **Studies in Computational Intelligence, SPRINGER** "A Bio-Inspired Chicken Swarm Optimization Based Fuel cell System for Electric Vehicle Applications" (**Under review**)

- **IEEE Transactions of Industrial Applications** "A Sliding Mode Controller Based Multilevel Inverter for PV Grid Integrated System with Gravitational MPPT Algorithm" (**Under review**)

- **IEEE Transactions of Industrial Informatics** "A Modified GWO-FLC Based Maximum Power Point Tracker Employing Multilevel Boost Converter for Photovoltaic System under Rapid Sun Irradiance Variation " (**Under review**)

No of Book Published with details

: Advances in Power Systems and Energy Management, SPRINGER (In Press)

Board of Governors	YES
Frequency of meeting	Once in a Year
Organizational Chart	
Student feedback mechanism on Institutional Governance / faculty performance	YES
Grievance redressal mechanism for faculty, staff and students	YES
Establishment of Anti Ragging Committee	YES
Establishment of Grievances Redressal Committee in the Institution	YES
Establishment of Internal Complaint Committee –ICC	YES

Establishment of Committee for SC/ST	YES
Internal Quality Assurance Cell	YES

Name of the Department	DEPARTMENT OF CIVIL ENGINEERING
Course	CIVIL ENGINEERING
Level	Diploma
1stYear of approval by the Council	2017
Year wise Sanctioned Intake	2017-63, 2018-63, 2019-63
Year wise Actual Admissions (Including TFW)	2017-40,2018-33,2019-27
Fee	As per approval from Fee Fixation Committee, Govt. of Jharkhand

Name of the Department	DEPARTMENT OF MECHANICAL ENGINEERING
Course	MECHANICAL ENGINEERING
Level	Diploma
1stYear of approval by the Council	2017
Year wise Sanctioned Intake	2017-63, 2018-63, 2019-63

Year wise Actual Admissions (Including TFW)	2017-35, 2018-53,2019-44
Fee	As per approval from Fee Fixation Committee, Govt. of Jharkhand

Name of the Department	DEPARTMENT OF ELECTRICAL ENGINEERING
Course	ELECTRICAL ENGINEERING
Level	Diploma
1stYear of approval by the Council	2017
Year wise Sanctioned Intake	2017-63, 2018-63, 2019-63
Year wise Actual Admissions (Including TFW)	2017-31, 2018-34,2019-38
Fee	As per approval from Fee Fixation Committee, Govt. of Jharkhand

Name of the Department	DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
Course	ELECTRICAL AND ELECTRONICS ENGINEERING
Level	Diploma
1stYear of approval by the Council	2017
Year wise Sanctioned Intake	2017-63, 2018-63, 2019-63

Year wise Actual Admissions (Including TFW)	2017-24, 2018-23,2019-20
Fee	As per approval from Fee Fixation Committee, Govt. of Jharkhand

Name of the Department	DEPARTMENT OF MECHANICAL ENGINEERING AUTOMOBILE
Course	MECHANICAL ENGINEERING AUTOMOBILE
Level	Diploma
1stYear of approval by the Council	2017
Year wise Sanctioned Intake	2017-63, 2018-63, 2019-63
Year wise Actual Admissions (Including TFW)	2017-16, 2018-11,2019-06
Fee	As per approval from Fee Fixation Committee, Govt. of Jharkhand

Sl. No	Name	Designation	Date of Joining	Last Qualification
1	Dr. Neeraj Priyadarshi	Principal	25/11/2019	PhD (Electrical Engineering)

FACULTY LIST

Sl No	Dept	Faculty Name and Designation	Academic Qualification	Appoint Type	Teching Exp
1	BSH	Mr Kajal Goswami	MSc	Regular	3
2	BSH	Mr Mahadeb Mahato	MSc	Regular	3
3	BSH	Mr Goutam Paramanik	MSc	Regular	3
4	BSH	Mr Anupam Kuiri	Msc	Regular	6
5	BSH	Mr Deepu Das	BSc	Regular	2
6	BSH	Mr Mrityunjay Banerjee	B-Tech	Regular	3
7	BSH	Mr Chandra Sekhar Mahato	MSc	Regular	10
8	BSH	Mr Siddhartha Kumar Dey	MSc	Regular	2
9	MEA	Md Neyaz Ahmed	B.Tech.	Regular	2
10	CE	Mr Ajit Kumar	B.Tech.	Regular	4
11	CE	Mr Deepak Kumar Mehta	B.Tech.	Regular	2
12	CE	Md Faizul Bari Shashi	B.Tech.	Regular	2
13	EEE	Ms Shobha Kumari	B.Tech.	Regular	2

14	EE	Mr Gautam Kumar Sah	B.Tech.	Regular	2
15	EE	Mr Samim Deewan	B.Tech.	Regular	1
16	ME	Mr Jay Krishna Mishra	B.Tech.	Regular	3
17	ME	Mr Prabhakar Modak	B.Tech.	Regular	2
18	ME	Mr Arvind Kumar	B.Tech.	Regular	2
19	ME	Mr Santanu Mukherjee	B.Tech	Regular	6
20	MEA	Mr Jyoti Singh	B.Tech	Regular	3
21	MEA	Mr Samrat Roy	B.Tech	Regular	3
22	EE	Mr Shaktipada Mahto	B.Tech	Regular	2
23	CE	Mr Manohar Sharma	B.Tech	Regular	4
24	ME	Mr Pintu Kumar	B.Tech	Regular	3
25	MEA	Mr Bikram Pratap Bhatta	M.Tech	Regular	3
26	EEE	Ms Pallavi Pardhia	B.Tech	Regular	-
27	BSH	Mr Sushovan Giri	M.Sc	Regular	1
28	CE	Mr Ashish Kumar	B.Tech	Regular	-
29	ME	Mr Chandan Kumar	B.Tech	Regular	-
30	ME	Mr Vivek Tiwari	B.Tech	Regular	-

Admission Quota	80% JCECE Board, Govt. of Jharkhand & 20% Through Management Quota
Entrance Test / Admission Criteria	Examination conducted by JCECE Board. If Seats remain vacant, then Direct Admission as per criteria fixed by the Dept. of Higher, Technical Education & Skill Development, Govt. of Jharkhand
Fees in Rupees	As per directives of Fee Fixation Committee, Govt. of Jharkhand
Admission Calendar	August Every Year

Information of Infrastructure and other Resources Available:

Instructional Area

Particulars	Area/number as per AICTE Norms(*Refer AICTE Approval Process Hand Book)	Area / No. available
Classroom (Size)	66 sq.m	79 sq.m
No. of Classrooms		15
Tutorial Room (Size)	33 sq.m	82 sq.m
No. of Tutorial Room		2
Drawing Hall (Size)	132 sq.m	169 sq.m
Computer Center (Size)	100 sq.m	169 sq.m
Workshop (Size)	200 sq.m	487 sq.m
Laboratories (Size)	66 sq.m	79 sq.m
No. of Labs		27
Physics Lab (Size)	66 sq.m	79 sq.m
Chemistry Lab (Size)	66 sq.m	79 sq.m
Library & Reading Room (Size)	300 sq.m	338 sq.m
Seminar Hall (Size)	132 sq.m	169 sq.m
Seminar Hall		1

Administrative Area

Particulars	Area as per AICTE Norms(*Refer AICTE Approval Process Hand Book)	Area / No. available
Principal Room (Size)	20 sq.m	31.2 sq.m
Head of Department Room (Size)	20 sq.m	29.90 sq.m
Department Office (Size)	20 sq.m	29.90 sq.m
Faculty Room (Size)	100 sq.m	80 sq.m
Central Store Room (Size)	30 sq.m	19.61 sq.m
Maintenance (Size)	10 sq.m	10.50 sq.m
College Office (Size)		
Board Room (Size)	20 sq.m	19.61 sq.m
Security Room (Size)		6 sq.m
House Keeping (Size)	10 sq.m	12 sq.m
Examinations control Office (Size)	30 sq.m	39 sq.m
Placement Office (Size)	50 sq.m	73 sq.m
Pantry for Staff (Size)	10 sq.m	24.5 sq.m

Amenities Area

Particulars	Area as per AICTE Norms	Area / No. available
Sports Club /Gymnasium	100 sq.m	160 sq.m
Boys' Common Room	75 sq.m	79 sq.m
Girls' Common Room	75 sq.m	173 sq.m
Cafeteria	150 sq.m	161 sq.m
Toilets		
First Aid cum Seek Room	10 sq.m	13 sq.m
Stationery Store and Reprography	10 sq.m	9 sq.m
Auditorium / Amphi Theater	250 sq.m	

Essential Facilities (As per AICTE Norms)

Sl. No.	Particulars	Yes / No
1	Language / Communication Lab	Yes
2	Potable Water Supply	Yes
3	Barrier Free Built Environment	Yes
4	Sewage Disposal System	Yes
5	Vehicle Parking	Yes
6	Mandatory disclosures, Previous AICTE Approvals in the website	Yes

7	Digital Payment for all Financial Transactions	Yes	
8	Safety and Security measures in the Campus	Yes	
9	Safety provisions including fire and other calamities	Yes	
10	Implementation of Food Safety and Standards Act, 2006	Yes	
11	General Insurance for assets	Yes	
12	General and Departmental Notice Board	Yes	
13	Group Insurance for employees	Yes	
14	First aid, Medical and Counseling Facilitis	Yes	
15	Placement Cell	Yes	
16	Online Grievance Redressal Mechanism	Yes	
17	All weather Road(Motorized Road)	Yes	
18	Anti Ragging Committee	Yes	
19	Internal Complaint Committee	Yes	
20	Committee for SC/ ST	Yes	

Library:

a. Number of Library Books: 2851

b. Number of Titles: 161

c. Laboratory Details

SL. NO	DEPARTMENT & 1ST YEAR COMMON SUBJECTS LAB	Name of Laboratory(*As per syllabus of JUT	Major Equipments
1	1st year common subject lab	FUNDAMENTAL OF COMPUTER LAB	MS-OFFICE, INTERNET, NOTEPAD++
		C-PROGRAMMING LAB	CODE BLOCKS, NOTEPAD++
		PHYSICS LAB	SPECTROMETER, OHM'S LAW TRAINER KIT, ENERGY BAND GAP TRAINER KIT, V-I CHARACTERISTICS TRAINER KIT, TRAVELLING MICROSCOPE, BAR PENDULAM, VERNIER CALIPER, SCREW GAUGE ETC.
		CHEMISTRY LAB	PH METER, CONDUCTIVITY METER, DIGITAL WEIGHT METER,

Civil Engineering Lab. Branch

SL. NO	Department & 1st year's common sub. lab	Name of Laboratory(*As per syllabus of JUT)	Major Equipments
2	CIVIL ENGINEERING	SURVEYING LAB	Steel Tape (30m), Dumpy level with Aluminum Telescope, Aluminum Leveling staves, Plane Table PTA size 750x600x21, Eastman vernier Transit Theodolite, Engineer's chain (20m), Aluminium Levelling staves(5m), Electronic Theodolite 2''/5'' accuracy, Auto Level machine
		BUILDING MATERIALS LAB	Compression Testing Machine , Water absorption Test, Slump Test Apparatus, Tensile Testing Machine
		HYDRAULICS LAB EQUIPMENT	Pelton Wheel, Centrifugal Pump, Reciprocating pump, Metacentre, Venturimeter
		TRANSPORTATION LAB	Flash and Fire point of Bitumen, Flakiness guage, Elongation Gauge, Aggregate Crushing value, ACV apparatus, Penetration Test on Bitumen.
		GEOTECHNICAL ENGINEERING LAB	Pycnometer, Core cutter Dolly, Sand Pouring cylinder 100mm, Liquid limit & Plastic limit, Trowel , Hot air oven Desiccators
		ENVIRONMENTAL ENGG. LAB	B.O.D

Electrical Laboratory Electrical & Electronics Laboratory Details:

SL. NO	Department &1st year's common sub. lab	Name of Laboratory(*As per syllabus of JUT)	Major Equipments
3	Electrical and Electronics Engineering	Electrical Machine	MG set, Synchronous Motor, 3-Phase induction motor, DC Motor
		Network Theory	Thevenin's, Nortons, Superposition Theorem trainer Kit, Measurement of Current voltage and Power for various Lamp, LCR series parallel trainer kit
		Digital Electronics and Microprocessor	8085 Microprocessor kit, 7-segment display trainer kit, Encoder decoder trainer kit
		Basic electrical	Thevenin's, Norton's, Superposition Theorem trainer Kit, Measurement of Current voltage and Power for various Lamp
		Basic Electronics	P-N Junction characteristics, Zener diode Characteristics, FET Characteristics, Rectifier Trainer Kit, CRO, Function Generator.
		Illumination Engineering	Flux Meter

Mechanical Laboratory & Mechanical Automobile Laboratory Details:

Sl. No.	Department & 1st Year's common sub. lab	Name of Laboratory(*As per syllabus of JUT)	Major Equipments

		Manufacturing Technology	Center lathe Machine, Milling Machine, Radial Drilling, Wood Turning Lathe, ARC welding machine, Spot Welding Machine, Sheet Bending Machine
		Fluid Mechanics and Machine	Venturimeter Apparatus, Meta centric Height, Pelton wheel, Centrifugal Pump, Reciprocating Pump
		Theory of Machine	Quick Return machine, Free wheel sprocket Mechanism, cam & follower, Dynamometer, gyroscope, gear model, belt drive model, double hook joint
		Thermal Engineering	Pin Fin apparatus, Forced convection apparatus, Natural convection apparatus, Composite wall apparatus, lagged pipe apparatus, Stefan Boltzman apparatus, Babcock Wilcox Boiler, Lancashire Boiler
2	Mechanical Engineering & Mechanical Engineering Automobile Branch	Power Engineering	A.C test Rig., Single Stage Reciprocating air compressor test rig., Two stage reciprocating air compressor test rig., Single cylinder four stroke petrol engine test rig., Rope brake Dynamometer, petrol engine 4-stroke model actual cut section, Diesel engine, Domestic Refrigeration model.
		Automobile Engines	Cooling System, Fuel Supply System, MPFI System, Multi clutch plate, DRY Clutch Assembly, synchromesh gear, sliding mesh gear, rear axle with differential section, steering actual cut section, leaf spring, hydraulic breaking system
		Measurement and Control	Vernier caliper, screw gauge, screw gauge micrometer, profilometer, spirit level
		Metrology and quality Control	Vernier caliper, screw gauge, screw gauge micrometer, profilometer, spirit level
		Refrigeration and Air condition	Air conditioning test rig, Domestic Refrigerator.

Computing Facilities:

a. Internet Bandwidth – 4 MBPS LEASE LINE (1:1)

b. Number and configuration of system – 80

c. Total Number of system connected by LAN – 80

d. Major software packages available – (Windows-10, MS-Office suite 2007, AUTOCAD-2007, Code block, Notepad++ etc)

f. Social Media Cell – Yes

List of Facilities available:

a. Games and Sports facilities – Yes

b. Extra Curricular activities – Yes

Teaching Learning Process:

a. Curricula and Syllabus for each of the programs as approved by the University - YES

b. Academic Calendar of the University – Available on University website

c. Academic time table with the name of the faculty members handling the course – Available on Institution Notice Board

Department of Mechanical Engineering

Fluid Mechanics Lab

MECHANICAL AUTOMOBILE ENGINEERING LAB
AUTOMOBILE TRANSMISSION LAB

CENTRIFUGAL CLUTCH MODEL

BALL BEARING

TAPER BEARING

MULTIPLATE CLUTCH

DEPTT. OF ELECTRICAL ENGINEERING(EE)
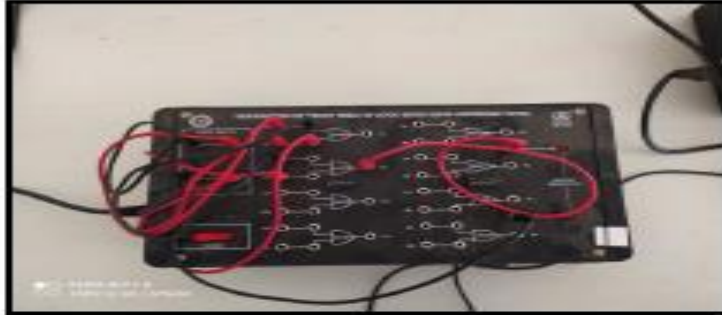
NETWORK LAB:

Superposition Theorem
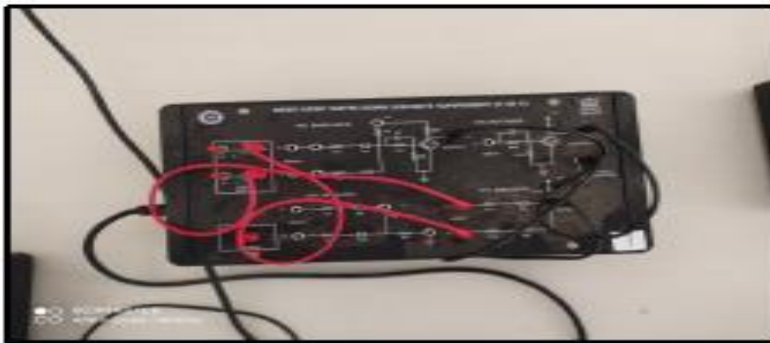

Thevenin's Theorem

Norton's Theorem

ELECTRICAL & ELECTRONICS ENGINEERING LAB

DIGITAL CIRCUIT & MICROPROCESSOR LAB

Verification Of Truth Table Of Logic Gate Using Universal Gate

Basic Logic Gate Using Discrete Component

Department of Civil Engineering

Surveying Lab

Hostel and Campus Area

Boys Playground

Hostel Entrance

Outside Hostel

Inside Hostel

Dining Room