Mandatory Disclosure [2021-2022]

1. Name of the Institution:

Dumka Engineering College

(Estd. by Govt. of Jharkhand and Run by Techno India under PPP)

Near Govt. Polytechnic, P.O. -Shiv Pahar Dumka, Jharkhand-814101. India.

Email: gecd.principal@gmail.com

Mob: +91 6434 290 691

2. Name and address of the Trust/ Society/ Company and the Trustees:

Name of Company: GAMA HIGHER EDUCATION

Type of Company: Section 8 Company as per Company Act

Name of Office bearer: ASOK KUMAR ROY

Address: EM 4 SALT LAKE SECTOR V; KOLKATA 700091

email: jhtigdir@gmail.com Qualification: GRADUATE Profession: SERVICE

Status in the Organization: DIRECTOR

3. Name and Address of the Vice Chancellor/ Principal/Director:

Dr. Palash Pal, Principal

Date of birth: 01/01/1982

Qualification (with subject): PhD (IIT, ISM DHANBAD), Department of Electrical Engineering, Member IEEE,

Member IE(I).

Experience: 5 years at current position

Academic Experience: 14 years Date of joining: 21/09/2016

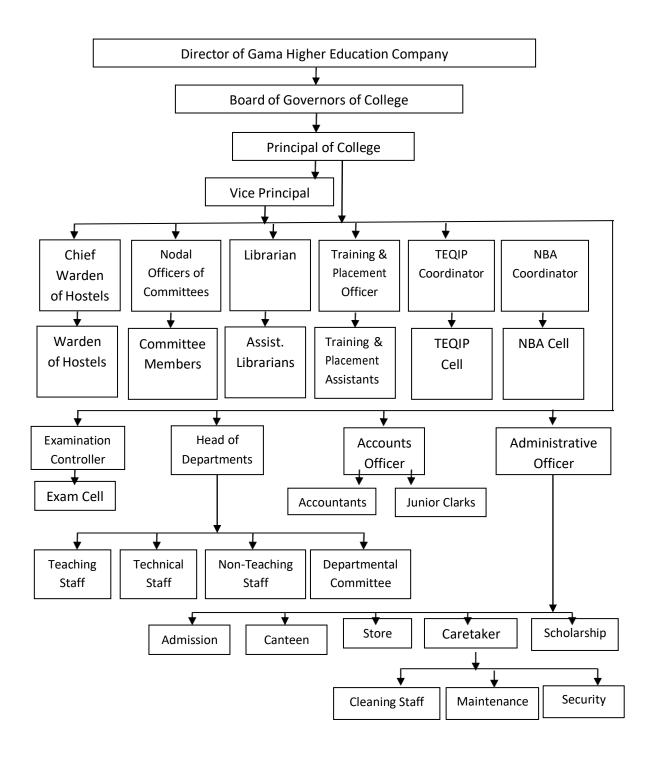
Email Id: gecd.principal@gmail.com

Mobile: +91 6434 290 691

4. Name of the affiliating University:

Jharkhand University of Technology, Ranchi

The college will have the following administrative set up based on the Role



(a) Nature and Extent of involvement of Faculty and students in academic affairs/improvements Mechanism/ Norms and Procedure for democratic/ good Governance

• Faculty members are included in various academic and administrative Committees,

- including Headship, Dean of Schools, Hostel Superintendents, Provost (Hostels) etc.
- Students are included in Anti-ragging Committee and other various academic technical activities.

(b) Student Feedback on Institutional Governance/ Faculty performance Online Students Feedback mechanism is existed.

http://www.dumkaengg.edu.in/Contact/student_feedback



(c) Grievance Redressal mechanism for Faculty, staff and students, Establishment of Online Grievance Redressal Mechanism, Establishment of Grievance Redressal Committee in the Institution and Appointment of OMBUDSMAN by the University.

Grievance Redressal Cell is existed, as stated below and online Grievance Redressal mechanism isoperative:

(d) Establishment of Anti Ragging Committee:

In compliance with the directives issued by AICTE /UGC/ Govt. of West Bengal for Prevention and Prohibitionof Ragging, and subsequently approved by the Board of Governors, the following "Anti-Ragging Committee" is hereby re-constituted in the Institute for the A.Y. 2019-2020: -

Anti-Ragging Committee

The following committee is constituted to look after the anti-ragging activities of the Institute;

1.Mr. Ratan Kr. BoseVice-PrincipalChairman7294864392.Mr. Abhishek MukherjeeAdministrative In-ChargeChief-Member7631144163.Mr. Pankaj SarkarEE DeptMember9931639794.Mr. Sujit KhamaruECE DeptMember7908520495.Mr. Sujit KumarCE DeptMember9614684576.Mr. Lalit Narayan MahtoME DeptMember8002058137.Mr. Ranadeep DeyCSE DeptMember8777375078.Dr. Subhendu MondalBSH DeptMember7004915079.Mrs. Indira Ghosh DastidarECE DeptMember833701384	07 50
3. Mr. Pankaj Sarkar EE Dept Member 993163973 4. Mr. Sujit Khamaru ECE Dept Member 790852044 5. Mr. Sujit Kumar CE Dept Member 961468457 6. Mr. Lalit Narayan Mahto ME Dept Member 800205813 7. Mr. Ranadeep Dey CSE Dept Member 877737507 8. Dr. Subhendu Mondal BSH Dept Member 700491507	50
4. Mr. Sujit Khamaru ECE Dept Member 79085204 5. Mr. Sujit Kumar CE Dept Member 961468457 6. Mr. Lalit Narayan Mahto ME Dept Member 800205817 7. Mr. Ranadeep Dey CSE Dept Member 877737507 8. Dr. Subhendu Mondal BSH Dept Member 700491507	
4. Mr. Sujit Knamaru ECE Dept Member 5. Mr. Sujit Kumar CE Dept Member 961468457 6. Mr. Lalit Narayan Mahto ME Dept Member 800205811 7. Mr. Ranadeep Dey CSE Dept Member 877737507 8. Dr. Subhendu Mondal BSH Dept Member 700491507	15
6. Mr. Lalit Narayan Mahto ME Dept Member 80020581: 7. Mr. Ranadeep Dey CSE Dept Member 877737507 8. Dr. Subhendu Mondal BSH Dept Member 700491507	13
7. Mr. Ranadeep Dey CSE Dept Member 877737507 8. Dr. Subhendu Mondal BSH Dept Member 700491507	77
8. Dr. Subhendu Mondal BSH Dept Member 700491503	10
8. Dr. Subhendu Wondar BSH Dept Member	78
9. Mrs. Indira Ghosh Dastidar ECE Dept Member 833701384	73
	41
10. Mrs. Rupa Garai BSH Dept Member 800174202	21
11. Mr. Sandeep Das ME Dept Member 859730057	70
12. Mr. Rajiv Ranjan Sah ME Dept Member 790906967	79
13. Mr. Monsur Ali shaikh Lib-Dept Member 947417682	28
14. Jitender Kumar Singh Admin Member 810237031	9
15. Mr. Pranjal Prerak Mishra 4 th year Student Member 880901294	4
16. Miss. Anupam Thakur 3 rd year Student Member 629919162	29
17. Miss. Goushia Parween 3rd year Student Member 620375985	5
18. Mr. Shiv Vishwakarma 4 th year Student Member 799245221	8
 Lal Babu Murmu 2nd Year Student Member 620357052 	

(h) Internal Quality Assurance Cell:

Composition of Internal Quality Assurance Cell (IQAC):

Institute: Dumka Engineering College (Estd. By Govt. of Jharkhand & Run by Techno India under PPP)

The prime task of the IQAC is to develop a system for conscious, consistent and catalytic improvement in the overall performance of institution. The IQAC will become a part of the institution's system and work towards realization of the goals of quality enhancement and sustenance. It will channelize all efforts and measures taken by the institution towards promoting its holistic academic excellence.

Objectives:

The Primary aim of IQAC is:

- To ensure conscious, consistent functioning of the system and to improve the academic performance of the institution.
- To ensure stakeholders connected with higher Education, namely parents, teachers, staff, employers, funding agencies and society in general, to provide the quality and integrity of the system.
- To ensure continuous improvement in the entire operations of the Institution.

• IQAC Cell:

Sl	Name	Responsibility	Category
No.			
1	Ranadeep Dey	IQAC Coordinator	(Dept. of CSE)
2	Kh. Kamal Ahmed	IQAC Co-Coordinator	(Dept. of ECE)
3	Indira Ghosh Dastidar	Chief-Member	(Dept. of ECE)
4	Pankaj Sarkar	Member	(Dept. of EE)
5	Amrita Roy	Member	(Dept. of ECE)
6	Amit Kr. Pramanik	Member	(Dept. of CSE)
7	Sunidhi Priyadarshini	Member	(Dept. of CSE)
8	Rajiv Ranjan Sah	Member	(Dept. of ME)
9	Pratima Kumari	Member	(Dept. of CE)

5. Programmes

• Name of Programmes approved by AICTE

Sl. No.	UG/PG	Name of Courses	Approved Intake 2020-2021	Supernumerary seats for EWS/TFW – 2020- 2021
1.	UG-B.Tech.	Civil Engineering	60	YES
2.	UG-B.Tech.	Computer Science & Engineering	60	YES
3.	UG-B.Tech.	Electronics & Communication Engineering	60	YES
4.	UG-B.Tech.	Electrical Engineering	60	YES
5.	UG-B.Tech.	Mechanical Engineering	60	YES

Name of Programmes Accredited by NBA, Status of Accreditation of the Courses

Total number of Courses, No. of Courses for which applied for Accreditation

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 (specify the number of courses)

SI. No.	Name of the B.Tech. Programs	Year of starting	Present Accreditation status or applied for
1	Civil Engineering	2014	The institution has applied for the NBA accreditation for three branches of
2	Electrical Engineering	2014	Engineering (Civil Engineering, Mechanical Engineering & Electrical Engineering)
3	Mechanical Engineering	2014	Date of Application: 1st July,2020 Application ID: 4831-01/07/2020
4	Computer Science & Engineering	2014	
5	Electronics & Communication Engineering	2014	

Besides, The Institute has the following qualitative achievement: -

1.	Life Institutional Member of Institution of Engineers (India) w.e.f. 2019.
2.	For the year 2020, the Institute has ranked 14 under Atal Ranking of Institutions on Innovation and Achievement 2020 Framework of MHRD.
3.	The Dumka Engineering College is an ISO 9001:2015 Certified Institute, approved by AICTE & affiliated by Sido Kanhu Murmu University, Dumka and Jharkhand University of Technology, Ranchi.
4.	Dumka Engineering College is a Recognized Social Entrepreneurship, Swachhta & Rural Engagement Cell (SES REC) Institution from 2019 by Mahatma Gandhi National Council of Rural Education, Ministry of Education, GoI.

For each Programme the following details are to be given (Preferably in Tabular form): Name, Number of seats, Duration, Cut off marks/rank of admission during the last three years, Fee (as approved by the state government).

We have no Twinning and Collaboration with Foreign University(s) and being run in the same Campus along with status of their AICTE approval.

However, The Institute has signed MOU with various Institutions for academic and research collaboration as well as Industry houses for student's internship. Training and placement activities: -

Industry-Collaborations and Tie-Ups:

SI No	Collaboration type	Organization	Objective
1.	MOU	MSME Jamshedpur	Final year and pre-final year project internships
2.	MOU	Auto-Desk	CADD Skill development training, certification and placement assistance
3.	MOU	CINIF TECHNOLOGIES LTD	Joint Research activities for Applied Research and Technological development, and Placement Assistance
4.	MOU	OPTRA AUTOMATION	Joint Research activities for Applied Research and Technological development, and Placement Assistance
5.	Life time Membership	The Institute of Engineers (India)	Research and Publication

Admission Procedure of Each Programme: -

Seat matrix of admission process is as per GoJ under ppp mode colleges AICTE Approved seats for an Academic session: 60 intake/ Engineering Branches

- Civil Engineering
- Computer Science & Engineering
- Electronics & Communication Engineering
- Electrical Engineering
- Mechanical Engineering

Seat Under TFW & EWS as per GoJ

ST seat: 26%

SC Seat: 10%

OBC: 14%

GEN Category Seat: 50%

Eligibility criteria for admission as per AICTE norm. Admission Procedure....

- THROUGH JHARKHAND COMBINED ENTRANCE EXAMINATION BOARD (JCECEB)
- THROUGH INSTITUTE LEVEL OPEN COUNSELLING
- DIRECT INSTITUTE SEAT

ADMISSION DETAILS

MODE OF ADMISSION	THROUGH JEE/JCECEB COUNSELLING	
DISCIPLINE WISE SANCTIONED INTAKE	 CIVIL ENGINEERING COMPUTER SCIENCE ENGINEERING ELECTRONICS AND COMMUNICATION ELECTRICAL ENGINEERING MECHANICAL ENGINEERING 	@60 INTAKE @60 INTAKE @60 INTAKE @60 INTAKE @60 INTAKE

Barrier Free Built Environment for disabled and elderly persons • Occupancy Certificate • Fire and Safety Certificate • Hostel Facilities

Barrier free built environment for disabled and elderly persons are available in the Institute and also certified by the Concerned authority, boundary wall of the campus with height of 12 ft, and maintained by the college administration. Occupancy certificates have been issued by DHTE. Fire extinguishers have been installed in all the places of the Institutes. Besides, the Institute has applied for NOC from the concerned Govt. which is under process. The Institute have the Fire policy (Policy Number: 150100112010000429) Policy Effective from 20:00 hours, on 01/02/2021 to midnight of 31/01/2022.



Separate Hostel facilities are available in the Institute for boys and girl's student.





Boys Hostel Girls Hostel

• Library • Number of Library books/ Titles/ Journals available (program-wise) • List of online National/ International Journals subscribed • E- Library facilities

❖ Total area of the library (in Sq. Mts.): 464 Sq M,

❖ Library & Reading Room(Air conditioned with cubicle) (in Sq. Mts.):150 Sq M Total Seating capacity: 60

Working hours: MONDAY - SATURDAY: 9:00am - 8:00pm,

❖ Number of titles :2258

❖ Number of volumes :22628

eBook Titles & Volumes: 150

Total Newspaper: Hindi -3+English -1 = 4

Total Magazines:08.

Number of National & International Journals: 32

E-Journals: Springer (Engg), IEEE, IE(I)

Circulation Systems: Automated through KOHA
 Digital Library Facilities: Yes, Digital - Library with more than 8,100 GB Video Lectures

available on our Local Network (Link :10.100.96.6) Resource Sharing &E-Learning facilities: NPTEL

❖ Facility for the Students: Xerox Centre+ Lamination Centre







egree, Diploma and A.M.I.E. Students]

By

S. RAMAMRUTHAM,
Neil): M.I.C.E., M.I.E. (India)
ege of Engineering, New Delhi
oncrete Structures, Theory of Structures
Design of Steel Structures,
ying, Civil Engineering Hand Book,
E. Engineering Mechanics,
tc.

R. NARAYANAN
B.E., M.S.

a State University

SED AND ENLARGED EDITION

BLISHING COMPANY (P) LTD.







• Laboratory and Workshop • List of Major Equipment/Facilities in each Laboratory/ Workshop • List of Experimental Setup in each Laboratory/ Workshop

Computer Science & Engineering Departmental Laboratory (104 sq. mt. each lab)

CSE CENTRAL LAB -1	Dell Vostro Model No. 3268 , Processor-i5
(AB I)	7th generation, 8GB RAM, 1TB HDD, DVD
CSE LAB 2(AB II)-26	Writer, Keyboard , optical mouse,1GB
CSE LAB 3(AB II)-30	graphics card , Linux , and 19.5" Led
CSE LAB 4(AB II)-40	monitor.
CSE LAB 5 (AB III)-37	20 KVA ONLINE UPS,1 set of 30 nos 42 AH-
	12 volte SMF battery for each ups system,
	rack, Inter connecting Cable
	Server Model no-SR550 7X04S2FB00
	Model no- X3650 M5 8871PEC
	Server Rack



CSE Central Lab 1



CSE lab 2



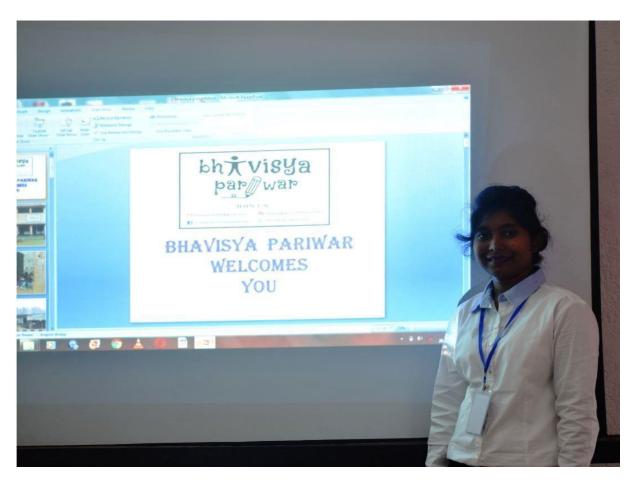
CSE Lab 3



CSE Lab 4



CSE Lab 5



CSE Projector Room



Computer Centre

Electronics & Communication Engineering Departmental Laboratory (104 sq. mt. each lab)

Digital Electronics and Integrated Circuit Lab

Analog Electronics Lab basic electronics lab communication lab ELECTRONICS MEASUREMENT LAB

EM Theory and MICROWAVE LAB
MICROWAVE DARK ROOM

VLSI LAB

Semiconductor Pannel/P3 (01)

Semiconductor Pannel/P8 (02)

Semiconductor Pannel/P7 (01)

Mux & DeMux (01)

Adder Subtracter Kit (02)

Universal Register Kit (02)

Encoder Decoder (02)

Flip Flop Kit using NAND Gate (02)

Parity Generator and Comparator (02)

"Synchronous and Asynchronous

Trainer (02)"

"Adder circuit using shift

Register (02)"

"Current Mirror and Level

Shifter Circuit (02)"

Bistable Multivibrator using NE555 (01)

V-I and I-V Converter using Opamp (02) etc.



Digital Electronics Lab



Analog Electronics lab



Analog & Digital Communication Lab



Digital Signal Processing Lab



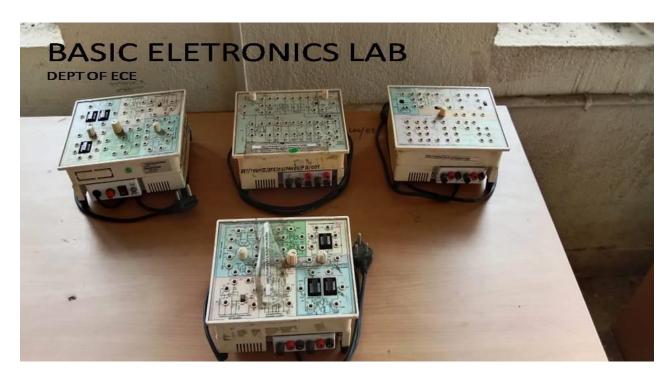
Microprocessor and Microcontroller Interfacing Lab



Electronics Measurement Lab



Microwave and Antenna Theory Lab



Basic Electronics Lab



VLSI Lab

Electrical Engineering Departmental Laboratory (104 sq. mt. each lab)

BASIC ELECTRICAL LAB
CIRCUIT THEORY LAB
CONTROL SYSTEMS LAB
ELECTRICAL DRIVES LAB
MEASUREMENT LAB
ELECTRICAL MACHINE LAB
ELECTRICAL POWER SYSTEM
LAB

MAXIMUM POWER TRANSFER THEOREM TRAINER KIT =1
MEASUREMENT OF POWER IN THREE PHASE CIRCUIT BY 2

WATTMETER METHOD =1

NORTON THEOREM TRAINER KIT =1

OC & SC TEST OF SINGLE PHASE TRANSFORMER =:

STUDY OF RLC SERIES CIRCUIT =1

SUPERPOSITION THEOREM Trainer Kit =1

THEVENINS THEOREM TRAINER KIT =1

Transient response of R-L and R-C network simulation with hardware kit =3

Transient response of R-L-C series and parallel circuit :simulation with hardware kit =3

Frequency response of LP and HP filters with hardware kit =3
Frequency response of BP and BR filters with hardware kit =3
Two port Network Z,Y,ABCD and H parameter Trainer Kit
Frequency Response of Band Pass and Band Stop Filters

DSO 50 MHz DSO 70 MHz

Function Generator Device

COMPENSATOR DESIGN KIT

LINEAR SYSTEM SIMULATOR

LIQUID LEVEL SYSTEM WITH PID CONTROLLER KIT THERMAL SYSTEM WITH PID CONTROLLER

STEEL ALMIRAH HP DESKTOP SET

Study of thyristar controlled DC drives, (1PC DC MOTOR) =1 study of chopper fed DC motor drives, (1PC DC MOTOR) =1 study of AC single phase motor speed control using TRAIC, (1PC

INDUCTION MOTOR) =1

PLC based AC and DC motor control operation, (1PC AC & DC DRIVE PANEL, 1PC PLC PANEL, 1PC DC MOTOR, 1PC INDUCTION MOTOR, 1PC MONITOR, 1PC CPU, 1PC KEYBOARD, 1PC MOUSE) =1

Study of IGBT based 3 phase inducatin motor drive, (1PC INDUCTION MOTOR) =1

dynamic & regenerative braking operation of 3 phase squirrel cage induction motor, (1PC DC MOTOR/GENERATOR,1PC INDUCTION MOTOR) =1

dynamic & regenerative braking operation DC shunt motor, (2PC DC MOTOR/GENERATOR) =1

VCO TRAINER KIT =1

PLL TRAINER KIT =1

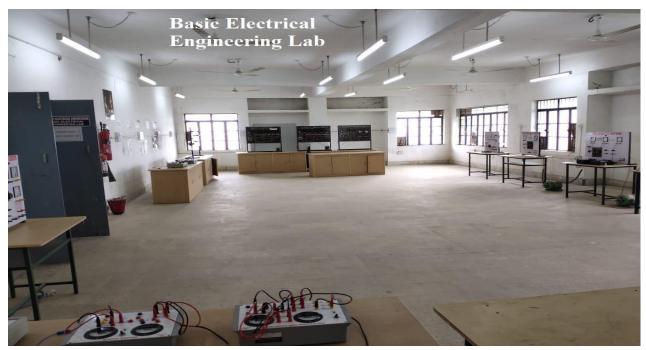
V TO I CONVERTER TRAINER KIT =1

I TO V CONVERTER TRAINER KIT =1

DATA ACQUISITION SYSTEM TRAINER KIT=1

WAVE AND SPECTRUM ANALYSIS USING Q METER=1

DIGITAL MULTIMETER=1



Basic Electrical Engineering Lab



Circuit Theory Lab



Control System I & Labs



Electrical Drives Lab



Electrical Measurement Lab



Electrical Machines Lab



Power Electronics Lab



Power Systems Lab

Civil Engineering Departmental Laboratory (104 sq. mt. each lab)

Environment Lab
Highway And Transportation Engineering Lab
Concrete Technology Lab
Soil Mechanics Lab-I
Solid Mechanics Lab
Surveying Practice Lab
Computer Lab
Soil Mechanics Lab-II

VANE Shear Test Apparatus
Triaxial test Equipment
Unconfined compression testing machine
ULTRASONIC PULSC VELOCITY TEST
COMPRESSION TESTING MECHINE 5000KN
DIGITEL
DETERMINATION OF LIQUID LIMIT
(CASARANDE APPARTURS), PLASTIC LIMIT &

SHRINKAGE LIMIT
DIAL GAUGE FOR DEFLECTION
ELECTRONICS WEIGHT MACHINE
POROUS STONES ARE REQUIRED FOR

PERMEABILITY TEST PYCONOMETER

RUBBAR MEMBRAME FOR TRIAXIAL TEST SIEVES

SPECIFIC GRAVITY BOTTELE SPLIT SPOON SAMPLER STOP WATCH

TRAY VERNUER CALIPER WEIGHT MACHINE

AUTOMATIC BRINELL HARDNESS TESTER SPARES FOR UNIVERSAL TESTING MACHINE DIGITAL FATIGUE TESTING MACHINE DIGITAL TORSION TESTING MACHINE SPARES FOR TORSION TESTING MACHINE

IMPACT TESTING MACHINE

SPARES FOR UNIVERSAL TESTING MACHINE SPARES FOR IMPACT TESTING MACHINE SPARES FOR FATIGUE TESTING MACHINE LEVELING (AUTO LEVEL WITH STAND)

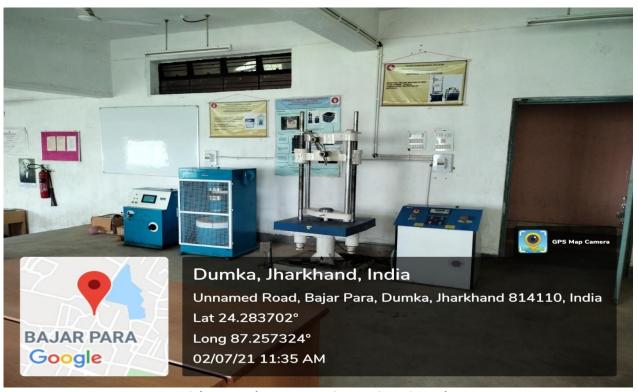
PLANE TABLE SET

TRAVERSING BY USING DIGITAL THEODOLITE WITH STAND

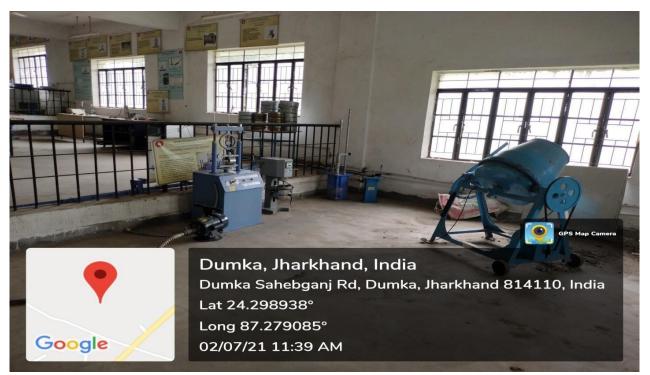
TRAVERSING BY USING TOTAL STATION WITH STAND



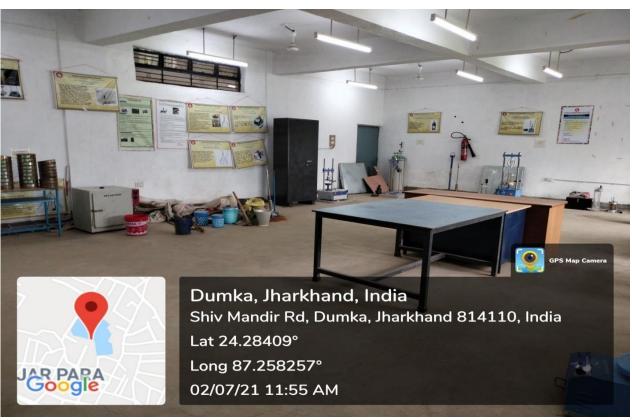
Environment Lab



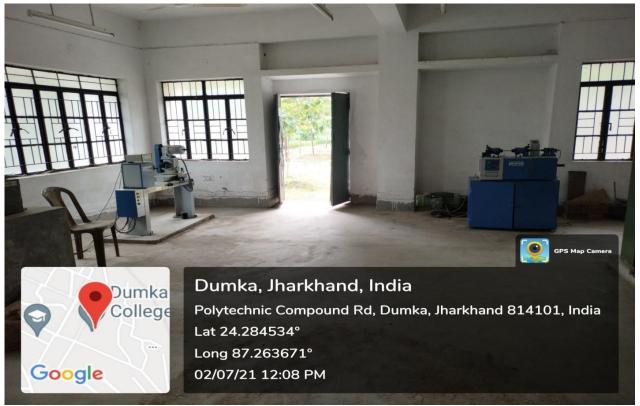
Highway and Transportation Engineering Lab



Concrete Technology Lab



Soil Mechanics Lab-I



Solid Mechanics Lab



Surveying Practice Lab



Computer Lab



Soil Mechanics Lab-II

Mechanical Engineering Departmental Laboratory (104 sq. mt. each lab)

DRAWING LAB (AB-1)
ADVANCE MANUFACTURING LAB
FLUID MECHANICS LAB
INTERNAL COMBUSTION ENGINE LAB
AIR CONDITIONING AND REFRIGERATION
LAB

MATERIAL TESTING LAB
COMPUTER AIDED DESIGN LAB
DYNAMICS OF MACHINE LAB
METROLOGY AND MEASUREMENT LAB
THERMAL ENGINEERING LAB
THERMODYNAMICS LAB
WORKSHOP-I AND II
HEAT AND MASS TRANSFER LAB

MODEL OF DISSECTED SOLIDS SET OF 8 CNC LATHE WITH PC BASED CONTROLLER CNC MILLING WITH PC BASED CONTROLLER AIR CONDITIONING (A.C) PELTON WHEEL TURBINE TEST BERNOULLI'S THEOREM APPARATUS NOTCH APPARATUS METACENTRIC HEIGHT APPARATUS INTERNAL COMBUSTION ENGINE LAB **ENGINE TEST SETUP 1CYLINDER 4 STROKE** DIESEL(COMPUTRISED) ENGINE TEST SETUP 3 CYLINDER, 4 STROKE MPFI PETROL (COMPUTRISED) ADDENDUM FOR VIRTUAL CLASSROOM VAPOR ABSORPTION REFRIGERATION **TEST RIG** WATER COOLER TEST DYE PENETRATION MAGNETIC PARTICAL TEST COMPUTRISED UNIVERSAL TESTING MACHINE



DRAWING LAB (AB-1)



ADVANCE MANUFACTURING LAB



FLUID MECHANICS LAB



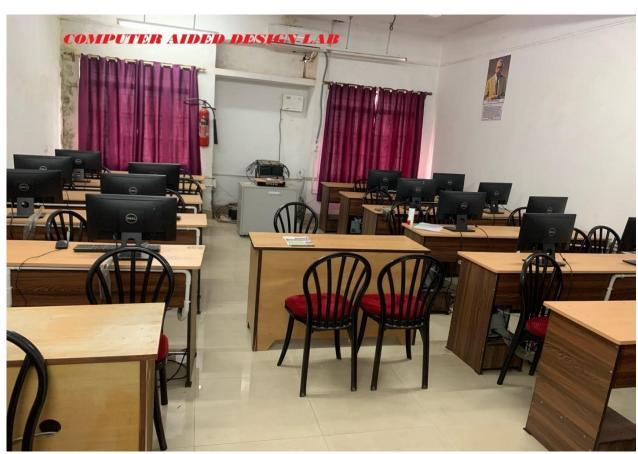
INTERNAL COMBUSTION ENGINE LAB



AIR CONDITIONING AND REFRIGERATION LAB



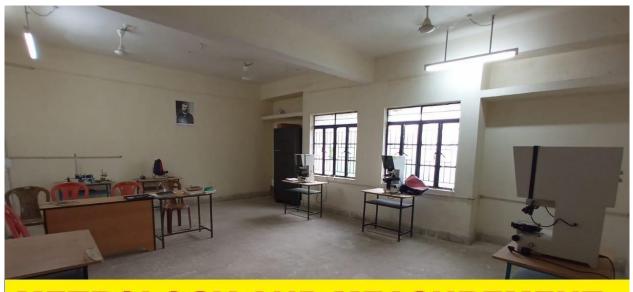
MATERIAL TESTING LAB



COMPUTER AIDED DESIGN LAB



DYNAMICS OF MACHINE LAB



METROLOGY AND MEASUREMENT LAB

METROLOGY AND MEASUREMENT LAB



THERMAL ENGINEERING LAB



THERMODYNAMICS LAB



WORKSHOP-I AND II



HEAT AND MASS TRANSFER LAB

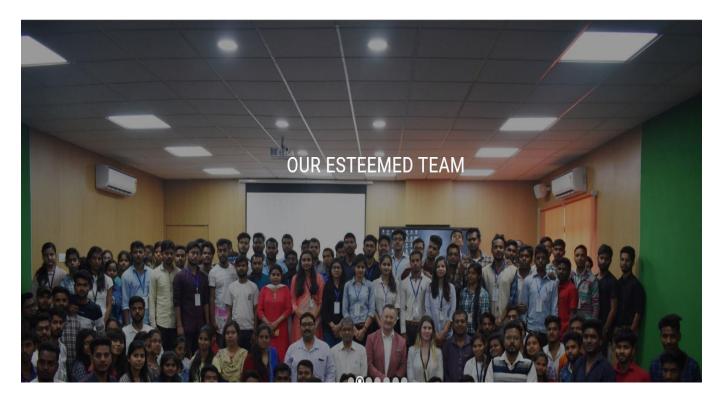




Physics dark room



Chemistry Laboratory





Seminar Hall



Language Laboratory

Computing Facilities • Internet Bandwidth • Number and configuration of System • Total number of systems connected by LAN • Total number of systems connected by WAN • Major software packages available • Special purpose facilities available.

Name of the Internet provider	Sify Broadband Services Pvt. Ltd.,	
Available band width	32 MBPS	
Total Number of PCs	259	
WiFi availability	Throughout the Campus including Students hostels and faculty residence.	
Internet access in labs, classrooms, library and offices of all Departments	YES	
Security arrangements	Private static IP based authentication (Identification MAC)	
Total Application	6	
Total Systems Software's	2	
Total Number of Document scanning & printing/ Reprographic facility	 CANON Image runner 2004N automatic-03 Scan JET pro -03, Laser Jet M1005-18 Laser jet 1020-08 Laser jet 1108-04 Epson Colour printer L-805- 02 Lamination Machine-02 Barcode reader-02 	

Innovation and Start-Up Cell:



Vision/Goal of Start-up Cell:

Creating a vibrant and dynamic Startup Ecosystem in Technical Institutions by playing a role of pre-incubator to promote, facilitate support system to innovative and entrepreneurial students and faculties to convert their innovative ideas/problems to tech-solution with a feasible business model stage.

Role of Pre-Incubator is to connect various student clubs (Idea clubs, Innovation Clubs, Start-up Clubs) to come up with tech solutions for the problems from Industry, Society, and Market to generate Ideas/Proof of Concepts (PoCs) and helping them to get converted to Prototypes and mentor them to develop business models ready. Therefore, creating a strong pipeline of quality and quantity tech based potential start-ups for incubators industry to take further.

Objective of Start-up Cell:

- 1. To Develop a Critical Mass of Motivated Students & Faculties with Entrepreneurial Orientation & Skill
- 2. To Build Infrastructure Support for Innovation & Early-Stage Enterprise development and Enabling Access to Resource & Facilities at Institute
- 3. To Enhance In-House Competency Development to Serve Potential and Early-Stage Entrepreneurs and Student Innovators at the Institute.
- 4. To Strengthen the Inter Department and Inter-Institutional linkage, Incubators and Other Ecosystem Enablers at Different Levels.

The Institute has dedicated R&D Monitoring committee under which various research and development projects are carried out. Besides, students are also carrying out various projects under the said Cell. Besides, the Institute has recently recognized as the 'Host Institute' for implementation of Ideation Camp with the collaboration of Institutions Innovation council (Ministry of HRD, GoI). Support for Entrepreneurial and Managerial Development, various innovative projects are invited from the faculty and students and other stakeholders from nonboring industries,

करियर काउंसिलिंग २७ को

दुमका/शिक्षा संवाददाता। संताल परगना कॉलेज के मनोविज्ञान विभाग द्वारा संचालित मानसिक स्वास्थ्य परामर्श केंद्र के तत्त्वावधान में 27 से 28 जनवरी को मनोविज्ञान के विद्यार्थियों के लिए एक करियर कॉउंसलिंग कार्यक्रम का आयोजन किया जायेगा। यह कार्यक्रम मनोविज्ञान विभाग में आयोजित होगा।

आज अयोजित होगा 'फिट इंडिया साईक्लेथॉन' कार्यक्रम

दुमका/शिक्षा संवाददाता। सिकामु विवि की एनएसए की ओर से सभी अंगीभूत, संबंद्दन एवं बीएड कॉलजों को 'फिट इंडिया साईक्लेथॉन' से संबंधित कार्यक्रम 18 जनवरी को आयोजित करने के लिये कहा गया है। फिट इंडिया कार्यक्रम के तहत कॉलेज के छात्र-छात्राओं के अलावे कोई भी आम नागरिक उस दिन साईकिल चलाना है। इससे आम लोगों के बीच स्वस्थ रहने को लेकर संदेश जायेगा। इसमें सभी कॉलेजों के यूजी एवं पीजी को भी आयोजित करना होगा। विवि परिसर में साईकिल रैली आयोजित की जायेगी जो ग्राम दिग्धी तक जायेगी।

इंजीनियरिंग के छात्रों ने बनाया सोलर से चलने वाला ग्रास कटर



ग्रास कटर का प्रदर्शन करते इंजीनियरिंग के छात्र।

दुमका/शिक्षा संवाददाता।

दुमका इंजीनियरिंग कॉलेज में सत्र 2015-19 के फाइनल सेमेस्टर की प्रोजेक्ट प्रजेंटेशन प्रस्तुत किया गया। इलेक्ट्रीक ब्रांच के छात्रों ने ग्रास कटर सोलर व बैटरी से चलने वाला यंत्र बनाया। विभागाध्यक्ष प्रो राजीव रंजन पाठक ने बताया कि सोलर से चलने वाला ग्रास कटर पहली बनाई गई हैं। इसके पूर्व जितने भी ग्रास कटर यंत्र बनाये गये है सभी बिजली या डीजल से चलती है। यह अपने आप में एक नया अविष्कार हैं। सेमेस्टर 8 के छात्र ने सूर्य की रोशनी का इस्तेमाल कर एक आधुनिक सोलर ग्रास कटर बनाने पर कॉलेज के प्राचार्य डॉ पलाश पाल, प्रबंधक अभिषेक मुखर्जी सहित सभी ने तारीफ की है। इस आधुनिक तकनीक का इस्तेमाल कर इन्होंने अपना हुनर दिखाया है। यह ग्रास कटर द्वारा लंबे— लंबे घासो को एक समांतर

कटाई करने में सक्षम है। यह प्रदूषण मुक्त ग्रास कटर है एवं भविष्य में ऐसी तकनीक की अत्यंत आवश्यकता है, क्योंकि वर्तमान में प्रदूषण एक बहुत बड़ी समस्या हैं। इस प्रोजेक्ट की प्रस्तुती पर इलेक्ट्रिकल डिपार्टमेंट के एचओडी राजीव रंजन पाठक के नेतृत्व में छात्र दीपक कुमार महतो, महंद्र हंब्रम, विशाल सिंह, संजीव रंजन, रामदेव महतो, चंद्रकांत के हारा संपन्न किया गया।

Social Media Cell

The Institute is conducting PMKVY courses and other various Community Development courses for the socially weaker section as well as designed for unskilled and skilled working industry persons. Besides, the Institute conducts varieties of societal activities like,

- 1. Campus Cleaning
- 2. Blood donation camp
- 3. Tree plantation
- 4. Road safety awareness programme under the banner "Safe Drive and save Life
- 5. "Swachh Bharat Abhiyan"
- 6. Survey of Literacy status in local SLUM areas (Sonwadangal, Taljhari, Ranga, Asansol, Boha) with the assistance Unnat Bharat Abhiyan.
- 7. The students with an objective to educate economically backward children from nearby locality at free of cost.
- 8. Actively participating in Smart India Hackathon Program and submitted proposals.





List of facilities available • Games and Sports Facilities • Extra-Curricular Activities • Soft Skill Development Facilities

Sports and cultural activities are organized throughout the year



Soft Skill development facility:

Employability skill Development Training was conducted for the Final and pre-Final year students.



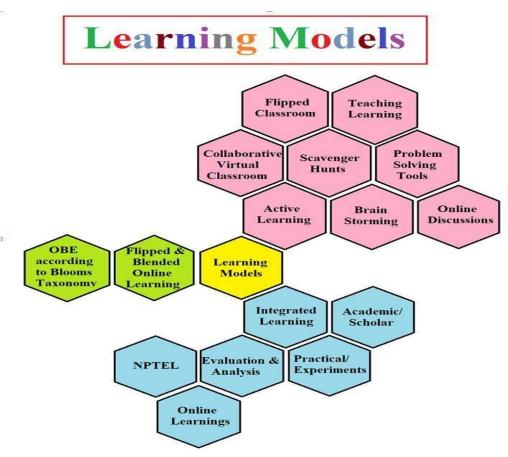
• Teaching Learning Process • Curricula and syllabus for each of the programmes as approved by the University • Academic Calendar of the University • Academic Time Table with the name of the faculty members handling the Course • Teaching Load of each Faculty • Internal Continuous Evaluation System and place • Student's assessment of Faculty, System in place

Curricula and syllabus for each of the programmes as approved by the University are available in the Institution website, in the following link: http://www.dumkaengg.edu.in/Academic/Course_wise_syllabus

Curriculum

Till 2018-19, curriculum and syllabus, by affiliating university- Sido Kanhu Murmu University, Dumka and in the same Academic year the 1st batch of B.Tech was admitted under the affiliation of Jharkhand University of Technology from Dumka Engineering College. The process of continuation of curriculum and syllabus of different programs has already been initiated by the Jharkhand University of Technology, Ranchi.

Teaching - Learning Process



Seminars, extra remedial classes, content beyond syllabus.

Projects on industrial problem and/or emerging areas.

Cooperative and collaborative teaching-learning process.

Use of charts, monograms, models, videos, tables

Catalogue, data handbook etc.

Mini projects.

Soft Skill Development Classes

Seminars / Workshops / Guest Lectures / Conference

Student counseling

Industrial training

Tutorial Classes

Remedial Teaching

Industrial visits.

Internal Continuous Evaluation System and place:

Attendance Monitoring

Monthly Continuous Assessment (CA) is introduced Internally

Continuous assessments are based on class test, assignments, viva/quiz etc.

Student feedback system

Mentoring and counseling

Industry Feedback

The faculty of department adopts various innovative Teaching & Learning methodologies to create the best learning environment for students.

These methodologies include traditional black board teaching, presentations, video

lecturing, collaborative learning methods are used where every concept is explained with real world illustrations, design and problematic aspects are conveyed by a short cut method.

The faculty are row oriented towards Outcome based Education (0BE) and are actively utilizing the OBE to cater the learning needs of students by innovative way.

- 1. Lecture Session duration 50 minutes. Laboratory duration is 3 hrs.
- 2. Assignments are given to students for their better performance.
- 3. Invited talks and seminars on the current trends are done regularly from the industry persons.
- 4. Tutorial/Remedial classes are conducted for the slow learners based on their performance in external exams and after the first internals.
- 5. Motivating and guiding students for higher studies and university ranks.
- 6. Technical quiz is conducted for the students.
- 7. Faculties are maintaining Attendance registers, course files, Work dairies.
- 8. Industrial visits are conducted at least once a year to reduce the gap between industry and institute.
- 9. Workshops are organized to help the students to understand concepts beyond curriculum.
- 10. One-one discussion, interaction between Professors and students has increased the confidence levels of the students.

• Special Purpose • Software, all design tools in case • Academic Calendar and frame work

Academic calendar and curricula are available in Institution website by the following link: http://www.dumkaengg.edu.in/Academic/academiccalender

MoUs with Industries:

Industry-Collaborations and Tie-Ups:

SI No	Collaboration type	Organization	Objective
1.	MOU	MSME Jamshedpur	Final year and pre-final year project internships
2.	MOU	Auto-Desk	CADD Skill development training, certification and placement assistance
3.	MOU	CINIF TECHNOLOGIES LTD	Joint Research activities for Applied Research and Technological development, and Placement Assistance
4.	MOU	OPTRA AUTOMATION	Joint Research activities for Applied Research and Technological development, and Placement Assistance
5.	Life time Membership	The Institute of Engineers (India)	Research and Publication

16. LOA and subsequent EoA till the current Academic year

All the AICTE approval letters and University affiliation letters since 2014 are available on the Institute website: http://www.dumkaengg.edu.in/About/approval

17. Accounted Audited Statement for last three years

Audited Accounts of the Institute are uploaded on Institute's website.

18. Best Practices adopted, if any

Institutional Best Practices Carried out on

- 1. GATE and Employability Training of students.
- 2. Rain Water Harvesting
- 3. Green audit
- 4. Energy audit
- 5. Environ Management Plan.
- **6.Equity action Plan.**
- 7. "Bhabisya Pariwar" an initiative to facilitate the Education to the poor children and Provide educational accessories

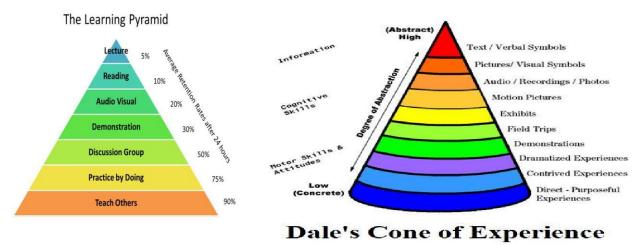


PROMOTE ACTIVE LEARNING

The most important element of success when setting up a proactive learning environment is motivation.

Studies have shown that active learning results in increased enthusiasm for both learners and facilitators. What's more, active learning also improves learners' perception and attitude towards information literacy. These are all critical attitudes in establishing an active learning environment.

Moreover, fostering an environment that values active learning methods is not only the responsibility of a select few (like the training department, for example); but it needs to involve the active participation of the entire community as well – from the Chairman to the mid-management, to the rank and file.



Active learning Ideas that involve Technology:

COLLABORATIVE VIRTUAL CLASSROOMS

Collaborative virtual classrooms make online learning more engaging. Aside from the usual audio-video conferencing and chat features, virtual classrooms also provide synchronous and asynchronous annotation, communication, and resource sharing for facilitators and participants. It's a definite must-have for any eLearning platform!

MIND MAPPING / BRAINSTORMING

These two are approaches that can also be classified under active learning methods. Mind mapping and brainstorming are staple methodologies for any problem-solving activity. In these sessions, learners come up with ideas and post them on a board. As a group, the students then select the best ones and use those to come up with a solution. For these methods, there are available apps that allow learners to use their own device and collaborate with others in coming up with a mind-map or idea tree.

SCAVENGER HUNTS

Here is another fun and engaging activity that involves the use of the institute knowledge base. Scavenger hunts start off with a stakeholder concern. The learner's task is to use the system and find the appropriate resource to

address the issue. Not only does it familiarize the learners with the system, but it also prepares them to handle reallife stakeholder scenarios.

■ DATA AND TOOLS FOR PROBLEM-SOLVING

A combination of a scavenger hunt and role-playing activity, this exercise is one of the more effective active learning strategies for adults. The facilitator assigns a case-study (preferably taken from common stakeholder scenarios) to a learner. The learner, in turn, makes sense of the data and uses the available resources to solve the case.

ONLINE DISCUSSION BOARDS

Online discussion boards are also one of many proven active participation strategies. Online boards are virtual boards where students can learn collaboratively. They post questions and answer queries. Most of the time, there is very little facilitator or subject matter expert intervention involved, with most answers usually coming from the other participants who are more knowledgeable on the topic.



21st Century Program Structure



LEARNING BY TEACHING

In a nutshell, learning by teaching means that you allow learners to prepare and teach the lessons (or part of them) to their fellow students. Although it may look like the facilitator is taking a very hands-off approach in this method, it actually involves a very elaborate process where the facilitator is both moderator and subject matter expert. Do take note that learning by teaching does not simply mean a presentation or a lecture presented by the learners. In this particular approach, the learners are the ones who are facilitating the session by engaging with fellow students. The facilitator ensures that the learning gets processed correctly and also lends a hand to the studenthosts. Webinars and online discussion boards are the usual media used for this methodology.

THE 'FLIPPED CLASSROOM'

The flipped classroom is a fairly new term in the learning and EdTech industry. Lessons are 'flipped;' meaning that most of the work like reading and research are all done outside of class. This goes in contrast to the traditional approach where most of the class time is used for lectures, and activities are assigned as homework.

Flipping a classroom leaves more time for the facilitator to implement active learning methods during class time. This concept works on making efficient use of class time with less (or no) lectures, and more time for activities.

THE EVER-EVOLVING RELATIONSHIP BETWEEN TECH AND LEARNING METHODS

There are still multitudes of activities for active learning methods out there. With the help of technology, learning managers and professionals have been presented more options on how to better engage today's tech-dependent students. Nevertheless, it will now only be a matter of time before tech advances again and learning methodologies evolve with it. Learning professionals just have to either keep up and adapt or get connected to their learners.

